

Network Readiness Index 2024

Building a Digital Tomorrow:
Public-Private Partnerships for
Digital Readiness

Editors: Soumitra Dutta and Bruno Lanvin



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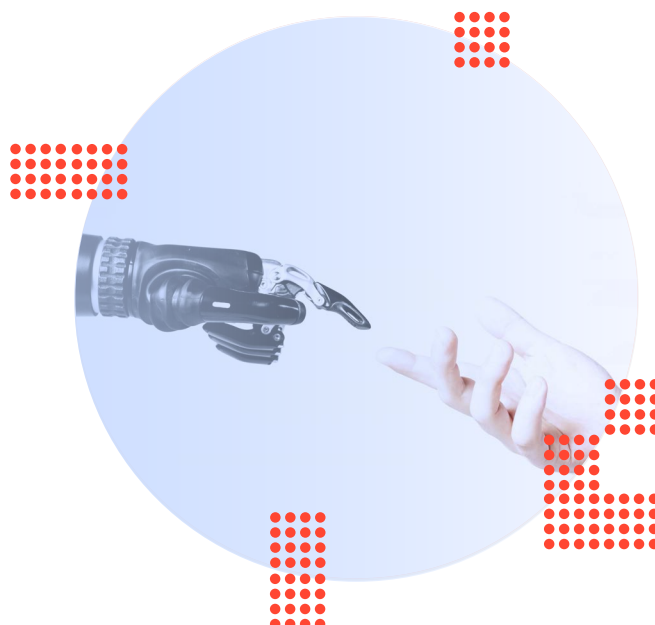
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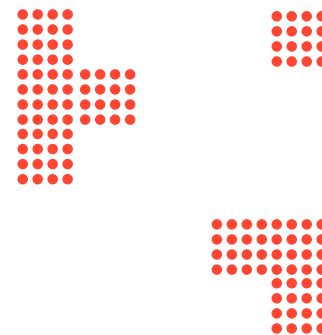


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The Network Readiness Index (NRI) serves as a compass for governments navigating this digital transformation. This year's report examines how DPPPs drive digital readiness, ultimately fostering economic growth and improving quality of life worldwide.

Preface



• Soumitra Dutta
Co-editor and Co-author

• Bruno Lanvin
Co-editor and Co-author

The accelerated pace of digital transformation demands a new playbook for public-private collaboration. While traditional Public-Private Partnerships (PPPs) built our roads and hospitals, Digital Public-Private Partnerships (DPPPs) are forging the pathways of our virtual future.

These partnerships aren't simply PPPs in digital clothing—they're agile, adaptive entities shaped by the pace of technological change. As we race toward tomorrow's digital frontier, understanding how these partnerships can accelerate transformation at a time when serving the public interest has never been more crucial.

Since the 1990s, PPPs have undergone a remarkable evolution. Once focused solely on physical infrastructure, they now embrace the inter-connected complexity of the digital age. Today's critical infrastructure stretches from terrestrial networks to orbital constellations, creating an interconnected web of physical and digital assets.

This transformation brings both promise and challenge. Modern DPPPs must bridge two contrasting worlds: the methodical pace of public infrastructure and the breakneck speed of digital innovation. Consider SpaceX's "fail fast, learn quick" philosophy - a stark contrast to traditional public sector approaches. As our digital dependencies deepen, these partnerships must develop frameworks that marry public interest with private sector dynamism.

The COVID-19 pandemic proved a powerful catalyst for digital transformation. Faced with unprecedented challenges, governments partnered with tech companies

to rapidly deploy solutions in contact tracing, telemedicine, and remote learning. This crisis demonstrated how digital infrastructure and data-driven decision-making could reshape public services at scale.

The regulatory and financial landscape has evolved in parallel. Governments have established robust frameworks emphasizing transparency and fair risk allocations. New financing models, particularly blended finance, combine public funds with private capital while safeguarding public interests—creating more sustainable and viable projects.

The Network Readiness Index (NRI) serves as a compass for governments navigating this digital transformation. This year's report examines how DPPPs drive digital readiness, ultimately fostering economic growth and improving quality of life worldwide.

We thank colleagues at the Saïd Business School, University of Oxford for co-publishing this report and our Knowledge Partners—Amazon Web Services (AWS) and the Brazilian National Confederation of Industry (CNI)—for supporting the 2024 NRI edition. Our gratitude extends to our Advisory Board, NRI Technical Advisory Group, and the Joint Research Centre (JRC) for ensuring the precision and relevance of our analysis.

And to all of you reading this report, your insights help us keep the NRI at the forefront of measuring our world's digital evolution. We welcome your feedback as we continue this journey.

Foreword by AWS



• Jeffrey B. Kratz
Vice President, Worldwide Public
Sector Industry Sales, AWS

As we stand on the cusp of a new digital era, the importance of collaboration between the public and private sectors in driving innovation has never been more critical. At Amazon Web Services (AWS), we've witnessed firsthand the transformative power of such partnerships in building a digital tomorrow that is accessible, efficient, and secure for all.

We have numerous examples of how public-private investments and global collaboration are accelerating digital readiness across various sectors. From the launch of the **AWS GovTech Accelerator** for startups addressing justice and public safety challenges, to the introduction of **Snowflake's Government & Education Data Cloud** on AWS, we're seeing innovative solutions emerge that tackle some of society's most pressing issues. Similarly, NYU Langone Health and NVIDIA, leveraged AWS to develop **NYUMets**, the world's largest longitudinal dataset of metastatic cancer. This groundbreaking work, made freely accessible through the **AWS Open Data Sponsorship Program**, demonstrates how public-private cooperation can accelerate scientific research and improve healthcare outcomes globally.

AWS has democratized access to cloud computing services, and we now provide access to generative AI technologies which enable developers and companies of all sizes, and across all industries, to build applications which can transform and grow their businesses. **Amazon Bedrock** provides a choice of foundation models from leading AI providers via a single API for companies to build and scale generative AI applications. To ensure our customers are able to capture the societal and productivity gains from this technology we have invested \$100M in the **AWS Generative AI Innovation Center**, a program that connects AWS customers worldwide with AWS ML and AI experts

to help these companies envision, design, and launch new generative AI products, services, and processes. We have also recently announced a \$10 million commitment to help create the new **Cancer AI Alliance (CAIA)** with the Fred Hutch Cancer Center. Together, we will accelerate innovation in cancer discovery and treatments, deploy generative AI at scale, and leverage the power, agility, and security of cloud computing to revolutionize health and patient outcomes.

When building new digital solutions and services for our customers, AWS often works closely with a network of more than 130,000 technology partners ('AWS Partners') from more than 200 countries. In this context, the rise of "partners partnering" is another exciting trend, where AWS Partners are joining forces to create even greater impact. For instance, Rubicon and Esri's collaboration to help the City of Columbus with efficient waste collection showcases how combined expertise can solve complex urban challenges.

As we look to the future, AWS remains committed to fostering an environment where innovation thrives. Through initiatives like our **Partner Transformation Program** and the **Amazon Partner Network Customer Engagements Program**, we're simplifying the partner journey and creating more opportunities for collaboration. Building a digital tomorrow requires not just technological advancements, but also a shared vision and commitment to global collaboration. By continuing to invest in public-private partnerships and fostering a global ecosystem of innovation, we can ensure that the benefits of digital transformation are realized by all, creating a more connected, efficient, and equitable world.

Foreword by CNI



• Antonio Ricardo Alvarez Alban
*President, Brazilian National Confederation
of Industry (CNI)*

The Brazilian Industry System recognizes digital readiness as a strategic imperative. Our mission is to strengthen Brazil's industrial economy, from basic education and professional training to advocating for public policies that promote industrial development and developing innovative technologies. Our network, which includes the Brazilian National Confederation of Industry (CNI), the Social Service of Industry (SESI), the National Service for Industrial Training (SENAI), the Euvaldo Lodi Institute (IEL), and several regional and sectoral associations, is uniquely positioned to advance digital readiness at scale.

Enhancing economic competitiveness and creating dignified job opportunities in the digital era requires robust private-public coordination. Despite 69% of Brazilian industrial companies using at least one digital technology, many are still in the preliminary stages of digitalization. Our role is to support these companies in their digital transformation journey, from ensuring that the right policies are in place to providing the necessary education for tomorrow's workforce.

We actively engage in public-private partnerships, such as the *Brasil Mais Produtivo* program, implemented by SENAI and the Brazilian government. This program assesses companies' digital readiness and provides financial support for adopting and developing digital technologies. Such initiatives could be benchmarked for global implementation with support from developed countries and international organizations.

CNI regularly convenes the CEOs of Brazil's largest companies at the Business Mobilization for Innovation (MEI) to discuss and propose national strategies on digital transformation. Key priorities include public digital

infrastructures, worker skill development, support for small and medium-sized enterprises in digital transformation and fostering dialogue between the public and private sectors. As hosts of this year's B20, the business forum for the G20, we are committed to creating global consensus on advancing digital infrastructure, fostering innovation ecosystems, and ensuring cybersecurity. We aim to bridge the digital divide by proposing policies that expand access to digital resources and opportunities for all.

Our partnership with the Portulans Institute underscores our commitment to building a digitally inclusive society, guided by the best data and global benchmarks. The Network Readiness Index findings provide valuable insights that inform our actions and strategies to ensure that Brazil is not just ready for the digital future but is at the forefront of shaping it.

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Building a Digital Tomorrow: Public-Private Partnerships for Digital Readiness



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Introduction

Building Bridges: The Evolution of Digital Public-Private Partnerships

Digital Partnerships (DPs) between private and public entities are not just a transposition of Private-Public Partnerships (PPPs) to the digital world. PPPs are qualitatively different, having the ability to adapt rapidly to new and evolving circumstances. Considering the rapid pace at which digital technologies and business models have changed over the last decade, it is vitally important to assess how new types of partnerships can help private and public players to shape a better digital to-morrow while accelerating digital transformation. However, we need to draw the lessons of the recent past to deepen digital partnerships (DPs).

PPPs have historically played a crucial role in delivering large-scale infrastructure projects, such as roads, hospitals, and schools. They are often financed through models like the Private Finance Initiative (PFI). Early PPPs primarily aimed to share financial risks between public and private sectors, leveraging private capital to benefit public infrastructure development. However, over time, criticisms related to high costs, complex contractual frameworks, and accountability challenges have led to a reassessment of these models.

The focus of PPPs has dramatically expanded in the current digital era. Digital Public-Private Partnerships (DPPPs) have emerged as a transformative approach, facilitating collaboration between governments and private sector technology companies to co-create digital infrastructure and public services. The COVID-19 pandemic acted as a significant accelerant for this shift, driving the need for digital solutions across sectors such as healthcare, education, and governance. Governments have increasingly embraced DPPPs as a way to integrate cutting-edge technologies like artificial intelligence (AI), the Internet of Things (IoT), and blockchain into public service delivery.

DPPPs now play a pivotal role in advancing global sustainability and social development goals, including the United Nations' Sustainable Development Goals (SDGs). These partnerships go beyond traditional infrastructure, emphasizing inclusivity, transparency, and environmental responsibility. The concept of "People-first PPPs" has also gained prominence, underscoring the importance of delivering not only economic value but also broader societal benefits such as equitable access to services and the reduction of the digital divide.

Regulatory and institutional frameworks have also adapted in response to these evolving demands. Governments and international organizations have developed comprehensive guidelines to ensure transparency, data governance, and fair risk allocation in DPPPs. These frameworks address past challenges by promoting public trust and enhancing community participation in digital projects, ensuring that DPPPs can effectively balance technological innovation with public accountability.

Moreover, innovative financing models have become essential for funding digital transformation. For example, blended finance models combine public funds with private investment. These models decrease the risk level of investments in digital infrastructure, attract private sector participation, and ensure that DPPPs can scale up sustainably.

This chapter explores how DPPPs are reshaping the boundaries of public-private collaboration in the digital age in ways that include enhancing community participation and balances technological innovation with public accountability. Through these partnerships, governments can navigate the complexities of digital transformation, ensuring that technological progress is aligned with the broader goals of equity, inclusion, and resilience.



● Photo by Caner Demiroğlu

Digital Waves: Technology as a Core Focus of Modern PPPs

Defining Public-Private Partnerships (PPPs)

Public-Private Partnerships (PPPs), as defined by the Organisation for Economic Co-operation and Development (OECD), are long-term agreements in which the government collaborates with a private entity to deliver and finance public services while sharing the associated risks (OECD, 2019). Unlike traditional projects, PPPs emphasize balancing risk between public and private sectors to ensure optimal outcomes (European Court of Auditors 2018). Historically, PPPs have been heavily concentrated on traditional infrastructure projects, such as transportation. For instance, between 2000 and 2014, transport-related PPPs made up 88% of the total budget for EU-funded partnerships, while other technology initiatives accounted for just 5% of investments during the same period.

PPPs have been recognized for their potential to achieve efficiency gains by accelerating project timelines, sharing risks between public and private agents, and optimizing costs throughout a project's lifecycle. By combining public and private expertise, PPPs can provide in-depth project assessments, help optimize project scope, and implement a whole-life approach that enhances maintenance and service levels (OECD, 2011). This collaboration often results in higher quality service delivery, improved operational efficiency, and greater innovation compared to purely single-sector initiatives.

Due to the dynamic nature of technology, PPPs in this sector take on various forms, ranging from broadband connectivity and satellite services to capacity-building programs, secure platforms for information sharing, and digital public services like e-government systems (World Bank 2021; European Commission, 2021). The choice of which technologies to invest in largely depends on government priorities and funding objectives. Given the interconnected and interdependent nature of technology, successful initiatives require accessible and affordable connectivity, robust online platforms, and strong privacy and data protection measures (Cirera, et al., 2022). For instance, effective e-government services rely not only on infrastructure but also on secure, user-friendly platforms that encourage widespread adoption and trust.

Strong privacy and data protection measures, along with adequate controls, are crucial to safeguarding sensitive information in digital PPPs (Organization for Security and Co-operation in Europe, 2023). These elements are essential for encouraging adoption, building public trust, and ensuring the overall integrity of the system. Unlike traditional infrastructure, digital systems are characterized by their ability to scale rapidly and be replicated across different contexts. This scalability and replicability are among the most critical factors in the success of digital infrastructure, making private sector participation in building digital public infrastructure (DPI) an inherent requirement (Asian Development Bank, 2022). Effective digital PPPs are efficient at integrating these factors to deliver secure, scalable, and user-centric solutions that meet evolving public needs.





First Wave: the COVID-19 shift

The onset of the COVID-19 pandemic underscored the critical need for resilient digital infrastructure, compelling governments and businesses to swiftly adapt to the realities of the “new normal.” Faced with widespread closures of workplaces and educational institutions, alongside strict mobility restrictions and disruptions to supply chains (Zancajo et al., 2022), digital platforms became indispensable in maintaining essential services, including education and government operations. In particular, the reliance on Government-to-Citizen (G2C) channels for disbursing financial subsidies and pandemic relief surged during this period (Lau et al., 2024).

This marked a significant acceleration in the digitalization of financial systems, especially in low- and middle-income countries. For example, the World Bank noted that over 80 million adults in India conducted their first digital payment since the pandemic began, with a similar trend observed in China, where over 100 million individuals embraced digital payments for the first time (World Bank, 2022). In Brazil, the Central Bank’s instant payment platform, Pix, introduced mobile transactions to over 71 million people within two years of its 2022 launch (Central Bank of Brazil, n.d.). Although the rapid growth in mobile money adoption has slowed compared to its peak during the pandemic, the trend remains strong, with GSMA reporting a 9% increase in active mobile money accounts by the end of 2023, totaling approximately 435 million worldwide (GSMA, 2024).

Second Wave: Investing in digital resilience

The acceleration of digital infrastructure development in the wake of the pandemic has prompted significant global investment. High-profile initiatives, such as the United Nations’ High Impact Initiatives on Digital Public Infrastructure (DPI) launched in September 2023 (ITU, 2023), reflect the growing recognition of the critical role digital infrastructure plays in addressing modern challenges. In parallel, the European Commission underscored the strategic importance of technologies like cloud computing, edge computing, and semiconductors in sustaining economic resilience, particularly in response to disruptions in global value chains (European Commission, 2021a). Supporting these efforts, the NextGenerationEU initiative—the largest European recovery project since the Marshall Plan—has committed €723 billion towards recovery. This initiative mandates that at least 20% of each Member State’s recovery and resilience plan be allocated to digital transformation (European Commission, 2021b), addressing critical challenges and fostering long-term digital capacity.

Box 1 / USAID Philippines

Advancing the Philippine Digital Infrastructure through PPP Initiatives

The Philippine government is demonstrating heightened interest in partnership with private sector contributions to the country’s overall digital infrastructure development. In previous years, the target funding source for the country’s national government flagship ICT infrastructure projects, such as the National Broadband Program (NBP) and National Government Data

Center (NGDC), has consisted of the annual national government budget appropriation. However, the release of the Philippine Development

Report 2023 was an early signal of the government’s enhanced willingness to adopt PPP models for information and communications technology (ICT) infrastructure funding.

The Philippine Development Report 2023 indicates that two of the Department of Information and Communications Technology (DICT) flagship programs are moving beyond conventional funding sources. For example, the NBP is planning to issue a call for PPP proposals for DICT-owned towers and National Satellite Systems. Further, the Free Public Internet Access Program (FPIAP) is

going to engage the private sector in proof-of-concept initiatives aimed at discovering alternative technologies to boost digital infrastructure rollout.	was signed between DICT and the PPP Center on June 14, 2023, formalizing a collaboration for sustaining project assistance and promoting policy development. To address specific infrastructure needs, four project concept notes were developed. These included both the NBP Accelerated Tower Building Project and an Underground Fiber Optic Cable Conduit Network along the Philippine National Railroad’s 700-km right of way.	growth rates. The lower 25% annual growth rate implies that total satellite demand could reach 2.3 terabits per second (Tbps) in 10 years. The higher 45% growth rate could push demand to 10.1 Tbps. Ultimately, adding this growth on top of existing demand implies that ultimate consumer demand could reach 4.8 Tbps to 19.1 Tbps, respectively. In addition, BEACON provided training that enabled DICT personnel to map all 235 DICT-owned towers, achieving 88% geospatial data coverage for 133 out of 151 tower lots. Furthermore, BEACON is facilitating access of DICT for transactional advisory services of ADB and Project Development and Monitoring Fund (PDMF) of the PPP Center for their priority PPP projects.
The United States Agency for International Development’s (USAID) has used the Better Access and Connectivity (BEACON) project in the Philippines to actively support Philippine ICT infrastructure development through PPPs via a series of initiatives. In 2022, BEACON awarded a grant to the Research, Education, and Institutional Development (REID) Foundation to conduct training workshops for DICT personnel on PPP concepts and processes. Subsequently, a Memorandum of Agreement (MOA)	To support infrastructure planning, BEACON facilitated the conduct of a recent satellite demand study for the Philippines by the Asian Development Bank (ADB). The study projected significant future bandwidth requirements using two plausible	

Table 1 Major Priority Programs and Projects to Expand and Upgrade Infrastructure

Digital Connectivity		
Strategy	Major Priority Programs and Projects/Status of Implementation	Plans for 2024-2025
Move people, goods, and information through modernized and expanded transport and digital infrastructure, with active participation of the private sector	National Broadband Program	
	Component 3: Accelerated Tower Build (ATB) – In April 2023, the first communications tower in Boac, Marinduque, which is expected to connect at least 42 government-owned facilities, was completed.	<ul style="list-style-type: none">• Component 3: Continued expansion of the existing facilities to fully connect all government-owned facilities and solicitation of PPP proposals for the DICT-owned towers.
	Component 5: Satellite Overlay –Ongoing conduct of satellite services survey, which will collect data from national government agencies and local government units (LGU) on their current internet connectivity, digital operations and e-services, as well as their potential satellite connectivity usage in the next 5 and 10 years, to provide inputs to Information and communications technology (ICT) planning and policy formulation. Survey to be completed within 2023.	<ul style="list-style-type: none">• Component 5: Satellite Overlay – Formulation of the Philippine Communications Satellite Framework and solicitation of PPP proposals for the National Satellite Systems.
	Consultants commissioned for the conduct of a feasibility study on the development of a sovereign satellite in the Philippines.	
	Free Wi-Fi for All – Free Public Internet Access Program	
	Connected a total of 8,184 sites, covering 17 regions, 80 provinces and Metro Manila, and 661 cities and municipalities.	<ul style="list-style-type: none">• Continued implementation of the program (increase the number of live sites especially at the geographically isolated and disadvantaged areas, among others).• Conduct proof-of-concept activities with the private sector in exploring other alternative technologies (i.e., LTE, Wi-Fi 6/7, LEO/MEO, Open RAN among others) to accelerate the deployment of digital infrastructure for the program.

Source: Philippine Development Report 2023



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Third Wave: The intangible infrastructure and the rise of AI

The shift toward digital infrastructure, particularly in areas like cloud computing and cybersecurity, highlights the increasing focus on intangible assets that exist within these partnerships. Governments have become acutely aware of their precarious reliance on a limited number of cloud service providers (Gartner, 2022), emphasizing the pressing need to enhance national resilience in cloud computing. This realization has given rise to the concept of the “sovereign cloud,” which emphasizes local control over data storage, access, and governance. Many governments are now aligning with these strategies, prompting cloud providers to adjust to many new regulatory demands. For instance, Amazon Web Services (AWS) has committed to investing €7.8 billion in its European Sovereign Cloud in Germany by 2040, contributing to its €150 billion investment in the EU since 2010 (Amazon, 2023). This investment is designed to meet the stringent requirements set by the German Federal Office for Information Security (BSI) and ensure compliance with evolving data governance frameworks (Federal Office for Information Security [BSI], n.d.).

Around the world, efforts are currently underway to strengthen cybersecurity across government agencies, critical infrastructure, and industries (Pendleton, et al., 2023). One such initiative is the Joint Cyber Defense Collaborative (JCDC), spearheaded by the U.S. Cybersecurity and Infrastructure Security Agency (CISA). The JCDC facilitates collaboration between cybersecurity experts from the public and private sectors, including cloud service providers and government bodies (Cybersecurity and Infrastructure Security Agency, 2021). Since its inception, the JCDC has enhanced information sharing, bolstered preparedness for large-scale cyber events, and issued timely updates to the Known Exploited Vulnerabilities

Catalog alongside actionable threat mitigation guidelines (Cybersecurity and Infrastructure Security Agency, n.d.).

AI’s integration into public-private partnerships is reshaping how governments and industries collaborate on digital infrastructure projects. In these partnerships, AI is increasingly used to enhance decision-making, automate processes, and improve the delivery of public services. Governments are working closely with private sector leaders in AI to develop solutions that address complex challenges, such as predictive maintenance for public infrastructure, dynamic resource management in healthcare, and automated compliance with regulatory frameworks. When governments can model outcomes and optimize interventions in real time, these collaborations not only boost operational efficiency, but they also enable more informed, data-driven policymaking. AI-driven technologies are applied in urban development to optimize traffic management, and applied to the energy sector to enhance the efficiency of smart grids. In the realm of cybersecurity, AI has become essential for detecting and mitigating threats across critical infrastructure, providing speed and scale far beyond traditional methods. As such, AI’s role in public-private partnerships is a driving force for innovation, resilience, and more adaptive governance across diverse public services.

AI’s integration into public-private partnerships is reshaping how governments and industries collaborate on digital infrastructure projects. In these partnerships, AI is increasingly used to enhance decision-making, automate processes, and improve the delivery of public services

Box 2 / Amazon Web Services (AWS)**Accelerating Innovation: AWS's Collaborative Approach to Solving Global Challenges**

Tackling the world's most pressing challenges requires strong collaboration between the public and private sectors. By bringing together the expertise and resources of governments, organizations, and businesses, innovative solutions can be created to drive meaningful impact for humanity

WS Clean Energy Accelerator: Fueling Sustainable Solutions

Amazon Web Services (AWS) initiated a Clean Energy Accelerator that exemplifies this collaborative approach in action. In this public-private initiative, AWS contributes its industry-leading cloud computing, infrastructure, and AI capabilities, while pioneering clean energy startups provide their cutting-edge technologies. Government and industry partners can provide domain expertise, data, and other resources to help these startups grow and scale. This public-private synergy ensures the solutions developed address real-world needs and challenges, while also providing valuable regulatory insights and policy guidance. By pooling these strengths, we are able to accelerate the development and deployment of sustainable energy solutions at scale. Since 2021 this program has influenced over \$420

million in cleantech investments by participants, launched over 30 pilot projects and partnerships, and attracted over 2,000 startup candidates from 64 countries, with 77 project proposals just last year.

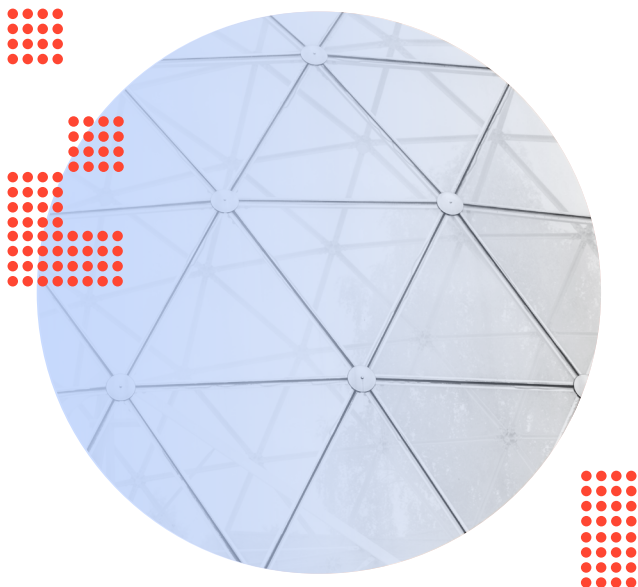
Transforming Drug Discovery with Aion Labs and UK Biobank

Similarly, the collaboration with Aion Labs demonstrates how AWS is harnessing the power of public-private partnerships to revolutionize drug discovery. By pairing its advanced cloud and AI capabilities with the drug discovery expertise, research data, and clinical trial experience of medical institutions, the company is empowering life science researchers to accelerate the identification of promising drug candidates. For example, Aion Labs has used this partnership to reduce diagnosis time for complex brain diseases from 6 days to just 6 hours, while also tackling the challenge of misdiagnoses. AWS is also working with the UK Biobank, a government-funded medical data repository, to provide scalable cloud infrastructure, data storage, and AI tools. Together, they are enabling researchers worldwide to access and interrogate the Biobank's comprehensive datasets in groundbreaking ways, fueling

new discoveries in personalized medicine. Since the database opened in 2012, more than 30,000 researchers from 90 countries have registered to use UK Biobank. So far, there have been more than 10,000 scientific publications based on researchers' discoveries using UK Biobank data.

Empowering Public Sector Progress

Across these diverse initiatives, a common thread emerges as collaboration between the public and private sectors enables the transformative potential of technologies like cloud computing and AI to be harnessed in ways that benefit humanity. By pooling the strengths and expertise of government agencies, organizations, and businesses, AWS accelerates the development of solutions to the world's most pressing challenges. These public-private partnerships amplify technological capabilities while empowering public sector leaders to drive progress in critical areas such as clean energy, healthcare, and scientific research. This collaborative innovation transcends traditional boundaries, fostering a brighter future for all.



● Photo by kublizz

Digital PPPs need strong Regulatory and Institutional Frameworks

The integration of digital technologies into partnerships between the public and private sectors is transforming regulatory and institutional frameworks globally. Digital PPPs have emerged as an evolution of traditional models, where technology-driven collaborations focus on enhancing public services through digital platforms, cloud infrastructure, and cybersecurity measures. These partnerships aim to combine the strengths of both sectors to address those unprecedented challenges posed by digital transformation while safeguarding public interests (World Economic Forum, 2024).

This shift has led to more agile regulatory approaches, focusing on data privacy, cybersecurity, and interoperability (Mohammed et al., n.d.). New standards for transparency and data governance are emerging, with many governments adopting open data practices to enhance public access to information collected through digital initiatives (Wu, 2023). A prime example is the European Union's General Data Protection Regulation (GDPR), which has set a high benchmark for data protection and privacy (European Commission, 2023). The regulation has significantly impacted cybersecurity, particularly in sectors like finance and insurance, where 82% of organizations report improvements attributed to GDPR. International bodies, such as the OECD, promote the interoperability of privacy frameworks, easing cross-border data flows and reducing investment barriers (OECD, 2021).

In regions like West Africa, public-private-social partnerships are championing inclusive digital development. The West African Development Bank, for instance, aims to launch at least two digital projects annually (West African Development Bank, 2021). In Nigeria, over 100 million citizens have registered for the National Identification Number, with plans to reach 148 million by mid-2024, significantly boosting financial inclusion rates to 74% (TechCabal, 2023; Thales Group, 2023).

Navigating Ethical Challenges in Digital Partnerships

As DPPP's continue to expand the use of digital technologies to promote efficiencies in public services, ethical concerns have also moved to the forefront of public sector regulatory discussions. Governments are increasingly focused on developing guidelines that ensure AI and other advanced technologies respect fundamental rights, promote fairness, and prevent algorithmic bias (European Commission, 2023). These efforts emphasize the critical need to balance technological advancement with ethical accountability.

A clear illustration of these challenges is the Aarogya Setu application, launched in India for conducting contact tracing during the COVID-19 pandemic. Despite its public health objectives, the app encountered significant backlash due to concerns over privacy. Such concerns were focused particularly on the collection of excessive personal data, as well as insufficient transparency in data management (Gupta et al., 2020). The absence of a comprehensive data protection law in India at that time further heightened public concerns (Sharma and Basu, 2020). Moreover, the app's mandatory use in certain settings raised broader issues around civil liberties and privacy, leading to legal challenges and public debate (Bhandari and Sinha, 2021).

The Aarogya Setu case exemplifies the delicate balance required between regulatory oversight and the practical demands of digital public services. It underscores the need for adaptive governance models that can keep pace with rapid technological advancements while ensuring robust protection of citizens' rights (United Nations Economic Commission for Europe, 2024).

Global Harmonization of Digital Public-Private Partnerships

On the international stage, organizations such as the World Bank are playing a pivotal role in shaping and harmonizing policies for DPPP's across diverse jurisdictions. Their initiatives aim to create environments that encourage private sector participation in digital infrastructure projects while promoting sustainable digital development (World Bank, n.d.). Approaches to regulating DPPP's vary regionally, with the European Union leading efforts through frameworks like the General Data Protection Regulation (GDPR) and suggesting new regulations for AI and digital services (European Commission, 2023).

The GDPR, in particular, addresses critical aspects of DPPP by establishing strong standards for data protection and privacy. These standards ensure that personal data collected through digital initiatives is managed securely and transparently, reinforcing principles such as data minimization, consent, and accountability. This regulatory framework builds public trust in digital services, aligning with the goals of DPPPs to deliver secure and efficient public services while upholding citizens' rights (European Commission, 2023).

In the Asia-Pacific region, countries such as Australia, mainland China, Hong Kong SAR, Indonesia, Malaysia, Singapore, South Korea, and Thailand are exploring regulatory sandboxes to trial innovative DPPP models (Asian Development Bank, 2022; EY, 2023; APEC, 2021). A regulatory sandbox is a controlled environment established by regulators that allows companies to test innovative products and services with relaxed regulatory constraints. This framework encourages experimentation with emerging technologies, such as blockchain and AI, in a real-world setting while managing risks and protecting consumers. By piloting these innovations within a sandbox, financial services firms and regulators can collaboratively identify potential regulatory gaps and adapt to evolving digital landscapes, ultimately fostering a balance between innovation and oversight.

Similarly, African nations are working towards harmonizing digital regulations to facilitate cross-border digital services and infrastructure development. The African Union has spearheaded efforts to standardize ICT and digital policies across the continent, with a particular focus on enabling the Single Digital Market in Africa (African Union, 2023; Global Voice Group, 2023). Countries such as Cameroon, Gabon, Ghana, Kenya, Mali, Mauritius, Morocco, South Africa, Tunisia, and Zambia are actively participating in these efforts, which include the development of frameworks for a Continental Data Policy and Digital ID Interoperability (African Union, 2023).

Building Adaptive and Inclusive International Frameworks for DPPPs

Despite substantial progress, significant challenges remain in creating cohesive international frameworks for DPPPs. Issues such as cross-border data flows, cybersecurity, and the rapid pace of technological change continue to collectively present regulatory obstacles (OECD, 2024). Overcoming these challenges requires a concerted effort from governments, private sector stakeholders, and international organizations to develop governance models that are both adaptive and inclusive.

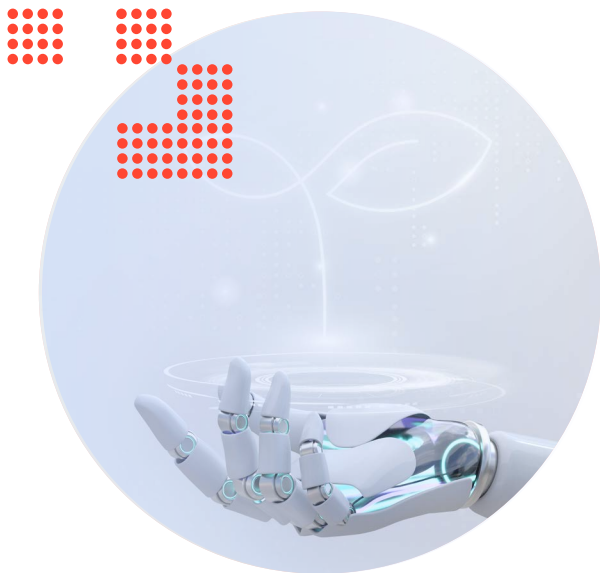
The success and sustainability of these partnerships hinge on strengthening digital capabilities within the public sector. To this end, governments are increasingly investing in digital skills training for public employees and establishing specialized units dedicated to managing digital initiatives (United Nations, 2023). Additionally, the importance of cross-sector collaboration cannot be overstated—effective DPPPs rely on the combined expertise of government agencies, private technology firms, academic institutions, and civil society organizations (World Economic Forum, 2023).

Public engagement is also becoming a crucial element in the development and implementation of DPPPs. Governments are turning to participatory approaches, such as citizen labs and digital town halls, to involve the public in digital policymaking and ensure that these initiatives address societal needs (OECD, 2023). This multi-stakeholder approach not only fosters trust but also ensures that digital projects benefit from diverse perspectives and expertise.

For example, in the United States, the Michigan Department of Health and Human Services has successfully used town hall meetings to gather feedback on maternal and infant health services, helping to shape public policies and improve health outcomes (Michigan Department of Health and Human Services, n.d.). Similarly, platforms like CitizenLab have enabled over 300 governments and organizations worldwide to engage citizens in participatory budgeting and idea generation, promoting more inclusive and responsive decision-making (CitizenLab, n.d.).

Looking ahead, the regulatory and institutional frameworks governing DPPPs are expected to evolve in response to technological advancements. A key challenge is in formulating governance models that remain flexible enough to accommodate innovation while ensuring robust protections for public interests. Developing governance structures that integrate ethical considerations and encourage citizen engagement may further enable governments to harness the potential of DPPPs in supporting sustainable development and enhancing public services in the digital age.

In the Asia-Pacific region, countries such as Australia, mainland China, Hong Kong SAR, Indonesia, Malaysia, Singapore, South Korea, and Thailand are exploring regulatory sandboxes to trial innovative DPPP models



Leveraging DPPPs for Global Sustainable Goals

Education

Digital transformation has significantly expanded the role of DPPPs in promoting sustainability, inclusivity, and equity. In education, these partnerships have revolutionized access to learning, particularly in underserved regions. The Global Education Coalition (GEC), established during the COVID-19 pandemic, exemplifies the impact of digital partnerships in advancing educational continuity. In Africa, the GEC's initiatives have benefited millions, including through TeacherConnect in South Africa, a mentorship platform supporting nearly 150,000 educators, and a distance learning platform in Senegal that has reached over 500,000 learners through collaboration with UNESCO, Microsoft, Huawei, and Orange (UNESCO, 2023).

Similarly, the Learning Passport—a collaboration between UNICEF and Microsoft—demonstrates how digital partnerships can enhance inclusivity by providing high-quality educational content through devices with offline capabilities. As of 2023, the Learning Passport operates in 38 countries, serving over 6 million users and offering more than 13,000 courses, underscoring the critical role DPPPs play in bridging educational gaps (UNICEF, 2024).

Health

In healthcare, DPPPs are driving innovation in both developing and developed nations by leveraging digital technologies to address infrastructure gaps and improve the quality of care. In Rwanda, a partnership between the Ministry of Health and Babyl, a digital healthcare provider,

has expanded public access to remote consultations, prescriptions, and health advice through mobile technology. This integration of digital services with the national healthcare system has improved healthcare accessibility, particularly in remote areas (Gasore, 2020).

In more developed contexts, these partnerships are equally impactful. In the United States, for example, the collaboration between the U.S. Department of Veterans Affairs and IBM Watson Health uses AI to enhance cancer treatments for veterans in rural areas. This effort showcases how DPPPs can address critical healthcare gaps through advanced technology (VA and IBM, 2018).

Climate

DPPPs are also instrumental in combating climate change by driving clean energy initiatives and supporting climate action through digital technologies. By leveraging big data, AI, and the Internet of Things (IoT), these partnerships optimize energy use and reduce carbon footprints. An example of this is the implementation of smart grids, which use real-time data to efficiently balance energy supply and demand. Again, in the US, a collaboration between Con Edison and the New York State Energy Research and Development Authority (NYSERDA) has developed a smart energy platform as part of New York's carbon-free electric grid mandate, set for 2040 (NYSERDA, 2019).

Similarly, technology-driven partnerships are reshaping urban landscapes by developing smart cities. In Barcelona, Spain, the city's collaboration with Cisco Systems has deployed IoT sensors and data analytics to optimize waste management, traffic flow, and public services, reducing carbon emissions while improving residents' quality of life. These DPPPs are vital in creating more resilient, sustainable cities that integrate renewable energy and promote social equity (CISCO, 2014).

DPPPs are also instrumental in combating climate change by driving clean energy initiatives and supporting climate action through digital technologies. By leveraging big data, AI, and the Internet of Things



● Photo by Google DeepMind

Data privacy and security are among the most pressing concerns in DPPP, particularly as these partnerships increasingly rely on data to deliver solutions. Ensuring the protection of sensitive personal information will only become more critical as DPPP expand. Another immediate challenge is the “digital divide”—disparities in access to and usage of the internet, often exacerbated by socioeconomic factors, limited infrastructure, and insufficient digital literacy.

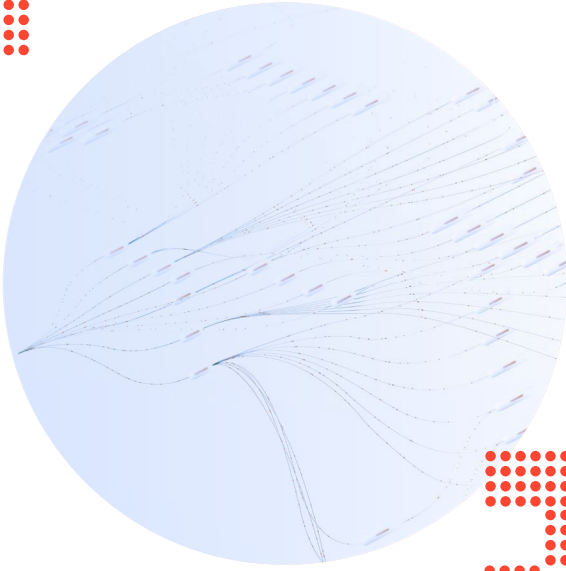
Addressing Challenges in DPPP

While DPPP offer transformative potential, they face several significant challenges that must be addressed to realize their full impact. Common obstacles in these partnerships include funding risks, stakeholder commitment, and unequal power dynamics between finance providers, governance personnel and beneficiaries. These challenges can be mitigated by adopting best practices such as clearly defining roles, allocating risks effectively, and ensuring proactive stakeholder engagement (Nel, 2020). However, technology-driven partnerships introduce additional complexities that are unique to the digital landscape.

Data privacy and security are among the most pressing concerns in DPPP, particularly as these partnerships increasingly rely on data to deliver solutions. Ensuring the protection of sensitive personal information will only become more critical as DPPP expand. Another immediate challenge is the “digital divide”—disparities in access to and usage of the internet, often exacerbated by socioeconomic factors, limited infrastructure, and insufficient digital literacy (Aissaoui, 2021; Shenykova, 2022). This divide highlights geographic inequalities and social stratification, which can limit the ability of certain groups to benefit from digital advancements (Zdjelar et al., 2021).

Effective DPPP must prioritize inclusivity by developing accessible technologies for underserved communities, including individuals with disabilities, the elderly, those lacking access to modern devices, and those whose languages are underrepresented in the digital sphere (Chetty et al., 2018). A people-centric approach can help bridge these gaps, as demonstrated by the Digital India Initiative, where the Indian government collaborates with technology companies to expand broadband access in rural areas. Similarly, Estonia’s e-residency and e-governance platforms—developed through public-private collaborations—have democratized access to government services, showcasing how technology can promote inclusion (Abaku et al., 2022; Gupta, 2015).

Addressing these challenges is critical for DPPP to drive sustainable development and social equity. By embedding inclusivity, safeguarding data privacy and security, and adopting proactive risk management strategies, these partnerships can overcome obstacles and foster meaningful global change. The success of DPPP ultimately hinges on their ability to merge technological innovation with a people-centric focus, creating a more connected, equitable, and resilient world.



● Photo by Google DeepMind

Financing and Scaling Digital Transformation through DPPPs

Blended Finance and Public-Private Partnerships

Blended financing mechanisms are gaining prominence, leveraging the diverse risk and return preferences of various market actors (Pillai, 2024; Eburajolo, 2023). Blended financing mechanisms are gaining prominence as they leverage the diverse risk and return preferences of various market actors (Pillai, 2024; Eburajolo, 2023). This approach is particularly relevant for investments in digital infrastructure and technology development, which promise substantial financial returns and significant social impact despite inherent uncertainties and risks. However, the extended time horizon required to realize these returns can deter investors seeking quicker profits, creating a financial shortfall. Additionally, regulatory uncertainties and a lack of standardized frameworks for measuring social impact contribute to the hesitance of many investors to commit resources to these long-term projects. As noted by UN Deputy Secretary-General Amina J. Mohammed, there remains a large gap between the \$213 billion mobilized so far and the trillions required to meet sustainable development goals (UN, 2024).

Blended finance instruments are being used to bridge this gap. This includes guarantees, first-loss capital, outcome funding, concessional debt and equity, subordinated debt, impact-linked finance, impact bonds, grants, and technical assistance. Combining concessional finance with private

sector capital is a blended finance approach. It not only mitigates investment risks to ensure that DPPPs can pursue long-term digital infrastructure projects that align with public interest, it also maintains financial viability. Some deals can mobilize more than \$2 in private investment for every \$1 in public or philanthropic funds, although such cases remain rare (Kwon et al., 2022; Juneja, 2024).

A standout example of blended finance in action is USAID's "Digital Invest" program. Launched in 2023, this initiative supports fund managers, project developers, and private sector partners who aim to accelerate market growth for internet service providers (ISPs) and financial technology companies serving traditionally excluded communities in developing markets. The program's initial government funding of \$6.45 million is part of a larger \$455 million investment commitment aimed at reducing the digital divide (USAID, 2023).

Even with limited resources allocated to AI research and development (R&D) in the past, technological advancements have allowed for rapid scaling of capabilities. This progress has drawn increasing interest from new investors (Roser 2023). In fact, global venture capital funding has reached new heights, with AI accounting for 27% of total fundraising, up from 12% in 2023 (Field and Sigalos 2024). Impact investors, whose primary objective is to address social challenges such as the digital divide, are playing an important role in scaling DPPPs, demonstrating that maximizing financial returns is not always the principal goal (Sulser 2021).

Risk Management Strategies in DPPPs

Gerstein and Leidy (2024) noted that technology developers are adapting traditional risk management procedures and introducing novel assessments to manage both known and unknown emerging risks. As AI becomes embedded into various societal systems, the risk of systemic vulnerabilities increases, raising the potential for widespread disruptions (European Parliament, 2024).

DPPPs play a crucial role in managing these risks, as governments often rely on private sector expertise to regulate emerging technologies (Eastwood, 2023). Institutions responsible for the safety of novel technologies, such as AI Safety Institutes located in the U.S. and the U.K., are collaborating closely with developers to conduct evaluations and audits (NIST, 2024). Measures like "Responsible Scaling Policies" (Anthropic, 2023) inform regulatory actions, while private sector companies look to governments to provide regulatory sandboxes and testbeds for new technologies (European Parliament Research Service, 2022). This is particularly important for small and medium-sized enterprises (SMEs) and startups, which may struggle to manage the financial risks or bear

the increasing costs of technology development, such as AI training runs (Korinek & Vipra, 2023).

Ensuring Sustaining Digital Readiness

Balancing innovation with financial stability, particularly in times of fiscal austerity (Costantini & Storm, 2024), presents a key challenge for governments. This challenge is compounded by the complex structure of DPPP, which often involve multiple stakeholders, making it difficult to pivot quickly in a rapidly evolving technological landscape (Foerster and Chao, 2024).

Governments may also face challenges in avoiding dependency on private partners for delivering public services. It can be difficult to maintain sustainable and independent leadership in digital innovation without prioritizing the development of in-house expertise and technology. Such a miscalculation can make it difficult to maintain sustainable and independent leadership in digital innovation (Hueskes et al., 2017; Kivilä et al., 2017; Yescombe and Farquharson, 2018).

Innovative Technologies Transforming Public Services

Emerging technologies are reshaping how public services are delivered, with DPPP driving many of these innovations. One key area is GovTech, which uses digital tools to improve the efficiency, accessibility, and value of public services. Growth in the GovTech sector is expected to surpass \$1 trillion globally by 2028 (Mergenthaler and Buckup, 2024). Such growth allows DPPP to enable the integration of private sector expertise in deploying technologies like the Internet of Things (IoT) for traffic management, public safety, and environmental monitoring (Sumatsoft, 2023). Blockchain technology is also being leveraged to enhance data integrity and privacy, and to streamline processes such as company registration (PwC, n.d.; Shahaab et al., 2023).

In the United States, cloud computing has become integral to government operations, with agencies such as Homeland Security, the Treasury, and the Department of Labor already utilizing these services (GAO, 2023). Public-private collaborations have furthered AI research, with startups providing innovative solutions to entities like DARPA and the U.S. Air Force (Guttman, 2023; Howley, 2024). In the UK, the NHS AI Lab exemplifies how AI-driven DPPP are transforming healthcare, while the “Cloud First” policy prioritizes public cloud solutions for digital integration (World Bank, 2022; NHS, 2024). Singapore’s smart city initiatives, supported by DPPP, include AI applications for managing mass transit and contactless immigration, as well as the creation of the G-cloud for government services (World Bank, 2022; Miller, 2023).

These advancements underscore the essential role of innovative financing mechanisms, such as blended finance, in catalyzing investments in digital infrastructure. By utilizing DPPP, governments can harness private sector expertise to advance technological innovation while managing associated risks and ensuring long-term sustainability.

Pushing the Digital Frontier: The Future of DPPP

As DPPP continue to evolve, they face increasingly complex challenges in technology integration, data governance, and financing models, while also grappling with the need to adapt to rapid technological advancements. Effectively addressing these multifaceted issues is essential for fully leveraging the transformative potential of DPPP to enhance digital readiness and drive inclusive, sustainable digital transformation. The integration of emerging technologies—such as AI, IoT, and blockchain—into public services through DPPP must account for not only the technical aspects but also the ethical and social implications.

This report explores how these technologies have already made significant strides

- **Education:** AI-powered adaptive learning platforms and virtual reality applications have redefined educational experiences, as demonstrated by UNESCO’s Global Education Coalition.
- **Healthcare:** IoT devices and AI-powered diagnostics are enhancing patient care and optimizing resource allocation, exemplified by the U.S. Department of Veterans Affairs’ partnership with IBM Watson Health for cancer treatment.
- **Urban Development:** Smart city initiatives, such as Barcelona’s collaboration with Cisco Systems, are utilizing IoT and data analytics to optimize waste management and traffic systems, improving urban living conditions.
- **Finance:** Blockchain technology is driving greater transparency and efficiency in public financial management, a key feature of Estonia’s e-governance platforms.

Data governance has become a critical issue, with global frameworks such as the European Union’s General Data Protection Regulation (GDPR) offering a model for balancing innovation with ethical safeguards (Tene and Polonetsky, 2016). Many countries are following the GDPR’s lead. For example, Brazil’s Lei Geral de Proteção de Dados (LGPD) and California’s Consumer Privacy Act (CCPA) in

the United States have both been heavily influenced by the GDPR. These frameworks reflect a global trend toward stronger data protection regulations, underscoring the growing recognition that countries must adopt comprehensive approaches to balance technological innovation with the protection of individual privacy rights.

Cloud computing, another essential component of digital infrastructure, underpins emerging technologies by offering scalable, on-demand computing power and storage. This flexibility enables the processing, connectivity, and distributed operations that are necessary for leveraging technologies such as AI and IoT. Cloud computing is a foundational element of the digital future that requires robust governance frameworks. Effective governance involves establishing policies for data security, privacy, compliance, and resource management to ensure that cloud services are deployed responsibly and securely.

Cybersecurity is also a paramount concern. High-profile incidents have revealed vulnerabilities in critical digital infrastructure globally, emphasizing the importance of robust security measures within DPPP (World Economic Forum, 2023). Inadequate cybersecurity can lead to significant financial losses, data breaches, and an erosion of public trust. The 2017 WannaCry ransomware attack, for instance, impacted over 200,000 computers across 150 countries, disrupting critical infrastructure and healthcare systems. In response to such threats, Estonia has developed innovative solutions like X-Road, a decentralized data exchange platform that enhances security and efficiency in e-government services. Estonia's example demonstrates how strong cybersecurity measures can be integrated into digital public services, ensuring both security and public confidence. At the same time, the rise of AI-driven decision-making systems in public services introduces the risk of perpetuating societal biases if not carefully designed and monitored (Whittaker et al., 2018).

Deepening DPPP in a Rapidly Changing Digital World

The rapid acceleration of technological innovation presents both opportunities and challenges for Digital Public-Private Partnerships (DPPPs). Emerging technologies offer immense potential to transform public service delivery and decision-making processes (Dowling and Milburn, 2017). Yet, effectively harnessing this potential requires flexible and adaptive partnership models that can evolve with the digital landscape.

Building robust digital capabilities within the public sector is essential for managing technology-driven partnerships effectively. Governments must continue to invest in skills development to become informed and capable partners in these initiatives (OECD, 2020). This encompasses not only technical expertise but also the ability to navigate the broader societal and ethical implications of technological advancements.

Aligning DPPP initiatives with broader national and international goals, such as the UN Sustainable Development Goals (SDGs), is key to ensuring coherent, long-term progress (Dutta and Lanvin, 2022). Developing comprehensive evaluation frameworks that assess the social, economic, and environmental impacts of DPPPs will guide future initiatives. As highlighted in earlier sections, DPPPs play a pivotal role in advancing SDGs related to education, healthcare, infrastructure, and climate action. For instance, UNESCO's Global Education Coalition, formed during the COVID-19 pandemic, has leveraged DPPPs to maintain learning continuity in Africa. In South Africa, the TeacherConnect platform has supported nearly 150,000 educators, while UNESCO's partnership with Huawei has enhanced digital learning infrastructure in Egypt, Ethiopia, and Ghana.

As we look ahead, the role of DPPPs will not only be in driving technological advancements but also in setting the foundation for a digitally inclusive and sustainable future. Success in this endeavor will require a balanced regulatory approach—one that allows flexibility for technological innovation while upholding essential values of privacy, security, and fairness (Floridi et al., 2018). Yet, digital inclusion remains a critical challenge, requiring ongoing efforts to extend the benefits of digital transformation to all sectors of society. As discussed earlier, addressing the digital divide through DPPPs is crucial to achieving equitable development and preventing the widening of existing inequalities. The Digital India Initiative, for example, is helping to bridge the gap by expanding broadband access to rural areas through partnerships with technology companies.

Additionally, international cooperation will be essential to addressing shared digital challenges and spreading best practices globally. By fostering collaborative platforms and knowledge-sharing initiatives, countries can accelerate the global pace of digital transformation (United Nations, 2023). The future of DPPPs holds vast potential to drive transformative change across societies. By effectively navigating the complexities of the digital ecosystem, adapting to rapid technological advancements, and embracing innovative governance approaches, countries can leverage these partnerships to create more inclusive, sustainable, and resilient digital futures. Ultimately, success will require balancing innovation with responsibility, efficiency with equity, and technological progress with human-centered values. Confronting these challenges should help public-private collaboration to serve the needs and aspirations of all.

Key Messages NRI 2024





● Designed by Freepik

Public-Private Partnerships (PPPs) offer a powerful framework for building a better digital future by aligning the goals and resources of both public and private sectors.

1

Public-Private Partnerships Can Shape a Better Digital Future

Public-Private Partnerships (PPPs) offer a powerful framework for building a better digital future by aligning the goals and resources of both public and private sectors. In today's digital era, Digital Public-Private Partnerships (DPPPs) have emerged as key drivers of transformation, enabling governments to work with technology companies to create digital infrastructure and modernize public services. Countries such as Singapore and the United States, which show strengths in emerging technologies, highlight how DPPPs can integrate advanced technologies like AI and IoT into essential areas such as healthcare, education, and governance. With supportive regulatory frameworks and innovative financing models, these partnerships foster a balanced approach to digital transformation, blending public accountability with private-sector innovation.

2

COVID-19 Redefined the Focus of Public-Private Partnerships

The COVID-19 pandemic fundamentally shifted the focus of PPPs toward digital resilience and infrastructure, highlighting the urgent need for adaptable, technology-driven solutions. With widespread lockdowns, mobility restrictions, and disruptions to essential services, digital platforms became critical for maintaining continuity in areas like education, healthcare, and government operations. The pandemic accelerated the rate of digital adoption worldwide, with significant increases in mobile payment usage, especially in low- and middle-income countries, as people turned to digital channels for financial transactions and government aid. This shift drove governments and private sector partners to invest more heavily in digital public infrastructure. For example, economies like Zimbabwe and Lesotho demonstrated resilience by closing the rural gap in digital payments, making digital channels vital for financial transactions and government aid distribution. As a result, the emphasis in PPPs has increasingly moved from traditional infrastructure projects to digital solutions that can respond flexibly to emerging global challenges.



DPPPs play a crucial role in advancing global sustainable goals by promoting inclusivity and equity across various sectors.

3

Robust Regulatory and Institutional Frameworks Are Essential to Harness the Potential of Digital PPPs

To harness the full potential of DPPPs, strong regulatory frameworks are essential. These frameworks need to address key issues like data privacy, cybersecurity, and transparency, ensuring that the rapid advancement of digital services aligns with public interests. For instance, countries such as the United Kingdom and Estonia, known for their strength in cybersecurity, set high standards that are crucial for building public trust in digital initiatives. Similarly, regulations such as the European Union's GDPR have set high standards for data protection, which are crucial for building public trust in digital initiatives. International organizations, such as the OECD and the World Bank, are also promoting guidelines for privacy and interoperability to support secure cross-border data flows and reduce regulatory barriers. By setting clear standards, these frameworks can guide DPPPs to deliver efficient, secure, and inclusive public services while safeguarding citizens' rights in a rapidly digitalizing world.

4

DPPPs Are Essential to Advancing Global Sustainable Goals

DPPPs play a crucial role in advancing global sustainable goals by promoting inclusivity and equity across various sectors. These partnerships enhance access to essential services, particularly in underserved regions, by leveraging digital technologies to address systemic challenges. In education, for instance, DPPPs have transformed learning opportunities, improving access to ensure that diverse populations can benefit from quality education. Examples are countries like Singapore, Indonesia, and Rwanda that have demonstrated strengths in ICT skills within their education systems, helping diverse populations gain access to quality learning resources. Similarly, in healthcare, these collaborations improve access to medical services and innovations, particularly in remote areas. By fostering cooperation between public and private entities, DPPPs are instrumental in driving progress towards achieving the United Nations' Sustainable Development Goals, ultimately contributing to a more equitable and sustainable future.





5

DPPPs are Diversifying Funding and Scaling Digital Transformation

Blended financing mechanisms are increasingly recognized for their potential to diversify funding sources and scale digital transformation initiatives. These mechanisms harness the varying risk and return preferences of multiple market participants, making them particularly valuable for investments in digital infrastructure and technology development. Countries like the United States and Sweden, which have strengths in investments in emerging technologies, illustrate how combining concessional finance with private sector capital can mitigate investment risks. This approach not only enhances the financial viability of projects but also addresses the substantial gap in funding required to meet sustainable development goals. Through innovative financial instruments, DPPPs can attract private investment and support the scaling of digital transformation efforts, ultimately fostering a more inclusive digital economy.

6

Cloud Computing in DPPPs Expands Digital Service Accessibility and Drives Innovation

Cloud computing has emerged as a cornerstone for DPPPs, enabling governments to expand the capacity and reach of digital services and providing on-demand, scalable solutions across sectors. Countries like the United States, United Kingdom, and Japan, which exhibit strengths in the public cloud computing market, demonstrate how leveraging cloud infrastructure allows governments to deploy essential services like e-governance, healthcare, and education without heavy upfront investments. For instance, cloud platforms support telemedicine and remote learning, making critical services accessible even in remote areas. Additionally, the flexibility of cloud computing allows for the rapid deployment of innovative technologies, such as AI-driven analytics, supporting governments in delivering responsive, data-driven public services.

7

Public Engagement as a Critical Component in Building Trust and Inclusivity in DPPPs

In successful DPPPs, public engagement is essential to ensure that digital transformations are inclusive, transparent, and aligned with community needs. Economies such as Finland, the Republic of Korea, and Estonia, are recognized for their strengths in E-participation and government online services, as they exemplify how public engagement initiatives like digital town halls and citizen feedback platforms can foster collaboration between the public sector, private entities, and communities. This participatory approach not only builds trust in digital initiatives but also ensures that solutions reflect diverse perspectives and address specific community challenges. By involving citizens in the planning and evaluation phases of DPPP projects, governments can better navigate ethical concerns and create services that are equitable and widely adopted.

Key Results of NRI 2024

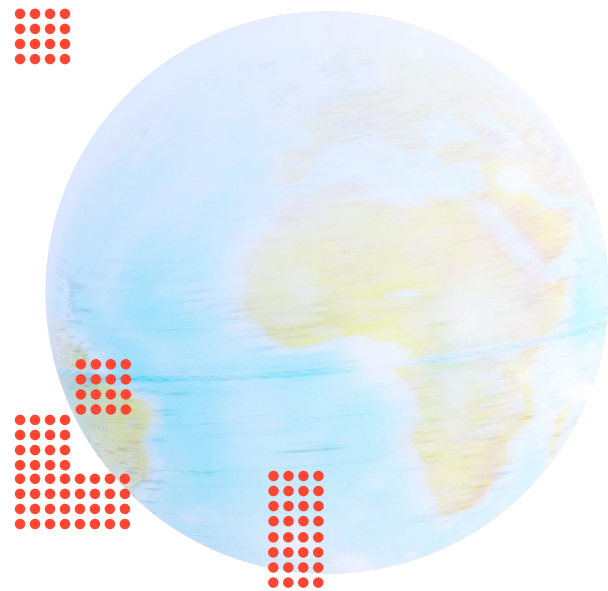


The Top 10

For the third consecutive year, the United States has maintained its leading position in the Network Readiness Index (NRI), with Singapore following closely behind. Finland has retained its third-place ranking, while Sweden has advanced to fourth. The Republic of Korea has risen to fifth place, showing continued improvement. Meanwhile, the Netherlands, Switzerland, the United Kingdom, Germany, and Denmark round out the top 10. Notably, the United Kingdom has moved up to eighth place, and Germany and Denmark are ranked at ninth and tenth, respectively.

The top performers in the NRI consistently display three significant trends: they are primarily high-income nations, they exhibit strong network readiness across all dimensions, and the European countries continue to maintain a strong presence. These patterns are evident in the NRI 2024 rankings, where each of the top 10 countries secures a position within the top 25 across the four main pillars: Technology, People, Governance, and Impact.

Regarding regional representation, Singapore and the Republic of Korea are the only countries from Asia and the Pacific that appear in the top 10, while the United States is the sole representative from the Americas. The remaining top 10 positions are occupied by European countries, underscoring their continued dominance in global network readiness.



● Photo by Marina Leonov

Table A Top 10 performers in NRI 2024

Country	Pillars					
	NRI rank	NRI score	Technology	People	Governance	Impact
United States of America	1	78.96	1	2	9	11
Singapore	2	76.94	6	3	8	5
Finland	3	75.76	11	9	4	1
Sweden	4	74.99	7	15	6	2
Republic of Korea	5	74.85	10	1	22	13
Netherlands	6	73.94	3	20	3	6
Switzerland	7	73.71	2	10	13	10
United Kingdom	8	73.57	5	7	14	8
Germany	9	73.54	4	8	16	9
Denmark	10	72.70	8	18	1	7

Source: Network Readiness Index Database, Portulans Institute, 2024.



● Photo by Tara Winstead

Regional Leaders

The Network Readiness Index 2024 reveals a complex global digital landscape where significant disparities exist between regions and development levels. At the top of the rankings, the United States leads with exceptional performance across technology adoption and innovation metrics, particularly excelling in areas like AI development and digital business transformation.

The Asia-Pacific region presents a fascinating study in contrasts. Singapore maintains its position as a global digital powerhouse, ranking 2nd overall, with remarkable strengths in governance and digitally connected businesses. China, ranking 17th overall, demonstrates impressive capabilities in various domains. Specifically, China leads globally in AI scientific publications and domestic market scale, though it is facing challenges in regulatory frameworks and privacy protection.

Southeast Asian nations show varying levels of digital maturity. Malaysia (36th) emerges as a regional leader among upper-middle-income economies, with strong performance in emerging technology adoption and digitally skilled population. Thailand (40th) and Vietnam (45th) follow closely, with each nation showing its own unique strengths – Thailand in digital inclusion and Vietnam in impact of digital technologies on economy and quality of life.

India's position (49th) reflects its dual nature as a technology powerhouse and developing economy. While leading globally in AI publications and showing strong performance in public cloud computing (4th), India faces significant challenges in digital inclusion and regulatory frameworks.

The lower rankings reveal a persistent digital divide, particularly affecting African nations. Despite some bright spots, like Rwanda's strong performance in government promotion of digital technologies (23rd), many Sub-Saharan African countries struggle with basic digital infrastructure and skills development. This divide is particularly evident in countries like Uganda (118th), Malawi (119th), and Chad (130th).

This global digital landscape underscores the growing importance of comprehensive digital transformation strategies that address not just technological infrastructure, but also regulatory frameworks, skills development, and digital inclusion. The success stories of rapidly advancing nations like China and Malaysia provide valuable lessons in strategic digital development while highlighting the continued challenges in achieving global digital equity.

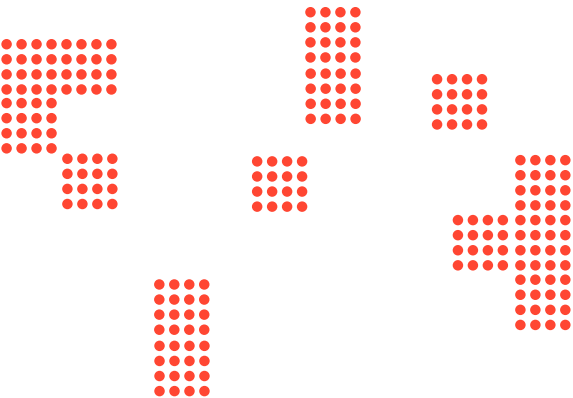


Table B Top 3 countries by region

Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
1. Mauritius (60)	1. United Arab Emirates (28)	1. Singapore (2)	1. Russian Federation (41)	1. Finland (3)	1. United States of America (1)
2. Seychelles (71)	2. Saudi Arabia (35)	2. Republic of Korea (5)	2. Kazakhstan (61)	2. Sweden (4)	2. Canada (11)
3. South Africa (72)	3. Qatar (38)	3. Japan (12)	3. Armenia (66)	3. Netherlands (6)	3. Brazil (44)

Note: Global ranks in parentheses. CIS = Commonwealth of Independent States.
Source: Network Readiness Index Database, Portulans Institute, 2024.

Income group leaders

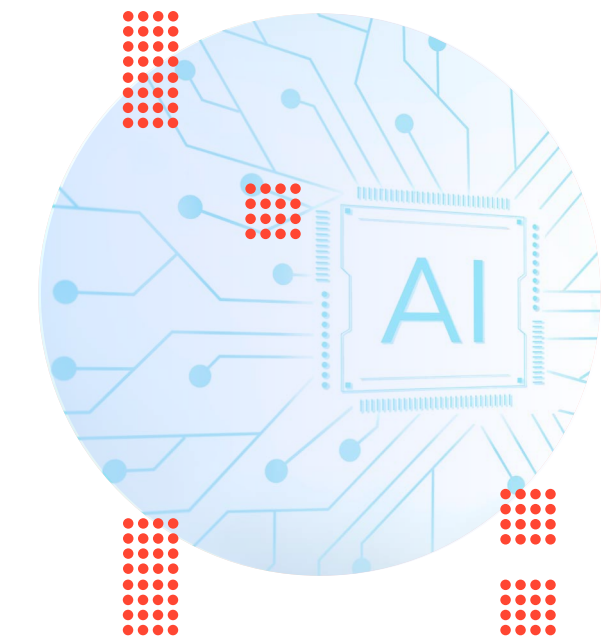
In the 2024 Network Readiness Index, the top three countries in each income group highlight diverse strengths across digital readiness and development. Among the high-income countries, the United States, Singapore, and Finland lead globally, ranking first, second, and third, respectively. These nations demonstrate a well-rounded approach to digital infrastructure, education, and innovation, securing their positions at the forefront of technological advancements.

In the upper-middle-income group of countries, China ranks highest at 17th, followed by Malaysia and Thailand at 36th and 40th, respectively. These rankings underscore the efforts of these countries to drive digital transformation within their economic capacities, focusing on educational improvements and technological adoption.

Among lower-middle-income countries, Vietnam, India, and the Philippines rank 45th, 49th, and 63rd, respectively. Their advancements reflect significant progress in areas such as ICT adoption and workforce upskilling, aligning with regional economic development objectives.

In the low-income countries, Rwanda (91st), Uganda (118th), and Malawi (119th) demonstrate commendable strides toward enhancing digital readiness, despite their resource constraints. These rankings showcase the varied pathways through which countries across income levels are leveraging digital readiness to foster economic growth and competitiveness in the global digital landscape.

In the upper-middle-income group of countries, China ranks highest at 17th, followed by Malaysia and Thailand at 36th and 40th, respectively.



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Outstanding pillar performance among middle- and low-income economies

Middle- and low-income economies, notably China, Ukraine, Vietnam, and Kenya, have significantly outperformed expectations in digital readiness, achieving scores that exceed trendlines by at least 10% relative to their GDP per capita. Africa and Asia & Pacific lead regionally, with countries like Rwanda, Brazil, and Kyrgyzstan also making marked advancements. The lower middle-income group shows the largest concentration of high performers, highlighting its prominent role in this ongoing digital evolution. For a comprehensive view, please see Table 5 in the Detailed Results of the Index.

Table C Top 3 countries by income group

High-income economies	Upper middle-income economies	Lower middle-income economies	Low-income economies
1. United States of America (1)	1. China (17)	1. Viet Nam (45)	1. Rwanda (91)
2. Singapore (2)	2. Malaysia (36)	2. India (49)	2. Uganda (118)
3. Finland (3)	3. Thailand (40)	3. Philippines (63)	3. Malawi (119)

Note: Global ranks in parentheses.
Source: Network Readiness Index Database, Portulans Institute, 2024.

Continuing to improve the NRI model



Digital transformation necessitates a constant review of the data that powers the NRI model. Annually, the NRI team scours a variety of general and tech-specific sources, pinpointing new indicators that can effectively gauge the ever-shifting terrain of digital evolution and network readiness.

Stability is paramount; while evolving the model is crucial, ensuring its stability is equally essential for maintaining its validity. The refinement of the NRI stems from the introduction, evolution, or integration of relevant metrics. However, at the heart of the NRI model remains the belief that our shared future hinges on a seamless fusion of People and Technology.

As technology progresses, its interplay with people will intensify. Both entities will work hand in hand, forming a symbiotic relationship in both social and business realms. To bolster this alliance, it's imperative to institute governance structures addressing trust, security, and inclusivity. Our ultimate goal is to enhance the ways people can harness technology to its full potential, a measure that is reflected in three pivotal domains of societal wellbeing.

- To have a positive impact on the economy
- To have a positive impact on a country's quality of life
- To help a country achieve all Sustainable Development Goals (SDGs)

Each of these objectives aligns with the United Nations' vision for a brighter and more sustainable future.

The Network Readiness Index

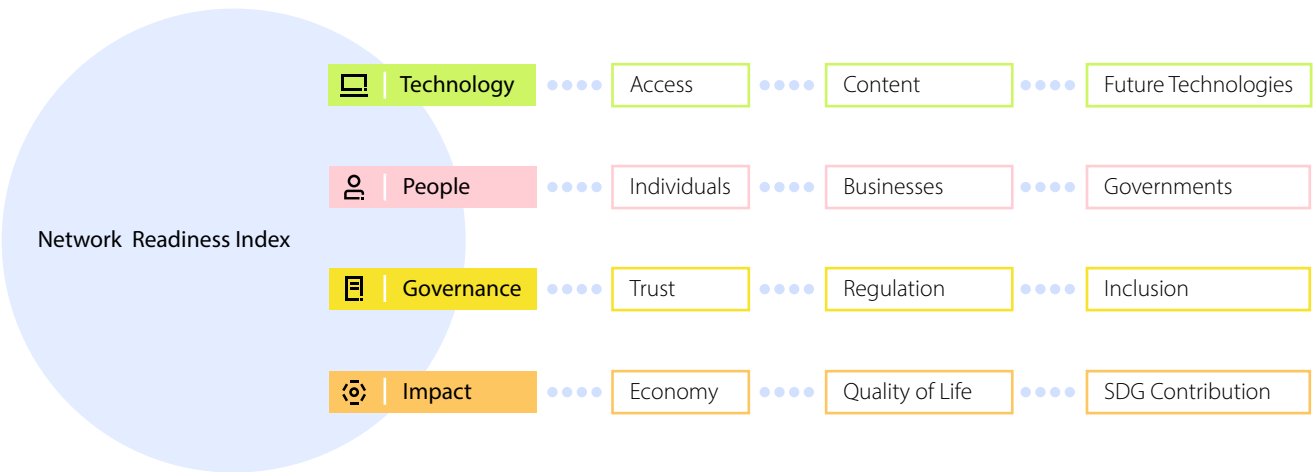
The 2024 NRI Report is anchored in the three core principles outlined by the NRI Technical Advisory Group in 2019, ensuring the NRI model remains future-ready.

1. To maintain continuity with the major components of the NRI from previous years.
2. To reflect the current issues concerning ICT deployment that the previous NRI models may not have adequately captured.
3. To future-proof the NRI model regardless of developing future technology trends.

The NRI 2024 model maintains its foundational four-pillar structure: Technology, People, Governance, and Impact. Each pillar is further divided into three sub-pillars, as illustrated in Figure A.

Primary technical updates to the NRI 2024 apply to ten indicators across six sub-pillars: Future Technologies, Individuals, Businesses, Governments, Regulations and Economy. Additionally, six indicators within the Individuals, Businesses, and Economy sub-pillar underwent a nomenclature and code revision. A sum of 54 indicators spans across the 12 sub-pillars in the NRI. For detailed insights into enhancements within the full set of indicators, refer to Appendix I: Technical Notes and Appendix II: Sources and Definitions. The organization of the NRI model's pillars and sub-pillars is outlined as follows:

Figure A NRI 2024 model



Technology

Central to the networked economy is technology. As a foundational component of the NRI, the Technology pillar aims to evaluate the technological infrastructure crucial for a country's engagement in the global economy. The Technology pillar's objectives are addressed through three sub-pillars:

- **Access:** This examines the basic level of ICT accessibility for individuals in countries, delving into facets such as communication infrastructure and cost-effectiveness.
- **Content:** Focuses on the nature of digital technologies generated within countries and the local deployable content/applications. It encompasses data derived from scientific articles, expenditure on software, GitHub commits, and the development and use of mobile applications.
- **Future Technologies:** Gauges a country's readiness towards the impending trends in the networked economy and novel technological paradigms. It encapsulates the adoption of Artificial Intelligence (AI), the Internet of Things (IoT), and investments in budding technologies.

People

The technological landscape mirrors the proficiency, inclusivity, and adeptness of the populace and entities of a nation in harnessing technological assets. The People pillar, therefore, assesses the application of ICT across three facets: individuals, enterprises, and public sectors.

- **Individuals:** Analyzes individual technological utilization and their capacity to engage in the networked economy.
- **Businesses:** Evaluates the way enterprises integrate ICT and their involvement in the networked economy, including advancements in AI and public cloud computing. This is reflected through metrics such as the Number of venture capital deals invested in AI and Public cloud computing market scale.
- **Governments:** Probes into government ICT investments and deployments to cater to the wider populace. Recent updates to the model also include measurements of the government's Data Capabilities.

Box 3 / Telecom Advisory Services

Assessing Cloud Computing Use

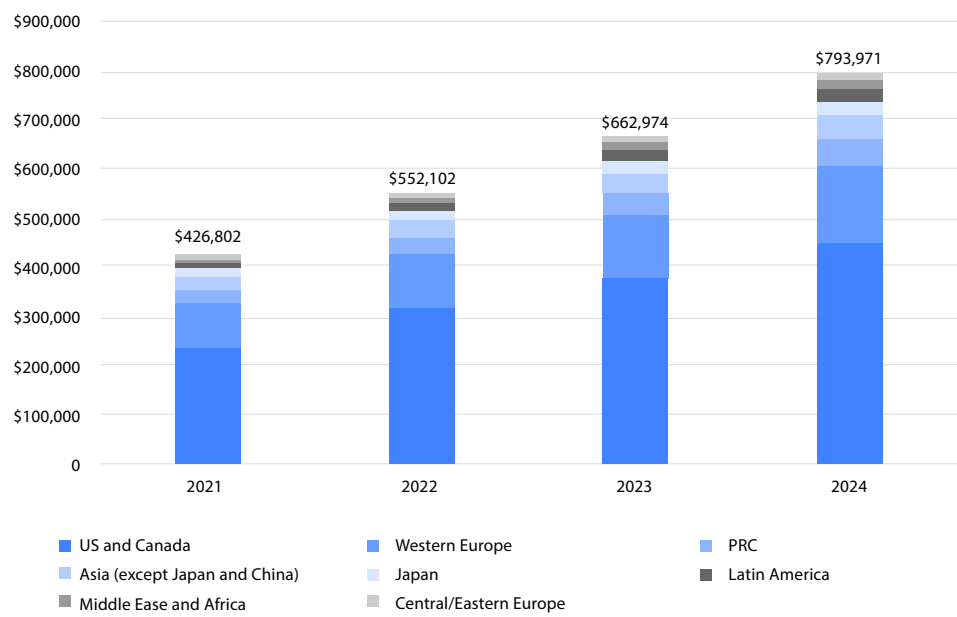
Cloud Computing is a crucial contribution to firms' digitization process and is achieved through several internal effects. The ability to share and remotely access computing resources such as servers, storage areas, and network service applications with a high degree of reliability and scalability is one of cloud computing's primary advantages. Moreover, these computational resources can be accessed online at a minimal additional cost, thanks to cloud technology. This means that businesses do not have to spend significant resources developing their own infrastructure.

As a result, firms that use cloud services can gain from advantages like cost savings, flexibility, and scalability. Businesses can also automatically scale software and storage in response to increasing workloads by utilizing cloud computing, helping them save resources. Spending less on resources improves a company's margins and its monetary value, revealing the robust economic contribution of cloud services. Finally, the cloud is a critical enabler of artificial intelligence (AI). The cloud's critical role as an AI enabler and value multiplier is revealed at three levels: (i) as a provider of

critical computing power, storage, and data; (ii) as a supplier of foundational trained models that support business applications; and (iii) as an access provider of AI-based platforms for user facing apps.

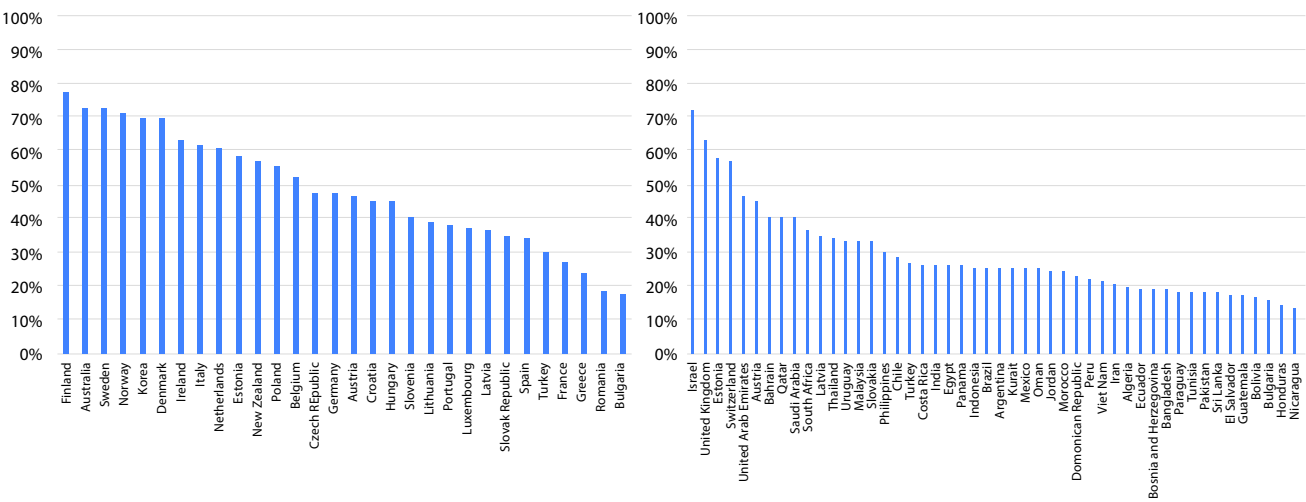
Spending in cloud computing has been growing significantly in the past four years, reaching close to \$794 billion worldwide (see graphic 1).

Graphic 1 Worldwide spending in cloud computing (in million USD)



Source: IDC. Software and public cloud services spending, 2023-2024.

Graphic 2 Cloud computing adoption (percent of organizations) (selected countries) (2023)



Source: OECD Stat

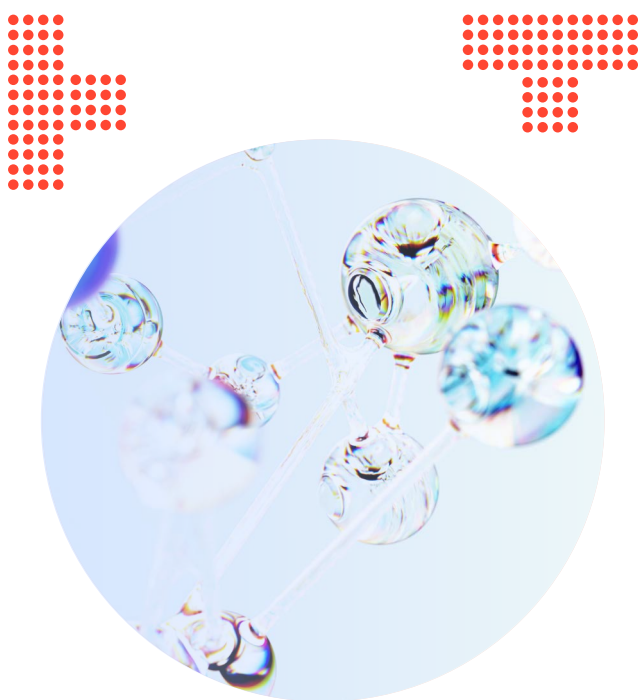
Source: Telecom Advisory Services

While cloud-related spending is prevalent in advanced economies of North America and Western Europe, growth is also strong across the rest of the developing world. Further, cloud computing spending does not reflect the level of its maturity within the economy. Such maturity is initially measured by adoption within public and private organizations. Adoption data is available for advanced economies in the OECD Stat site, while Telecom Advisory Services has been able to develop estimates for other countries in multiple studies commissioned by AWS (see graphic 2).

While some countries exhibit high cloud computing adoption rates, not all organizations rely on the cloud in the same way. In our experience, cloud maturity can be assessed in three levels:

- **Basic:** usage of cloud computing for email, office software, and storage files
- **Medium:** usage of cloud computing for finance and accounting software, and customer relationship management (CRM)
- **Advanced:** usage of cloud computing for hosting databases, and for gaining computing power to run the company's software and processes

For example, in a study conducted for AWS, we were able to determine 11.1% of large enterprises in Israel depict an advanced level of cloud use, while only 6.4% of small enterprises use cloud computing.



• Photo by Google DeepMind

Governance

Governance epitomizes the frameworks that fortify a holistic network, ensuring its users' safety. The Governance pillar emphasizes the creation and reachability of structures that invigorate the networked economy across a triad of dimensions:

- **Trust:** Assesses the security landscape for both individuals and corporations within the networked economy, highlighting a trust-conducive environment and its consequent behavior among citizens.
- **Regulation:** Surveys the government's role in fostering networked economy participation via regulatory measures, strategies, and foresight.
- **Inclusion:** Identifies digital disparities within nations, where governance can mitigate discrepancies stemming from gender, disabilities, and economic backgrounds.

Impact

A nation's readiness in the networked economy translates into holistic growth and societal enhancement. The Impact pillar endeavors to gauge the diverse ramifications of engagement in the networked economy across a trio of arenas:

- **Economy:** Delves into the economic repercussions of integration into the networked economy, incorporating aspects like the magnitude of the domestic market. ICT patent applications serve as an indicator of the outcomes of this integration.
- **Quality of Life:** Chronicles the societal implications derived from participation in the networked economy.
- **SDG Contribution:** Analyzes the influence of networked economy engagement in the purview of the Sustainable Development Goals (SDGs). In this context, ICT emerges as pivotal, with specific indicators weaving through health, education, gender parity, and environmental concerns.

Our ultimate goal is to enhance the ways people can **harness technology** to its full potential, a measure that is reflected in three pivotal domains of societal wellbeing.

Detailed Results of NRI 2024



Overall rankings

The Network Readiness Index (NRI) 2024 provides a comprehensive assessment of 133 economies, evaluating each country's capacity to capitalize on digital technologies. In the latest rankings, the United States and Singapore have maintained their lead positions at 1st and 2nd place, respectively, while Finland has consistently held on to its 3rd position from last year.

The Netherlands has dropped to 6th, previously ranked 4th in 2023, while Sweden advanced to 4th position. The Republic of Korea has shown improved performance, advancing from 7th to 5th, as Switzerland shifted from 6th position in 2023 to 7th this year. The United Kingdom experienced an upward trajectory, reaching the 8th position, while Germany maintained a steady ranking at 9th. Denmark, completing the top 10, now ranks 10th, after repositioning from 8th in 2023.

Among the notable shifts, Jamaica saw the most significant repositioning, moving from 72nd to 93rd, while Sri Lanka moved from 80th to 95th. Peru dropped by ten places to 83rd, and Türkiye shifted by eleven spots to 47th. China demonstrates steady progress, rising to 17th from 20th last year. While these changes may indicate each economy's evolving commitment to digital preparedness, it is essential to consider the NRI's continuous methodological refinements as a contributing factor, enhancing the precision and comprehensiveness of digital readiness measurement.

The top ten performers in NRI 2024 underscore that advanced economies across Europe, the Americas, Asia, and the Pacific continue to excel in network readiness. Specifically, among the top 25 countries, Europe is represented by seventeen nations (predominantly the Western and Scandinavian regions. East and Southeast Asia contribute four economies (Singapore, Republic of Korea, China, and Japan, Oceania is represented by Australia and New Zealand, and North America includes both Canada and the United States.

In terms of income distribution within the 2024 rankings, 52 countries are high-income economies, 36 are upper-middle-income economies, 32 are lower-middle-income economies, and 13 are low-income economies.



● Designed by Freepik

Regionally, Europe leads with representation from 41 countries, followed by Africa with 30 countries, Asia and the Pacific with 21, the Americas with 22, the Arab States with 13 and CIS with 6 countries. These rankings highlight the ongoing leadership of high-income economies while also acknowledging progress among emerging markets in network readiness.

The 2024 NRI rankings have introduced four new countries: Seychelles, Sierra Leone, Trinidad and Tobago, and Yemen. Meanwhile, Eswatini, Gambia, Guinea, Lebanon, and Tajikistan have been excluded from the list. It's important to acknowledge that year-to-year comparisons of NRI rankings can be influenced by data availability and changes in the NRI model framework.

Note: Countries are grouped according to the World Bank Income Classifications (1 July 2022).

Table 1 NRI 2024 rankings

Rank	Economy	Score	Income Group		Region
1	United States of America	78.96	●	High income	The Americas
2	Singapore	76.94	●	High income	Asia & Pacific
3	Finland	75.76	●	High income	Europe
4	Sweden	74.99	●	High income	Europe
5	Republic of Korea	74.85	●	High income	Asia & Pacific
6	Netherlands	73.94	●	High income	Europe
7	Switzerland	73.71	●	High income	Europe
8	United Kingdom	73.57	●	High income	Europe
9	Germany	73.54	●	High income	Europe
10	Denmark	72.70	●	High income	Europe
11	Canada	71.76	●	High income	The Americas
12	Japan	70.96	●	High income	Asia & Pacific
13	Israel	70.46	●	High income	Europe
14	Norway	69.70	●	High income	Europe
15	Australia	69.43	●	High income	Asia & Pacific
16	France	68.71	●	High income	Europe
17	China	68.70	●	Upper middle income	Asia & Pacific
18	Estonia	67.85	●	High income	Europe
19	Ireland	66.20	●	High income	Europe
20	Austria	66.05	●	High income	Europe
21	Belgium	65.88	●	High income	Europe
22	New Zealand	65.83	●	High income	Asia & Pacific
23	Luxembourg	65.45	●	High income	Europe
24	Spain	65.15	●	High income	Europe
25	Iceland	64.86	●	High income	Europe
26	Italy	63.60	●	High income	Europe
27	Czechia	63.47	●	High income	Europe
28	United Arab Emirates	62.79	●	High income	Arab States
29	Hong Kong, China	61.77	●	High income	Asia & Pacific
30	Portugal	61.73	●	High income	Europe
31	Lithuania	59.95	●	High income	Europe
32	Poland	59.94	●	High income	Europe
33	Malta	59.75	●	High income	Europe
34	Slovenia	59.38	●	High income	Europe
35	Saudi Arabia	58.75	●	High income	Arab States
36	Malaysia	57.88	●	Upper middle income	Asia & Pacific
37	Latvia	57.68	●	High income	Europe
38	Qatar	57.31	●	High income	Arab States
39	Cyprus	56.68	●	High income	Europe
40	Thailand	56.07	●	Upper middle income	Asia & Pacific
41	Russian Federation	55.74	●	High income	CIS
42	Hungary	55.33	●	High income	Europe
43	Ukraine	55.32	●	Upper middle income	Europe
44	Brazil	55.20	●	Upper middle income	The Americas
45	Viet Nam	54.96	●	Lower middle income	Asia & Pacific
46	Slovakia	54.88	●	High income	Europe
47	Serbia	53.91	●	Upper middle income	Europe

Rank	Economy	Score	Income Group	Region
48	Indonesia	53.84	Upper middle income	Asia & Pacific
49	India	53.63	Lower middle income	Asia & Pacific
50	Oman	53.52	High income	Arab States
51	Bahrain	53.50	High income	Arab States
52	Costa Rica	53.44	Upper middle income	The Americas
53	Uruguay	53.40	High income	The Americas
54	Chile	53.40	High income	The Americas
55	Bulgaria	53.15	High income	Europe
56	Greece	52.90	High income	Europe
57	Romania	52.77	High income	Europe
58	Türkiye	52.65	Upper middle income	Europe
59	Croatia	51.96	High income	Europe
60	Mauritius	51.17	Upper middle income	Africa
61	Kazakhstan	50.52	Upper middle income	CIS
62	Mexico	50.32	Upper middle income	The Americas
63	Philippines	49.93	Lower middle income	Asia & Pacific
64	Colombia	49.64	Upper middle income	The Americas
65	Montenegro	49.58	Upper middle income	Europe
66	Armenia	49.54	Upper middle income	CIS
67	Kuwait	49.30	High income	Arab States
68	Georgia	49.30	Upper middle income	Europe
69	Argentina	48.99	Upper middle income	The Americas
70	Republic of Moldova	48.11	Upper middle income	Europe
71	Seychelles	47.99	High income	Africa
72	South Africa	47.80	Upper middle income	Africa
73	Kenya	47.06	Lower middle income	Africa
74	Jordan	47.04	Lower middle income	Arab States
75	Azerbaijan	46.08	Upper middle income	CIS
76	Morocco	45.93	Lower middle income	Arab States
77	North Macedonia	45.92	Upper middle income	Europe
78	Panama	45.61	High income	The Americas
79	Iran (Islamic Republic of)	45.51	Upper middle income	Asia & Pacific
80	Dominican Republic	45.27	Upper middle income	The Americas
81	Uzbekistan	44.87	Lower middle income	CIS
82	Ecuador	44.76	Upper middle income	The Americas
83	Peru	44.76	Upper middle income	The Americas
84	Albania	44.67	Upper middle income	Europe
85	Egypt	44.42	Lower middle income	Arab States
86	Kyrgyzstan	44.16	Lower middle income	CIS
87	Ghana	43.95	Lower middle income	Africa
88	Mongolia	43.88	Upper middle income	Asia & Pacific
89	Bangladesh	43.56	Lower middle income	Asia & Pacific
90	Bosnia and Herzegovina	43.20	Upper middle income	Europe
91	Rwanda	43.16	Low income	Africa
92	Cote d'Ivoire	42.53	Lower middle income	Africa
93	Jamaica	42.50	Upper middle income	The Americas
94	Paraguay	42.26	Upper middle income	The Americas

Rank	Economy	Score	Income Group		Region
95	Sri Lanka	42.12	●	Lower middle income	Asia & Pacific
96	Tunisia	41.57	●	Lower middle income	Arab States
97	Pakistan	41.43	●	Lower middle income	Asia & Pacific
98	Cabo Verde	39.75	●	Lower middle income	Africa
99	El Salvador	39.36	●	Upper middle income	The Americas
100	Algeria	39.24	●	Upper middle income	Arab States
101	Senegal	39.10	●	Lower middle income	Africa
102	Bolivia (Plurinational State of)	38.25	●	Lower middle income	The Americas
103	United Republic of Tanzania	37.93	●	Lower middle income	Africa
104	Venezuela (Bolivarian Republic of)	36.84	●	Upper middle income	The Americas
105	Guatemala	36.52	●	Upper middle income	The Americas
106	Trinidad and Tobago	36.48	●	High income	The Americas
107	Honduras	36.39	●	Lower middle income	The Americas
108	Lao People's Democratic Republic	36.36	●	Lower middle income	Asia & Pacific
109	Nepal	35.96	●	Lower middle income	Asia & Pacific
110	Cambodia	35.65	●	Lower middle income	Asia & Pacific
111	Benin	35.62	●	Lower middle income	Africa
112	Nigeria	34.87	●	Lower middle income	Africa
113	Cameroon	34.59	●	Lower middle income	Africa
114	Botswana	34.54	●	Upper middle income	Africa
115	Zambia	33.97	●	Lower middle income	Africa
116	Nicaragua	33.51	●	Lower middle income	The Americas
117	Namibia	33.50	●	Upper middle income	Africa
118	Uganda	32.90	●	Low income	Africa
119	Malawi	31.75	●	Low income	Africa
120	Mali	30.82	●	Low income	Africa
121	Zimbabwe	30.33	●	Lower middle income	Africa
122	Ethiopia	29.60	●	Low income	Africa
123	Lesotho	27.65	●	Lower middle income	Africa
124	Mauritania	27.16	●	Lower middle income	Arab States
125	Madagascar	27.00	●	Low income	Africa
126	Mozambique	26.63	●	Low income	Africa
127	Burkina Faso	25.91	●	Low income	Africa
128	Angola	25.25	●	Lower middle income	Africa
129	Sierra Leone	23.43	●	Low income	Africa
130	Chad	22.22	●	Low income	Africa
131	Democratic Republic of the Congo	21.49	●	Low income	Africa
132	Burundi	20.69	●	Low income	Africa
133	Yemen	20.24	●	Low income	Arab States

Note: CIS = Commonwealth of Independent States.

Source: Network Readiness Index Database, Portulans Institute, 2024.

Pillar-level performances

The Network Readiness Index 2024 reveals distinct patterns across its four pillars. The Technology pillar is led by the United States, with strong performances from Switzerland and the Netherlands, while China leads in Access metrics. In the People pillar, the Republic of Korea dominates, followed by the United States and Singapore. The Governance pillar shows clear Northern European dominance, with Denmark, Norway and the Netherlands leading. The Impact pillar is led by Finland, with strong performances from Sweden and Ireland. Throughout all four pillars, there's a notable digital divide between high-income and developing economies, though some emerging economies show remarkable strengths in specific areas.

Technology

The United States stands as the top-ranking economy in the Technology pillar, demonstrating exceptional performance across all sub-pillars, particularly in Content (1st) and Future Technologies (1st). Switzerland (2nd) also showcases strong capabilities in the Technology pillar, excelling particularly in Content (5th) and Future Technologies (3rd). In securing the 3rd position, The Netherlands demonstrates remarkable strength in Content (2nd) and Future Technologies (6th), while maintaining solid performance in Access (23rd).

China (12th), a standout performer among upper-middle-income economies, is the global leader in Access (1st). The economy particularly excels in FTTH/building Internet subscriptions (1st) and international Internet bandwidth (3rd). Singapore (6th) demonstrates strong overall performance, particularly in the Access metrics (3rd). Singapore ranks first in handset prices, mobile network coverage, and Internet access in schools.

Notable performances emerge from other economies as well. The Republic of Korea (10th) shows particular strength in Adoption of Emerging Technologies (1st), while Israel demonstrates robust capabilities in Content (19th), Investment in Emerging Technologies (2nd), and Mobile App Development (3rd). India, ranking 34th overall in the Technology pillar, outperforms many higher-income economies in AI Scientific Publication (1st), International Internet bandwidth (2nd), FTTH/building Internet subscriptions (2nd), and Investment in Emerging Technologies (26th).

This pattern of performance across the Technology pillar underscores the varying strengths of economies in digital infrastructure, content creation, and technological innovation. It also highlights the potential for middle-income countries to excel in specific technological domains through targeted investments and strategic focus.

People

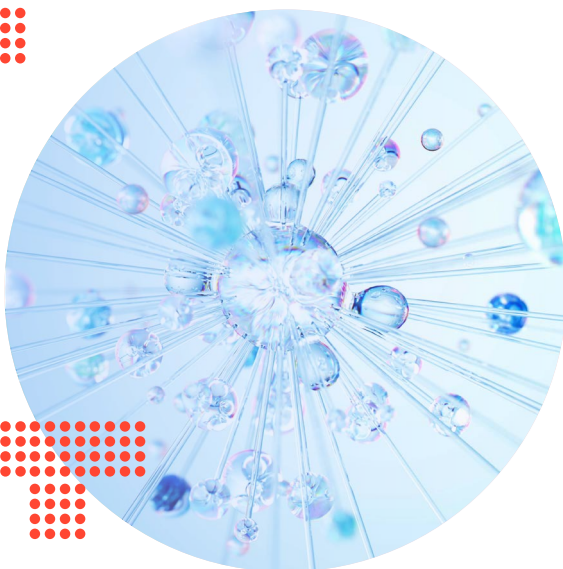
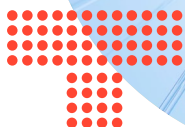
The Republic of Korea maintains its commanding position in the People pillar (1st). The nation demonstrates exceptional performance across all sub-pillars with remarkable consistency in Individuals (1st), Businesses (2nd), and Governments (1st). This comprehensive strength underscores the Republic of Korea's sustained excellence in digital technology adoption across all segments of society. The United States secures the second place, with outstanding achievements in digitally engaged Businesses (1st) and Governments (2nd). These rankings highlight its strong private sector leadership and public sector commitment to digital transformation.

Singapore follows in the third position, showcasing also strong performance in the Business (5th) and Government (3rd) sub-pillars. These rankings reveal the country's robust digital ecosystem and effective public sector digitalization. Japan demonstrates remarkable consistency at fourth place, with strong showings across Individuals (3rd), Business (8th), and Government (13th) sub-pillars, all reflecting its balanced approach to digital adoption. Israel rounds out the Top 5 Technology performers, with strong Business (7th) and Government (5th) performance.

China's impressive sixth-place ranking is particularly noteworthy, with strong performance in Individuals (6th) and Business (9th), showcasing its rapid digital transformation and growing technological sophistication.

Notable performances among emerging economies include India (29th) and Vietnam (38th), with both nations showing particular strength in government digital services and business adoption. The United Arab Emirates (12th) leads the Arab States, demonstrating strong government-led digital initiatives.

These rankings across the People pillar reflect the varying approaches and successes of economies in fostering digital technology adoption among their populations, businesses, and public sectors. The top performers consistently demonstrate strength across all three sub-pillars, while emerging economies often show notable strengths in specific areas, particularly in government-led initiatives and business adoption.



● Photo by Google DeepMind

Governance

The Governance pillar continues to be dominated by Northern European economies. Denmark secures the top position (1st), followed by Norway (2nd), the Netherlands (3rd), Finland (4th), and Sweden (6th). This European prominence within this pillar underscores the region's exceptional performance across Trust, Regulation, and Inclusion sub-pillars.

Denmark claims the leading position through outstanding performance in Trust (1st), supported by high rankings in Secure Internet Servers (1st) and Online Access to Financial Account (2nd). Norway demonstrates remarkable strength in Trust (2nd) and Regulation (2nd), while maintaining strong performance in digital inclusion metrics. The Netherlands (3rd) shows consistent excellence across all sub-pillars, particularly in Trust (5th) and Inclusion (4th).

Among non-European economies, Singapore stands out at 8th place overall, with particular strength in Inclusion (1st). Luxembourg maintains its position as a global leader in Regulation (1st), while Estonia (5th) demonstrates strong performance in Inclusion (3rd) as well as in E-commerce legislation (1st) and Cybersecurity (2nd). Notable performances from emerging economies include China (36th), showing strength in Inclusion (19th) despite challenges in Regulation (88th). Saudi Arabia (44th) leads the Arab States in Governance, while Brazil (39th) and Malaysia (41st) show strong performance among upper-middle-income economies.

The rankings within the Governance pillar reveal significant regional disparities. While African nations generally rank lower, Rwanda (76th), Kenya (68th), and Mauritius (62nd) show relatively stronger performance in their income groups. In general, the Latin American economies demonstrate mixed performance, with Brazil, Chile (40th), and Uruguay (55th) leading the region.

Impact

Finland leads the Impact pillar rankings, securing the 1st position globally. This ranking reflects the nation's exceptional performance across all sub-pillars. Finland particularly excels in the Quality of Life (1st), ranking first in happiness and showing strong performance in freedom to make life choices (4th). Sweden follows closely in second place, with remarkable achievements in Economy (4th) and Quality of Life (5th) and in particular in Women's Economic Opportunity (1st).

Ireland maintains a strong position (3rd), showcasing its leadership in SDG Contribution (1st). The nation exhibits outstanding impact performance, notably ranking 1st in both SDG 5: Women's Economic Opportunity and SDG 7: Affordable and Clean Energy, and 4th in SDG 11: Sustainable Cities and Communities. The Netherlands (6th) and Denmark (7th) round out the European dominance in this pillar, with strong showings in quality-of-life metrics and sustainable development indicators.

Among the Asian economies, Singapore stands out at 5th place, with particular strength in the Economy sub-pillar (5th). China (19th) shows commendable performance in the Economy sub-pillar (7th), leading the group of upper middle-income economies. China's dominance is evident in Domestic Market Scale, Prevalence of gig economy, SDG 4: Quality Education, (1st), and in ICT Patent applications (17th). Notable performances from emerging economies include Vietnam (31st) and India (40th), with both showing particular strength in economic impact metrics at 20th and 13th respectively. The United Arab Emirates (33rd) leads the Arab States in the Impact pillar, while Costa Rica (29th) shows the strongest performance among Latin American economies.

These pillar rankings reveal significant regional disparities, with African nations generally ranking lower, though Rwanda (98th), Kenya (82nd), and Mauritius (47th) demonstrate relatively stronger performance within their income groups. This pattern underscores the continuing challenges in translating digital transformation into broader societal impacts across developing regions.

Table 2 Rankings by pillar

Economy	NRI ranking	Technology	People	Governance	Impact
United States of America	1	1	2	9	11
Singapore	2	6	3	8	5
Finland	3	11	9	4	1
Sweden	4	7	15	6	2
Republic of Korea	5	10	1	22	13
Netherlands	6	3	20	3	6
Switzerland	7	2	10	13	10
United Kingdom	8	5	7	14	8
Germany	9	4	8	16	9
Denmark	10	8	18	1	7
Canada	11	9	11	12	12
Japan	12	14	4	26	15
Israel	13	28	5	29	4
Norway	14	15	17	2	20
Australia	15	19	16	7	16
France	16	13	14	25	18
China	17	12	6	36	19
Estonia	18	32	13	5	21
Ireland	19	30	35	23	3
Austria	20	20	25	15	23
Belgium	21	18	26	21	22
New Zealand	22	29	27	10	17
Luxembourg	23	16	66	11	14
Spain	24	23	19	24	24
Iceland	25	22	24	18	30
Italy	26	24	21	28	34
Czechia	27	26	34	19	26
United Arab Emirates	28	21	12	50	33
Hong Kong, China	29	17	36	34	36
Portugal	30	25	42	30	27
Lithuania	31	36	41	17	46
Poland	32	37	39	32	32
Malta	33	38	44	33	25
Slovenia	34	33	59	31	28
Saudi Arabia	35	31	30	44	45
Malaysia	36	40	23	41	54
Latvia	37	55	61	20	39
Qatar	38	35	31	45	53
Cyprus	39	43	69	35	35
Thailand	40	48	32	42	60
Russian Federation	41	47	22	49	69
Hungary	42	46	64	38	49
Ukraine	43	44	28	56	51
Brazil	44	45	49	39	64
Viet Nam	45	41	38	67	31
Slovakia	46	49	92	27	52
Serbia	47	78	46	48	37
Indonesia	48	27	37	69	74
India	49	34	29	88	40
Oman	50	67	43	47	56
Bahrain	51	57	58	52	44

Economy	NRI ranking	Technology	People	Governance	Impact
Costa Rica	52	70	57	57	29
Uruguay	53	66	45	55	43
Chile	54	69	54	40	61
Bulgaria	55	52	60	46	67
Greece	56	61	67	37	77
Romania	57	63	79	51	38
Turkiye	58	39	40	54	96
Croatia	59	74	68	43	68
Mauritius	60	76	51	62	47
Kazakhstan	61	81	53	53	66
Mexico	62	80	50	65	48
Philippines	63	79	33	74	58
Colombia	64	60	52	70	76
Montenegro	65	53	75	66	62
Armenia	66	51	81	80	42
Kuwait	67	68	70	71	50
Georgia	68	62	55	64	90
Argentina	69	77	85	58	59
Republic of Moldova	70	84	90	59	57
Seychelles	71	50	77	82	70
South Africa	72	59	73	60	105
Kenya	73	73	89	68	82
Jordan	74	58	48	73	112
Azerbaijan	75	75	78	86	65
Morocco	76	64	72	83	99
North Macedonia	77	90	87	61	92
Panama	78	83	76	84	72
Iran (Islamic Republic of)	79	54	47	81	120
Dominican Republic	80	91	65	78	80
Uzbekistan	81	72	91	90	85
Ecuador	82	89	63	92	75
Peru	83	99	56	77	87
Albania	84	96	62	87	71
Egypt	85	56	93	99	95
Kyrgyzstan	86	97	80	89	55
Ghana	87	87	82	79	97
Mongolia	88	88	96	63	109
Bangladesh	89	65	99	102	88
Bosnia and Herzegovina	90	102	83	72	94
Rwanda	91	93	88	76	98
Cote d'Ivoire	92	95	74	98	83
Jamaica	93	86	108	75	89
Paraguay	94	100	86	85	91
Sri Lanka	95	82	105	101	78
Tunisia	96	71	94	91	122
Pakistan	97	42	103	116	102
Cabo Verde	98	115	95	96	84
El Salvador	99	105	98	110	73
Algeria	100	85	71	109	119
Senegal	101	92	119	97	86
Bolivia (Plurinational State of)	102	113	84	117	81
United Republic of Tanzania	103	104	102	103	103

Economy	NRI ranking	Technology	People	Governance	Impact
Venezuela (Bolivarian Republic of)	104	106	110	105	101
Guatemala	105	110	106	107	100
Trinidad and Tobago	106	103	120	93	110
Honduras	107	114	114	108	79
Lao People's Democratic Republic	108	101	101	129	63
Nepal	109	111	111	112	93
Cambodia	110	109	100	121	108
Benin	111	117	118	95	104
Nigeria	112	94	112	114	118
Cameroon	113	108	109	119	107
Botswana	114	118	107	94	123
Zambia	115	122	97	106	117
Nicaragua	116	129	115	124	41
Namibia	117	107	116	118	111
Uganda	118	119	124	100	113
Malawi	119	124	117	111	106
Mali	120	123	113	120	114
Zimbabwe	121	116	104	115	133
Ethiopia	122	98	126	130	115
Lesotho	123	128	121	104	132
Mauritania	124	112	123	127	126
Madagascar	125	130	122	113	125
Mozambique	126	126	128	123	121
Burkina Faso	127	132	132	122	116
Angola	128	121	125	125	129
Sierra Leone	129	120	133	128	124
Chad	130	133	130	126	130
Democratic Republic of the Congo	131	125	127	131	131
Burundi	132	131	129	133	127
Yemen	133	127	131	132	128

Source: Network Readiness Index Database, Portulans Institute, 2024.

Top 10 NRI performers

1

The United States defends its position as the global leader in network readiness for the third consecutive year. It excels in Technology (1st), showcasing top performance in Internet access in schools, AI scientific publications, Investment in emerging technologies, and computer software spending. The United States exhibits remarkable improvement in People (2nd), driven by outstanding performance in annual investment in telecommunications services (1st), public cloud computing market scale (1st), Government promotion of investment in emerging technologies (1st), plus R&D expenditure by government and higher education (3rd), and Mobile broadband Internet traffic (3rd). In Governance (9th), the United States leads globally in cybersecurity and E-commerce legislation and is second in secure Internet servers. Yet, it has the opportunity to improve privacy protection laws (78th) and enhance ICT regulatory environment (31st) and the Socioeconomic gap in use of digital payments (35th). The United States has notably improved its Impact (11th), with advancements in good health and wellbeing (10th) and SDG 4: Quality Education (17th). While progress is evident in healthy life expectancy at birth (42nd), further enhancement in this area remains an opportunity. Additional areas of opportunity for the United States are Freedom to make Life Choices (107th) and Income Inequality (92nd), important contributors to the overall quality of life.

2

Singapore retains its position as a global leader in digital readiness with a strong 2nd place. The country excels in Access (3rd) and the uptake of Future Technologies (2nd), leading to a strong performance in Technology (6th). Singapore has improved its performance in People (3rd), driven by the Number of Venture Capital Deals Invested in AI (1st), Government Online Services (5th), and Government Promotion of Emerging Technologies (3rd). Singapore's strong focus on Governance (8th) is evident through its top scores in Cybersecurity (5th), the Regulation of Emerging Technologies (3rd), and E-Participation (3rd). While these results may be capturing a well-regulated and inclusive digital landscape, some areas still allow room for improvement. These can be noted by Singapore's reduced performance in Impact (5th) and in areas such as Privacy Protection by Law Content (95th). Other areas for potential growth include Domestic Market Scale (37th), ICT Service Exports (35th), and Women's Economic Opportunity (74th).



● Photo by Srattha Nualsate

3

Finland maintains its leadership in digital readiness by retaining the 3rd global position. Its prominence is supported by good performance in Technology (11th). The country's focus on Future Technologies (9th) is evident from its rankings in the Adoption of Emerging Technologies (7th) and Investments in Emerging Technologies (5th). Finland has a strong performance in People (9th), with commendable results in Governments (7th) and Businesses (11th), and in particular in Firms with websites (1st) and Government Online Services (2nd). Governance (4th) is a strength for Finland, driven by E-commerce legislation (1st), Regulation of Emerging Technologies (2nd), and ICT Regulatory Environment (3rd). High Online Access to Financial Accounts (3rd) points towards prevalent digital literacy and financial inclusion across its population, fostering greater economic resilience and connectivity. The economy is also the global leader in Impact (1st), reflecting a well-rounded and progressive society. Finland excels in both ICT patent applications (1st) and ICT Services Exports (6th), suggesting a dynamic and competitive digital economy with a global reach. The country also ranks highly in happiness (1st) and freedom to make life choices (4th) metrics, underscoring a high quality of life and strong social values.

4

Sweden maintains the 4th position in network readiness in 2024. Its high ranking in Technology (7th) showcases its top strengths in Access (16th), in areas like Population Covered by at least a 3G Mobile Network (1st) and Internet access in schools (1st). This is further strengthened by high output in GitHub Commits (6th) and Robot Density (6th), both linked to the production of Content (9th). Sweden demonstrates solid performance when it comes to People (15th), with notable achievements in ICT skills in the Education System (6th) and Firms with Websites (8th). However, its performance in Individuals (51st) may reveal areas of opportunity. In Governments (6th), Sweden displays high performance in R&D Expenditure by Government and Higher Education (4th) and Government promotion of investment in emerging technologies (11th). Sweden's Impact (2nd) is particularly strong in SDG 5: Women's Economic Opportunity (1st) and SDG 11: Sustainable Cities and Communities (3rd). The country also performs well in happiness (7th) and Freedom to make Life Choices (12th), with both contributing to its high Quality of Life ranking (5th). However, it shows potential for enhancement in the rankings for Domestic Market Scale (39th) and Income Inequality (21st).

5

The Republic of Korea ranks 5th globally in 2024. In the Technology Pillar (10th), it ranks top in Internet access in schools, Robot Density, and Adoption of Emerging Technologies. The Republic of Korea displays opportunities in Mobile tariffs (74th) and Computer Software Spending (64th). In People (1st), the Republic of Korea showcases strengths across Individuals (1st), Businesses (2nd), and Governments (1st). Other notable achievements include two indicators related to AI: AI Talent Concentration (1st), and the number of venture capital deals invested in AI. Data capabilities (2nd), ICT Skills in the Education System (10th), and Government Online Services (3rd) are additional examples of high performance. Governance (22nd) reveals mixed results. On one hand it has strong performances in Cybersecurity (5th), E-commerce legislation (1st), and Internet Shopping (5th); on the other opportunities in ICT Regulatory Environment (105th) and Privacy Protection by Law Content (61st). On Impact (13th), the Republic of Korea leads in ICT Patent Applications (1st) yet reflects opportunities for growth in Quality of Life indicators such as Happiness (56th) and Freedom to Make Life Choices (87th). The economy's SDG contributions vary, with excellence in Good Health and Well-Being (2nd) and Quality Education (4th), but room for improvement in Affordable and Clean Energy (97th).

6

The Netherlands maintains a strong position in network readiness, ranking 6th globally. It demonstrates exceptional performance in Technology (3rd), showcasing strengths in Internet Domain Registrations (1st), and in Adoption and investment of Emerging Technologies, (6th and 5th, respectively). However, the Netherlands shows opportunities in FTTH/Building Internet Subscriptions (54th) and Population Covered by at Least a 3G Mobile Network (60th). The Netherlands' performance in People (20th), can be highlighted by notable outcomes in Businesses (17th) and Governments (19th). Strengths include Firms with Website (9th) and Use of Virtual Social Networks (8th), while in Individuals (87th), opportunities are noted in Mobile broadband internet traffic (47th). In Governance (3rd), the Netherlands excels across Trust (5th), Regulation (5th), and Inclusion (4th). In particular in Secure Internet Servers (3rd), Regulatory quality (7th), E-commerce legislation (1st), the Availability of local online content (3rd), and E-Participation (5th). The country also shows strength in Online Access to Financial Account (10th) and Internet Shopping (8th). On Impact (6th), the Netherlands shows consistent strength, especially in Economy, where it leads in Prevalence of Gig Economy (3rd). Quality of Life (7th) Happiness (5th) and Income Inequality (4th) stand out as strengths. In SDG Contribution (21st), the Netherlands excels in Women's Economic Opportunity (1st) and performs in the top 20 in SDG 11: Sustainable Cities and Communities (17th).

7

Switzerland ranks 7th globally in network readiness. In Technology (2nd), it excels in Future Technologies (3rd), and earns top rankings in Mobile Tariffs and Handset Prices. Yet room for improvement is evident in FTTH/Building Internet Subscriptions (82nd) and International Internet Bandwidth (74th). Switzerland's ranking in People (10th) reveals mixed results with strong performance in Businesses (10th), and in particular areas like Firms with Websites (4th) and AI Talent Concentration (6th). Switzerland's output in Governments (14th) stands out in R&D Expenditure by Governments and Higher Education (7th). Despite the economy's strong position in ICT Skills in the Education System (5th), Individuals (37th) reveal areas of opportunity especially in Mobile broadband internet traffic (43rd). In Governance (13th), Switzerland excels in Regulation (3rd), setting a high standard in Privacy Protection by Law Content (4th). Similarly, Inclusion (14th), and particularly Availability of local online content (6th), are strong areas for Switzerland. However, Trust (31st), presents Cybersecurity (50th) as an area with margin for improvement for this economy. Impact (10th) is consistently strong for Switzerland, with Economy (15th) showing strength in ICT Patent Applications (9th). Similarly, Quality of Life (13th) shows strengths in

Happiness (4th) and Healthy Life Expectancy at Birth (10th). In SDG Contribution (7th), Switzerland excels in Good Health and Well-Being (9th) and Sustainable Cities and Communities (6th).

8

The [United Kingdom \(UK\)](#) is the 8th network-ready economy globally. In Technology (5th), the UK excels in Content (3rd) and Access (10th), with notable strengths in International Internet Bandwidth (8th), AI scientific publications (7th), and Internet Domain Registrations (10th). However, within these two dimensions it displays room for improvement in FTTH/Building Internet Subscriptions (34th) and Mobile Tariffs (25th). When it comes to People (7th), the UK shows varied results with Businesses (4th) and Governments (4th) in the top 5 and Individuals (49th) nearing the top 50. These areas reflect the favorable outcome in Public Cloud Computing Market Scale (3rd) and Government Promotion of Emerging Technologies (7th). In Individuals (49th), Mobile broadband internet traffic (17th) is the strongest area for this economy. In Governance (14th), the UK's strengths are in Inclusion (5th) and Regulation (25th), with top rankings in E-commerce legislation (1st) and socioeconomic gap in use of digital payments (5th). Trust (21st), presents opportunities for the UK in Online Access to Financial Account (33rd) and Secure Internet servers (21st). The UK's performance in Impact (8th) is consistently strong, with Economy (12th) showing strengths in Prevalence of Gig Economy (4th) and ICT Services Exports (27th). Happiness (25th) and Freedom to Make Life Choices (38th) provide clout to the UK's Quality of Life (22nd). In SDG Contribution (4th), the UK excels in Good Health and Well-Being (5th) and Quality Education (13th) with all SDG 5: Women's economic opportunity (15th), SDG 7: Affordable and Clean Energy (14th), and SDG 11: Sustainable Cities and Communities (16th) among the global top 20.

9

[Germany](#) is 9th globally in network readiness. In Technology (4th), Germany stands out in Content (4th) and in Future Technologies (7th), with strengths in AI Scientific Publications (9th) and Robot Density (4th). Areas of opportunity are noted here in FTTH/Building Internet Subscriptions (38th) and Mobile Apps Development (48th). This economy displays solid results across People (8th), with noted performance in Businesses (6th), particularly in Firms with Website (2nd), Public cloud market scale (4th), and Annual Investment in Telecommunication Services (6th). Individuals (20th) and Governments (15th), respectively, reflect AI Talent Concentration (5th) and R&D Expenditure by Governments and Higher Education (9th) as advantages for Germany. Governance (16th), Regulation

(13th) and Trust (22nd), display top rankings in E-commerce Legislation (1st) and Socioeconomic Gap in Use of Digital Payments (2nd). In Inclusion (20th), Gender Gap in Internet Use (64th) is an opportunity for the country. Germany is consistently strong in Impact (9th), with Economy (11th) reflecting strength in Domestic Market Scale (5th) and ICT patent applications (10th). Quality of Life (23rd) captures among the top 25 Happiness (19th) and Healthy Life Expectancy at Birth (25th). In SDG Contribution (9th), Germany excels in Women's Economic Opportunity (1st) and Good Health and Well-Being (5th) with Affordable and clean energy (28th) closing into the top 25.

10

Rounding up the Top 10 is [Denmark](#) showcasing digital prowess in all areas of network readiness. In Technology (8th), Denmark excels in Internet Access in Schools (1st) and Population Covered by at Least a 3G Mobile Network (1st), reflecting strong digital infrastructure. Denmark also performs well in Content (8th) and Future Technologies (10th), indicating a forward-looking approach to digital development. Yet, opportunities are noted in FTTH/Building Internet Subscriptions (71st) and International Internet Bandwidth (85th). In People (18th) Denmark shows mixed results across sub-pillars. In Businesses (14th) Firms with Website (5th) stand out, same applies to Government Online Services (4th) in Governments (18th). Conversely, Individuals (78th), displays opportunities in Mobile broadband internet traffic within the country (44th). Denmark excels in Governance (1st) leading in Trust (1st) and particularly in Secure Internet Servers (1st), underscoring a strong cybersecurity and public confidence in digital infrastructure. Regulation (7th) reflects efficient Regulatory Quality (4th) and ICT Regulatory Environment (9th). Inclusion (11th) also displays strengths particularly in Socioeconomic gap in use of digital payments (7th) and in E-Participation (12th). In Impact (7th), Denmark displays top Quality of Life (4th) and SDG Contribution (5th). In these areas Denmark reflects high social wellness as noted by Happiness (3rd), and strong commitment to sustainable development goals, especially in Women's Economic Opportunity (1st). However, there is room for improvement in ICT Services Exports (43rd), suggesting potential to enhance economic diversification and export capabilities in the technology sector.

Digital Outperformance Across Income Groups

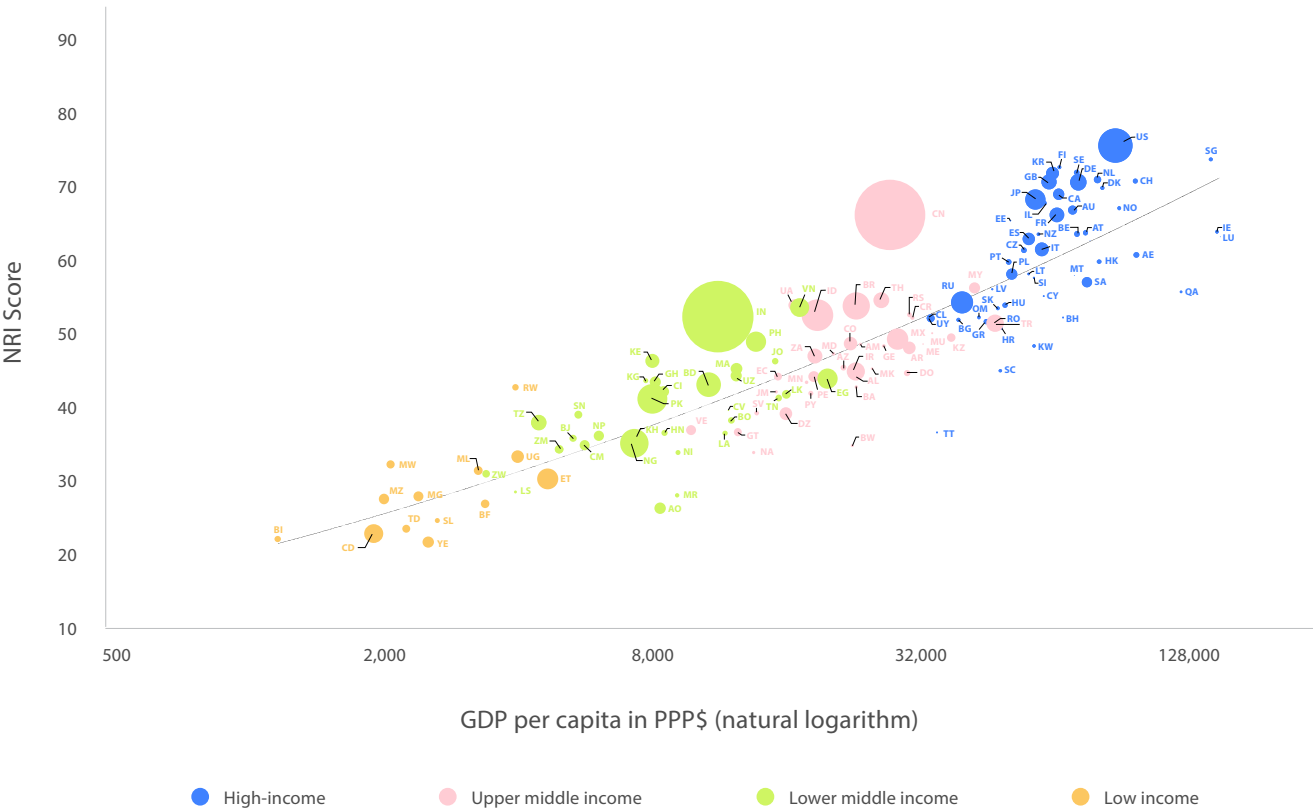
Digital readiness typically correlates with economic prosperity, as wealthier nations generally have the resources to support advanced technological infrastructure. This trend is captured in Figure 1. Yet, each year brings surprising successes from low- and middle-income countries that defy this trend.

China leads the pack among these outperformers, securing the 17th place globally and highlighting its growing digital influence. Other upper middle-income economies—Thailand (40th), Brazil (44th), and Indonesia (48th)—also display strong digital capabilities, while Ukraine (43rd) holds its position as a noteworthy player, though its assessed performance may still be affected by data lags.

In the lower middle-income group, nations like Vietnam (45th), India (49th), and the Philippines (63rd) are making substantial strides, narrowing the digital gap with innovative policies and rapid adoption. African nations are well represented in this category, with Kenya (73rd), Ghana (87th), and Côte d'Ivoire (92nd) driving digital growth on the continent. Pakistan (97th) and Kyrgyzstan (86th) add to this momentum, demonstrating that the ability to achieve more with less in digital advancement transcends regional boundaries.

Rwanda (91st) and Malawi (119th) stand out within the low-income category, serving as examples of how digital advancement is unfolding even in resource-constrained environments. Overall, these high-performing countries are concentrated in Asia & Pacific and Africa, underscoring the persistent technological momentum in these regions. This annual process of identifying top digital performers continues to highlight that digital readiness is achievable across diverse economic landscapes.

Figure 1 NRI scores and GDP per capita in PPP\$ NRI 2024 (bubble size: population)



Notes:

1. GDP per capita is in PPP\$ (natural logarithms). Both GDP per capita and population data (represented by the size of the bubbles) are for 2024 or the latest year available. The data are drawn from the World Bank's World Development Indicators database. The general trend line is a polynomial of degree two ($R^2 = 0.7959$).
2. Countries are grouped according to the World Bank Income Classifications (20 June 2023) with the exception of Venezuela classified as an upper-middle income country until FY21.
3. Population for Sri Lanka for the year 2022.

Country/Economy codes for the chart

Code	Economy	Code	Economy	Code	Economy
AL	Albania	GR	Greece	PK	Pakistan
DZ	Algeria	GT	Guatemala	PA	Panama
AO	Angola	HN	Honduras	PY	Paraguay
AR	Argentina	HK	Hong Kong, China	PE	Peru
AM	Armenia	HU	Hungary	PH	Philippines
AU	Australia	IS	Iceland	PL	Poland
AT	Austria	IN	India	PT	Portugal
AZ	Azerbaijan	ID	Indonesia	QA	Qatar
BH	Bahrain	IR	Iran (Islamic Republic of)	KR	Republic of Korea
BD	Bangladesh	IE	Ireland	MD	Republic of Moldova
BE	Belgium	IL	Israel	RO	Romania
BJ	Benin	IT	Italy	RU	Russian Federation
BO	Bolivia (Plurinational State of)	JM	Jamaica	RW	Rwanda
BA	Bosnia and Herzegovina	JP	Japan	SA	Saudi Arabia
BW	Botswana	JO	Jordan	SN	Senegal
BR	Brazil	KZ	Kazakhstan	RS	Serbia
BG	Bulgaria	KE	Kenya	SC	Seychelles
BF	Burkina Faso	KW	Kuwait	SL	Sierra Leone
BI	Burundi	KG	Kyrgyzstan	SG	Singapore
CV	Cabo Verde	LA	Lao People's Democratic Republic	SK	Slovakia
KH	Cambodia	LV	Latvia	SI	Slovenia
CM	Cameroon	LS	Lesotho	ZA	South Africa
CA	Canada	LT	Lithuania	ES	Spain
TD	Chad	LU	Luxembourg	LK	Sri Lanka
CL	Chile	MG	Madagascar	SE	Sweden
CN	China	MW	Malawi	CH	Switzerland
CO	Colombia	MY	Malaysia	TH	Thailand
CR	Costa Rica	ML	Mali	TT	Trinidad and Tobago
CI	Cote d'Ivoire	MT	Malta	TN	Tunisia
HR	Croatia	MR	Mauritania	TR	Turkiye
CY	Cyprus	MU	Mauritius	UG	Uganda
CZ	Czechia	MX	Mexico	UA	Ukraine
CD	Democratic Republic of the Congo	MN	Mongolia	AE	United Arab Emirates
DK	Denmark	ME	Montenegro	GB	United Kingdom
DO	Dominican Republic	MA	Morocco	TZ	United Republic of Tanzania
EC	Ecuador	MZ	Mozambique	US	United States of America
EG	Egypt	NA	Namibia	UY	Uruguay
SV	El Salvador	NP	Nepal	UZ	Uzbekistan
EE	Estonia	NL	Netherlands	VE	Venezuela (Bolivarian Republic of)
ET	Ethiopia	NZ	New Zealand	VN	Viet Nam
FI	Finland	NI	Nicaragua	YE	Yemen
FR	France	NG	Nigeria	ZM	Zambia
GE	Georgia	MK	North Macedonia	ZW	Zimbabwe
DE	Germany	NO	Norway	ZW	Zimbabwe
GH	Ghana	OM	Oman		

NRI Performances by Income Group

The NRI rankings reveal a strong correlation between income levels and digital readiness, with high-income countries dominating the top positions. The United States, Singapore, and Finland all lead the rankings, showcasing their advanced digital infrastructures and governance. However, the presence of upper-middle-income countries like China (17th), Malaysia (36th), and Thailand (40th) in higher ranks demonstrates that factors beyond wealth contribute to digital preparedness.

Lower-middle-income nations such as Vietnam (45th), India (49th), and the Philippines (63rd) show impressive adaptability, often outperforming expectations. These

countries have prioritized digital education and mobile connectivity, which are critical for creating economic growth and resilience. In the low-income category, Rwanda (91st) stands out as an example that even resource-constrained countries can make significant progress in network readiness.

This data highlights a global trend: while wealthier countries are better positioned for digital advancement, strategic initiatives in middle- and low-income countries are enabling them to narrow the gap. The rankings underscore the importance of targeted investments and policies to bridge the digital divide and promote inclusive digital growth across all income groups. However, the persistent lower rankings of most low-income nations emphasize the ongoing challenges they face in developing digital infrastructure and attracting investment.

Figure 2 Box plot by income group



Notes: The whiskers indicate minimum and maximum values, while the extremes of a box indicate the 25th and 75th percentiles. The line within a box represents the median (i.e. 50th percentile) Source: Network Readiness Index Database, Portulans Institute, 2024.

Table 3 Top 3 countries by income group

High-income economies	Upper middle-income economies	Lower middle-income economies	Low-income economies
1. United States of America (1)	1. China (17)	1. Viet Nam (45)	1. Rwanda (91)
2. Singapore (2)	2. Malaysia (36)	2. India (49)	2. Uganda (118)
3. Finland (3)	3. Thailand (40)	3. Philippines (63)	3. Malawi (119)

Note: Global ranks in parentheses.
Source: Network Readiness Index Database, Portulans Institute, 2024.

The Network Readiness Index (NRI) dataset comprises 133 countries that are categorized by income level. This offering provides a comprehensive view of global digital readiness and infrastructure capabilities. The countries are grouped into four income categories: 13 low-income, 32 lower middle-income, 36 upper middle-income, and 52 high-income nations.

Low-income countries have NRI scores ranging from 20.24 to 43.16, with most falling below the 25th percentile mark of 39.36. Only one country slightly exceeds this percentile but remains below the median score. This pattern underscores significant challenges in digital readiness, such as limited technology access and inadequate infrastructure.

Lower middle-income countries exhibit NRI scores between 25.25 and 54.96. Many score between the 25th and 50th percentiles (39.36 to 47.05), indicating modest improvements over low-income nations but highlighting ongoing challenges. A few fall below the 25th percentile, while some surpass the median, reflecting variability within this group.

Upper middle-income countries score from 33.50 to 68.70. The majority land between the 50th and 75th percentiles (47.05 to 59.75), signifying substantial digital development and investment. While some score below the median and a few exceed the 75th percentile, this group generally demonstrates significant progress toward advanced digital readiness.

High-income countries predominantly score between 51.96 and 78.96, with most exceeding the 75th percentile of 59.75. Despite an outlier with a low score of 36.48, the overall trend confirms that high-income nations lead in digital infrastructure and innovation support.

The data reinforces the strong correlation between higher national income levels and elevated NRI scores. While exceptions exist due to factors like policy decisions, geographic challenges, or socio-political conditions, income level remains a key indicator of a country's digital readiness and capacity for technological advancement.

The upper middle-income group of countries is led by China (17th), followed by Malaysia (36th) and Thailand (40th)

China showcases remarkable progress in network readiness, securing the 17th position globally in the NRI 2024, rising three positions from last year. The country's technological landscape is particularly impressive, ranking 12th in the Technology pillar, with outstanding achievements in Access (1st) and AI scientific publications (1st). China's digital transformation is evident in its strong performance in the area of People (6th), demonstrating exceptional capabilities in adoption of digital technologies by individuals (6th) and Businesses (9th).

The country's technological prowess is further highlighted by its leadership in emerging technologies, ranking 3rd in Robot density and securing the top position in Domestic market scale. China's Public cloud computing market (2nd) and FTTH/building Internet subscriptions (1st) underscore its robust digital infrastructure development.

However, China's journey presents some contrasts. While excelling in technological adoption and innovation, challenges persist in the area of digital Governance (36th), particularly in Regulatory quality (93rd), ICT regulatory environment (119th) and Privacy protection by law content (123rd). The Impact (19th) pillar reveals strong performance in Economy (7th), but low rankings in Quality-of-life metrics (58th), indicating that there is room for improvement. The country's digital inclusion efforts show mixed results, with notable achievements in Availability of local online content (3rd). However, China faces challenges in Rural gap in use of digital payments (63rd) and Gender gap in Internet use (47th).

Malaysia demonstrates a competitive position in network readiness, ranking 36th globally in the NRI 2024. The country's performance reveals an interesting mix of strengths and areas for improvement across different dimensions. Malaysia's technological landscape shows particular strength in People (23rd), highlighting the country's success in digital adoption and human capital development. The nation performs notably well in digital readiness of Individuals (9th) and shows strong and digitally engaged Government (23rd).

The country exhibits impressive capabilities in specific areas, ranking highly in E-commerce legislation (1st), Freedom to make life choices (1st), and Prevalence of gig economy (6th). Malaysia's leadership in Investment in emerging technologies (12th) reflect its commitment to technological advancement. The nation also demonstrates strength in Data Capabilities (8th) and Cybersecurity (8th). However, Malaysia's technology journey presents some contrasts. While excelling in Government (23rd) digital services, challenges exist in the Governance pillar (41st), particularly in ICT regulatory environment (71st). The area of Impact (54th) shows mixed results, with stronger performance in the overall impact of digital technologies on Economy (31st) but room for improvement in Quality-of-life metrics (43rd).

The country's digital Inclusion (44th) efforts reveal varying success rates, with notable achievements in Government promotion of investment in emerging tech (15th). However, it faces challenges in areas like Rural gap in use of digital payments (57th). This narrative reflects Malaysia's position as an emerging digital economy while highlighting opportunities for further development in regulatory frameworks and digital equality.

Thailand demonstrates solid digital competitiveness, ranking 40th in the NRI 2024. The country shows particular strength in infrastructure development, ranking 10th in FTTH/building Internet subscriptions and 11th in International Internet bandwidth. Thailand's digital ecosystem benefits from strong Mobile broadband internet traffic within the country (8th). In the area of People (32nd), Thailand shows robust performance in digital uptake, specifically in Annual investment in telecommunication services (25th) and Data Capabilities (27th). However, challenges persist in Regulation (54th) of emerging technologies and in digitization of Businesses (76th).

The impact of technology on the country's Economy (74th) suggests room for improvement in translating digital capabilities into economic outcomes. The country shows promise in AI scientific publications (31st) and in Adoption of emerging technologies (28th) but needs to strengthen its regulatory environment and digital governance structures. Areas requiring attention include Privacy protection by law content (77th), Cybersecurity (52nd), and Gender gap in Internet use (65th). Thailand's performance in Government online services (47) indicates effective digital transformation in the public sector, though there's potential for further improvement in the area of SDG Contribution (95th).

The lower-middle income group is led by Vietnam (45th), India (49th) and The Philippines (63rd).

Vietnam exhibits impressive digital development, securing the 45th position globally with consistent performance across Technology (41st), People (38th) and Impact (31st). The country's outstanding performance in the digital Economy (20th) is on the backdrop of a strong Domestic market scale (25th) and an impressive gig economy (22nd). Vietnam also shows remarkable strength in Freedom to make life choices (3rd), resulting in a high performance in Quality of Life (27th). Nevertheless, there lies potential in strengthening its SDG Contribution (58th). The country's People pillar performance (38th) reflects its leadership in widespread digitization within the Individuals (12th).

Vietnam's technological infrastructure continues to improve, with strong showings in FTTH/building Internet subscription (4th), Mobile apps development (7th) and strength in international internet bandwidth (12th). However, significant challenges exist in Privacy protection by law content (127th) and Regulation (101st), indicating a need for stronger digital governance structures. The country's performance in the Adoption of emerging technologies (33rd) and Government promotion of investment in emerging tech shows promise for future growth. Vietnam's digital economy benefits from robust mobile infrastructure and increasing digital service adoption.

Areas requiring attention include digital Inclusion (90th), and ICT regulatory environment (102nd). The country's strong showing in digitally engaged Governments (49th) suggests effective digital transformation across sectors, though regulatory frameworks need strengthening to support sustainable digital development.

India demonstrates significant digital progress, ranking 49th globally with notable strengths in technological innovation and digital transformation. The country's outstanding performance in AI scientific publications (1st) and Domestic market scale (3rd) showcases its technological capabilities. India ranks highly in Public cloud computing (11th) and shows strong performance in the People pillar (29th), particularly in digitization of Businesses (36th) and digitally skilled Individuals (17th). The country's emerging technologies sector is robust, with strong Government promotion of investment in emerging tech (42nd) and impressive Data Capabilities (31st).

However, India faces substantial challenges in digital inclusion (105th), particularly in Socioeconomic gap in use of digital payments (97th) and Gender gap in Internet use (105th). The area of Regulation (79th) also needs strengthening, especially when it comes to Privacy protection by law content (104th) and E-commerce legislation (87th). Despite these challenges, India's digital economy shows promise with strong performance in ICT services exports (1st). The country's large-scale digital transformation initiatives and strong AI talent concentration (1st) position it well for future digital growth.

The **Philippines** shows encouraging digital development, ranking 63rd globally with particular strength in the area of People (33rd). The country demonstrates impressive performance in digital readiness of Individuals (7th) and shows potential in the Investment in technologies (31st). Notable achievements include performance in Gender gap in Internet use (5th), strong Mobile broadband internet traffic within the country (18th) and ICR skills in the education system (18th). The country also performs well in ICT services exports (19th) and shows a growing Domestic market scale (28th).

However, significant challenges exist in the area of digital Access (86th) and Regulation (85th). The Philippines displays room for improvement in affordability of Handset prices (121st) and Number of venture capital deals invested in AI (77th). The country shows promise in AI scientific publications (33rd) and Mobile app development (57th), but requires a stronger ICT regulatory environment (109th) and Secure Internet servers (101st). The country's ranking in Government online services (76th) reveals room for improvement, while technology adoption by Businesses (53rd) metrics indicate growing digital maturity in the private sector.

The group of low-income economies is led by Rwanda (91st), Uganda (118th) and Malawi (119th)

Rwanda demonstrates a commitment to digital transformation, despite ranking 91st globally. The country shows notable strength in Government online services (41st) and Government promotion of emerging technologies (23rd). Governance (76th) is a relatively strong area for Rwanda, showing promising results in Cybersecurity (65th) and Regulatory quality (62nd). It also boasts strong performance in the Number of venture capital deals invested in AI (8th) and Investment in emerging technologies (42nd).

However, significant challenges exist in the area of Access (102nd) and digital inclusion (80th, particularly in Socioeconomic gap in use of digital payments (120th) and Availability of local online content (82nd) metrics. Rwanda's Government's digital transformation initiatives show commitment to improvement, with solid results in adoption of digital technologies by Governments (40th). The country's mobile infrastructure and digital payment systems demonstrate potential, but broader digital infrastructure development remains a priority, especially when it comes to addressing Mobile broadband internet traffic within the country (107th) and Use of virtual social networks (127th). Despite these challenges, Rwanda's strategic focus on digital transformation and strong government support suggest positive future development.

Uganda faces significant challenges in digital readiness, ranking 118th globally. The country shows some strength in Online access to financial accounts (67th), with promising results in Rural gap in use of digital payments (70th). Uganda demonstrates potential in growing Investment in emerging technologies (75th) and Number of venture capital deals invested in AI (45th). However, major challenges exist across multiple dimensions, including digital infrastructure Access (119th) and Regulation (97th), particularly with respect to Privacy protection by law content (112th).

The country's performance in affordability of Handset prices (125th) and Mobile tariffs (113th) indicates need for substantial improvement. While International internet bandwidth (34th) shows promise, more comprehensive digital development strategies are needed. Uganda's digital Inclusion (103rd) metrics suggest significant divides, ranking 102th in Socioeconomic gap in use of digital payments and 123th in Availability of local digital content. The country requires focused investment in digital infrastructure, skills development, and regulatory frameworks to improve its digital readiness.

Malawi faces considerable digital development challenges, ranking 119th globally. It shows strength in digital Economy (63rd) and SDG Contribution (68th) metrics. The country

shows mixed results in digital inclusion (108th), with balanced levels of Rural gap in use of digital payments (71st) and weaker showings in Availability of local online content (128th).

Notable efforts in digitally connected Governments (107th) demonstrate commitment to digital transformation. However, significant challenges persist across all pillars, particularly in digital infrastructure Access (124th) and Regulation (108th), specifically in areas such as the overall Regulatory quality (113th). Other areas with significant potential for improvement include Prevalence of gig economy (123rd) and Use of virtual social networks (129th) underscoring the need for building digital skills across the society.

Overall, the country would benefit from substantial investment in digital infrastructure, skills development, and regulatory frameworks. While showing potential in ICT services exports (9th) and Online Access to financial account (80th), Malawi needs comprehensive digital transformation strategies to improve its overall network readiness position.

NRI Performances by Region

Figure 3 offers a comprehensive overview of NRI statistics across six distinct regions: Africa, the Arab States, Asia and the Pacific, the Commonwealth of Independent States (CIS), Europe, and the Americas. Within each region, a strong correlation emerges between regional performance and the prevalence of income groups.

Europe stands out with a dominant position in the NRI 2024, boasting an impressive average score of 60.84 across 41 countries, the highest among all regions. This is complemented by a high concentration of high-income economies. In stark contrast, Africa records the lowest scores, with an average score of 34.11. This region is characterized by a significant concentration of lower-middle-income and low-income economies, comprising 30 countries in total.

The Asia and the Pacific region, with an average score of 54.25, consists of 21 economies with a mix of upper-middle, lower-middle, and high-income countries, displaying substantial performance variability as evidenced by a standard deviation of 13.22. The Americas, comprising 22 economies, has an average score of 47.17 and also exhibits significant performance variation, reflecting diverse levels of digital readiness and capabilities across its member economies.

The CIS region, made up of 6 economies, has a moderate average score of 48.48 and the smallest performance variation among regions, with a standard deviation of 4.37.

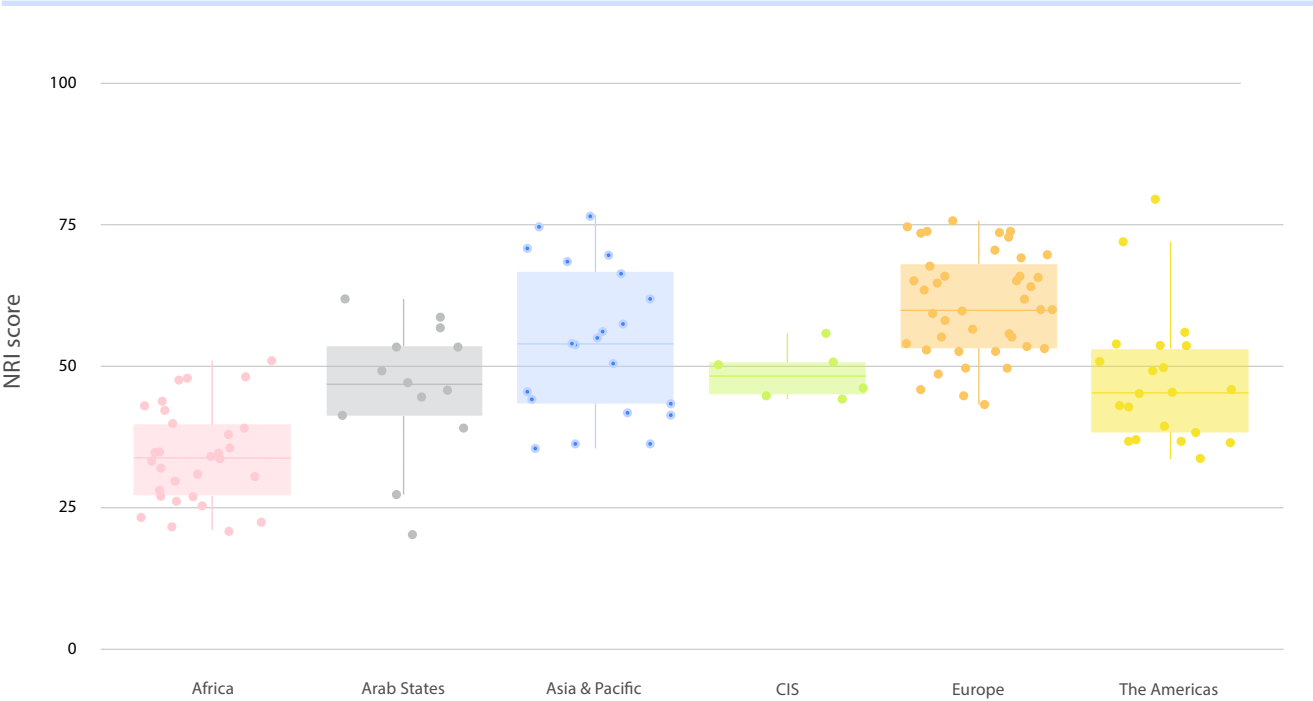
This stability indicates relatively consistent network readiness within the region, albeit at a moderate level.

In summary, Africa (30 countries) and Europe (41 countries) demonstrate less variation in NRI scores than Asia and the Pacific or the Americas, likely due to the economic characteristics within these regions. The high-income concentration in Europe and the prevalence of lower-income economies in Africa contribute significantly to this outcome. These insights highlight the varying levels of digital readiness and the impact of economic composition on network capabilities across regions. Europe’s strong performance, especially among Northern and Western European countries, underscores its commitment to digital innovation and a conducive environment for digital development. The NRI 2024 rankings reveal that Western Europe retains a leading

position globally, with several countries achieving high ranks. Although Europe demonstrates impressive regional performance, the top individual economies in the NRI rankings come from the Americas and Asia and the Pacific, reflecting exceptional digital readiness and innovation in these regions. While these regions still show room for growth in broader network capabilities, their top performers set a high benchmark. By following the successful models of leading regions, others can further advance their network readiness and realize the benefits of the digital era.

Europe’s strong performance, especially among Northern and Western European countries, underscores its commitment to digital innovation and a conducive environment for digital development.

Figure 3 Box plot by region



Note: The whiskers indicate minimum and maximum values, while the extremes of a box indicate the 25th and 75th percentiles. The line within a box represents the median (i.e. 50th percentile)
Source: Network Readiness Index Database, Portulans Institute, 2024.

Table 4 Top 3 countries by region

Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
1. Mauritius (60)	1. United Arab Emirates (28)	1. Singapore (2)	1. Russian Federation (41)	1. Finland (3)	1. United States of America (1)
2. Seychelles (71)	2. Saudi Arabia (35)	2. Republic of Korea (5)	2. Kazakhstan (61)	2. Sweden (4)	2. Canada (11)
3. South Africa (72)	3. Qatar (38)	3. Japan (12)	3. Armenia (66)	3. Netherlands (6)	3. Brazil (44)

Note: Global ranks in parentheses. CIS = Commonwealth of Independent States.
Source: Network Readiness Index Database, Portulans Institute, 2024.

Notable scores by individual countries

Africa

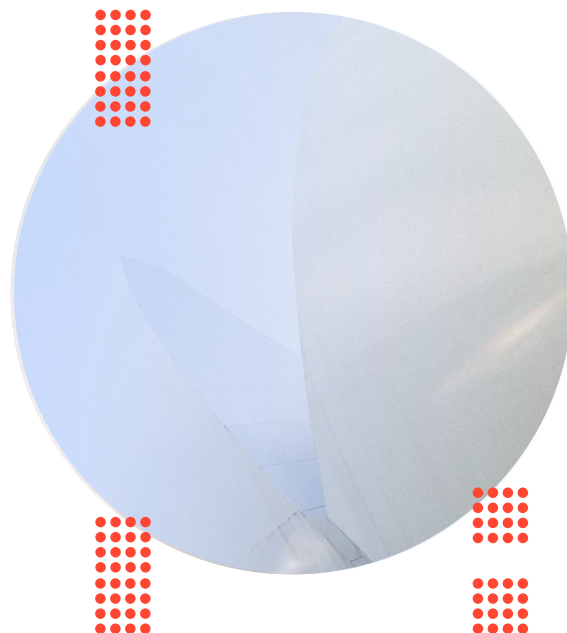
Mauritius leads African nations in digital readiness, ranking 60th globally, demonstrating balanced performance across multiple dimensions. The country shows particular strength in the Impact (47th) and People (51st) pillars, with notable achievements in digitally connected Businesses (23rd). Mauritius performs well in Regulation (61st) of emerging technologies, and excels in digital inclusion (60th), especially with regards to addressing Socioeconomic Gap in use of Digital Payments (49th) and Rural gap in use of digital payments (43rd).

However, significant challenges exist in infrastructure Access (67th) and digital Content (87th) metrics. Mauritius's performance in Government (84th) digitalization suggests room for improvement in public sector digital transformation. On the other hand, the country's strong showing in Regulatory quality (27th) and Cybersecurity (23rd) provides a solid foundation for future digital growth. Notable strengths include performance in the area of SDG Contribution (23rd), particularly in SDG 7: Affordable and Clean Energy provision (13th) and SDG 5: Women's economic opportunity (46th).

Ranked 71st globally in the Network Readiness Index (NRI) 2024, **Seychelles** exhibits distinctive attributes in its digital advancement. The nation excels in the Content sub-pillar, securing the 17th position, and demonstrates strong performance in digitally advanced Businesses (33rd). As a small island country, it performs exceptionally well in specific technological areas, achieving 2nd place in Mobile apps development.

The country's digital infrastructure benefits from robust international connectivity, but faces challenges typical of small island states, such as Domestic Market Scale (133rd) and ICT services exports (102nd). Notable successes include a high number of Secure Internet Servers (13th) and robust Regulatory quality (54th).

Significant obstacles remain in the adoption of Future Technologies (96th) and Computer Software spending (96th). There is also room for improvement in the area of digital Inclusion (112th), particularly when it comes to E-Participation (119th). However, the country's achievements in the Businesses sub-pillar (33rd) reflects increasing digital maturity in the private sector.



● Photo by Marina Leonova

Ranked 72nd globally, **South Africa** displays a mixed profile in digital readiness with notable strengths in the digitalization of Businesses (34th) and in the adoption of Future Technologies (51st). South Africa's results in Public cloud computing market scale (23rd) and Annual investment in telecommunication services (24th) are particularly impressive. It also demonstrates strength in digitally advanced Business (34th) and Computer software spending (28th), but encounters considerable hurdles in the area of digital Inclusion (65th), specifically with regards to Socioeconomic gap in use of digital payments (68th).

Key achievements include progress in regulatory Regulation (55th) of emerging technologies and Investment in emerging technologies (40th). However, substantial challenges persist in developing digital skills among Individuals (105th) and enhancing Quality of Life (118th).

South Africa's position reflects its role as a regional leader in digital transformation, while also highlighting critical areas that require attention to achieve inclusive digital development.

Arab States

The United Arab Emirates (UAE) demonstrates impressive digital development, ranking 28th globally, with exceptional strengths in Access (4th) to digital infrastructure and Adoption of emerging technologies (3rd). The country excels in Government promotion of emerging technologies (2nd) and shows remarkable performance in developing ICT skills in the education system (7th). The UAE's digital infrastructure benefits from affordable Mobile tariffs (10th), strong International internet bandwidth (15th), and Handset prices (1st).

However, there is room for enhancing the availability of Content (63rd), especially when it comes to AI scientific publications (73rd). Other opportunities for growth exist in Regulation (74th) and Impact (33rd) metrics. The UAE shows strength in the Quality-of-Life sub-pillar (17th) and performs well in areas such as Prevalence of gig economy (11th) and SDG 3: Good Health and Well-Being (27th). The country's strategic focus on emerging technologies and innovation positions it well for future digital growth.

Positioned at 35th globally, [Saudi Arabia](#) exhibits robust digital development with notable strengths in Access (22nd) and Future technologies (14th) dimensions. The nation excels in digitally connected Governments (26th) and demonstrates an impressive level of Adoption of emerging technologies (8th). Significant Annual investments in telecommunications services (17th) and balanced Regulation of emerging technologies (18th), underpin the country's digital transformation efforts. Saudi Arabia also ranks highly in Prevalence of gig economy (5th) and international internet bandwidth (9th). ``

Despite these advances, challenges persist in Regulation (91st) and inclusion (30th) metrics, particularly concerning E-Participation (43rd) and the Socioeconomic gap in use of digital payments (60th). While the Economy (29th) Pillar indicators reflect the success of its digital initiatives, there is still room for improvement in areas such as ICT services exports (40th).

Saudi Arabia's solid financial foundation allows for continued investment in digital infrastructure and services, as evidenced by its ranking in Annual investment in telecommunication services (31st) and Public cloud computing market scale (32nd), positioning the country favorably for future digital expansion.

Occupying the 38th spot globally, [Qatar](#) exhibits strong digital advancement with significant strengths in Access (34th) and Future technologies (13th) dimensions. The country ranks particularly high in having digitally ready Individuals (8th). Qatar demonstrates impressive results in sustained Investment (17th) and Adoption (19th) of emerging technologies supported by impressive showings in Government promotion of investment in emerging tech (8th).

Despite these strengths, challenges remain in the area of digital Inclusion (63rd), specifically in areas such as E-Participation (89th). Availability of digital Content (96th) also displays room for improvement, particularly when it comes to AI scientific publications (100) and Mobile apps development (81st).

Supported by a strong financial position, the country continues to invest heavily in digital infrastructure, yet there is room to enhance the adoption of digital technologies by Businesses (70th) specifically with respect to the Annual investment in telecommunications services (60th). Qatar's performance in innovation metrics such as ICT services exports (80th) indicates potential for future growth, bolstered by substantial government initiatives aimed at digital transformation.

Asia & Pacific

[Find a detailed review of Republic of Korea's NRI 2024 performance in the Top 10 NRI performers section.](#)

[Find a detailed review of Singapore's NRI 2024 performance in the Top 10 NRI performers section.](#)

[Japan](#) is ranked 12th globally in the Network Readiness Index, maintaining a strong position in digital readiness with exceptional performance in technology adoption and innovation metrics. The country demonstrates significant strength in having digitally skilled People(4th), evidenced by impressive showings in digitally connected Individuals (3rd) and Businesses (8th), underscoring its tight focus on ICT skills in the education system (14th).

Japan excels in technological infrastructure and innovation, ranking highly in areas such as Mobile broadband internet traffic (7th), Public cloud computing market scale (5th), Robot density (5th) and AI scientific publications (11th). These are supported by strong performance metrics in Regulatory quality (17th) and Cybersecurity (12th). The country also performs well when it comes to the impact of digital transformation on its Economy (10th), with particularly strong showings in Domestic market scale (4th).

However, some challenges exist in the area of digital Inclusion (7th), particularly visible in Gender gap in Internet use (82nd) and Rural gap in use of digital payments (41st).

Other areas for improvement include challenges in establishing Trust (40th) in digital technologies, reflected in poor showings in Online access to financial accounts (61st) and relatively low levels of Internet shopping (32nd). Despite these challenges, Japan's overall performance demonstrates its continued commitment to digital advancement and innovation.

CIS

[The Russian Federation](#) demonstrates strong technological capabilities, ranking 41st globally with notable strengths in the People pillar (22nd), with particularly impressive results in having digitally skilled Individuals (5th). The country demonstrates strong performance in AI scientific publications (10th), Annual investment in telecommunication services (11th), and in International

Internet bandwidth (17th). Russia also ranks high in Adult literacy rate (3rd) Mobile broadband internet traffic (4th), as well as in Investment in emerging technologies (47th).

However, significant challenges exist in the Regulation (112th) space, with overall weak Regulatory quality (125th) and ICT regulatory environment (124th). There's significant room for improvement in the area of Future technologies (104th), specifically when it comes to Computer software spending (60th). However, Russia's digital economy benefits from its domestic market scale (6th) and strong technical talent pool, though governance issues and international digital integration remain areas for improvement.

Kazakhstan ranks 61st globally, showing moderate progress in digital development with particular strengths in Government online services (8th) and affordability of Mobile Tariffs (17th). The nation displays promise in the area of digital inclusion (39th), specifically in metrics such as E-Participation (15th) and Socioeconomic gap in use of digital payments (9th). Kazakhstan's ICT infrastructure presents a mixed picture, as its strong performance in International Internet bandwidth (30th) is slightly offset by weaker showings in Population coverage of 3G mobile network (89th) and Handset prices (62nd).

While Kazakhstan has strong Cybersecurity (38th) frameworks, it faces significant challenges in Privacy protection by law content (119th) and overall ICT regulatory environment (129th).

The country's digital economy benefits from having a digitally engaged Government (36th), but requires more focus on increasing digitalization of Businesses (99th). Overall, Kazakhstan's Performance in the NRI 2024 suggests potential for growth, bolstered by strategic national digitalization plans.

Ranking 66th globally, **Armenia** exhibits promising digital development with notable strengths in areas such as Mobile apps development (31st) and addressing Gender gap in Internet use (4th). The country shows promising results in Regulation of emerging technologies (42nd), which are somewhat offset by metrics such as Cybersecurity (94th) and Online access to financial accounts (87th). Armenia ranks well when it comes to the Impact (42nd) of emerging technologies on Economy (42nd), demonstrated by strong showings in ICT service exports (8th).

However, it has potential to enhance adoption of digital technologies by Governments (89th), particularly when it comes to its Data Capabilities (79th) and R&D expenditure by governments and higher education in tech (89th). The country's results in Government online services (63rd) and E-Participation metrics (64th) indicate a commitment to digital transformation, though enhancements are needed when it comes to adoption of technology by Businesses

(81st) particularly in the area of Annual investment in telecommunication services (109th).

Armenia's standing reflects its emerging role in regional digital development while highlighting areas that require focus for comprehensive digital growth.

Europe

Finland (3rd), Sweden (4th) and the Netherlands (6th) are the top three performers in the region of Europe. Detailed remarks about each country can be found in the Top 10 NRI performers section. In this section, we focus on other European countries that are not in the Top 10

Norway demonstrates exceptional performance in the Network Readiness Index 2024, ranking 14th globally. The country shows particular strength in the Governance pillar (2nd), with outstanding performance in metrics such as Trust (2nd) and Regulation (2nd). This is evidenced by high rankings in the ICT regulatory environment (11th) and Privacy protection by law content (6th). In the Technology pillar (15th), Norway maintains solid performance across all sub-pillars, with notable achievements in Internet access in schools (1st), affordable Mobile tariffs (12th) and Handset prices (13th).

Norway's performance in the People pillar (17th) reflects strong digital adoption across society, particularly in having digitally engaged Government (12th) and Businesses (22nd). When it comes to the Impact (20th) of digital technologies, Norway demonstrates strong performance in Quality of Life metrics (3rd), particularly in Freedom to make life choices (7th) and Happiness (6th) indicators.

However, there's room for improvement in areas that impact the economy (67th), such as Domestic market scale (50th) and ICT services exports (66th). Overall, Norway's performance reflects its well-developed digital ecosystem, particularly in governance and regulatory frameworks, while suggesting opportunities for enhancement in economic impact and certain technological infrastructure metrics.

France maintains a strong position in the Network Readiness Index, ranking 16th globally. The country demonstrates solid performance across all pillars, with particular strengths in the area of Technology (13th) adoption, particularly by People (14th), and overall positive Impact (18th) of digital transformation on its economy and society. In the area of technology, France shows notable achievements in Access (6th) to digital services, excelling in affordable Mobile tariffs (28th) and Handset prices (8th). The country exhibits strong capabilities in generating digital Content (14th), such as AI scientific publications (17th) and Mobile apps development (20th).

The area of people highlights France's balanced digital development, with strong showings in Business (12th) and Government (9th) adoption of digital technologies to enhance their service delivery. The country ranks particularly well in Public cloud computing market scale (6th) and Government promotion of emerging technologies (16th). In the Governance pillar (25th), France maintains solid performance across Trust (34th), Regulation (15th), and Inclusion (23rd) sub-pillars, showing particular strength in the ICT regulatory environment (7th) and Cybersecurity (14th) levels.

The area of Impact (18th) demonstrates France's success in translating digital capabilities into societal benefits, with particularly strong showings in the impact on Economy (18th) and SDG contribution metrics (13th), though there's room for improvement in areas such as Freedom to make life choices (83rd) and SDG 7: Affordable and Clean Energy (44th).

[Estonia](#) demonstrates strong digital performance, ranking 18th globally in the NRI 2024. The country shows particular excellence in emerging technology Governance (5th), with outstanding achievements across the areas of Trust (8th), Regulation (9th), and digital Inclusion (3rd). In the Technology pillar (32nd), Estonia shows notable strength in Internet access in schools (1st) and Mobile apps development (6th). The country performs particularly well in digital Content metrics (21st), ranking 10th in GitHub commits and 26th in Internet domain registrations.

Estonia's performance in the People pillar (13th) reflects its successful digital transformation, with strong showings in digitally engaged Governments (10th) and Businesses (20th). The country ranks high in several key metrics, including Government online services (1st) and E-Participation (3rd) and overall Data Capabilities (1st), demonstrating its global leadership in e-governance. In the Impact pillar (21st), Estonia shows balanced performance across economic impact (25th) quality of life (24th) and SDG Contribution (16th) metrics. The country particularly excels in digital inclusion indicators demonstrating low Socioeconomic gap in use of digital payments (13th) and Gender gap in Internet use (13th). More can be done, however, when it comes to increasing its Computer software spending (92nd) and investing in telecommunication services (95th).

Estonia's overall performance reflects its position as a digital leader, particularly in e-governance and digital public services, while showing room for improvement in certain technological infrastructure metrics.

The Americas

[Find a detailed review of USA's NRI 2024 performance in the Top 10 NRI performers section.](#)

Holding the 11th position globally, [Canada](#) maintains a strong stance in digital readiness with balanced achievements across all four pillars. The country demonstrates exceptional strength in the adoption of emerging technologies by Businesses (3rd), generation of high-quality digital Content (6th) and performs robustly in adoption and investment in Future technologies (12th). While Canada's digital infrastructure is highly developed, there is potential for improvement in the area of Access (33rd) where strong showings in affordable Handset prices (14th) are slightly offset by relatively low rankings in Mobile Tariffs (53rd) and Population coverage by 3G (45th). Canada's noteworthy accomplishments include strong standings in the Governance space (12th), with particularly impressive levels of Cybersecurity (13th) and Regulatory quality (9th) effectively translating to high levels of Trust (11th) in digital technologies.

Canada also excels in the area of digital Inclusion (12th) particularly with respect to E-Participation (14th) and addressing Rural gap in use of digital payments (12th). However, indicators such as Gender gap in Internet use (50th) and Freedom to make life choices (60th) display some room for improvement. Overall, the nation's comprehensive approach to digital development is evident through its strong results in government services, business adoption, and individual digital readiness.

Positioned at 44th globally, [Brazil](#) demonstrates moderate digital development, with consistent showings across all four sub-pillars. The country boasts notable strengths in the People pillar (49th), where balanced showings in digitally engaged Governments (47th) and Businesses (37th) are somewhat offset by weaker results in adoption of digital technologies by Individuals (83rd). Brazil exhibits impressive performance in domestic market scale (8th) and E-participation (11th). It ranks notably high in Government online services (14th) but lags in the Government promotion of emerging technologies (82nd).

Certain challenges remain in digital infrastructure Access (57th), where Population coverage by at least a 3G mobile network (102nd) requires particular attention. The area of digital Inclusion (21st) shows significant promise, with Brazil demonstrating strong efforts in closing Gender gap in Internet use (8th) and addressing Rural gaps in use of digital payments (25th). Brazil's size and market potential support its digital transformation efforts, while the regulatory quality (84th) and ICT skills development in the education system (106th) continue to be areas where progress is necessary.

Outstanding pillar performance among middle- and low-income economies

Several middle- and low-income economies have exceeded expected performance across one or more of the foundational pillars in the NRI, reflecting capabilities in digital readiness that align with higher-ranking countries. These economies achieve scores above projections for their income levels across key areas of Technology, People, Governance, and Impact.

China, Ukraine, Vietnam, and Kenya each perform across all four pillars, leading within their respective income groups. Africa has the highest number of economies (20) surpassing expectations in at least one pillar, with 14 countries performing well in Governance. Rwanda and Kenya excel across all four dimensions, while Ghana, Malawi, Zimbabwe, Senegal, Tanzania, and Burundi demonstrate strength in three pillars.

In the Asia & Pacific region, 13 economies have exceeded expectations, with 8 demonstrating particular strength in Technology. China and Vietnam perform across all four pillars, while Thailand and India follow closely with performance across three pillars.

In the Americas, five economies show high performance in digital readiness, with Brazil excelling in Technology and Governance, and Costa Rica, Honduras, and Nicaragua showing strong results in Impact.

Qatar exhibits strong digital advancement with significant strengths in Access (34th) and Future technologies (13th) dimensions. The country ranks particularly high in having digitally ready Individuals (8th).



● Photo by Jose Ángel Ruiz Olivaresclouds-on-smartphone-screen-13586581/

The CIS region includes three economies exceeding expectations, with Kyrgyzstan demonstrating high performance in three pillars, People, Governance, and Impact. In this region, Armenia stands out in Technology and Impact, while Uzbekistan shows outperformance in Technology. In Europe, Ukraine performs across all four pillars, with Serbia showing strengths in Governance and Impact and Moldova in Governance.

The Arab States include four economies with strong digital performance, with Morocco and Jordan exceeding expectations in Technology and People.

The lower middle-income group contains 24 economies surpassing expectations in one or more pillars. Additionally, 14 upper middle-income and 10 low-income economies also show strong performance across one or more dimensions, indicating that digital advancement is present across a range of income levels.

These findings suggest that while higher income levels often correlate with broader digital readiness, economies across various income brackets are making measurable progress. The data indicates that regions like Africa and Asia & Pacific, in particular, are home to numerous economies that are leveraging targeted digital strategies to advance in specific pillars. This distribution of outperformers across income groups and regions highlights a potential for continued digital growth and resilience, even in resource-constrained contexts.

Table 5 Middle- and low-income economies with outstanding pillar performance by region, income group, and pillar

Region	Economy	Income	Technology	People	Governance	Impact
Africa	Kenya	Lower middle income	•	•	•	•
	Rwanda	Low income	•	•	•	•
	Ghana	Lower middle income	•	•	•	
	Senegal	Lower middle income	•		•	•
	United Republic of Tanzania	Lower middle income	•	•	•	
	Zimbabwe	Lower middle income	•	•	•	
	Malawi	Low income		•	•	•
	Burundi	Low income	•	•		•
	South Africa	Upper middle income	•		•	
	Zambia	Lower middle income		•	•	
	Cote d'Ivoire	Lower middle income		•		
	Benin	Lower middle income			•	
	Lesotho	Lower middle income			•	
	Uganda	Low income			•	
	Mali	Low income		•		
	Ethiopia	Low income	•			
	Mozambique	Low income			•	
	Madagascar	Low income			•	
	Sierra Leone	Low income	•			
	Democratic Republic of the Congo	Low income	•			
Asia & Pacific	China	Upper middle income	•	•	•	•
	Viet Nam	Lower middle income	•	•	•	•
	Thailand	Upper middle income	•	•	•	
	India	Lower middle income	•	•		•
	Indonesia	Upper middle income	•	•		
	Philippines	Lower middle income		•		•
	Malaysia	Upper middle income		•		
	Iran (Islamic Republic of)	Upper middle income	•			
	Mongolia	Upper middle income			•	
	Bangladesh	Lower middle income	•			
	Pakistan	Lower middle income	•			
	Nepal	Lower middle income				•
	Lao People's Democratic Republic	Lower middle income				•
The Americas	Brazil	Upper middle income	•		•	
	Costa Rica	Upper middle income				•
	Ecuador	Upper middle income		•		
	Honduras	Lower middle income				•
	Nicaragua	Lower middle income				•
Arab States	Morocco	Lower middle income	•	•		
	Jordan	Lower middle income	•	•		
	Egypt	Lower middle income	•			
	Tunisia	Lower middle income	•			
CIS	Kyrgyzstan	Lower middle income		•	•	•
	Armenia	Upper middle income	•			•
	Uzbekistan	Lower middle income	•			
Europe	Ukraine	Upper middle income	•	•	•	•
	Serbia	Upper middle income			•	•
	Republic of Moldova	Upper middle income			•	

Source: Network Readiness Index Database, Portulans Institute, 2024.

Annex 1: Pillar Tables



Table A-1.1 Rankings in the Technology pillar and associated sub-pillars

Economy	PILLAR	SUB-PILLARS		
	Technology	Access	Content	Future Technologies
United States of America	1	2	1	1
Switzerland	2	8	5	3
Netherlands	3	23	2	6
Germany	4	25	4	7
United Kingdom	5	10	3	16
Singapore	6	3	15	2
Sweden	7	16	9	4
Denmark	8	15	8	10
Canada	9	33	6	12
Republic of Korea	10	14	18	5
Finland	11	19	12	9
China	12	1	16	26
France	13	6	14	19
Japan	14	7	32	11
Norway	15	13	10	22
Luxembourg	16	18	20	15
Hong Kong, China	17	5	34	18
Belgium	18	26	26	17
Australia	19	12	11	39
Austria	20	40	22	20
United Arab Emirates	21	4	63	8
Iceland	22	54	7	35
Spain	23	11	29	29
Italy	24	35	30	25
Portugal	25	28	25	28
Czechia	26	29	23	36
Indonesia	27	20	35	38
Israel	28	44	19	43
New Zealand	29	49	28	32
Ireland	30	60	36	21
Saudi Arabia	31	22	79	14
Estonia	32	37	21	56
Slovenia	33	24	44	41
India	34	41	33	52

Economy	PILLAR	SUB-PILLARS		
	Technology	Access	Content	Future Technologies
Qatar	35	34	96	13
Lithuania	36	21	43	54
Poland	37	17	39	66
Malta	38	70	40	30
Turkiye	39	9	46	72
Malaysia	40	42	61	33
Viet Nam	41	32	42	68
Pakistan	42	100	31	23
Cyprus	43	52	27	81
Ukraine	44	69	41	40
Brazil	45	57	24	75
Hungary	46	31	47	67
Russian Federation	47	30	37	104
Thailand	48	36	69	47
Slovakia	49	27	53	74
Seychelles	50	78	17	96
Armenia	51	55	59	45
Bulgaria	52	43	50	69
Montenegro	53	93	13	90
Iran (Islamic Republic of)	54	104	38	24
Latvia	55	47	45	92
Egypt	56	38	55	83
Bahrain	57	51	94	37
Jordan	58	88	65	27
South Africa	59	66	57	51
Colombia	60	59	66	50
Greece	61	68	52	62
Georgia	62	46	60	73
Romania	63	45	58	78
Morocco	64	72	51	58
Bangladesh	65	62	48	77
Uruguay	66	58	62	61
Oman	67	50	95	48
Kuwait	68	53	91	46

Economy	PILLAR	SUB-PILLARS		
	Technology	Access	Content	Future Technologies
Chile	69	65	74	53
Costa Rica	70	79	88	34
Tunisia	71	71	77	49
Uzbekistan	72	63	78	63
Kenya	73	82	83	42
Croatia	74	48	54	108
Azerbaijan	75	64	93	64
Mauritius	76	67	87	71
Argentina	77	74	70	79
Serbia	78	61	56	103
Philippines	79	86	72	60
Mexico	80	75	68	88
Kazakhstan	81	56	85	100
Sri Lanka	82	99	82	44
Panama	83	91	76	70
Republic of Moldova	84	39	71	129
Algeria	85	80	81	94
Jamaica	86	87	108	59
Ghana	87	84	97	76
Mongolia	88	73	100	95
Ecuador	89	92	86	85
North Macedonia	90	76	75	117
Dominican Republic	91	81	106	101
Senegal	92	98	117	57
Rwanda	93	102	105	55
Nigeria	94	110	49	99
Cote d'Ivoire	95	94	118	84
Albania	96	77	98	123
Kyrgyzstan	97	89	90	115
Ethiopia	98	96	64	126
Peru	99	101	84	105
Paraguay	100	85	102	119
Lao People's Democratic Republic	101	105	129	31
Bosnia and Herzegovina	102	90	101	121

Economy	PILLAR	SUB-PILLARS		
	Technology	Access	Content	Future Technologies
Trinidad and Tobago	103	83	121	111
United Republic of Tanzania	104	109	103	82
El Salvador	105	97	109	114
Venezuela (Bolivarian Republic of)	106	103	107	98
Namibia	107	112	67	109
Cameroon	108	115	92	80
Cambodia	109	106	89	106
Guatemala	110	111	115	86
Nepal	111	118	73	107
Mauritania	112	121	119	65
Bolivia (Plurinational State of)	113	107	111	110
Honduras	114	116	113	91
Cabo Verde	115	108	126	89
Zimbabwe	116	120	104	102
Benin	117	122	116	87
Botswana	118	95	125	127
Uganda	119	119	99	118
Sierra Leone	120	113	112	113
Angola	121	117	120	131
Zambia	122	114	127	122
Mali	123	127	132	93
Malawi	124	124	124	116
Democratic Republic of the Congo	125	129	128	97
Mozambique	126	123	123	128
Yemen	127	130	80	132
Lesotho	128	126	131	124
Nicaragua	129	125	122	133
Madagascar	130	128	130	120
Burundi	131	132	110	125
Burkina Faso	132	131	114	130
Chad	133	133	133	112

Source: Network Readiness Index Database, Portulans Institute, 2024.

Table A-1.2 Rankings in the People pillar and associated sub-pillars

Economy	PILLAR	SUB-PILLARS		
	People	Individuals	Businesses	Governments
Republic of Korea	1	1	2	1
United States of America	2	18	1	2
Singapore	3	10	5	3
Japan	4	3	8	13
Israel	5	11	7	5
China	6	6	9	22
United Kingdom	7	49	4	4
Germany	8	20	6	15
Finland	9	27	11	7
Switzerland	10	37	10	14
Canada	11	53	3	17
United Arab Emirates	12	2	61	11
Estonia	13	35	20	10
France	14	44	12	9
Sweden	15	51	19	6
Australia	16	69	13	8
Norway	17	74	22	12
Denmark	18	78	14	18
Spain	19	28	21	27
Netherlands	20	87	17	19
Italy	21	30	26	25
Russian Federation	22	5	44	41
Malaysia	23	9	78	23
Iceland	24	96	15	21
Austria	25	60	27	24
Belgium	26	99	24	16
New Zealand	27	101	25	20
Ukraine	28	4	69	57
India	29	17	36	48
Saudi Arabia	30	15	87	26
Qatar	31	8	70	39
Thailand	32	13	76	32
Philippines	33	7	53	61
Czechia	34	90	16	37

Economy	PILLAR	SUB-PILLARS		
	People	Individuals	Businesses	Governments
Ireland	35	70	31	33
Hong Kong, China	36	25	28	73
Indonesia	37	29	72	28
Viet Nam	38	12	93	49
Poland	39	33	39	50
Turkiye	40	38	56	34
Lithuania	41	43	51	35
Portugal	42	45	45	38
Oman	43	16	85	59
Malta	44	42	58	42
Uruguay	45	23	75	45
Serbia	46	36	50	55
Iran (Islamic Republic of)	47	39	18	104
Jordan	48	21	71	58
Brazil	49	83	37	47
Mexico	50	64	30	72
Mauritius	51	75	23	84
Colombia	52	63	52	46
Kazakhstan	53	34	99	36
Chile	54	57	38	66
Georgia	55	32	68	64
Peru	56	26	41	86
Costa Rica	57	22	47	87
Bahrain	58	14	115	68
Slovenia	59	95	59	31
Bulgaria	60	50	88	43
Latvia	61	68	60	53
Albania	62	81	86	29
Ecuador	63	66	32	90
Hungary	64	65	62	60
Dominican Republic	65	59	80	54
Luxembourg	66	114	40	30
Greece	67	88	67	44
Croatia	68	77	63	63

Economy	PILLAR	SUB-PILLARS		
	People	Individuals	Businesses	Governments
Cyprus	69	40	83	77
Kuwait	70	19	102	88
Algeria	71	47	42	99
Morocco	72	54	66	83
South Africa	73	105	34	78
Cote d'Ivoire	74	80	54	81
Montenegro	75	46	55	98
Panama	76	31	92	92
Seychelles	77	61	33	115
Azerbaijan	78	48	49	100
Romania	79	62	95	69
Kyrgyzstan	80	58	57	96
Armenia	81	55	81	89
Ghana	82	102	79	52
Bosnia and Herzegovina	83	67	35	116
Bolivia (Plurinational State of)	84	24	77	108
Argentina	85	107	43	67
Paraguay	86	92	29	109
North Macedonia	87	91	74	70
Rwanda	88	109	82	40
Kenya	89	89	89	65
Republic of Moldova	90	73	100	75
Uzbekistan	91	72	101	74
Slovakia	92	112	64	56
Egypt	93	84	90	79
Tunisia	94	56	94	97
Cabo Verde	95	82	124	51
Mongolia	96	52	109	93
Zambia	97	104	73	76
El Salvador	98	86	46	110
Bangladesh	99	93	121	71
Cambodia	100	41	97	123
Lao People's Democratic Republic	101	76	131	62
United Republic of Tanzania	102	108	106	80

Economy	PILLAR	SUB-PILLARS		
	People	Individuals	Businesses	Governments
Pakistan	103	100	91	106
Zimbabwe	104	103	103	94
Sri Lanka	105	79	118	105
Guatemala	106	94	84	121
Botswana	107	85	104	120
Jamaica	108	115	117	82
Cameroon	109	111	119	91
Venezuela (Bolivarian Republic of)	110	71	116	126
Nepal	111	110	108	103
Nigeria	112	119	113	85
Mali	113	127	48	102
Honduras	114	98	96	130
Nicaragua	115	97	126	112
Namibia	116	106	120	119
Malawi	117	117	114	107
Benin	118	125	111	95
Senegal	119	113	122	113
Trinidad and Tobago	120	123	98	114
Lesotho	121	116	112	124
Madagascar	122	121	123	127
Mauritania	123	122	65	133
Uganda	124	120	132	101
Angola	125	126	110	129
Ethiopia	126	129	107	122
Democratic Republic of the Congo	127	118	125	132
Mozambique	128	128	105	131
Burundi	129	124	129	125
Chad	130	130	127	118
Yemen	131	131	130	111
Burkina Faso	132	133	128	117
Sierra Leone	133	132	133	128

Source: Network Readiness Index Database, Portulans Institute, 2024.

Table A-1.3 Rankings in the Governance pillar and associated sub-pillars

Economy	PILLAR	SUB-PILLARS		
	Governance	Trust	Regulation	Inclusion
Denmark	1	1	7	11
Norway	2	2	2	22
Netherlands	3	5	5	4
Finland	4	4	4	6
Estonia	5	8	9	3
Sweden	6	3	6	10
Australia	7	7	10	8
Singapore	8	16	12	1
United States of America	9	6	19	9
New Zealand	10	12	18	2
Luxembourg	11	20	1	17
Canada	12	11	11	12
Switzerland	13	31	3	14
United Kingdom	14	21	25	5
Austria	15	25	14	16
Germany	16	22	13	20
Lithuania	17	24	8	25
Iceland	18	10	35	13
Czechia	19	15	16	32
Latvia	20	19	20	27
Belgium	21	13	22	38
Republic of Korea	22	9	41	18
Ireland	23	14	28	28
Spain	24	26	26	15
France	25	34	15	23
Japan	26	40	24	7
Slovakia	27	18	30	43
Italy	28	30	27	29
Israel	29	36	21	26
Portugal	30	43	17	34
Slovenia	31	39	23	35
Poland	32	17	50	41
Malta	33	38	29	31
Hong Kong, China	34	27	71	24

Economy	PILLAR	SUB-PILLARS		
	Governance	Trust	Regulation	Inclusion
Cyprus	35	37	40	37
China	36	23	88	19
Greece	37	28	44	52
Hungary	38	29	38	57
Brazil	39	50	49	21
Chile	40	46	36	46
Malaysia	41	42	48	44
Thailand	42	44	54	36
Croatia	43	45	39	48
Saudi Arabia	44	32	91	30
Qatar	45	35	47	63
Bulgaria	46	53	32	51
Oman	47	41	82	45
Serbia	48	56	46	42
Russian Federation	49	33	112	40
United Arab Emirates	50	54	74	33
Romania	51	52	43	62
Bahrain	52	63	42	47
Kazakhstan	53	47	106	39
Türkiye	54	49	77	56
Uruguay	55	57	34	71
Ukraine	56	51	78	61
Costa Rica	57	64	33	73
Argentina	58	67	72	50
Republic of Moldova	59	60	52	68
South Africa	60	58	55	65
North Macedonia	61	59	62	64
Mauritius	62	62	61	60
Mongolia	63	61	96	54
Georgia	64	68	65	69
Mexico	65	66	45	88
Montenegro	66	77	63	55
Viet Nam	67	48	101	90
Kenya	68	71	60	76
Indonesia	69	70	86	67

Economy	PILLAR	SUB-PILLARS		
	Governance	Trust	Regulation	Inclusion
Colombia	70	79	53	70
Kuwait	71	69	84	79
Bosnia and Herzegovina	72	89	73	59
Jordan	73	94	83	53
Philippines	74	72	85	89
Jamaica	75	105	31	84
Rwanda	76	83	66	80
Peru	77	82	76	77
Dominican Republic	78	93	51	83
Ghana	79	73	59	100
Armenia	80	88	64	81
Iran (Islamic Republic of)	81	55	124	72
Seychelles	82	65	80	112
Morocco	83	80	37	118
Panama	84	91	70	85
Paraguay	85	95	90	75
Azerbaijan	86	74	100	91
Albania	87	85	56	106
India	88	76	79	105
Kyrgyzstan	89	97	111	58
Uzbekistan	90	75	127	49
Tunisia	91	81	95	94
Ecuador	92	108	92	74
Trinidad and Tobago	93	103	81	87
Botswana	94	87	57	115
Benin	95	101	58	107
Cabo Verde	96	102	67	102
Senegal	97	104	68	98
Cote d'Ivoire	98	96	89	99
Egypt	99	98	102	86
Uganda	100	86	97	103
Sri Lanka	101	100	109	82
Bangladesh	102	99	115	78
United Republic of Tanzania	103	90	107	104
Lesotho	104	112	118	66

Economy	PILLAR	SUB-PILLARS		
	Governance	Trust	Regulation	Inclusion
Venezuela (Bolivarian Republic of)	105	78	123	93
Zambia	106	92	94	120
Guatemala	107	122	99	92
Honduras	108	128	87	97
Algeria	109	119	98	101
El Salvador	110	118	93	116
Malawi	111	114	108	108
Nepal	112	111	114	109
Madagascar	113	123	69	121
Nigeria	114	84	113	128
Zimbabwe	115	106	125	96
Pakistan	116	109	105	119
Bolivia (Plurinational State of)	117	113	121	95
Namibia	118	107	122	111
Cameroon	119	110	104	126
Mali	120	126	110	113
Cambodia	121	120	117	110
Burkina Faso	122	116	75	132
Mozambique	123	115	103	125
Nicaragua	124	125	119	117
Angola	125	121	116	130
Chad	126	127	129	114
Mauritania	127	124	126	124
Sierra Leone	128	129	120	129
Lao People's Democratic Republic	129	117	130	123
Ethiopia	130	130	128	122
Democratic Republic of the Congo	131	133	131	127
Yemen	132	132	133	131
Burundi	133	131	132	133

Source: Network Readiness Index Database, Portulans Institute, 2024.

Table A-1.4 Rankings in the Impact pillar and associated sub-pillars

Economy	PILLAR	SUB-PILLARS		
	Impact	Economy	Quality of life	SDG Contribution
Finland	1	3	1	24
Sweden	2	4	5	10
Ireland	3	6	12	1
Israel	4	1	35	33
Singapore	5	5	18	3
Netherlands	6	9	7	21
Denmark	7	17	4	5
United Kingdom	8	12	22	4
Germany	9	11	23	9
Switzerland	10	15	13	7
United States of America	11	2	73	29
Canada	12	14	21	20
Republic of Korea	13	8	44	28
Luxembourg	14	32	8	6
Japan	15	10	46	27
Australia	16	24	15	12
New Zealand	17	30	11	15
France	18	18	36	13
China	19	7	58	47
Norway	20	67	3	17
Estonia	21	25	24	16
Belgium	22	52	10	18
Austria	23	45	20	14
Spain	24	38	38	11
Malta	25	42	28	25
Czechia	26	58	14	30
Portugal	27	51	41	8
Slovenia	28	101	6	26
Costa Rica	29	50	19	46
Iceland	30	57	2	69
Viet Nam	31	20	27	58
Poland	32	44	37	31
United Arab Emirates	33	33	17	60
Italy	34	37	64	19

Economy	PILLAR	SUB-PILLARS		
	Impact	Economy	Quality of life	SDG Contribution
Cyprus	35	27	59	41
Hong Kong, China	36	19	102	2
Serbia	37	22	48	61
Romania	38	35	39	51
Latvia	39	59	53	32
India	40	13	82	75
Nicaragua	41	65	45	40
Armenia	42	55	62	42
Uruguay	43	76	31	48
Bahrain	44	21	49	85
Saudi Arabia	45	29	16	112
Lithuania	46	61	68	35
Mauritius	47	81	75	23
Mexico	48	77	40	54
Hungary	49	82	67	36
Kuwait	50	48	9	118
Ukraine	51	16	90	89
Slovakia	52	92	47	45
Qatar	53	23	25	123
Malaysia	54	31	43	103
Kyrgyzstan	55	107	29	59
Oman	56	47	33	108
Republic of Moldova	57	60	54	71
Philippines	58	28	57	105
Argentina	59	70	56	70
Thailand	60	74	30	95
Chile	61	90	61	53
Montenegro	62	54	69	81
Lao People's Democratic Republic	63	64	74	66
Brazil	64	79	66	67
Azerbaijan	65	34	81	87
Kazakhstan	66	95	34	90
Bulgaria	67	39	87	77
Croatia	68	97	91	34
Russian Federation	69	41	77	88

Economy	PILLAR	SUB-PILLARS		
	Impact	Economy	Quality of life	SDG Contribution
Seychelles	70	132	42	38
Albania	71	87	51	82
Panama	72	105	55	64
El Salvador	73	114	32	74
Indonesia	74	43	65	106
Ecuador	75	121	92	22
Colombia	76	84	85	56
Greece	77	104	94	39
Sri Lanka	78	36	107	57
Honduras	79	103	76	52
Dominican Republic	80	78	60	101
Bolivia (Plurinational State of)	81	118	78	43
Kenya	82	40	109	65
Cote d'Ivoire	83	69	97	63
Cabo Verde	84	125	89	37
Uzbekistan	85	110	26	111
Senegal	86	62	95	80
Peru	87	116	79	50
Bangladesh	88	56	83	99
Jamaica	89	106	70	84
Georgia	90	93	72	98
Paraguay	91	123	63	73
North Macedonia	92	86	86	86
Nepal	93	88	80	91
Bosnia and Herzegovina	94	109	52	104
Egypt	95	26	114	83
Turkiye	96	66	120	44
Ghana	97	68	106	79
Rwanda	98	83	113	49
Morocco	99	71	96	96
Guatemala	100	108	71	113
Venezuela (Bolivarian Republic of)	101	126	84	76
Pakistan	102	46	110	107
United Republic of Tanzania	103	72	100	102
Benin	104	85	101	93

Economy	PILLAR	SUB-PILLARS		
	Impact	Economy	Quality of life	SDG Contribution
South Africa	105	89	118	55
Malawi	106	63	122	68
Cameroon	107	53	111	116
Cambodia	108	100	88	117
Mongolia	109	120	93	100
Trinidad and Tobago	110	130	50	125
Namibia	111	102	124	62
Jordan	112	91	104	114
Uganda	113	96	99	115
Mali	114	80	108	122
Ethiopia	115	73	115	110
Burkina Faso	116	112	112	97
Zambia	117	113	116	92
Nigeria	118	98	105	126
Algeria	119	75	117	121
Iran (Islamic Republic of)	120	99	103	132
Mozambique	121	129	98	127
Tunisia	122	111	119	109
Botswana	123	124	130	78
Sierra Leone	124	131	126	94
Madagascar	125	49	131	129
Mauritania	126	122	121	120
Burundi	127	119	123	119
Yemen	128	94	127	130
Angola	129	117	133	72
Chad	130	127	125	128
Democratic Republic of the Congo	131	115	129	133
Lesotho	132	128	132	124
Zimbabwe	133	133	128	131

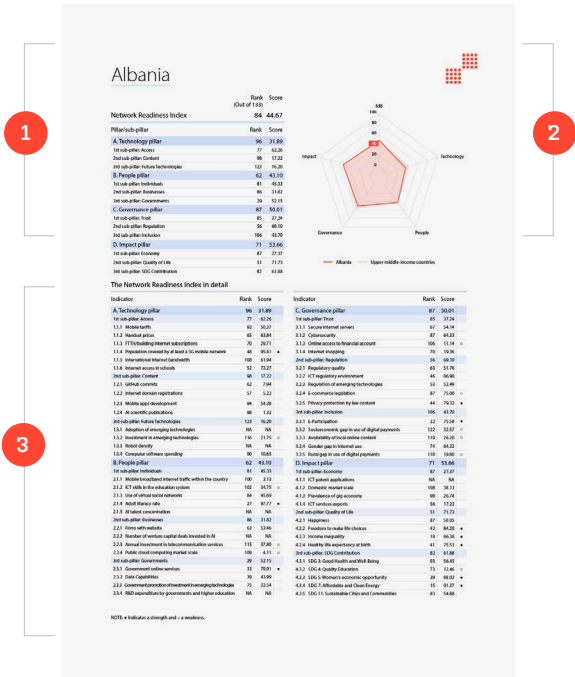
Source: Network Readiness Index Database, Portulans Institute, 2024.

Several middle-and low-income economies have exceeded expected performance across one or more of the foundational pillars in the NRI, reflecting capabilities in digital readiness that align with higher-ranking countries. These economies achieve scores above projections for their income levels across key areas of Technology, People, Governance, and Impact.

Country/Economy Profiles



How to read the Country/Economy Profiles



The Country/Economy Profiles presents a scorecard that summarizes the individual performance of each economy (133 total) covered in The Network Readiness Index 2024.

Each Country/Economy Profile consists of three parts:

1. Performance Highlights

The first section displays each Country/Economy's overall performance across the NRI, the four primary pillars, and the twelve sub-pillars. For each level of the NRI, the economy's ranking (out of the 133 economies) and individual score (on a 0-to-100 scale) is shown.

2. Radar Chart

The second section uses a radar chart to visually depict the individual economy's performance in the overall NRI, its four pillars, and sub-pillars. The dark blue line plots the economy's score, while the light blue line represents the average score of all economies found in the same income class. The World Bank defines each country's income classification and reflects data current to September 2024.

3. Detailed Network Readiness Index Reporting

The third section demonstrates how a particular economy performed across each of the 54 indicators comprising the NRI. All indicators organize into primary and secondary level pillars, and their numbering matches the data tables found in the other report sections with additional information such as descriptions, years, rankings, values, and normalized scores for all the indicators.

Strengths and Weaknesses

The indicators considered a strength of a particular economy are notated on the far right-hand side by a solid circle. Indicators signaled as a weakness receive a hollow circle. For all economies, indicators with the highest rankings are highlighted as strengths, while indicators with the lowest rankings represent weaknesses.

For any remaining indicators, the strengths and weaknesses of a particular economy are based on the percentage of economies with scores that fall above or below a score determined by percent ranks. Indicators highlighted as strengths earn a score in the 10th largest percent rank among the 54 possible indicators of each economy. Indicators highlighted as weaknesses include scores that rank below the 5th lowest percent rank of the 54 indicators.

It is important to note that the absence of data may have an effect on the rankings of those sub-pillars, pillars where these absences are noted. Thus, caution should be averted when reviewing the rankings of elements in the NRI under these circumstances. This includes the signaling of strengths and weaknesses.

The NRI Online

The NRI website (<https://networkreadinessindex.org/>) offers additional analysis, analytical tools, individual country/economy profiles, and visualizations such as sortable rankings and maps.

Albania

Rank
(Out of 133)

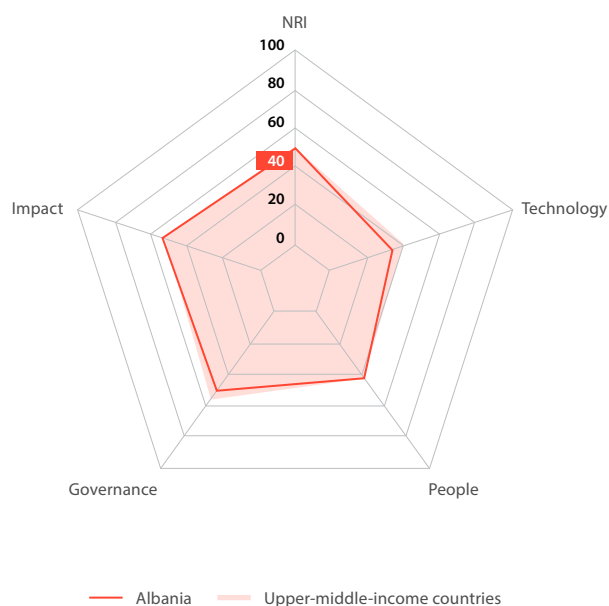
Network Readiness Index

84 44.67

Pillar/sub-pillar	Rank	Score
A. Technology pillar	96	31.89
1st sub-pillar: Access	77	62.26
2nd sub-pillar: Content	98	17.22
3rd sub-pillar: Future Technologies	123	16.20
B. People pillar	62	43.10
1st sub-pillar: Individuals	81	45.33
2nd sub-pillar: Businesses	86	31.82
3rd sub-pillar: Governments	29	52.15
C. Governance pillar	87	50.01
1st sub-pillar: Trust	85	37.24
2nd sub-pillar: Regulation	56	69.10
3rd sub-pillar: Inclusion	106	43.70
D. Impact pillar	71	53.66
1st sub-pillar: Economy	87	27.37
2nd sub-pillar: Quality of Life	51	71.73
3rd sub-pillar: SDG Contribution	82	61.88

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	96	31.89
1st sub-pillar: Access	77	62.26
1.1.1 Mobile tariffs	92	50.37
1.1.2 Handset prices	65	63.84
1.1.3 FTTH/building Internet subscriptions	70	29.71
1.1.4 Population covered by at least a 3G mobile network	48	95.41 ●
1.1.5 International Internet bandwidth	108	61.94
1.1.6 Internet access in schools	52	72.27
2nd sub-pillar: Content	98	17.22
1.2.1 GitHub commits	62	7.94
1.2.2 Internet domain registrations	57	5.22
1.2.3 Mobile apps development	94	54.38
1.2.4 AI scientific publications	98	1.32
3rd sub-pillar: Future Technologies	123	16.20
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	116	21.75 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	90	10.65
B. People pillar	62	43.10
1st sub-pillar: Individuals	81	45.33
2.1.1 Mobile broadband internet traffic within the country	100	3.13
2.1.2 ICT skills in the education system	102	34.75 ○
2.1.3 Use of virtual social networks	84	45.69
2.1.4 Adult literacy rate	27	97.77 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	86	31.82
2.2.1 Firms with website	63	53.46
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	115	37.89 ○
2.2.4 Public cloud computing market scale	109	4.11 ○
3rd sub-pillar: Governments	29	52.15
2.3.1 Government online services	33	79.91 ●
2.3.2 Data Capabilities	39	43.99
2.3.3 Government promotion of investment in emerging technologies	75	32.54
2.3.4 R&D expenditure by governments and higher education	NA	NA



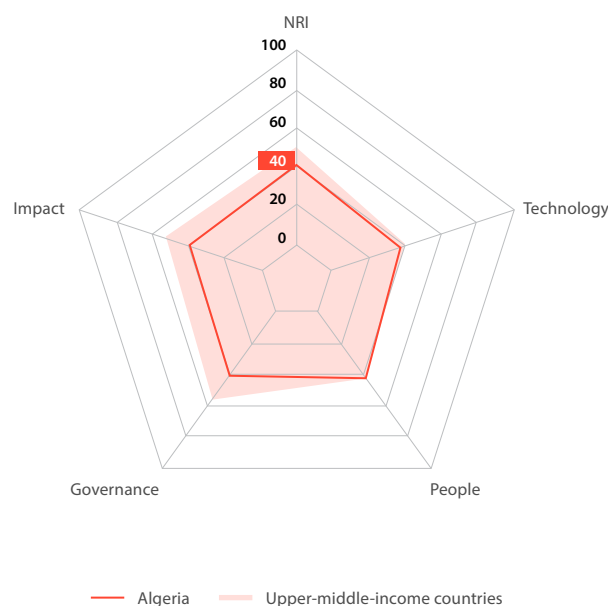
Indicator	Rank	Score
C. Governance pillar	87	50.01
1st sub-pillar: Trust	85	37.24
3.1.1 Secure Internet servers	67	54.14
3.1.2 Cybersecurity	87	64.33
3.1.3 Online access to financial account	106	11.14 ○
3.1.4 Internet shopping	70	19.36
2nd sub-pillar: Regulation	56	69.10
3.2.1 Regulatory quality	63	51.76
3.2.2 ICT regulatory environment	46	86.90
3.2.3 Regulation of emerging technologies	53	52.49
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	44	79.32 ●
3rd sub-pillar: Inclusion	106	43.70
3.3.1 E-Participation	22	75.59 ●
3.3.2 Socioeconomic gap in use of digital payments	122	32.57 ○
3.3.3 Availability of local online content	119	26.20 ○
3.3.4 Gender gap in Internet use	74	64.32
3.3.5 Rural gap in use of digital payments	118	19.80 ○
D. Impact pillar	71	53.66
1st sub-pillar: Economy	87	27.37
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	108	38.13
4.1.3 Prevalence of gig economy	98	26.74
4.1.4 ICT services exports	56	17.23
2nd sub-pillar: Quality of Life	51	71.73
4.2.1 Happiness	87	50.05
4.2.2 Freedom to make life choices	42	84.20 ●
4.2.3 Income inequality	19	86.38 ●
4.2.4 Healthy life expectancy at birth	41	75.53 ●
3rd sub-pillar: SDG Contribution	82	61.88
4.3.1 SDG 3: Good Health and Well-Being	93	56.45
4.3.2 SDG 4: Quality Education	73	12.46 ○
4.3.3 SDG 5: Women's economic opportunity	38	88.03 ●
4.3.4 SDG 7: Affordable and Clean Energy	15	91.37 ●
4.3.5 SDG 11: Sustainable Cities and Communities	83	54.88

NOTE: ● Indicates a strength and ○ a weakness.

Algeria

	Rank (Out of 133)	Score
Network Readiness Index	100	39.24

Pillar/sub-pillar	Rank	Score
A. Technology pillar	85	36.32
1st sub-pillar: Access	80	59.62
2nd sub-pillar: Content	81	21.29
3rd sub-pillar: Future Technologies	94	28.06
B. People pillar	71	40.24
1st sub-pillar: Individuals	47	52.14
2nd sub-pillar: Businesses	42	41.42
3rd sub-pillar: Governments	99	27.16
C. Governance pillar	109	41.07
1st sub-pillar: Trust	119	18.72
2nd sub-pillar: Regulation	98	58.06
3rd sub-pillar: Inclusion	101	46.41
D. Impact pillar	119	39.34
1st sub-pillar: Economy	75	30.70
2nd sub-pillar: Quality of Life	117	40.14
3rd sub-pillar: SDG Contribution	121	47.18



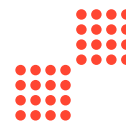
The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	85	36.32
1st sub-pillar: Access	80	59.62
1.1.1 Mobile tariffs	72	61.80
1.1.2 Handset prices	95	44.83
1.1.3 FTTH/building Internet subscriptions	49	35.74 ●
1.1.4 Population covered by at least a 3G mobile network	79	80.64
1.1.5 International Internet bandwidth	35	76.86 ●
1.1.6 Internet access in schools	58	57.85
2nd sub-pillar: Content	81	21.29
1.2.1 GitHub commits	108	1.40
1.2.2 Internet domain registrations	115	0.29
1.2.3 Mobile apps development	99	51.71
1.2.4 AI scientific publications	28	31.77 ●
3rd sub-pillar: Future Technologies	94	28.06
1.3.1 Adoption of emerging technologies	80	49.76
1.3.2 Investment in emerging technologies	83	34.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	129	0.42 ○
B. People pillar	71	40.24
1st sub-pillar: Individuals	47	52.14
2.1.1 Mobile broadband internet traffic within the country	29	30.83 ●
2.1.2 ICT skills in the education system	59	58.48
2.1.3 Use of virtual social networks	83	45.79
2.1.4 Adult literacy rate	77	73.48
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	42	41.42
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	45	57.01 ●
2.2.4 Public cloud computing market scale	46	25.82 ●
3rd sub-pillar: Governments	99	27.16
2.3.1 Government online services	115	30.85
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	49	41.19
2.3.4 R&D expenditure by governments and higher education	59	9.45

Indicator	Rank	Score
C. Governance pillar	109	41.07
1st sub-pillar: Trust	119	18.72
3.1.1 Secure Internet servers	113	30.92
3.1.2 Cybersecurity	105	33.92
3.1.3 Online access to financial account	119	1.27 ○
3.1.4 Internet shopping	98	8.78
2nd sub-pillar: Regulation	98	58.06
3.2.1 Regulatory quality	124	23.06 ○
3.2.2 ICT regulatory environment	111	63.69
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	109	45.50
3rd sub-pillar: Inclusion	101	46.41
3.3.1 E-Participation	119	20.94 ○
3.3.2 Socioeconomic gap in use of digital payments	112	41.78
3.3.3 Availability of local online content	91	47.84
3.3.4 Gender gap in Internet use	100	31.53 ○
3.3.5 Rural gap in use of digital payments	3	89.99 ●
D. Impact pillar	119	39.34
1st sub-pillar: Economy	75	30.70
4.1.1 ICT patent applications	77	0.01 ○
4.1.2 Domestic market scale	41	61.91 ●
4.1.3 Prevalence of gig economy	33	59.59 ●
4.1.4 ICT services exports	125	1.29 ○
2nd sub-pillar: Quality of Life	117	40.14
4.2.1 Happiness	84	52.12
4.2.2 Freedom to make life choices	130	11.08 ○
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	43	74.29 ●
3rd sub-pillar: SDG Contribution	121	47.18
4.3.1 SDG 3: Good Health and Well-Being	64	72.58
4.3.2 SDG 4: Quality Education	75	10.05 ○
4.3.3 SDG 5: Women's economic opportunity	125	41.88 ○
4.3.4 SDG 7: Affordable and Clean Energy	101	66.96
4.3.5 SDG 11: Sustainable Cities and Communities	65	67.05

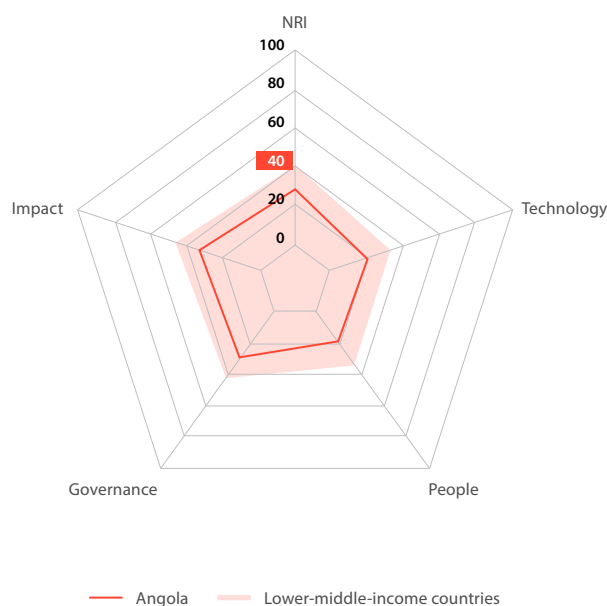
NOTE: ● Indicates a strength and ○ a weakness.

Angola



	Rank (Out of 133)	Score
Network Readiness Index	128	25.25

Pillar/sub-pillar	Rank	Score
A. Technology pillar	121	17.84
1st sub-pillar: Access	117	33.86
2nd sub-pillar: Content	120	9.24
3rd sub-pillar: Future Technologies	131	10.41
B. People pillar	125	19.36
1st sub-pillar: Individuals	126	20.64
2nd sub-pillar: Businesses	110	25.03
3rd sub-pillar: Governments	129	12.42
C. Governance pillar	125	31.32
1st sub-pillar: Trust	121	18.35
2nd sub-pillar: Regulation	116	49.65
3rd sub-pillar: Inclusion	130	25.95
D. Impact pillar	129	32.50
1st sub-pillar: Economy	117	19.69
2nd sub-pillar: Quality of Life	133	14.89
3rd sub-pillar: SDG Contribution	72	62.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	121	17.84
1st sub-pillar: Access	117	33.86
1.1.1 Mobile tariffs	116	32.43
1.1.2 Handset prices	85	51.68 ●
1.1.3 FTTH/building Internet subscriptions	76	27.05 ●
1.1.4 Population covered by at least a 3G mobile network	112	26.22
1.1.5 International Internet bandwidth	106	63.10
1.1.6 Internet access in schools	87	2.70
2nd sub-pillar: Content	120	9.24
2.2.1 GitHub commits	123	0.39
2.2.2 Internet domain registrations	129	0.07
2.2.3 Mobile apps development	119	36.37
2.2.4 AI scientific publications	130	0.12 ○
3rd sub-pillar: Future Technologies	131	10.41
3.3.1 Adoption of emerging technologies	106	19.23
3.3.2 Investment in emerging technologies	131	0.00 ○
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	87	12.01 ●
B. People pillar	125	19.36
1st sub-pillar: Individuals	126	20.64
2.1.1 Mobile broadband internet traffic within the country	92	5.49
2.1.2 ICT skills in the education system	116	8.75 ○
2.1.3 Use of virtual social networks	117	7.68
2.1.4 Adult literacy rate	91	60.62
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	110	25.03
2.2.1 Firms with website	111	16.09
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	71	48.84 ●
2.2.4 Public cloud computing market scale	82	10.16 ●
3rd sub-pillar: Governments	129	12.42
2.3.1 Government online services	104	41.60
2.3.2 Data Capabilities	93	3.11 ○
2.3.3 Government promotion of investment in emerging technologies	113	4.56 ○
2.3.4 R&D expenditure by governments and higher education	112	0.40 ○

Indicator	Rank	Score
C. Governance pillar	125	31.32
1st sub-pillar: Trust	121	18.35
3.1.1 Secure Internet servers	120	23.70
3.1.2 Cybersecurity	124	13.00
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	116	49.65
3.2.1 Regulatory quality	103	33.78
3.2.2 ICT regulatory environment	89	72.26 ●
3.2.3 Regulation of emerging technologies	115	8.41
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	87	58.81 ●
3rd sub-pillar: Inclusion	130	25.95
3.3.1 E-Participation	128	15.12 ○
3.3.2 Socioeconomic gap in use of digital payments	128	12.39 ○
3.3.3 Availability of local online content	125	23.08
3.3.4 Gender gap in Internet use	91	53.20
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	129	32.50
1st sub-pillar: Economy	117	19.69
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	63	53.36 ●
4.1.3 Prevalence of gig economy	120	5.23
4.1.4 ICT services exports	130	0.47 ○
2nd sub-pillar: Quality of Life	133	14.89
4.2.1 Happiness	120	13.49
4.2.2 Freedom to make life choices	131	0.00 ○
4.2.3 Income inequality	112	30.08
4.2.4 Healthy life expectancy at birth	119	32.29
3rd sub-pillar: SDG Contribution	72	62.91
4.3.1 SDG 3: Good Health and Well-Being	128	12.90
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	90	71.79
4.3.4 SDG 7: Affordable and Clean Energy	41	85.31 ●
4.3.5 SDG 11: Sustainable Cities and Communities	89	50.37 ●

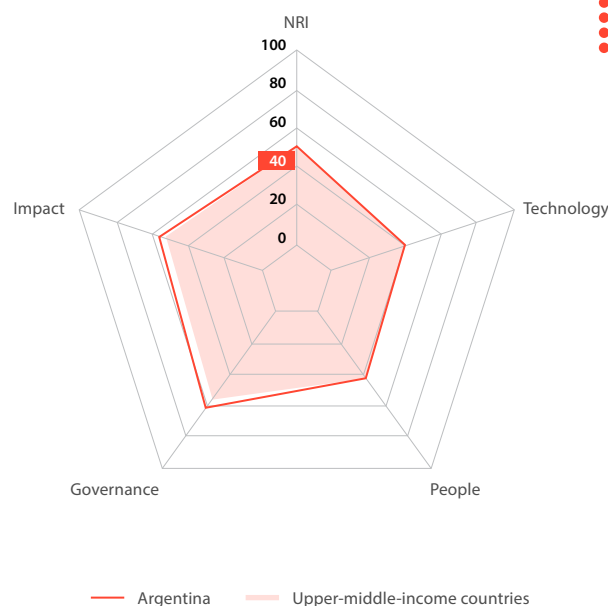
NOTE: ● Indicates a strength and ○ a weakness.

Argentina



	Rank (Out of 133)	Score
Network Readiness Index	69	48.99

Pillar/sub-pillar	Rank	Score
A. Technology pillar	77	39.89
1st sub-pillar: Access	74	63.21
2nd sub-pillar: Content	70	24.22
3rd sub-pillar: Future Technologies	79	32.24
B. People pillar	85	38.29
1st sub-pillar: Individuals	107	34.99
2nd sub-pillar: Businesses	43	41.10
3rd sub-pillar: Governments	67	38.79
C. Governance pillar	58	62.17
1st sub-pillar: Trust	67	50.44
2nd sub-pillar: Regulation	72	66.57
3rd sub-pillar: Inclusion	50	69.49
D. Impact pillar	59	55.62
1st sub-pillar: Economy	70	31.75
2nd sub-pillar: Quality of Life	56	70.73
3rd sub-pillar: SDG Contribution	70	64.39



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	77	39.89
1st sub-pillar: Access	74	63.21
1.1.1 Mobile tariffs	49	72.17
1.1.2 Handset prices	90	47.35
1.1.3 FTTH/building Internet subscriptions	26	46.72
1.1.4 Population covered by at least a 3G mobile network	76	83.77
1.1.5 International Internet bandwidth	51	73.52
1.1.6 Internet access in schools	59	55.72
2nd sub-pillar: Content	70	24.22
1.2.1 GitHub commits	46	17.36
1.2.2 Internet domain registrations	60	4.65
1.2.3 Mobile apps development	56	67.45
1.2.4 AI scientific publications	67	7.40
3rd sub-pillar: Future Technologies	79	32.24
1.3.1 Adoption of emerging technologies	54	64.71
1.3.2 Investment in emerging technologies	82	34.50
1.3.3 Robot density	42	2.66
1.3.4 Computer software spending	42	27.08
B. People pillar	85	38.29
1st sub-pillar: Individuals	107	34.99
2.1.1 Mobile broadband internet traffic within the country	46	19.67
2.1.2 ICT skills in the education system	56	59.14
2.1.3 Use of virtual social networks	61	58.99
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	44	2.15
2nd sub-pillar: Businesses	43	41.10
2.2.1 Firms with website	42	64.96
2.2.2 Number of venture capital deals invested in AI	71	1.88
2.2.3 Annual investment in telecommunication services	26	64.11
2.2.4 Public cloud computing market scale	36	33.47
3rd sub-pillar: Governments	67	38.79
2.3.1 Government online services	38	78.88
2.3.2 Data Capabilities	24	54.73
2.3.3 Government promotion of investment in emerging technologies	107	12.36
2.3.4 R&D expenditure by governments and higher education	60	9.19

Indicator	Rank	Score
C. Governance pillar	58	62.17
1st sub-pillar: Trust	67	50.44
3.1.1 Secure Internet servers	50	65.53
3.1.2 Cybersecurity	95	50.08
3.1.3 Online access to financial account	52	49.40
3.1.4 Internet shopping	54	36.76
2nd sub-pillar: Regulation	72	66.57
3.2.1 Regulatory quality	109	31.65
3.2.2 ICT regulatory environment	74	82.74
3.2.3 Regulation of emerging technologies	77	39.94
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	45	78.52
3rd sub-pillar: Inclusion	50	69.49
3.3.1 E-Participation	51	63.95
3.3.2 Socioeconomic gap in use of digital payments	54	81.47
3.3.3 Availability of local online content	59	64.18
3.3.4 Gender gap in Internet use	41	69.42
3.3.5 Rural gap in use of digital payments	52	68.43
D. Impact pillar	59	55.62
1st sub-pillar: Economy	70	31.75
4.1.1 ICT patent applications	73	0.06
4.1.2 Domestic market scale	29	68.45
4.1.3 Prevalence of gig economy	79	35.17
4.1.4 ICT services exports	46	23.30
2nd sub-pillar: Quality of Life	56	70.73
4.2.1 Happiness	40	71.07
4.2.2 Freedom to make life choices	65	77.44
4.2.3 Income inequality	88	57.33
4.2.4 Healthy life expectancy at birth	52	70.01
3rd sub-pillar: SDG Contribution	70	64.39
4.3.1 SDG 3: Good Health and Well-Being	41	80.65
4.3.2 SDG 4: Quality Education	64	23.75
4.3.3 SDG 5: Women's economic opportunity	90	71.79
4.3.4 SDG 7: Affordable and Clean Energy	51	83.19
4.3.5 SDG 11: Sustainable Cities and Communities	45	77.02

NOTE: ● Indicates a strength and ○ a weakness.

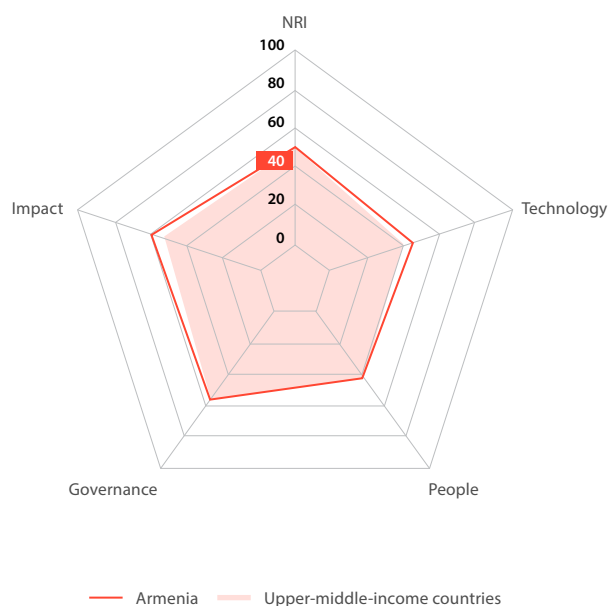
Armenia



Rank Score
(Out of 133)

Network Readiness Index **66** **49.54**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	51	46.37
1st sub-pillar: Access	55	68.96
2nd sub-pillar: Content	59	27.38
3rd sub-pillar: Future Technologies	45	42.77
B. People pillar	81	38.85
1st sub-pillar: Individuals	55	51.22
2nd sub-pillar: Businesses	81	33.08
3rd sub-pillar: Governments	89	32.23
C. Governance pillar	80	52.86
1st sub-pillar: Trust	88	36.41
2nd sub-pillar: Regulation	64	67.68
3rd sub-pillar: Inclusion	81	54.49
D. Impact pillar	42	60.09
1st sub-pillar: Economy	55	35.96
2nd sub-pillar: Quality of Life	62	69.44
3rd sub-pillar: SDG Contribution	42	74.88



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	51	46.37
1st sub-pillar: Access	55	68.96
1.1.1 Mobile tariffs	75	61.16
1.1.2 Handset prices	80	53.84
1.1.3 FTTH/building Internet subscriptions	63	31.02
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	86	67.72
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	59	27.38
1.2.1 GitHub commits	36	30.90 ●
1.2.2 Internet domain registrations	59	4.65
1.2.3 Mobile apps development	31	72.40 ●
1.2.4 AI scientific publications	95	1.57 ○
3rd sub-pillar: Future Technologies	45	42.77
1.3.1 Adoption of emerging technologies	58	62.68
1.3.2 Investment in emerging technologies	52	46.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	73	19.39
B. People pillar	81	38.85
1st sub-pillar: Individuals	55	51.22
2.1.1 Mobile broadband internet traffic within the country	93	5.44
2.1.2 ICT skills in the education system	71	52.38
2.1.3 Use of virtual social networks	80	47.38
2.1.4 Adult literacy rate	9	99.70 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	81	33.08
2.2.1 Firms with website	69	50.68
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	109	40.74 ○
2.2.4 Public cloud computing market scale	91	7.83 ○
3rd sub-pillar: Governments	89	32.23
2.3.1 Government online services	63	69.29
2.3.2 Data Capabilities	79	18.32 ○
2.3.3 Government promotion of investment in emerging technologies	62	37.79
2.3.4 R&D expenditure by governments and higher education	89	3.53 ○

Indicator	Rank	Score
C. Governance pillar	80	52.86
1st sub-pillar: Trust	88	36.41
3.1.1 Secure Internet servers	69	51.31
3.1.2 Cybersecurity	94	50.50
3.1.3 Online access to financial account	87	26.42 ○
3.1.4 Internet shopping	76	17.42
2nd sub-pillar: Regulation	64	67.68
3.2.1 Regulatory quality	73	47.57
3.2.2 ICT regulatory environment	54	86.31
3.2.3 Regulation of emerging technologies	42	62.29 ●
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	72	67.24
3rd sub-pillar: Inclusion	81	54.49
3.3.1 E-Participation	64	56.97
3.3.2 Socioeconomic gap in use of digital payments	92	55.89
3.3.3 Availability of local online content	72	59.38
3.3.4 Gender gap in Internet use	4	81.64 ●
3.3.5 Rural gap in use of digital payments	119	18.57 ○
D. Impact pillar	42	60.09
1st sub-pillar: Economy	55	35.96
4.1.1 ICT patent applications	67	0.16 ○
4.1.2 Domestic market scale	106	38.58 ○
4.1.3 Prevalence of gig economy	57	44.48
4.1.4 ICT services exports	8	60.63 ●
2nd sub-pillar: Quality of Life	62	69.44
4.2.1 Happiness	81	55.24
4.2.2 Freedom to make life choices	70	75.36
4.2.3 Income inequality	13	90.23 ●
4.2.4 Healthy life expectancy at birth	68	65.19
3rd sub-pillar: SDG Contribution	42	74.88
4.3.1 SDG 3: Good Health and Well-Being	82	62.90
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	41	87.18 ●
4.3.4 SDG 7: Affordable and Clean Energy	72	79.39
4.3.5 SDG 11: Sustainable Cities and Communities	85	53.25

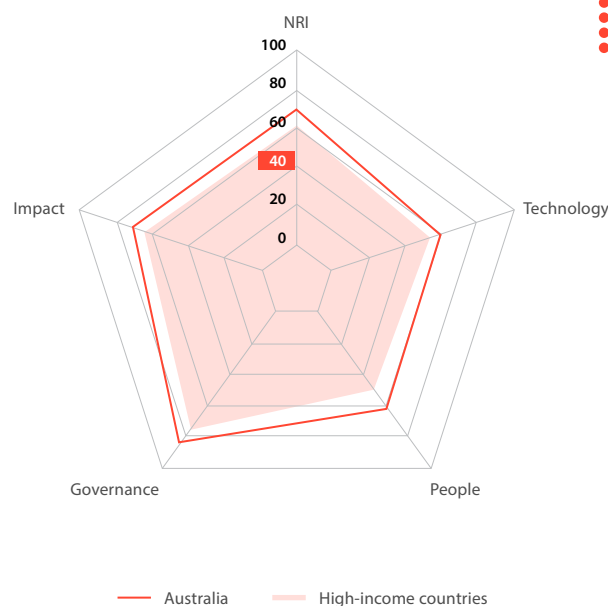
NOTE: ● Indicates a strength and ○ a weakness.

Australia



Rank (Out of 133) Score
Network Readiness Index 15 69.43

Pillar/sub-pillar	Rank	Score
A. Technology pillar	19	60.54
1st sub-pillar: Access	12	80.16
2nd sub-pillar: Content	11	55.75
3rd sub-pillar: Future Technologies	39	45.70
B. People pillar	16	58.49
1st sub-pillar: Individuals	69	48.37
2nd sub-pillar: Businesses	13	58.28
3rd sub-pillar: Governments	8	68.82
C. Governance pillar	7	87.61
1st sub-pillar: Trust	7	89.62
2nd sub-pillar: Regulation	10	88.54
3rd sub-pillar: Inclusion	8	84.67
D. Impact pillar	16	71.07
1st sub-pillar: Economy	24	44.56
2nd sub-pillar: Quality of Life	15	84.93
3rd sub-pillar: SDG Contribution	12	83.71



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	19	60.54
1st sub-pillar: Access	12	80.16
1.1.1 Mobile tariffs	36	76.29
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	51	35.57 ○
1.1.4 Population covered by at least a 3G mobile network	48	95.41
1.1.5 International Internet bandwidth	50	73.71
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	11	55.75
1.2.1 GitHub commits	23	49.04
1.2.2 Internet domain registrations	11	62.41
1.2.3 Mobile apps development	37	71.65
1.2.4 AI scientific publications	25	39.90
3rd sub-pillar: Future Technologies	39	45.70
1.3.1 Adoption of emerging technologies	14	85.73
1.3.2 Investment in emerging technologies	24	65.75
1.3.3 Robot density	29	9.90 ○
1.3.4 Computer software spending	67	21.42 ○
B. People pillar	16	58.49
1st sub-pillar: Individuals	69	48.37
2.1.1 Mobile broadband internet traffic within the country	28	31.06
2.1.2 ICT skills in the education system	21	78.29
2.1.3 Use of virtual social networks	27	68.45
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	28	15.67 ○
2nd sub-pillar: Businesses	13	58.28
2.2.1 Firms with website	21	78.99
2.2.2 Number of venture capital deals invested in AI	26	20.80
2.2.3 Annual investment in telecommunication services	10	73.98
2.2.4 Public cloud computing market scale	8	59.36 ●
3rd sub-pillar: Governments	8	68.82
2.3.1 Government online services	7	93.15 ●
2.3.2 Data Capabilities	11	69.74
2.3.3 Government promotion of investment in emerging technologies	10	80.16
2.3.4 R&D expenditure by governments and higher education	21	32.24

Indicator	Rank	Score
C. Governance pillar	7	87.61
1st sub-pillar: Trust	7	89.62
3.1.1 Secure Internet servers	18	84.53
3.1.2 Cybersecurity	15	97.50
3.1.3 Online access to financial account	9	87.15
3.1.4 Internet shopping	6	89.30 ●
2nd sub-pillar: Regulation	10	88.54
3.2.1 Regulatory quality	2	92.50 ●
3.2.2 ICT regulatory environment	11	94.64
3.2.3 Regulation of emerging technologies	22	75.95
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	42	79.60
3rd sub-pillar: Inclusion	8	84.67
3.3.1 E-Participation	2	98.83 ●
3.3.2 Socioeconomic gap in use of digital payments	20	96.29
3.3.3 Availability of local online content	9	93.03 ●
3.3.4 Gender gap in Internet use	49	68.42 ○
3.3.5 Rural gap in use of digital payments	55	66.79 ○
D. Impact pillar	16	71.07
1st sub-pillar: Economy	24	44.56
4.1.1 ICT patent applications	24	18.17
4.1.2 Domestic market scale	20	71.61
4.1.3 Prevalence of gig economy	12	78.20
4.1.4 ICT services exports	75	10.27 ○
2nd sub-pillar: Quality of Life	15	84.93
4.2.1 Happiness	9	85.06 ●
4.2.2 Freedom to make life choices	37	84.91
4.2.3 Income inequality	50	73.78 ○
4.2.4 Healthy life expectancy at birth	5	95.88 ●
3rd sub-pillar: SDG Contribution	12	83.71
4.3.1 SDG 3: Good Health and Well-Being	8	93.55 ●
4.3.2 SDG 4: Quality Education	10	66.20
4.3.3 SDG 5: Women's economic opportunity	20	95.73
4.3.4 SDG 7: Affordable and Clean Energy	74	78.00 ○
4.3.5 SDG 11: Sustainable Cities and Communities	9	96.29 ●

NOTE: ● Indicates a strength and ○ a weakness.

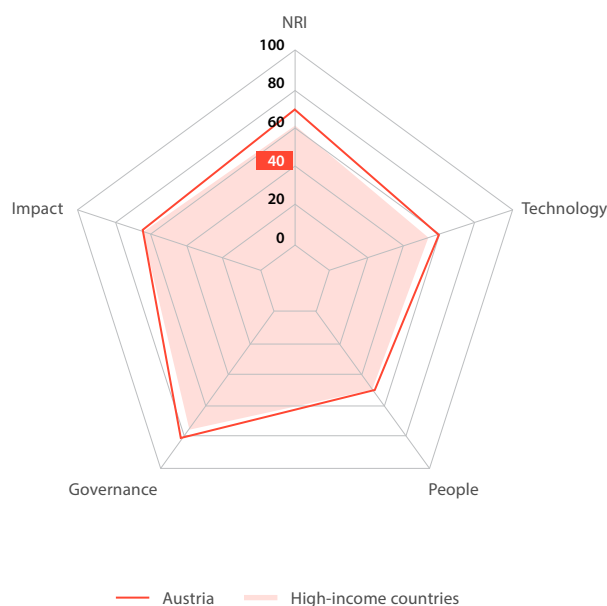
Austria



Rank Score
(Out of 133)

Network Readiness Index 20 66.05

Pillar/sub-pillar	Rank	Score
A. Technology pillar	20	59.93
1st sub-pillar: Access	40	74.45
2nd sub-pillar: Content	22	47.49
3rd sub-pillar: Future Technologies	20	57.84
B. People pillar	25	53.42
1st sub-pillar: Individuals	60	49.74
2nd sub-pillar: Businesses	27	51.01
3rd sub-pillar: Governments	24	59.50
C. Governance pillar	15	82.61
1st sub-pillar: Trust	25	79.23
2nd sub-pillar: Regulation	14	87.45
3rd sub-pillar: Inclusion	16	81.14
D. Impact pillar	23	68.26
1st sub-pillar: Economy	45	38.94
2nd sub-pillar: Quality of Life	20	82.44
3rd sub-pillar: SDG Contribution	14	83.41



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	20	59.93
1st sub-pillar: Access	40	74.45
1.1.1 Mobile tariffs	16	85.71 ●
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	102	15.01 ○
1.1.4 Population covered by at least a 3G mobile network	81	78.92 ○
1.1.5 International Internet bandwidth	89	67.05 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	22	47.49
1.2.1 GitHub commits	19	58.20
1.2.2 Internet domain registrations	14	52.28 ●
1.2.3 Mobile apps development	50	69.32 ○
1.2.4 AI scientific publications	56	10.15 ○
3rd sub-pillar: Future Technologies	20	57.84
1.3.1 Adoption of emerging technologies	34	74.90
1.3.2 Investment in emerging technologies	26	64.25
1.3.3 Robot density	13	31.82
1.3.4 Computer software spending	10	60.41 ●
B. People pillar	25	53.42
1st sub-pillar: Individuals	60	49.74
2.1.1 Mobile broadband internet traffic within the country	31	30.34
2.1.2 ICT skills in the education system	37	68.10
2.1.3 Use of virtual social networks	16	71.54 ●
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	15	28.97
2nd sub-pillar: Businesses	27	51.01
2.2.1 Firms with website	7	90.96 ●
2.2.2 Number of venture capital deals invested in AI	34	16.71 ○
2.2.3 Annual investment in telecommunication services	40	58.32
2.2.4 Public cloud computing market scale	28	38.05
3rd sub-pillar: Governments	24	59.50
2.3.1 Government online services	19	87.04
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	70	34.16 ○
2.3.4 R&D expenditure by governments and higher education	8	57.31 ●

Indicator	Rank	Score
C. Governance pillar	15	82.61
1st sub-pillar: Trust	25	79.23
3.1.1 Secure Internet servers	23	83.21
3.1.2 Cybersecurity	36	93.92
3.1.3 Online access to financial account	30	66.22
3.1.4 Internet shopping	20	73.57
2nd sub-pillar: Regulation	14	87.45
3.2.1 Regulatory quality	22	78.14
3.2.2 ICT regulatory environment	38	88.69
3.2.3 Regulation of emerging technologies	13	82.18 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	20	88.23
3rd sub-pillar: Inclusion	16	81.14
3.3.1 E-Participation	21	76.74
3.3.2 Socioeconomic gap in use of digital payments	10	98.14 ●
3.3.3 Availability of local online content	23	85.34
3.3.4 Gender gap in Internet use	69	65.99 ○
3.3.5 Rural gap in use of digital payments	7	79.51 ●
D. Impact pillar	23	68.26
1st sub-pillar: Economy	45	38.94
4.1.1 ICT patent applications	21	28.95
4.1.2 Domestic market scale	42	61.87
4.1.3 Prevalence of gig economy	77	35.47 ○
4.1.4 ICT services exports	31	29.48
2nd sub-pillar: Quality of Life	20	82.44
4.2.1 Happiness	27	76.44
4.2.2 Freedom to make life choices	40	84.63
4.2.3 Income inequality	24	83.03
4.2.4 Healthy life expectancy at birth	24	89.48
3rd sub-pillar: SDG Contribution	14	83.41
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	19	61.62
4.3.3 SDG 5: Women's economic opportunity	20	95.73
4.3.4 SDG 7: Affordable and Clean Energy	32	87.06
4.3.5 SDG 11: Sustainable Cities and Communities	23	88.14

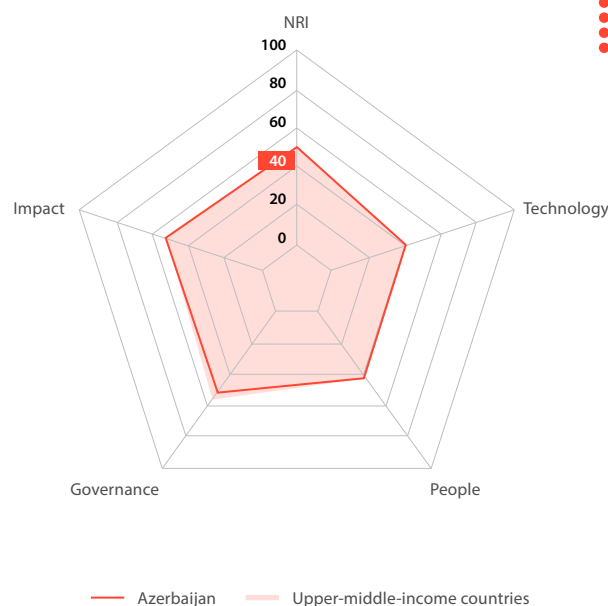
NOTE: ● Indicates a strength and ○ a weakness.

Azerbaijan



	Rank (Out of 133)	Score
Network Readiness Index	75	46.08

Pillar/sub-pillar	Rank	Score
A. Technology pillar	75	40.16
1st sub-pillar: Access	64	66.36
2nd sub-pillar: Content	93	17.75
3rd sub-pillar: Future Technologies	64	36.38
B. People pillar	78	39.31
1st sub-pillar: Individuals	48	51.86
2nd sub-pillar: Businesses	49	38.97
3rd sub-pillar: Governments	100	27.10
C. Governance pillar	86	50.45
1st sub-pillar: Trust	74	42.94
2nd sub-pillar: Regulation	100	57.64
3rd sub-pillar: Inclusion	91	50.77
D. Impact pillar	65	54.38
1st sub-pillar: Economy	34	41.25
2nd sub-pillar: Quality of Life	81	61.74
3rd sub-pillar: SDG Contribution	87	60.14



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	75	40.16
1st sub-pillar: Access	64	66.36
1.1.1 Mobile tariffs	57	66.36 ●
1.1.2 Handset prices	76	56.28
1.1.3 FTTH/building Internet subscriptions	64	31.02
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	38	76.47 ●
1.1.6 Internet access in schools	56	68.03
2nd sub-pillar: Content	93	17.75
1.2.1 GitHub commits	78	4.61
1.2.2 Internet domain registrations	92	1.28
1.2.3 Mobile apps development	78	61.37
1.2.4 AI scientific publications	82	3.74
3rd sub-pillar: Future Technologies	64	36.38
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	23	67.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	101	5.77 ○
B. People pillar	78	39.31
1st sub-pillar: Individuals	48	51.86
2.1.1 Mobile broadband internet traffic within the country	89	6.07
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	75	49.81
2.1.4 Adult literacy rate	10	99.68 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	49	38.97
2.2.1 Firms with website	51	61.21 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	102	41.91 ○
2.2.4 Public cloud computing market scale	71	13.81
3rd sub-pillar: Governments	100	27.10
2.3.1 Government online services	81	57.11
2.3.2 Data Capabilities	73	20.60 ○
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	88	3.59 ○

Indicator	Rank	Score
C. Governance pillar	86	50.45
1st sub-pillar: Trust	74	42.94
3.1.1 Secure Internet servers	85	45.49
3.1.2 Cybersecurity	48	89.33 ●
3.1.3 Online access to financial account	86	26.70
3.1.4 Internet shopping	91	10.25
2nd sub-pillar: Regulation	100	57.64
3.2.1 Regulatory quality	77	45.60
3.2.2 ICT regulatory environment	116	58.93 ○
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	99	51.05
3rd sub-pillar: Inclusion	91	50.77
3.3.1 E-Participation	88	37.21
3.3.2 Socioeconomic gap in use of digital payments	96	54.39
3.3.3 Availability of local online content	24	85.10 ●
3.3.4 Gender gap in Internet use	85	56.43 ○
3.3.5 Rural gap in use of digital payments	117	20.72 ○
D. Impact pillar	65	54.38
1st sub-pillar: Economy	34	41.25
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	74	50.40
4.1.3 Prevalence of gig economy	16	70.06 ●
4.1.4 ICT services exports	107	3.30 ○
2nd sub-pillar: Quality of Life	81	61.74
4.2.1 Happiness	93	44.93
4.2.2 Freedom to make life choices	67	76.94
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	69	64.98
3rd sub-pillar: SDG Contribution	87	60.14
4.3.1 SDG 3: Good Health and Well-Being	87	59.68
4.3.2 SDG 4: Quality Education	68	17.92 ○
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	89	73.39
4.3.5 SDG 11: Sustainable Cities and Communities	39	79.80 ●

NOTE: ● Indicates a strength and ○ a weakness.

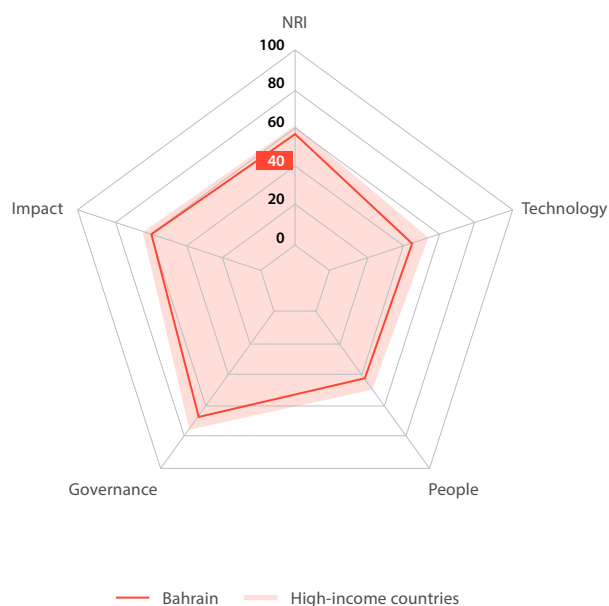
Bahrain



Rank Score
(Out of 133)

Network Readiness Index **51** **53.50**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	57	44.78
1st sub-pillar: Access	51	70.08
2nd sub-pillar: Content	94	17.63
3rd sub-pillar: Future Technologies	37	46.62
B. People pillar	58	43.38
1st sub-pillar: Individuals	14	67.07
2nd sub-pillar: Businesses	115	24.40
3rd sub-pillar: Governments	68	38.68
C. Governance pillar	52	65.98
1st sub-pillar: Trust	63	51.66
2nd sub-pillar: Regulation	42	75.65
3rd sub-pillar: Inclusion	47	70.62
D. Impact pillar	44	59.85
1st sub-pillar: Economy	21	46.58
2nd sub-pillar: Quality of Life	49	71.94
3rd sub-pillar: SDG Contribution	85	61.02



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	57	44.78
1st sub-pillar: Access	51	70.08
1.1.1 Mobile tariffs	83	56.75
1.1.2 Handset prices	51	75.96
1.1.3 FTTH/building Internet subscriptions	106	13.19 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	47	74.58
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	94	17.63
1.2.1 GitHub commits	64	7.53
1.2.2 Internet domain registrations	71	2.87
1.2.3 Mobile apps development	85	59.46 ○
1.2.4 AI scientific publications	114	0.65 ○
3rd sub-pillar: Future Technologies	37	46.62
1.3.1 Adoption of emerging technologies	57	63.64
1.3.2 Investment in emerging technologies	NA	NA
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	37	29.60
B. People pillar	58	43.38
1st sub-pillar: Individuals	14	67.07
2.1.1 Mobile broadband internet traffic within the country	72	10.38
2.1.2 ICT skills in the education system	26	74.68 ●
2.1.3 Use of virtual social networks	2	86.14 ●
2.1.4 Adult literacy rate	31	97.08
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	115	24.40
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	29	19.27
2.2.3 Annual investment in telecommunication services	86	45.47 ○
2.2.4 Public cloud computing market scale	88	8.46 ○
3rd sub-pillar: Governments	68	38.68
2.3.1 Government online services	54	72.62
2.3.2 Data Capabilities	77	18.77 ○
2.3.3 Government promotion of investment in emerging technologies	24	61.67 ●
2.3.4 R&D expenditure by governments and higher education	105	1.64 ○

Indicator	Rank	Score
C. Governance pillar	52	65.98
1st sub-pillar: Trust	63	51.66
3.1.1 Secure Internet servers	74	48.77
3.1.2 Cybersecurity	68	77.83
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	62	28.38
2nd sub-pillar: Regulation	42	75.65
3.2.1 Regulatory quality	32	70.81
3.2.2 ICT regulatory environment	65	83.93
3.2.3 Regulation of emerging technologies	19	78.12 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	110	45.41 ○
3rd sub-pillar: Inclusion	47	70.62
3.3.1 E-Participation	85	43.03
3.3.2 Socioeconomic gap in use of digital payments	65	75.64
3.3.3 Availability of local online content	14	88.94 ●
3.3.4 Gender gap in Internet use	31	70.21
3.3.5 Rural gap in use of digital payments	26	75.26 ●
D. Impact pillar	44	59.85
1st sub-pillar: Economy	21	46.58
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	91	43.56
4.1.3 Prevalence of gig economy	25	63.66 ●
4.1.4 ICT services exports	28	32.53 ●
2nd sub-pillar: Quality of Life	49	71.94
4.2.1 Happiness	60	61.45
4.2.2 Freedom to make life choices	47	83.69
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	56	69.44
3rd sub-pillar: SDG Contribution	85	61.02
4.3.1 SDG 3: Good Health and Well-Being	52	75.81
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	114	56.41 ○
4.3.4 SDG 7: Affordable and Clean Energy	123	40.50 ○
4.3.5 SDG 11: Sustainable Cities and Communities	8	96.47 ●

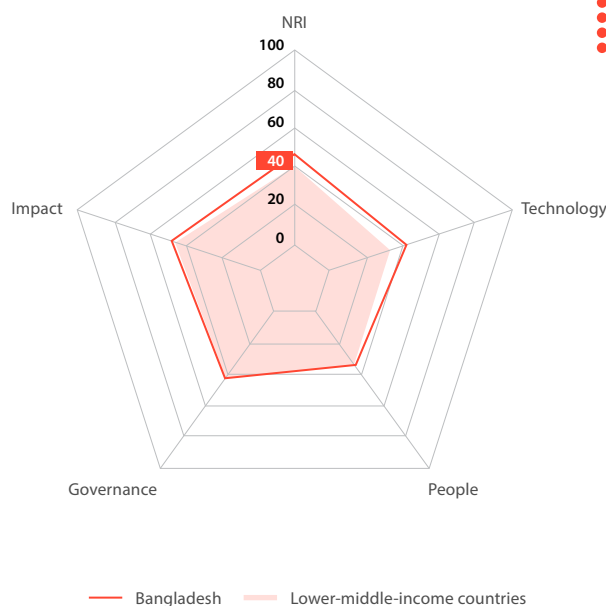
NOTE: ● Indicates a strength and ○ a weakness.

Bangladesh



	Rank (Out of 133)	Score
Network Readiness Index	89	43.56

Pillar/sub-pillar	Rank	Score
A. Technology pillar	65	43.73
1st sub-pillar: Access	62	66.54
2nd sub-pillar: Content	48	32.31
3rd sub-pillar: Future Technologies	77	32.35
B. People pillar	99	34.09
1st sub-pillar: Individuals	93	42.02
2nd sub-pillar: Businesses	121	22.26
3rd sub-pillar: Governments	71	38.00
C. Governance pillar	102	45.88
1st sub-pillar: Trust	99	31.97
2nd sub-pillar: Regulation	115	49.83
3rd sub-pillar: Inclusion	78	55.84
D. Impact pillar	88	50.53
1st sub-pillar: Economy	56	34.20
2nd sub-pillar: Quality of Life	83	61.22
3rd sub-pillar: SDG Contribution	99	56.18



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	65	43.73
1st sub-pillar: Access	62	66.54
1.1.1 Mobile tariffs	42	75.42
1.1.2 Handset prices	108	36.65
1.1.3 FTTH/building Internet subscriptions	5	70.72
1.1.4 Population covered by at least a 3G mobile network	73	86.71
1.1.5 International Internet bandwidth	20	80.45
1.1.6 Internet access in schools	63	49.30
2nd sub-pillar: Content	48	32.31
1.2.1 GitHub commits	96	2.88
1.2.2 Internet domain registrations	117	0.20 ○
1.2.3 Mobile apps development	67	64.45
1.2.4 AI scientific publications	14	61.71
3rd sub-pillar: Future Technologies	77	32.35
1.3.1 Adoption of emerging technologies	81	48.87
1.3.2 Investment in emerging technologies	96	29.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	74	19.17
B. People pillar	99	34.09
1st sub-pillar: Individuals	93	42.02
2.1.1 Mobile broadband internet traffic within the country	23	39.43
2.1.2 ICT skills in the education system	94	40.84
2.1.3 Use of virtual social networks	103	23.60
2.1.4 Adult literacy rate	89	64.21
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	121	22.26
2.2.1 Firms with website	113	12.34 ○
2.2.2 Number of venture capital deals invested in AI	78	0.30 ○
2.2.3 Annual investment in telecommunication services	66	50.01
2.2.4 Public cloud computing market scale	45	26.40
3rd sub-pillar: Governments	71	38.00
2.3.1 Government online services	74	61.55
2.3.2 Data Capabilities	69	24.00
2.3.3 Government promotion of investment in emerging technologies	81	28.46
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	102	45.88
1st sub-pillar: Trust	99	31.97
3.1.1 Secure Internet servers	98	39.30
3.1.2 Cybersecurity	61	81.25
3.1.3 Online access to financial account	118	4.53 ○
3.1.4 Internet shopping	117	2.79 ○
2nd sub-pillar: Regulation	115	49.83
3.2.1 Regulatory quality	118	26.25 ○
3.2.2 ICT regulatory environment	116	58.93 ○
3.2.3 Regulation of emerging technologies	90	33.76
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	92	55.22
3rd sub-pillar: Inclusion	78	55.84
3.3.1 E-Participation	74	51.16
3.3.2 Socioeconomic gap in use of digital payments	53	82.35
3.3.3 Availability of local online content	88	50.00
3.3.4 Gender gap in Internet use	101	21.96 ○
3.3.5 Rural gap in use of digital payments	36	73.73
D. Impact pillar	88	50.53
1st sub-pillar: Economy	56	34.20
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	24	70.14
4.1.3 Prevalence of gig economy	101	24.42
4.1.4 ICT services exports	82	8.03
2nd sub-pillar: Quality of Life	83	61.22
4.2.1 Happiness	116	20.55 ○
4.2.2 Freedom to make life choices	16	92.27
4.2.3 Income inequality	43	76.09
4.2.4 Healthy life expectancy at birth	66	65.55
3rd sub-pillar: SDG Contribution	99	56.18
4.3.1 SDG 3: Good Health and Well-Being	107	37.10
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	127	30.77 ○
4.3.4 SDG 7: Affordable and Clean Energy	7	93.86
4.3.5 SDG 11: Sustainable Cities and Communities	88	50.75

NOTE: ● Indicates a strength and ○ a weakness.

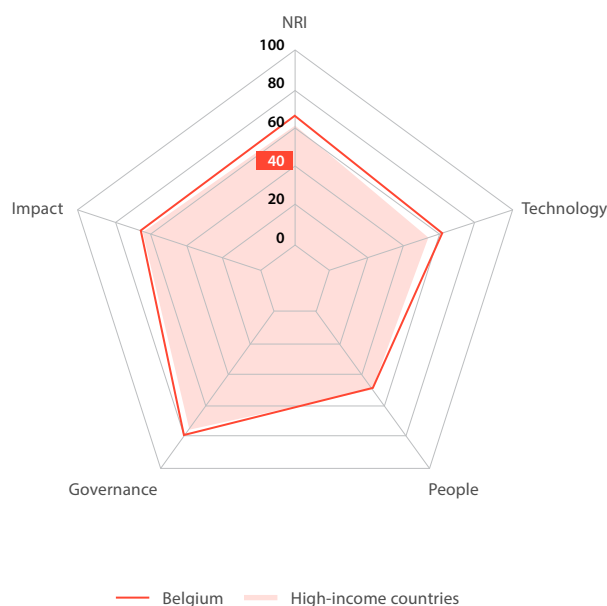
Belgium



Rank Score
(Out of 133)

Network Readiness Index **21** **65.88**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	18	60.93
1st sub-pillar: Access	26	77.96
2nd sub-pillar: Content	26	45.48
3rd sub-pillar: Future Technologies	17	59.37
B. People pillar	26	52.97
1st sub-pillar: Individuals	99	40.09
2nd sub-pillar: Businesses	24	52.98
3rd sub-pillar: Governments	16	65.82
C. Governance pillar	21	80.94
1st sub-pillar: Trust	13	84.40
2nd sub-pillar: Regulation	22	83.93
3rd sub-pillar: Inclusion	38	74.48
D. Impact pillar	22	68.71
1st sub-pillar: Economy	52	36.92
2nd sub-pillar: Quality of Life	10	86.52
3rd sub-pillar: SDG Contribution	18	82.68



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	18	60.93
1st sub-pillar: Access	26	77.96
1.1.1 Mobile tariffs	18	84.70
1.1.2 Handset prices	19	93.53
1.1.3 FTTH/building Internet subscriptions	98	16.11 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	52	73.40
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	26	45.48
1.2.1 GitHub commits	13	64.62 ●
1.2.2 Internet domain registrations	19	42.78
1.2.3 Mobile apps development	72	62.64 ○
1.2.4 AI scientific publications	53	11.86 ○
3rd sub-pillar: Future Technologies	17	59.37
1.3.1 Adoption of emerging technologies	21	79.98
1.3.2 Investment in emerging technologies	21	67.50
1.3.3 Robot density	16	28.99
1.3.4 Computer software spending	9	60.99 ●
B. People pillar	26	52.97
1st sub-pillar: Individuals	99	40.09
2.1.1 Mobile broadband internet traffic within the country	69	11.26 ○
2.1.2 ICT skills in the education system	32	71.78
2.1.3 Use of virtual social networks	25	68.54
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	37	8.80 ○
2nd sub-pillar: Businesses	24	52.98
2.2.1 Firms with website	12	85.83 ●
2.2.2 Number of venture capital deals invested in AI	35	15.19 ○
2.2.3 Annual investment in telecommunication services	21	66.17
2.2.4 Public cloud computing market scale	20	44.73
3rd sub-pillar: Governments	16	65.82
2.3.1 Government online services	67	65.73 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	17	73.95
2.3.4 R&D expenditure by governments and higher education	6	57.79 ●

Indicator	Rank	Score
C. Governance pillar	21	80.94
1st sub-pillar: Trust	13	84.40
3.1.1 Secure Internet servers	29	80.55
3.1.2 Cybersecurity	26	96.25
3.1.3 Online access to financial account	13	82.09
3.1.4 Internet shopping	16	78.72
2nd sub-pillar: Regulation	22	83.93
3.2.1 Regulatory quality	23	77.43
3.2.2 ICT regulatory environment	26	92.86
3.2.3 Regulation of emerging technologies	8	83.51 ●
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	13	90.84 ●
3rd sub-pillar: Inclusion	38	74.48
3.3.1 E-Participation	82	44.18 ○
3.3.2 Socioeconomic gap in use of digital payments	23	95.02
3.3.3 Availability of local online content	25	84.62
3.3.4 Gender gap in Internet use	29	70.48
3.3.5 Rural gap in use of digital payments	10	78.08 ●
D. Impact pillar	22	68.71
1st sub-pillar: Economy	52	36.92
4.1.1 ICT patent applications	23	19.23
4.1.2 Domestic market scale	36	63.86
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	33	27.68
2nd sub-pillar: Quality of Life	10	86.52
4.2.1 Happiness	15	83.26
4.2.2 Freedom to make life choices	43	83.97
4.2.3 Income inequality	10	93.57 ●
4.2.4 Healthy life expectancy at birth	20	91.06
3rd sub-pillar: SDG Contribution	18	82.68
4.3.1 SDG 3: Good Health and Well-Being	10	91.94 ●
4.3.2 SDG 4: Quality Education	20	61.62
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	69	79.75 ○
4.3.5 SDG 11: Sustainable Cities and Communities	28	86.75

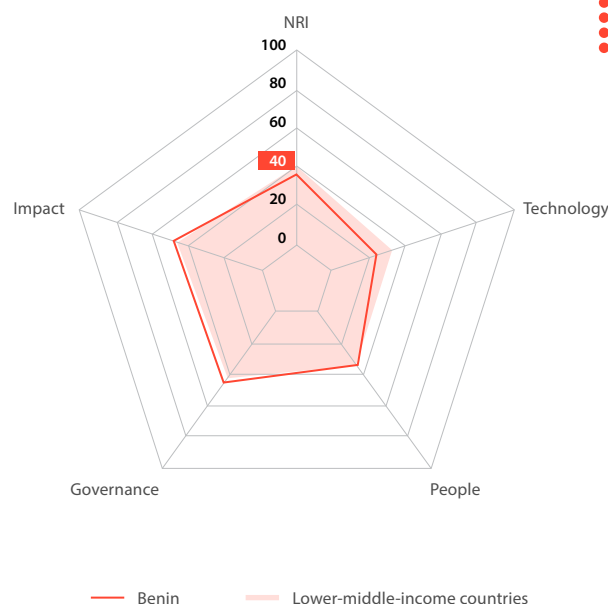
NOTE: ● Indicates a strength and ○ a weakness.

Benin



	Rank (Out of 133)	Score
Network Readiness Index	111	35.62

Pillar/sub-pillar	Rank	Score
A. Technology pillar	117	23.33
1st sub-pillar: Access	122	28.48
2nd sub-pillar: Content	116	11.10
3rd sub-pillar: Future Technologies	87	30.41
B. People pillar	118	25.82
1st sub-pillar: Individuals	125	22.83
2nd sub-pillar: Businesses	111	24.73
3rd sub-pillar: Governments	95	29.92
C. Governance pillar	95	47.76
1st sub-pillar: Trust	101	31.17
2nd sub-pillar: Regulation	58	68.45
3rd sub-pillar: Inclusion	107	43.67
D. Impact pillar	104	45.55
1st sub-pillar: Economy	85	28.04
2nd sub-pillar: Quality of Life	101	50.91
3rd sub-pillar: SDG Contribution	93	57.69



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	117	23.33
1st sub-pillar: Access	122	28.48
1.1.1 Mobile tariffs	124	18.07 ○
1.1.2 Handset prices	129	17.59 ○
1.1.3 FTTH/building Internet subscriptions	110	10.31
1.1.4 Population covered by at least a 3G mobile network	110	29.11
1.1.5 International Internet bandwidth	88	67.34
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	116	11.10
1.2.1 GitHub commits	115	0.83
1.2.2 Internet domain registrations	114	0.30
1.2.3 Mobile apps development	117	39.50 ○
1.2.4 AI scientific publications	81	3.79 ●
3rd sub-pillar: Future Technologies	87	30.41
1.3.1 Adoption of emerging technologies	51	65.07 ●
1.3.2 Investment in emerging technologies	115	22.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	108	4.17
B. People pillar	118	25.82
1st sub-pillar: Individuals	125	22.83
2.1.1 Mobile broadband internet traffic within the country	97	4.36
2.1.2 ICT skills in the education system	74	50.76 ●
2.1.3 Use of virtual social networks	116	9.64
2.1.4 Adult literacy rate	100	26.54 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	111	24.73
2.2.1 Firms with website	102	27.46
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	97	42.63
2.2.4 Public cloud computing market scale	109	4.11
3rd sub-pillar: Governments	95	29.92
2.3.1 Government online services	94	47.45
2.3.2 Data Capabilities	84	12.38 ○
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	95	47.76
1st sub-pillar: Trust	101	31.17
3.1.1 Secure Internet servers	121	22.89 ○
3.1.2 Cybersecurity	64	80.08 ●
3.1.3 Online access to financial account	100	17.68
3.1.4 Internet shopping	113	4.03 ○
2nd sub-pillar: Regulation	58	68.45
3.2.1 Regulatory quality	90	39.84
3.2.2 ICT regulatory environment	110	64.29
3.2.3 Regulation of emerging technologies	62	48.48 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	16	89.64 ●
3rd sub-pillar: Inclusion	107	43.67
3.3.1 E-Participation	97	32.56
3.3.2 Socioeconomic gap in use of digital payments	87	58.72
3.3.3 Availability of local online content	112	29.57
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	82	53.85
D. Impact pillar	104	45.55
1st sub-pillar: Economy	85	28.04
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	105	38.71
4.1.3 Prevalence of gig economy	59	43.60 ●
4.1.4 ICT services exports	117	1.79 ○
2nd sub-pillar: Quality of Life	101	50.91
4.2.1 Happiness	110	27.34
4.2.2 Freedom to make life choices	79	69.64 ●
4.2.3 Income inequality	53	73.52 ●
4.2.4 Healthy life expectancy at birth	112	37.99
3rd sub-pillar: SDG Contribution	93	57.69
4.3.1 SDG 3: Good Health and Well-Being	126	14.52 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	71	77.78 ●
4.3.4 SDG 7: Affordable and Clean Energy	91	72.95
4.3.5 SDG 11: Sustainable Cities and Communities	122	30.17 ○

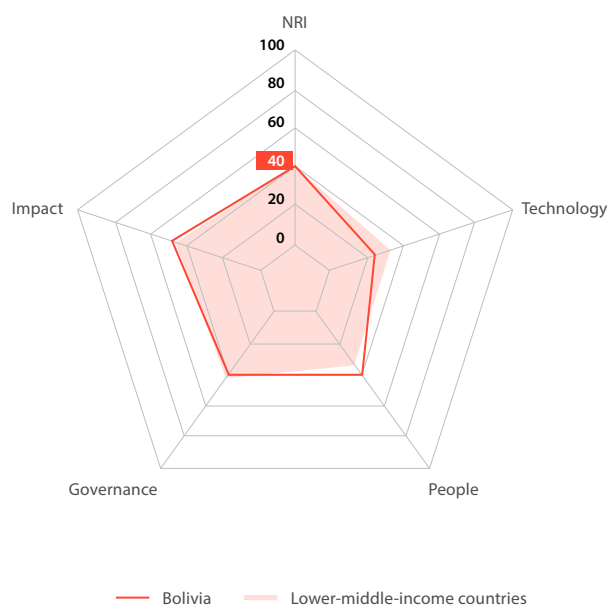
NOTE: ● Indicates a strength and ○ a weakness.

Bolivia



	Rank (Out of 133)	Score
Network Readiness Index	102	38.25

Pillar/sub-pillar	Rank	Score
A. Technology pillar	113	25.19
1st sub-pillar: Access	107	41.38
2nd sub-pillar: Content	111	12.66
3rd sub-pillar: Future Technologies	110	21.53
B. People pillar	84	38.29
1st sub-pillar: Individuals	24	58.21
2nd sub-pillar: Businesses	77	33.48
3rd sub-pillar: Governments	108	23.19
C. Governance pillar	117	37.94
1st sub-pillar: Trust	113	22.70
2nd sub-pillar: Regulation	121	43.06
3rd sub-pillar: Inclusion	95	48.08
D. Impact pillar	81	51.57
1st sub-pillar: Economy	118	18.05
2nd sub-pillar: Quality of Life	78	62.06
3rd sub-pillar: SDG Contribution	43	74.60



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	113	25.19
1st sub-pillar: Access	107	41.38
1.1.1 Mobile tariffs	94	49.36
1.1.2 Handset prices	101	41.47
1.1.3 FTTH/building Internet subscriptions	27	46.12 ●
1.1.4 Population covered by at least a 3G mobile network	107	35.24
1.1.5 International Internet bandwidth	81	68.58
1.1.6 Internet access in schools	83	7.52 ○
2nd sub-pillar: Content	111	12.66
1.2.1 GitHub commits	84	4.25
1.2.2 Internet domain registrations	96	0.98
1.2.3 Mobile apps development	108	44.48
1.2.4 AI scientific publications	109	0.93
3rd sub-pillar: Future Technologies	110	21.53
1.3.1 Adoption of emerging technologies	105	26.21 ○
1.3.2 Investment in emerging technologies	128	12.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	48	26.38 ●
B. People pillar	84	38.29
1st sub-pillar: Individuals	24	58.21
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	107	31.62 ○
2.1.3 Use of virtual social networks	74	51.78 ●
2.1.4 Adult literacy rate	57	91.23 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	77	33.48
2.2.1 Firms with website	79	40.88
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	69	49.40 ●
2.2.4 Public cloud computing market scale	82	10.16
3rd sub-pillar: Governments	108	23.19
2.3.1 Government online services	95	46.87
2.3.2 Data Capabilities	70	22.69
2.3.3 Government promotion of investment in emerging technologies	114	0.00 ○
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	117	37.94
1st sub-pillar: Trust	113	22.70
3.1.1 Secure Internet servers	92	42.48
3.1.2 Cybersecurity	120	16.17 ○
3.1.3 Online access to financial account	94	19.28
3.1.4 Internet shopping	84	12.87
2nd sub-pillar: Regulation	121	43.06
3.2.1 Regulatory quality	128	19.61 ○
3.2.2 ICT regulatory environment	111	63.69
3.2.3 Regulation of emerging technologies	113	9.81 ○
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	59	72.17 ●
3rd sub-pillar: Inclusion	95	48.08
3.3.1 E-Participation	101	30.24
3.3.2 Socioeconomic gap in use of digital payments	103	49.89
3.3.3 Availability of local online content	115	28.37
3.3.4 Gender gap in Internet use	83	58.47
3.3.5 Rural gap in use of digital payments	37	73.42 ●
D. Impact pillar	81	51.57
1st sub-pillar: Economy	118	18.05
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	86	46.21
4.1.3 Prevalence of gig economy	121	4.94 ○
4.1.4 ICT services exports	110	3.01
2nd sub-pillar: Quality of Life	78	62.06
4.2.1 Happiness	72	59.25 ●
4.2.2 Freedom to make life choices	66	77.42 ●
4.2.3 Income inequality	91	56.81
4.2.4 Healthy life expectancy at birth	111	42.24
3rd sub-pillar: SDG Contribution	43	74.60
4.3.1 SDG 3: Good Health and Well-Being	90	58.06
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	48	84.62 ●
4.3.4 SDG 7: Affordable and Clean Energy	71	79.53 ●
4.3.5 SDG 11: Sustainable Cities and Communities	75	61.26

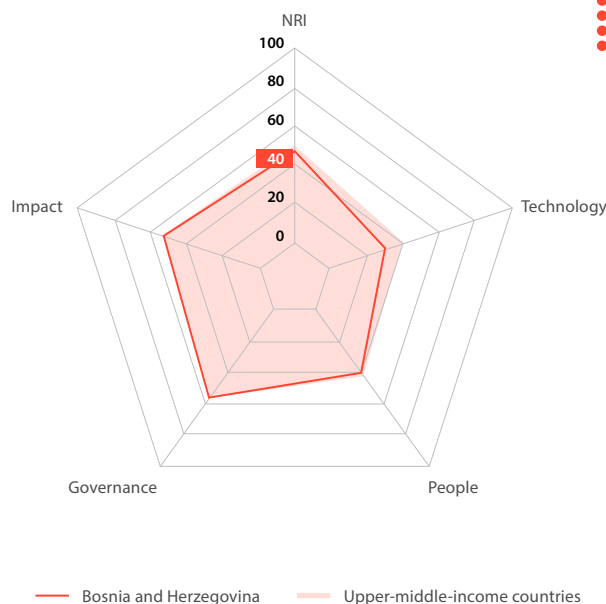
NOTE: ● Indicates a strength and ○ a weakness.

Bosnia and Herzegovina



Rank (Out of 133) Score
Network Readiness Index 90 43.20

Pillar/sub-pillar	Rank	Score
A. Technology pillar	102	29.70
1st sub-pillar: Access	90	55.98
2nd sub-pillar: Content	101	15.79
3rd sub-pillar: Future Technologies	121	17.32
B. People pillar	83	38.48
1st sub-pillar: Individuals	67	48.72
2nd sub-pillar: Businesses	35	46.83
3rd sub-pillar: Governments	116	19.90
C. Governance pillar	72	55.36
1st sub-pillar: Trust	89	36.38
2nd sub-pillar: Regulation	73	66.49
3rd sub-pillar: Inclusion	59	63.21
D. Impact pillar	94	49.26
1st sub-pillar: Economy	109	22.22
2nd sub-pillar: Quality of Life	52	71.22
3rd sub-pillar: SDG Contribution	104	54.34



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	102	29.70
1st sub-pillar: Access	90	55.98
1.1.1 Mobile tariffs	77	60.84
1.1.2 Handset prices	82	52.70
1.1.3 FTTH/building Internet subscriptions	99	15.63
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	110	61.85 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	101	15.79
1.2.1 GitHub commits	57	9.73 ●
1.2.2 Internet domain registrations	67	3.29
1.2.3 Mobile apps development	105	47.36 ○
1.2.4 AI scientific publications	87	2.77
3rd sub-pillar: Future Technologies	121	17.32
1.3.1 Adoption of emerging technologies	87	46.06
1.3.2 Investment in emerging technologies	124	17.00 ○
1.3.3 Robot density	53	0.41 ○
1.3.4 Computer software spending	100	5.83
B. People pillar	83	38.48
1st sub-pillar: Individuals	67	48.72
2.1.1 Mobile broadband internet traffic within the country	103	3.01
2.1.2 ICT skills in the education system	99	36.11 ○
2.1.3 Use of virtual social networks	62	58.33
2.1.4 Adult literacy rate	29	97.42 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	35	46.83
2.2.1 Firms with website	11	86.85 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	89	45.19
2.2.4 Public cloud computing market scale	88	8.46
3rd sub-pillar: Governments	116	19.90
2.3.1 Government online services	100	43.61
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	105	12.79 ○
2.3.4 R&D expenditure by governments and higher education	90	3.29

Indicator	Rank	Score
C. Governance pillar	72	55.36
1st sub-pillar: Trust	89	36.38
3.1.1 Secure Internet servers	53	64.22 ●
3.1.2 Cybersecurity	107	29.42
3.1.3 Online access to financial account	101	17.10 ○
3.1.4 Internet shopping	57	34.79
2nd sub-pillar: Regulation	73	66.49
3.2.1 Regulatory quality	80	44.32
3.2.2 ICT regulatory environment	34	89.29 ●
3.2.3 Regulation of emerging technologies	106	22.62 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	49	76.22 ●
3rd sub-pillar: Inclusion	59	63.21
3.3.1 E-Participation	71	52.33
3.3.2 Socioeconomic gap in use of digital payments	78	65.63
3.3.3 Availability of local online content	76	54.33
3.3.4 Gender gap in Internet use	45	68.75 ●
3.3.5 Rural gap in use of digital payments	28	75.01 ●
D. Impact pillar	94	49.26
1st sub-pillar: Economy	109	22.22
4.1.1 ICT patent applications	48	1.09
4.1.2 Domestic market scale	101	40.11
4.1.3 Prevalence of gig economy	106	21.80 ○
4.1.4 ICT services exports	40	25.89 ●
2nd sub-pillar: Quality of Life	52	71.22
4.2.1 Happiness	58	62.54
4.2.2 Freedom to make life choices	59	80.08
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	49	70.86 ●
3rd sub-pillar: SDG Contribution	104	54.34
4.3.1 SDG 3: Good Health and Well-Being	87	59.68
4.3.2 SDG 4: Quality Education	59	26.98
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	105	64.91
4.3.5 SDG 11: Sustainable Cities and Communities	120	32.25 ○

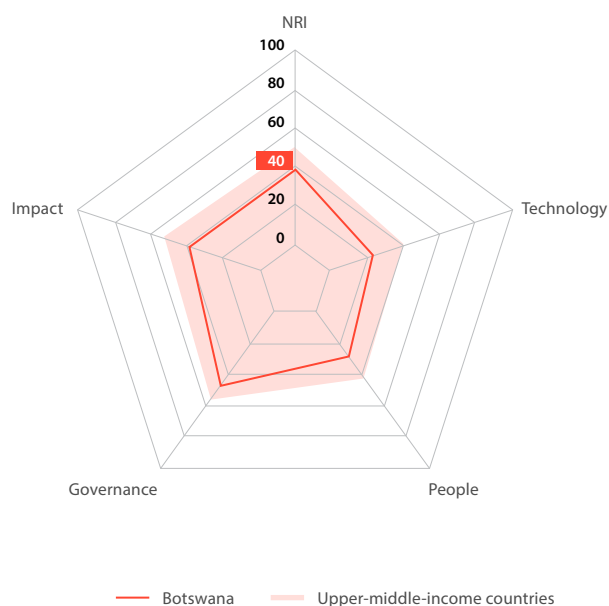
NOTE: ● Indicates a strength and ○ a weakness.

Botswana



	Rank (Out of 133)	Score
Network Readiness Index	114	34.54

Pillar/sub-pillar	Rank	Score
A. Technology pillar	118	23.12
1st sub-pillar: Access	95	53.06
2nd sub-pillar: Content	125	2.41
3rd sub-pillar: Future Technologies	127	13.90
B. People pillar	107	29.89
1st sub-pillar: Individuals	85	44.37
2nd sub-pillar: Businesses	104	26.75
3rd sub-pillar: Governments	120	18.54
C. Governance pillar	94	48.30
1st sub-pillar: Trust	87	36.55
2nd sub-pillar: Regulation	57	68.98
3rd sub-pillar: Inclusion	115	39.36
D. Impact pillar	123	36.84
1st sub-pillar: Economy	124	17.18
2nd sub-pillar: Quality of Life	130	30.86
3rd sub-pillar: SDG Contribution	78	62.47



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	118	23.12
1st sub-pillar: Access	95	53.06
1.1.1 Mobile tariffs	93	49.47
1.1.2 Handset prices	66	63.40 ●
1.1.3 FTTH/building Internet subscriptions	124	4.02 ○
1.1.4 Population covered by at least a 3G mobile network	81	78.92
1.1.5 International Internet bandwidth	76	69.47 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	125	2.41
2.2.1 GitHub commits	104	1.88
2.2.2 Internet domain registrations	87	1.40
2.2.3 Mobile apps development	123	5.43 ○
2.2.4 AI scientific publications	110	0.92
3rd sub-pillar: Future Technologies	127	13.90
3.3.1 Adoption of emerging technologies	110	0.00 ○
3.3.2 Investment in emerging technologies	94	30.75
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	89	10.96
B. People pillar	107	29.89
1st sub-pillar: Individuals	85	44.37
2.1.1 Mobile broadband internet traffic within the country	101	3.05
2.1.2 ICT skills in the education system	62	57.32 ●
2.1.3 Use of virtual social networks	94	36.80
2.1.4 Adult literacy rate	71	80.30
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	104	26.75
2.2.1 Firms with website	85	36.65
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	110	40.40
2.2.4 Public cloud computing market scale	112	3.20
3rd sub-pillar: Governments	120	18.54
2.3.1 Government online services	128	19.76 ○
2.3.2 Data Capabilities	78	18.73
2.3.3 Government promotion of investment in emerging technologies	88	25.74
2.3.4 R&D expenditure by governments and higher education	58	9.93 ●

Indicator	Rank	Score
C. Governance pillar	94	48.30
1st sub-pillar: Trust	87	36.55
3.1.1 Secure Internet servers	88	43.84
3.1.2 Cybersecurity	93	53.08
3.1.3 Online access to financial account	64	39.75 ●
3.1.4 Internet shopping	93	9.51
2nd sub-pillar: Regulation	57	68.98
3.2.1 Regulatory quality	43	62.60 ●
3.2.2 ICT regulatory environment	87	73.81
3.2.3 Regulation of emerging technologies	100	27.60
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	37	80.89 ●
3rd sub-pillar: Inclusion	115	39.36
3.3.1 E-Participation	128	15.12 ○
3.3.2 Socioeconomic gap in use of digital payments	94	54.46
3.3.3 Availability of local online content	123	23.56 ○
3.3.4 Gender gap in Internet use	96	41.21
3.3.5 Rural gap in use of digital payments	68	62.45 ●
D. Impact pillar	123	36.84
1st sub-pillar: Economy	124	17.18
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	111	37.36
4.1.3 Prevalence of gig economy	117	11.92 ○
4.1.4 ICT services exports	115	2.27
2nd sub-pillar: Quality of Life	130	30.86
4.2.1 Happiness	128	3.22 ○
4.2.2 Freedom to make life choices	98	62.12
4.2.3 Income inequality	115	24.94 ○
4.2.4 Healthy life expectancy at birth	124	29.56 ○
3rd sub-pillar: SDG Contribution	78	62.47
4.3.1 SDG 3: Good Health and Well-Being	101	41.94
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	119	50.43
4.3.4 SDG 7: Affordable and Clean Energy	27	88.38 ●
4.3.5 SDG 11: Sustainable Cities and Communities	82	55.29 ●

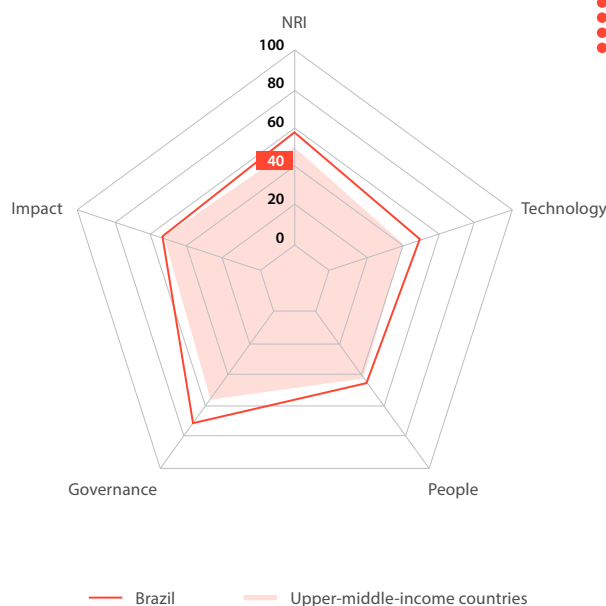
NOTE: ● Indicates a strength and ○ a weakness.

Brazil



	Rank (Out of 133)	Score
Network Readiness Index	44	55.20

Pillar/sub-pillar	Rank	Score
A. Technology pillar	45	48.88
1st sub-pillar: Access	57	68.03
2nd sub-pillar: Content	24	45.96
3rd sub-pillar: Future Technologies	75	32.63
B. People pillar	49	45.53
1st sub-pillar: Individuals	83	44.88
2nd sub-pillar: Businesses	37	45.72
3rd sub-pillar: Governments	47	45.98
C. Governance pillar	39	71.77
1st sub-pillar: Trust	50	62.53
2nd sub-pillar: Regulation	49	73.32
3rd sub-pillar: Inclusion	21	79.45
D. Impact pillar	64	54.64
1st sub-pillar: Economy	79	30.12
2nd sub-pillar: Quality of Life	66	68.11
3rd sub-pillar: SDG Contribution	67	65.71



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	45	48.88
1st sub-pillar: Access	57	68.03
1.1.1 Mobile tariffs	52	71.40
1.1.2 Handset prices	36	85.04
1.1.3 FTTH/building Internet subscriptions	3	72.93 ●
1.1.4 Population covered by at least a 3G mobile network	102	39.82 ○
1.1.5 International Internet bandwidth	25	79.21
1.1.6 Internet access in schools	57	59.81
2nd sub-pillar: Content	24	45.96
1.2.1 GitHub commits	49	13.48
1.2.2 Internet domain registrations	53	5.96
1.2.3 Mobile apps development	40	71.16
1.2.4 AI scientific publications	8	93.24 ●
3rd sub-pillar: Future Technologies	75	32.63
1.3.1 Adoption of emerging technologies	60	62.32
1.3.2 Investment in emerging technologies	65	39.00
1.3.3 Robot density	45	2.24 ○
1.3.4 Computer software spending	43	26.98
B. People pillar	49	45.53
1st sub-pillar: Individuals	83	44.88
2.1.1 Mobile broadband internet traffic within the country	19	41.89 ●
2.1.2 ICT skills in the education system	106	32.76 ○
2.1.3 Use of virtual social networks	66	57.21
2.1.4 Adult literacy rate	53	92.10
2.1.5 AI talent concentration	46	0.43 ○
2nd sub-pillar: Businesses	37	45.72
2.2.1 Firms with website	72	48.09
2.2.2 Number of venture capital deals invested in AI	48	6.83
2.2.3 Annual investment in telecommunication services	12	73.31 ●
2.2.4 Public cloud computing market scale	10	54.66 ●
3rd sub-pillar: Governments	47	45.98
2.3.1 Government online services	14	88.55 ●
2.3.2 Data Capabilities	37	46.33
2.3.3 Government promotion of investment in emerging technologies	82	28.17 ○
2.3.4 R&D expenditure by governments and higher education	34	20.86

Indicator	Rank	Score
C. Governance pillar	39	71.77
1st sub-pillar: Trust	50	62.53
3.1.1 Secure Internet servers	55	64.09
3.1.2 Cybersecurity	25	96.58
3.1.3 Online access to financial account	49	49.81
3.1.4 Internet shopping	52	39.66
2nd sub-pillar: Regulation	49	73.32
3.2.1 Regulatory quality	84	42.85 ○
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	59	49.68
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	39	80.04
3rd sub-pillar: Inclusion	21	79.45
3.3.1 E-Participation	11	89.53 ●
3.3.2 Socioeconomic gap in use of digital payments	40	88.16
3.3.3 Availability of local online content	50	67.55
3.3.4 Gender gap in Internet use	8	76.75 ●
3.3.5 Rural gap in use of digital payments	25	75.26
D. Impact pillar	64	54.64
1st sub-pillar: Economy	79	30.12
4.1.1 ICT patent applications	54	0.71
4.1.2 Domestic market scale	8	79.97 ●
4.1.3 Prevalence of gig economy	92	29.36 ○
4.1.4 ICT services exports	74	10.44
2nd sub-pillar: Quality of Life	66	68.11
4.2.1 Happiness	29	74.60
4.2.2 Freedom to make life choices	45	83.88
4.2.3 Income inequality	114	28.28 ○
4.2.4 Healthy life expectancy at birth	75	63.40
3rd sub-pillar: SDG Contribution	67	65.71
4.3.1 SDG 3: Good Health and Well-Being	37	82.26
4.3.2 SDG 4: Quality Education	62	24.80 ○
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	73	79.02
4.3.5 SDG 11: Sustainable Cities and Communities	47	76.80

NOTE: ● Indicates a strength and ○ a weakness.

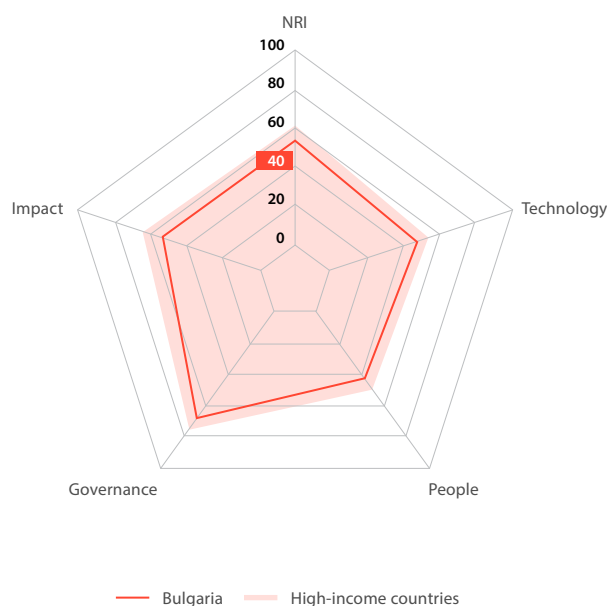
Bulgaria



Rank Score
(Out of 133)

Network Readiness Index **55** **53.15**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	52	46.33
1st sub-pillar: Access	43	73.25
2nd sub-pillar: Content	50	30.85
3rd sub-pillar: Future Technologies	69	34.89
B. People pillar	60	43.28
1st sub-pillar: Individuals	50	51.74
2nd sub-pillar: Businesses	88	31.50
3rd sub-pillar: Governments	43	46.61
C. Governance pillar	46	69.00
1st sub-pillar: Trust	53	59.47
2nd sub-pillar: Regulation	32	79.22
3rd sub-pillar: Inclusion	51	68.31
D. Impact pillar	67	54.00
1st sub-pillar: Economy	39	39.94
2nd sub-pillar: Quality of Life	87	59.50
3rd sub-pillar: SDG Contribution	77	62.57



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	52	46.33
1st sub-pillar: Access	43	73.25
1.1.1 Mobile tariffs	37	76.09
1.1.2 Handset prices	52	74.30
1.1.3 FTTH/building Internet subscriptions	43	37.53
1.1.4 Population covered by at least a 3G mobile network	24	99.88 ●
1.1.5 International Internet bandwidth	28	78.45 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	50	30.85
1.2.1 GitHub commits	34	33.25 ●
1.2.2 Internet domain registrations	40	14.03
1.2.3 Mobile apps development	45	70.59
1.2.4 AI scientific publications	71	5.55
3rd sub-pillar: Future Technologies	69	34.89
1.3.1 Adoption of emerging technologies	36	72.03
1.3.2 Investment in emerging technologies	51	46.50
1.3.3 Robot density	41	2.96 ○
1.3.4 Computer software spending	76	18.06
B. People pillar	60	43.28
1st sub-pillar: Individuals	50	51.74
2.1.1 Mobile broadband internet traffic within the country	53	15.08
2.1.2 ICT skills in the education system	70	52.45
2.1.3 Use of virtual social networks	64	57.68
2.1.4 Adult literacy rate	28	97.66
2.1.5 AI talent concentration	9	35.84 ●
2nd sub-pillar: Businesses	88	31.50
2.2.1 Firms with website	76	42.04
2.2.2 Number of venture capital deals invested in AI	33	17.07
2.2.3 Annual investment in telecommunication services	64	51.26
2.2.4 Public cloud computing market scale	68	15.63
3rd sub-pillar: Governments	43	46.61
2.3.1 Government online services	64	67.86
2.3.2 Data Capabilities	29	52.68
2.3.3 Government promotion of investment in emerging technologies	33	52.21
2.3.4 R&D expenditure by governments and higher education	47	13.70

Indicator	Rank	Score
C. Governance pillar	46	69.00
1st sub-pillar: Trust	53	59.47
3.1.1 Secure Internet servers	15	86.02 ●
3.1.2 Cybersecurity	83	67.42 ○
3.1.3 Online access to financial account	63	39.96
3.1.4 Internet shopping	48	44.48
2nd sub-pillar: Regulation	32	79.22
3.2.1 Regulatory quality	55	55.55
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	41	62.36
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	29	84.15 ●
3rd sub-pillar: Inclusion	51	68.31
3.3.1 E-Participation	29	73.25 ●
3.3.2 Socioeconomic gap in use of digital payments	76	67.26
3.3.3 Availability of local online content	36	78.12
3.3.4 Gender gap in Internet use	54	67.46
3.3.5 Rural gap in use of digital payments	77	55.45 ○
D. Impact pillar	67	54.00
1st sub-pillar: Economy	39	39.94
4.1.1 ICT patent applications	51	0.87
4.1.2 Domestic market scale	69	51.56
4.1.3 Prevalence of gig economy	24	63.95 ●
4.1.4 ICT services exports	20	43.38 ●
2nd sub-pillar: Quality of Life	87	59.50
4.2.1 Happiness	82	53.26 ○
4.2.2 Freedom to make life choices	92	64.34 ○
4.2.3 Income inequality	82	61.70 ○
4.2.4 Healthy life expectancy at birth	81	60.13 ○
3rd sub-pillar: SDG Contribution	77	62.57
4.3.1 SDG 3: Good Health and Well-Being	69	70.97
4.3.2 SDG 4: Quality Education	50	31.77
4.3.3 SDG 5: Women's economic opportunity	41	87.18
4.3.4 SDG 7: Affordable and Clean Energy	88	73.46 ○
4.3.5 SDG 11: Sustainable Cities and Communities	105	44.76 ○

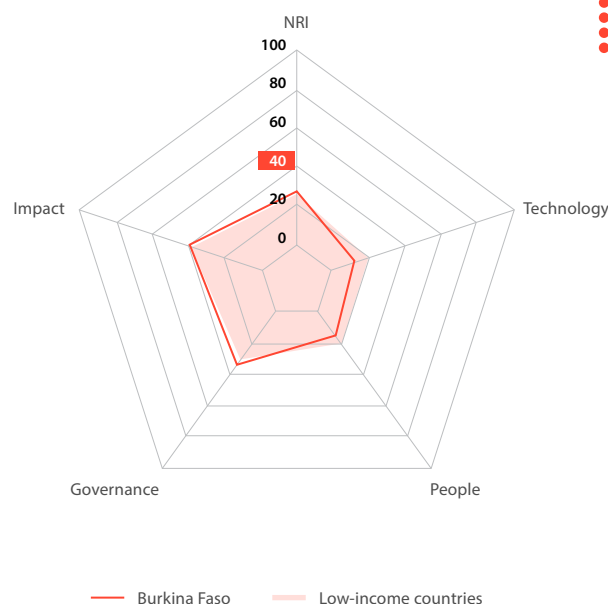
NOTE: ● Indicates a strength and ○ a weakness.

Burkina Faso



	Rank (Out of 133)	Score
Network Readiness Index	127	25.91

Pillar/sub-pillar	Rank	Score
A. Technology pillar	132	12.73
1st sub-pillar: Access	131	13.48
2nd sub-pillar: Content	114	11.62
3rd sub-pillar: Future Technologies	130	13.09
B. People pillar	132	13.34
1st sub-pillar: Individuals	133	4.42
2nd sub-pillar: Businesses	128	15.72
3rd sub-pillar: Governments	117	19.88
C. Governance pillar	122	36.58
1st sub-pillar: Trust	116	21.81
2nd sub-pillar: Regulation	75	65.84
3rd sub-pillar: Inclusion	132	22.10
D. Impact pillar	116	40.98
1st sub-pillar: Economy	112	21.00
2nd sub-pillar: Quality of Life	112	45.11
3rd sub-pillar: SDG Contribution	97	56.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	132	12.73
1st sub-pillar: Access	131	13.48
1.1.1 Mobile tariffs	128	15.23
1.1.2 Handset prices	130	7.53 ○
1.1.3 FTTH/building Internet subscriptions	126	1.35 ○
1.1.4 Population covered by at least a 3G mobile network	129	0.17 ○
1.1.5 International Internet bandwidth	121	56.37
1.1.6 Internet access in schools	89	0.23
2nd sub-pillar: Content	114	11.62
1.2.1 GitHub commits	130	0.11 ○
1.2.2 Internet domain registrations	131	0.04 ○
1.2.3 Mobile apps development	111	43.10
1.2.4 AI scientific publications	83	3.25 ●
3rd sub-pillar: Future Technologies	130	13.09
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	109	24.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	116	2.19
B. People pillar	132	13.34
1st sub-pillar: Individuals	133	4.42
2.1.1 Mobile broadband internet traffic within the country	126	0.31
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	120	6.46
2.1.4 Adult literacy rate	102	6.50 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	128	15.72
2.2.1 Firms with website	123	1.94 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	101	42.02
2.2.4 Public cloud computing market scale	112	3.20
3rd sub-pillar: Governments	117	19.88
2.3.1 Government online services	116	30.70
2.3.2 Data Capabilities	68	24.60 ●
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	84	4.32 ●

Indicator	Rank	Score
C. Governance pillar	122	36.58
1st sub-pillar: Trust	116	21.81
3.1.1 Secure Internet servers	129	13.67 ○
3.1.2 Cybersecurity	100	40.00
3.1.3 Online access to financial account	81	28.74 ●
3.1.4 Internet shopping	109	4.82
2nd sub-pillar: Regulation	75	65.84
3.2.1 Regulatory quality	97	37.03 ●
3.2.2 ICT regulatory environment	59	84.52 ●
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	74	66.82 ●
3rd sub-pillar: Inclusion	132	22.10
3.3.1 E-Participation	119	20.94
3.3.2 Socioeconomic gap in use of digital payments	105	46.40
3.3.3 Availability of local online content	131	8.41 ○
3.3.4 Gender gap in Internet use	105	0.00 ○
3.3.5 Rural gap in use of digital payments	105	34.76
D. Impact pillar	116	40.98
1st sub-pillar: Economy	112	21.00
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	102	39.30
4.1.3 Prevalence of gig economy	113	15.99
4.1.4 ICT services exports	84	7.72 ●
2nd sub-pillar: Quality of Life	112	45.11
4.2.1 Happiness	108	28.28
4.2.2 Freedom to make life choices	109	57.74
4.2.3 Income inequality	73	65.81 ●
4.2.4 Healthy life expectancy at birth	118	32.81
3rd sub-pillar: SDG Contribution	97	56.84
4.3.1 SDG 3: Good Health and Well-Being	124	17.74
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	74	76.07 ●
4.3.4 SDG 7: Affordable and Clean Energy	98	68.27
4.3.5 SDG 11: Sustainable Cities and Communities	118	34.61

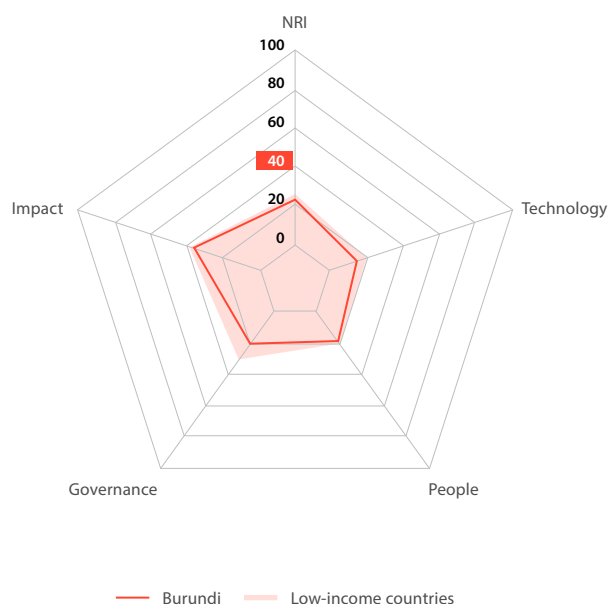
NOTE: ● Indicates a strength and ○ a weakness.

Burundi



	Rank (Out of 133)	Score
Network Readiness Index	132	20.69

Pillar/sub-pillar	Rank	Score
A. Technology pillar	131	12.81
1st sub-pillar: Access	132	10.74
2nd sub-pillar: Content	110	12.85
3rd sub-pillar: Future Technologies	125	14.82
B. People pillar	129	17.07
1st sub-pillar: Individuals	124	23.07
2nd sub-pillar: Businesses	129	12.93
3rd sub-pillar: Governments	125	15.22
C. Governance pillar	133	18.61
1st sub-pillar: Trust	131	9.25
2nd sub-pillar: Regulation	132	31.89
3rd sub-pillar: Inclusion	133	14.69
D. Impact pillar	127	34.26
1st sub-pillar: Economy	119	17.99
2nd sub-pillar: Quality of Life	123	36.96
3rd sub-pillar: SDG Contribution	119	47.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	131	12.81
1st sub-pillar: Access	132	10.74
1.1.1 Mobile tariffs	129	15.21
1.1.2 Handset prices	133	0.00 ○
1.1.3 FTTH/building Internet subscriptions	127	0.00 ○
1.1.4 Population covered by at least a 3G mobile network	132	0.06 ○
1.1.5 International Internet bandwidth	130	49.18
1.1.6 Internet access in schools	91	0.00 ○
2nd sub-pillar: Content	110	12.85
1.2.1 GitHub commits	127	0.20
1.2.2 Internet domain registrations	128	0.08
1.2.3 Mobile apps development	109	44.24
1.2.4 AI scientific publications	68	6.89 ●
3rd sub-pillar: Future Technologies	125	14.82
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	110	23.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	98	6.14 ●
B. People pillar	129	17.07
1st sub-pillar: Individuals	124	23.07
2.1.1 Mobile broadband internet traffic within the country	120	1.56
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	126	1.69
2.1.4 Adult literacy rate	88	65.96 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	129	12.93
2.2.1 Firms with website	114	12.10
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	121	25.53
2.2.4 Public cloud computing market scale	123	1.16 ○
3rd sub-pillar: Governments	125	15.22
2.3.1 Government online services	124	26.79
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	86	3.66 ●

Indicator	Rank	Score
C. Governance pillar	133	18.61
1st sub-pillar: Trust	131	9.25
3.1.1 Secure Internet servers	127	16.76
3.1.2 Cybersecurity	131	1.75 ○
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	132	31.89
3.2.1 Regulatory quality	119	25.78
3.2.2 ICT regulatory environment	126	54.40
3.2.3 Regulation of emerging technologies	82	37.67 ●
3.2.4 E-commerce legislation	129	25.00 ○
3.2.5 Privacy protection by law content	131	16.60 ○
3rd sub-pillar: Inclusion	133	14.69
3.3.1 E-Participation	97	32.56 ●
3.3.2 Socioeconomic gap in use of digital payments	129	0.00 ○
3.3.3 Availability of local online content	119	26.20
3.3.4 Gender gap in Internet use	105	0.00 ○
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	127	34.26
1st sub-pillar: Economy	119	17.99
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	130	20.43
4.1.3 Prevalence of gig economy	89	30.81 ●
4.1.4 ICT services exports	112	2.73 ●
2nd sub-pillar: Quality of Life	123	36.96
4.2.1 Happiness	121	13.05
4.2.2 Freedom to make life choices	118	46.05
4.2.3 Income inequality	75	65.55 ●
4.2.4 Healthy life expectancy at birth	112	37.99
3rd sub-pillar: SDG Contribution	119	47.84
4.3.1 SDG 3: Good Health and Well-Being	121	19.35
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	99	67.52 ●
4.3.4 SDG 7: Affordable and Clean Energy	117	53.29
4.3.5 SDG 11: Sustainable Cities and Communities	125	26.06

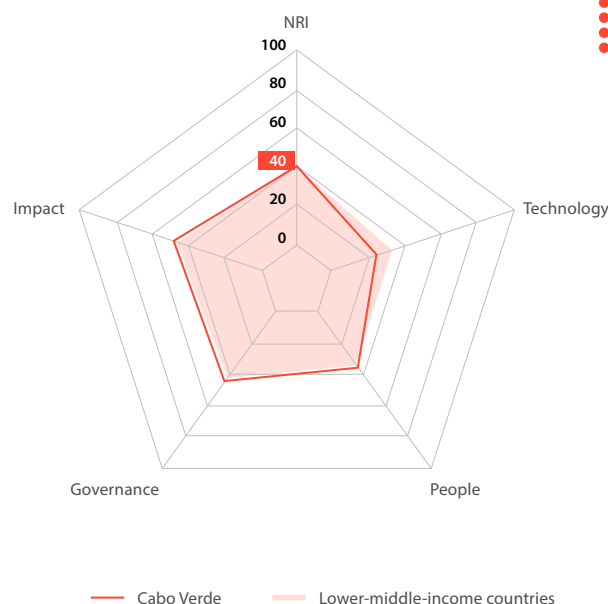
NOTE: ● Indicates a strength and ○ a weakness.

Cabo Verde



	Rank (Out of 133)	Score
Network Readiness Index	98	39.75

Pillar/sub-pillar	Rank	Score
A. Technology pillar	115	24.04
1st sub-pillar: Access	108	40.51
2nd sub-pillar: Content	126	2.24
3rd sub-pillar: Future Technologies	89	29.36
B. People pillar	95	36.32
1st sub-pillar: Individuals	82	45.12
2nd sub-pillar: Businesses	124	19.04
3rd sub-pillar: Governments	51	44.78
C. Governance pillar	96	47.68
1st sub-pillar: Trust	102	29.36
2nd sub-pillar: Regulation	67	67.49
3rd sub-pillar: Inclusion	102	46.18
D. Impact pillar	84	50.96
1st sub-pillar: Economy	125	17.01
2nd sub-pillar: Quality of Life	89	59.35
3rd sub-pillar: SDG Contribution	37	76.54



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	115	24.04
1st sub-pillar: Access	108	40.51
1.1.1 Mobile tariffs	109	38.76 ○
1.1.2 Handset prices	68	62.23 ●
1.1.3 FTTH/building Internet subscriptions	121	6.14 ○
1.1.4 Population covered by at least a 3G mobile network	100	49.41
1.1.5 International Internet bandwidth	126	54.35 ○
1.1.6 Internet access in schools	72	32.14
2nd sub-pillar: Content	126	2.24
1.2.1 GitHub commits	83	4.31
1.2.2 Internet domain registrations	74	2.37 ●
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	131	0.03 ○
3rd sub-pillar: Future Technologies	89	29.36
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	83	34.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	51	24.73 ●
B. People pillar	95	36.32
1st sub-pillar: Individuals	82	45.12
2.1.1 Mobile broadband internet traffic within the country	125	0.52 ○
2.1.2 ICT skills in the education system	58	58.52 ●
2.1.3 Use of virtual social networks	95	36.52
2.1.4 Adult literacy rate	65	84.91
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	124	19.04
2.2.1 Firms with website	120	4.35 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	119	33.73 ○
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	51	44.78
2.3.1 Government online services	97	44.35
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	44	45.22 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	96	47.68
1st sub-pillar: Trust	102	29.36
3.1.1 Secure Internet servers	95	40.97
3.1.2 Cybersecurity	119	17.75 ○
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	67	67.49
3.2.1 Regulatory quality	56	54.21 ●
3.2.2 ICT regulatory environment	85	75.83
3.2.3 Regulation of emerging technologies	86	36.11
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	62	71.28 ●
3rd sub-pillar: Inclusion	102	46.18
3.3.1 E-Participation	113	23.26 ○
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	86	50.48
3.3.4 Gender gap in Internet use	73	64.81
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	84	50.96
1st sub-pillar: Economy	125	17.01
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	132	8.97 ○
4.1.3 Prevalence of gig economy	82	34.01
4.1.4 ICT services exports	81	8.04
2nd sub-pillar: Quality of Life	89	59.35
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	94	52.96
4.2.4 Healthy life expectancy at birth	65	65.74 ●
3rd sub-pillar: SDG Contribution	37	76.54
4.3.1 SDG 3: Good Health and Well-Being	73	67.74
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	59	81.20 ●
4.3.4 SDG 7: Affordable and Clean Energy	21	90.06 ●
4.3.5 SDG 11: Sustainable Cities and Communities	95	48.98

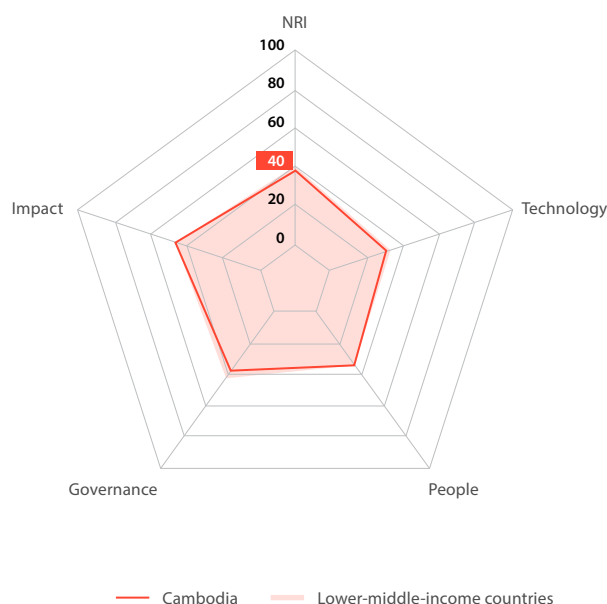
NOTE: ● Indicates a strength and ○ a weakness.

Cambodia



	Rank (Out of 133)	Score
Network Readiness Index	110	35.65

Pillar/sub-pillar	Rank	Score
A. Technology pillar	109	27.96
1st sub-pillar: Access	106	41.70
2nd sub-pillar: Content	89	19.19
3rd sub-pillar: Future Technologies	106	22.99
B. People pillar	100	33.64
1st sub-pillar: Individuals	41	54.32
2nd sub-pillar: Businesses	97	29.08
3rd sub-pillar: Governments	123	17.51
C. Governance pillar	121	36.60
1st sub-pillar: Trust	120	18.57
2nd sub-pillar: Regulation	117	48.45
3rd sub-pillar: Inclusion	110	42.79
D. Impact pillar	108	44.38
1st sub-pillar: Economy	100	24.91
2nd sub-pillar: Quality of Life	88	59.47
3rd sub-pillar: SDG Contribution	117	48.77



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	109	27.96
1st sub-pillar: Access	106	41.70
1.1.1 Mobile tariffs	91	52.33
1.1.2 Handset prices	100	42.79
1.1.3 FTTH/building Internet subscriptions	33	43.04 ●
1.1.4 Population covered by at least a 3G mobile network	103	38.14
1.1.5 International Internet bandwidth	78	69.30 ●
1.1.6 Internet access in schools	85	4.60 ○
2nd sub-pillar: Content	89	19.19
2.2.1 GitHub commits	99	2.28
2.2.2 Internet domain registrations	108	0.42
2.2.3 Mobile apps development	39	71.22 ●
2.2.4 AI scientific publications	86	2.84 ●
3rd sub-pillar: Future Technologies	106	22.99
3.3.1 Adoption of emerging technologies	NA	NA
3.3.2 Investment in emerging technologies	55	43.75 ●
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	115	2.24 ○
B. People pillar	100	33.64
1st sub-pillar: Individuals	41	54.32
2.1.1 Mobile broadband internet traffic within the country	36	27.16 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	58	59.18 ●
2.1.4 Adult literacy rate	73	76.62
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	97	29.08
2.2.1 Firms with website	87	35.44
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	87	45.33
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	123	17.51
2.3.1 Government online services	112	35.69
2.3.2 Data Capabilities	82	14.90
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	103	1.95 ○

Indicator	Rank	Score
C. Governance pillar	121	36.60
1st sub-pillar: Trust	120	18.57
3.1.1 Secure Internet servers	94	41.95
3.1.2 Cybersecurity	117	19.08 ○
3.1.3 Online access to financial account	113	8.90 ○
3.1.4 Internet shopping	111	4.34 ○
2nd sub-pillar: Regulation	117	48.45
3.2.1 Regulatory quality	110	31.36
3.2.2 ICT regulatory environment	113	63.10
3.2.3 Regulation of emerging technologies	87	35.66
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	117	37.12 ○
3rd sub-pillar: Inclusion	110	42.79
3.3.1 E-Participation	105	26.75
3.3.2 Socioeconomic gap in use of digital payments	109	43.37
3.3.3 Availability of local online content	94	45.19
3.3.4 Gender gap in Internet use	68	66.12 ●
3.3.5 Rural gap in use of digital payments	108	32.51
D. Impact pillar	108	44.38
1st sub-pillar: Economy	100	24.91
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	90	43.80
4.1.3 Prevalence of gig economy	95	27.62
4.1.4 ICT services exports	106	3.33
2nd sub-pillar: Quality of Life	88	59.47
4.2.1 Happiness	115	22.94 ○
4.2.2 Freedom to make life choices	2	99.30 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	95	52.88
3rd sub-pillar: SDG Contribution	117	48.77
4.3.1 SDG 3: Good Health and Well-Being	98	46.77
4.3.2 SDG 4: Quality Education	83	0.00 ○
4.3.3 SDG 5: Women's economic opportunity	80	74.36 ●
4.3.4 SDG 7: Affordable and Clean Energy	93	71.71
4.3.5 SDG 11: Sustainable Cities and Communities	86	51.22 ●

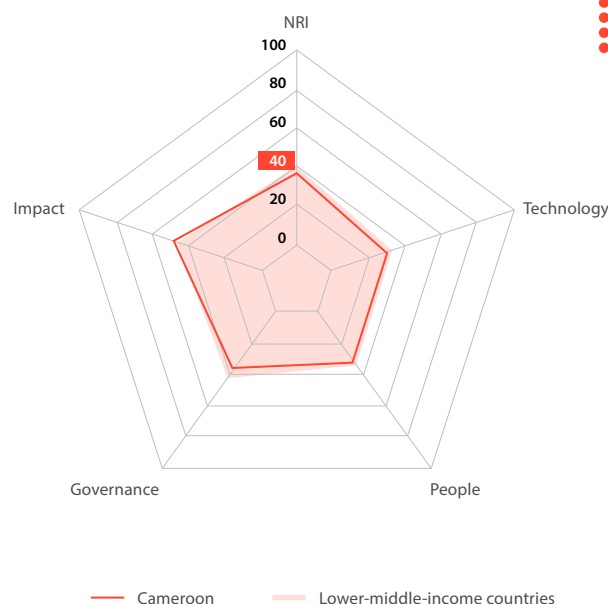
NOTE: ● Indicates a strength and ○ a weakness.

Cameroon



	Rank (Out of 133)	Score
Network Readiness Index	113	34.59

Pillar/sub-pillar	Rank	Score
A. Technology pillar	108	28.04
1st sub-pillar: Access	115	34.22
2nd sub-pillar: Content	92	17.80
3rd sub-pillar: Future Technologies	80	32.09
B. People pillar	109	29.02
1st sub-pillar: Individuals	111	32.88
2nd sub-pillar: Businesses	119	22.85
3rd sub-pillar: Governments	91	31.33
C. Governance pillar	119	36.84
1st sub-pillar: Trust	110	26.26
2nd sub-pillar: Regulation	104	55.04
3rd sub-pillar: Inclusion	126	29.22
D. Impact pillar	107	44.46
1st sub-pillar: Economy	53	36.46
2nd sub-pillar: Quality of Life	111	47.70
3rd sub-pillar: SDG Contribution	116	49.21



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	108	28.04
1st sub-pillar: Access	115	34.22
1.1.1 Mobile tariffs	106	41.34
1.1.2 Handset prices	107	37.15
1.1.3 FTTH/building Internet subscriptions	78	26.38 ●
1.1.4 Population covered by at least a 3G mobile network	125	1.54 ○
1.1.5 International Internet bandwidth	102	64.68
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	92	17.80
1.2.1 GitHub commits	109	1.39
1.2.2 Internet domain registrations	103	0.60
1.2.3 Mobile apps development	93	55.98
1.2.4 AI scientific publications	49	13.24 ●
3rd sub-pillar: Future Technologies	80	32.09
1.3.1 Adoption of emerging technologies	76	52.03
1.3.2 Investment in emerging technologies	87	33.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	88	11.00
B. People pillar	109	29.02
1st sub-pillar: Individuals	111	32.88
2.1.1 Mobile broadband internet traffic within the country	122	0.74 ○
2.1.2 ICT skills in the education system	73	50.98 ●
2.1.3 Use of virtual social networks	113	11.42
2.1.4 Adult literacy rate	84	68.39
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	119	22.85
2.2.1 Firms with website	116	8.47 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	58	52.26 ●
2.2.4 Public cloud computing market scale	91	7.83
3rd sub-pillar: Governments	91	31.33
2.3.1 Government online services	113	32.76
2.3.2 Data Capabilities	80	15.64
2.3.3 Government promotion of investment in emerging technologies	43	45.59 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	119	36.84
1st sub-pillar: Trust	110	26.26
3.1.1 Secure Internet servers	122	22.37 ○
3.1.2 Cybersecurity	97	45.67
3.1.3 Online access to financial account	78	31.69 ●
3.1.4 Internet shopping	106	5.31
2nd sub-pillar: Regulation	104	55.04
3.2.1 Regulatory quality	116	26.92
3.2.2 ICT regulatory environment	100	67.86
3.2.3 Regulation of emerging technologies	95	30.02
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	101	50.39
3rd sub-pillar: Inclusion	126	29.22
3.3.1 E-Participation	105	26.75
3.3.2 Socioeconomic gap in use of digital payments	111	41.96
3.3.3 Availability of local online content	122	24.76 ○
3.3.4 Gender gap in Internet use	102	18.20 ○
3.3.5 Rural gap in use of digital payments	106	34.43
D. Impact pillar	107	44.46
1st sub-pillar: Economy	53	36.46
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	84	46.81 ●
4.1.3 Prevalence of gig economy	40	56.10 ●
4.1.4 ICT services exports	89	6.47
2nd sub-pillar: Quality of Life	111	47.70
4.2.1 Happiness	98	38.99
4.2.2 Freedom to make life choices	99	61.77
4.2.3 Income inequality	93	53.47
4.2.4 Healthy life expectancy at birth	120	31.20 ○
3rd sub-pillar: SDG Contribution	116	49.21
4.3.1 SDG 3: Good Health and Well-Being	115	24.19 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	122	45.30 ○
4.3.4 SDG 7: Affordable and Clean Energy	80	77.05 ●
4.3.5 SDG 11: Sustainable Cities and Communities	124	26.38 ○

NOTE: ● Indicates a strength and ○ a weakness.

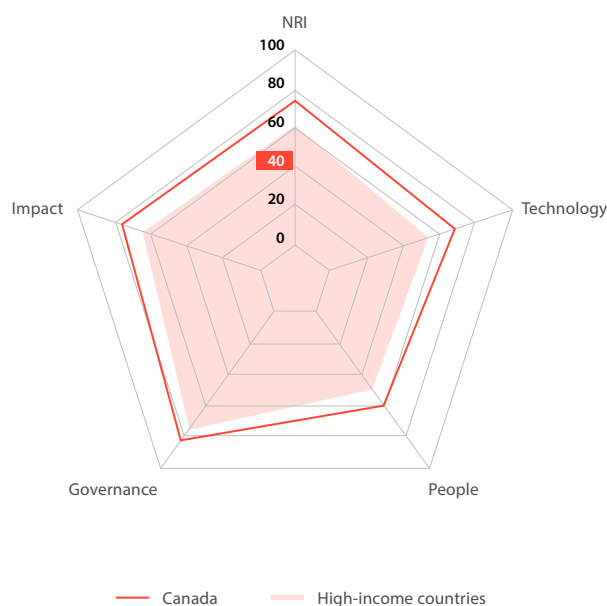
Canada



Rank Score
(Out of 133)

Network Readiness Index **11** **71.76**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	9	67.23
1st sub-pillar: Access	33	76.18
2nd sub-pillar: Content	6	61.97
3rd sub-pillar: Future Technologies	12	63.54
B. People pillar	11	60.94
1st sub-pillar: Individuals	53	51.23
2nd sub-pillar: Businesses	3	66.39
3rd sub-pillar: Governments	17	65.19
C. Governance pillar	12	85.48
1st sub-pillar: Trust	11	85.60
2nd sub-pillar: Regulation	11	88.23
3rd sub-pillar: Inclusion	12	82.61
D. Impact pillar	12	73.39
1st sub-pillar: Economy	14	55.78
2nd sub-pillar: Quality of Life	21	82.30
3rd sub-pillar: SDG Contribution	20	82.07



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	9	67.23
1st sub-pillar: Access	33	76.18
1.1.1 Mobile tariffs	53	69.91 ○
1.1.2 Handset prices	14	94.45
1.1.3 FTTH/building Internet subscriptions	32	43.39
1.1.4 Population covered by at least a 3G mobile network	45	96.54 ○
1.1.5 International Internet bandwidth	36	76.63
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	6	61.97
2.1.1 GitHub commits	11	66.62 ●
2.2.2 Internet domain registrations	12	57.93 ●
2.2.3 Mobile apps development	43	70.62 ○
2.2.4 AI scientific publications	18	52.70
3rd sub-pillar: Future Technologies	12	63.54
3.1.1 Adoption of emerging technologies	12	88.54
3.1.2 Investment in emerging technologies	20	68.25
3.1.3 Robot density	15	29.12
3.1.4 Computer software spending	5	68.24 ●
B. People pillar	11	60.94
1st sub-pillar: Individuals	53	51.23
2.1.1 Mobile broadband internet traffic within the country	41	22.27 ○
2.1.2 ICT skills in the education system	19	78.86
2.1.3 Use of virtual social networks	14	71.82
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	11	31.97
2nd sub-pillar: Businesses	3	66.39
2.2.1 Firms with website	13	83.10
2.2.2 Number of venture capital deals invested in AI	10	41.33
2.2.3 Annual investment in telecommunication services	7	78.99 ●
2.2.4 Public cloud computing market scale	7	62.15 ●
3rd sub-pillar: Governments	17	65.19
2.3.1 Government online services	27	83.47
2.3.2 Data Capabilities	10	70.12
2.3.3 Government promotion of investment in emerging technologies	12	79.39
2.3.4 R&D expenditure by governments and higher education	25	27.79

Indicator	Rank	Score
C. Governance pillar	12	85.48
1st sub-pillar: Trust	11	85.60
3.1.1 Secure Internet servers	19	84.53
3.1.2 Cybersecurity	13	97.67
3.1.3 Online access to financial account	16	79.46
3.1.4 Internet shopping	14	80.76
2nd sub-pillar: Regulation	11	88.23
3.2.1 Regulatory quality	9	87.39 ●
3.2.2 ICT regulatory environment	54	86.31 ○
3.2.3 Regulation of emerging technologies	16	80.67
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	22	86.76
3rd sub-pillar: Inclusion	12	82.61
3.3.1 E-Participation	14	82.55
3.3.2 Socioeconomic gap in use of digital payments	19	96.33
3.3.3 Availability of local online content	15	88.70
3.3.4 Gender gap in Internet use	50	68.38 ○
3.3.5 Rural gap in use of digital payments	12	77.09
D. Impact pillar	12	73.39
1st sub-pillar: Economy	14	55.78
4.1.1 ICT patent applications	14	47.66
4.1.2 Domestic market scale	16	74.73
4.1.3 Prevalence of gig economy	9	81.98 ●
4.1.4 ICT services exports	54	18.76 ○
2nd sub-pillar: Quality of Life	21	82.30
4.2.1 Happiness	16	80.99
4.2.2 Freedom to make life choices	60	80.05 ○
4.2.3 Income inequality	30	80.46
4.2.4 Healthy life expectancy at birth	18	91.27
3rd sub-pillar: SDG Contribution	20	82.07
4.3.1 SDG 3: Good Health and Well-Being	1	100.00 ●
4.3.2 SDG 4: Quality Education	7	69.92 ●
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	109	60.09 ○
4.3.5 SDG 11: Sustainable Cities and Communities	7	96.57 ●

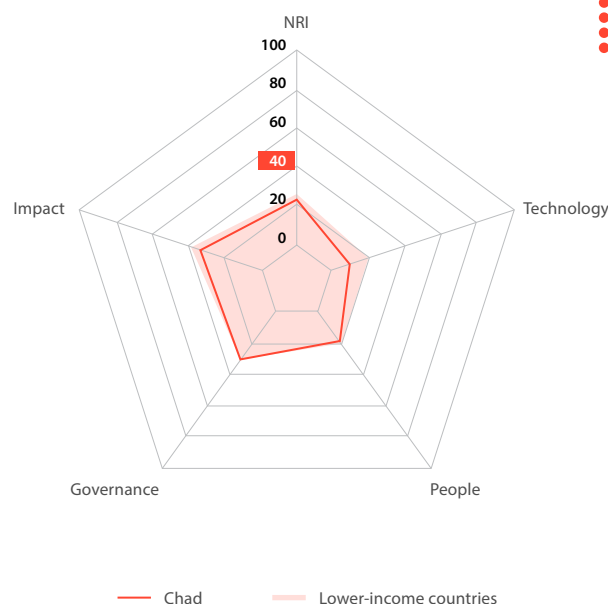
NOTE: ● Indicates a strength and ○ a weakness.

Chad



	Rank (Out of 133)	Score
Network Readiness Index	113	22.22

Pillar/sub-pillar	Rank	Score
A. Technology pillar	133	10.53
1st sub-pillar: Access	133	10.10
2nd sub-pillar: Content	133	0.26
3rd sub-pillar: Future Technologies	112	21.21
B. People pillar	130	16.37
1st sub-pillar: Individuals	130	13.45
2nd sub-pillar: Businesses	127	16.16
3rd sub-pillar: Governments	118	19.49
C. Governance pillar	126	30.06
1st sub-pillar: Trust	127	14.67
2nd sub-pillar: Regulation	129	35.65
3rd sub-pillar: Inclusion	114	39.86
D. Impact pillar	130	31.91
1st sub-pillar: Economy	127	15.58
2nd sub-pillar: Quality of Life	125	36.79
3rd sub-pillar: SDG Contribution	128	43.36



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	133	10.53
1st sub-pillar: Access	133	10.10
1.1.1 Mobile tariffs	133	0.00 ○
1.1.2 Handset prices	131	5.07
1.1.3 FTTH/building Internet subscriptions	127	0.00 ○
1.1.4 Population covered by at least a 3G mobile network	128	1.09
1.1.5 International Internet bandwidth	125	54.46
1.1.6 Internet access in schools	91	0.00 ○
2nd sub-pillar: Content	133	0.26
1.2.1 GitHub commits	131	0.00 ○
1.2.2 Internet domain registrations	130	0.04
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	113	0.73
3rd sub-pillar: Future Technologies	112	21.21
1.3.1 Adoption of emerging technologies	103	29.68
1.3.2 Investment in emerging technologies	126	12.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	130	16.37
1st sub-pillar: Individuals	130	13.45
2.1.1 Mobile broadband internet traffic within the country	123	0.57
2.1.2 ICT skills in the education system	67	53.24 ●
2.1.3 Use of virtual social networks	132	0.00 ○
2.1.4 Adult literacy rate	104	0.00 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	127	16.16
2.2.1 Firms with website	119	5.44
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	107	40.82
2.2.4 Public cloud computing market scale	119	2.22
3rd sub-pillar: Governments	118	19.49
2.3.1 Government online services	129	19.61
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	73	33.64 ●
2.3.4 R&D expenditure by governments and higher education	76	5.23 ●

Indicator	Rank	Score
C. Governance pillar	126	30.06
1st sub-pillar: Trust	127	14.67
3.1.1 Secure Internet servers	133	0.00 ○
3.1.2 Cybersecurity	99	40.42 ●
3.1.3 Online access to financial account	103	14.12
3.1.4 Internet shopping	112	4.16
2nd sub-pillar: Regulation	129	35.65
3.2.1 Regulatory quality	126	21.04
3.2.2 ICT regulatory environment	128	52.02
3.2.3 Regulation of emerging technologies	109	14.47
3.2.4 E-commerce legislation	129	25.00
3.2.5 Privacy protection by law content	79	65.70 ●
3rd sub-pillar: Inclusion	114	39.86
3.3.1 E-Participation	101	30.24 ●
3.3.2 Socioeconomic gap in use of digital payments	81	64.74 ●
3.3.3 Availability of local online content	132	0.00 ○
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	62	64.45 ●
D. Impact pillar	130	31.91
1st sub-pillar: Economy	127	15.58
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	125	32.44
4.1.3 Prevalence of gig economy	118	10.76
4.1.4 ICT services exports	105	3.54
2nd sub-pillar: Quality of Life	125	36.79
4.2.1 Happiness	103	30.09
4.2.2 Freedom to make life choices	123	35.83
4.2.3 Income inequality	73	65.81 ●
4.2.4 Healthy life expectancy at birth	128	23.07
3rd sub-pillar: SDG Contribution	128	43.36
4.3.1 SDG 3: Good Health and Well-Being	131	0.00 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	115	53.85
4.3.4 SDG 7: Affordable and Clean Energy	84	76.24 ●
4.3.5 SDG 11: Sustainable Cities and Communities	132	0.00 ○

NOTE: ● Indicates a strength and ○ a weakness.

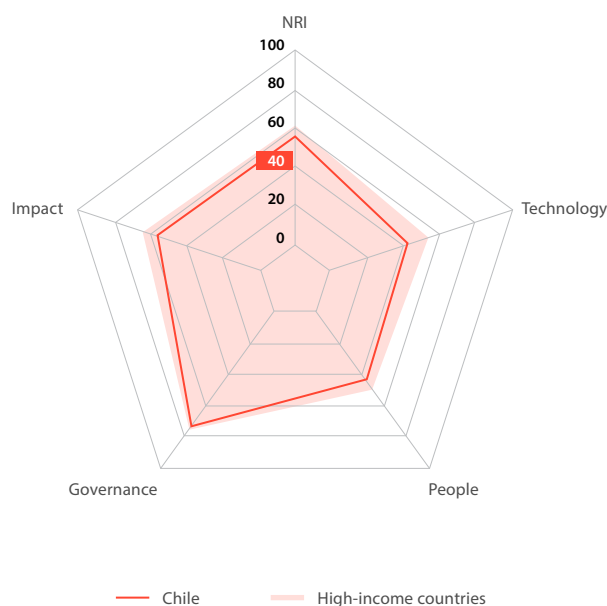
Chile



Rank Score
(Out of 133)

Network Readiness Index **54** **53.40**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	69	42.54
1st sub-pillar: Access	65	66.31
2nd sub-pillar: Content	74	22.90
3rd sub-pillar: Future Technologies	53	38.40
B. People pillar	54	44.20
1st sub-pillar: Individuals	57	50.30
2nd sub-pillar: Businesses	38	43.41
3rd sub-pillar: Governments	66	38.88
C. Governance pillar	40	71.61
1st sub-pillar: Trust	46	66.48
2nd sub-pillar: Regulation	36	77.38
3rd sub-pillar: Inclusion	46	70.96
D. Impact pillar	61	55.25
1st sub-pillar: Economy	90	26.75
2nd sub-pillar: Quality of Life	61	69.84
3rd sub-pillar: SDG Contribution	53	69.15



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	69	42.54
1st sub-pillar: Access	65	66.31
1.1.1 Mobile tariffs	35	77.02
1.1.2 Handset prices	42	82.73
1.1.3 FTTH/building Internet subscriptions	29	45.38 ●
1.1.4 Population covered by at least a 3G mobile network	81	78.92
1.1.5 International Internet bandwidth	24	79.44 ●
1.1.6 Internet access in schools	71	34.35 ○
2nd sub-pillar: Content	74	22.90
1.2.1 GitHub commits	58	9.30
1.2.2 Internet domain registrations	47	8.46
1.2.3 Mobile apps development	68	64.35
1.2.4 AI scientific publications	60	9.50
3rd sub-pillar: Future Technologies	53	38.40
1.3.1 Adoption of emerging technologies	49	65.65
1.3.2 Investment in emerging technologies	67	38.50
1.3.3 Robot density	52	0.59 ○
1.3.4 Computer software spending	23	48.84 ●
B. People pillar	54	44.20
1st sub-pillar: Individuals	57	50.30
2.1.1 Mobile broadband internet traffic within the country	26	34.40 ●
2.1.2 ICT skills in the education system	72	52.13
2.1.3 Use of virtual social networks	31	67.60 ●
2.1.4 Adult literacy rate	38	95.86
2.1.5 AI talent concentration	45	1.50 ○
2nd sub-pillar: Businesses	38	43.41
2.2.1 Firms with website	27	76.33 ●
2.2.2 Number of venture capital deals invested in AI	60	4.03 ○
2.2.3 Annual investment in telecommunication services	30	62.75
2.2.4 Public cloud computing market scale	40	30.56
3rd sub-pillar: Governments	66	38.88
2.3.1 Government online services	30	80.99 ●
2.3.2 Data Capabilities	34	46.94
2.3.3 Government promotion of investment in emerging technologies	93	21.70 ○
2.3.4 R&D expenditure by governments and higher education	73	5.89 ○

Indicator	Rank	Score
C. Governance pillar	40	71.61
1st sub-pillar: Trust	46	66.48
3.1.1 Secure Internet servers	41	75.46
3.1.2 Cybersecurity	81	68.83
3.1.3 Online access to financial account	32	65.54
3.1.4 Internet shopping	40	56.09
2nd sub-pillar: Regulation	36	77.38
3.2.1 Regulatory quality	31	70.99 ●
3.2.2 ICT regulatory environment	41	88.10
3.2.3 Regulation of emerging technologies	51	53.80
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	57	74.01
3rd sub-pillar: Inclusion	46	70.96
3.3.1 E-Participation	43	68.61
3.3.2 Socioeconomic gap in use of digital payments	11	97.84 ●
3.3.3 Availability of local online content	54	66.35
3.3.4 Gender gap in Internet use	61	66.74
3.3.5 Rural gap in use of digital payments	79	55.27
D. Impact pillar	61	55.25
1st sub-pillar: Economy	90	26.75
4.1.1 ICT patent applications	46	1.40
4.1.2 Domestic market scale	43	61.41
4.1.3 Prevalence of gig economy	65	40.41
4.1.4 ICT services exports	101	3.79 ○
2nd sub-pillar: Quality of Life	61	69.84
4.2.1 Happiness	51	67.45
4.2.2 Freedom to make life choices	72	74.62
4.2.3 Income inequality	96	51.41 ○
4.2.4 Healthy life expectancy at birth	29	83.51 ●
3rd sub-pillar: SDG Contribution	53	69.15
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	44	40.14
4.3.3 SDG 5: Women's economic opportunity	86	72.65 ○
4.3.4 SDG 7: Affordable and Clean Energy	57	82.68
4.3.5 SDG 11: Sustainable Cities and Communities	46	76.81

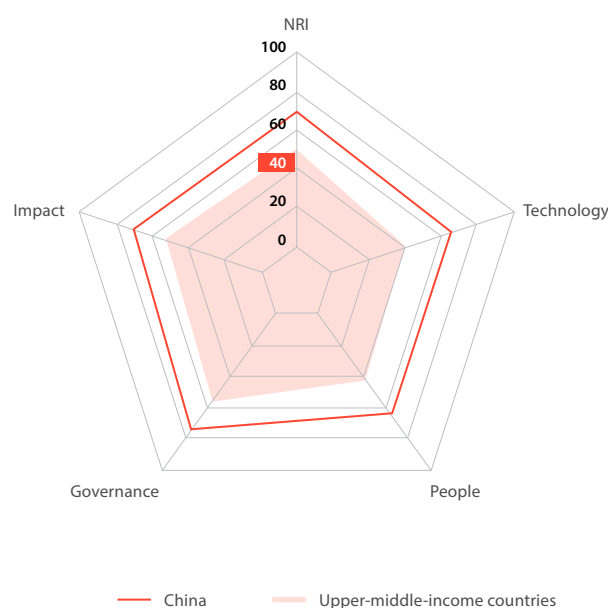
NOTE: ● Indicates a strength and ○ a weakness.

China

Rank
(Out of 133)

Network Readiness Index 17 68.70

Pillar/sub-pillar	Rank	Score
A. Technology pillar	12	65.34
1st sub-pillar: Access	1	91.77
2nd sub-pillar: Content	16	52.03
3rd sub-pillar: Future Technologies	26	52.24
B. People pillar	6	66.33
1st sub-pillar: Individuals	6	74.25
2nd sub-pillar: Businesses	9	63.14
3rd sub-pillar: Governments	22	61.60
C. Governance pillar	36	73.81
1st sub-pillar: Trust	23	79.41
2nd sub-pillar: Regulation	88	62.11
3rd sub-pillar: Inclusion	19	79.90
D. Impact pillar	19	69.32
1st sub-pillar: Economy	7	64.76
2nd sub-pillar: Quality of Life	58	70.41
3rd sub-pillar: SDG Contribution	47	72.80



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	12	65.34
1st sub-pillar: Access	1	91.77
1.1.1 Mobile tariffs	38	76.06
1.1.2 Handset prices	40	83.04
1.1.3 FTTH/building Internet subscriptions	1	100.00 ●
1.1.4 Population covered by at least a 3G mobile network	29	98.83
1.1.5 International Internet bandwidth	3	94.00 ●
1.1.6 Internet access in schools	40	98.68
2nd sub-pillar: Content	16	52.03
1.2.1 GitHub commits	NA	NA
1.2.2 Internet domain registrations	63	4.06
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	26	52.24
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	33	59.75
1.3.3 Robot density	3	60.98 ●
1.3.4 Computer software spending	29	35.98
B. People pillar	6	66.33
1st sub-pillar: Individuals	6	74.25
2.1.1 Mobile broadband internet traffic within the country	1	100.00 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	36	64.61
2.1.4 Adult literacy rate	42	95.25
2.1.5 AI talent concentration	8	37.12
2nd sub-pillar: Businesses	9	63.14
2.2.1 Firms with website	52	61.09
2.2.2 Number of venture capital deals invested in AI	24	21.20
2.2.3 Annual investment in telecommunication services	2	96.34 ●
2.2.4 Public cloud computing market scale	2	73.93 ●
3rd sub-pillar: Governments	22	61.60
2.3.1 Government online services	15	87.58
2.3.2 Data Capabilities	26	54.02
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	14	43.21

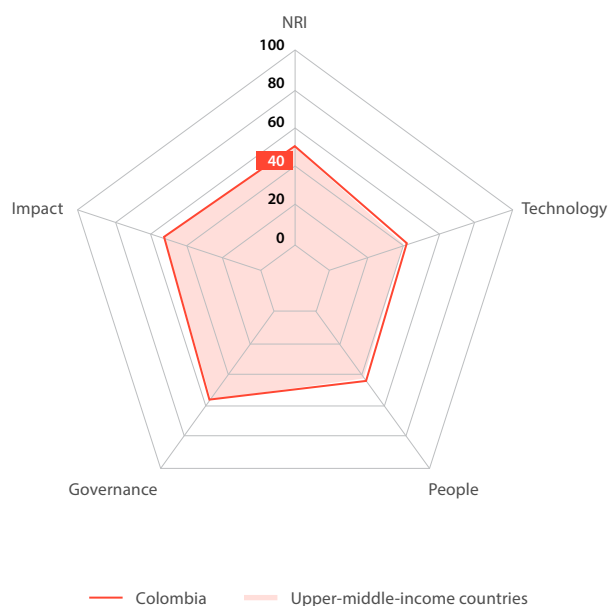
Indicator	Rank	Score
C. Governance pillar	36	73.81
1st sub-pillar: Trust	23	79.41
3.1.1 Secure Internet servers	65	54.70
3.1.2 Cybersecurity	40	92.50
3.1.3 Online access to financial account	17	78.08
3.1.4 Internet shopping	3	92.37 ●
2nd sub-pillar: Regulation	88	62.11
3.2.1 Regulatory quality	93	38.20 ○
3.2.2 ICT regulatory environment	119	57.14 ○
3.2.3 Regulation of emerging technologies	7	85.10
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	123	30.12 ○
3rd sub-pillar: Inclusion	19	79.90
3.3.1 E-Participation	13	86.04
3.3.2 Socioeconomic gap in use of digital payments	51	83.52
3.3.3 Availability of local online content	3	97.12 ●
3.3.4 Gender gap in Internet use	47	68.57
3.3.5 Rural gap in use of digital payments	63	64.25 ○
D. Impact pillar	19	69.32
1st sub-pillar: Economy	7	64.76
4.1.1 ICT patent applications	17	38.83
4.1.2 Domestic market scale	1	100.00 ●
4.1.3 Prevalence of gig economy	1	100.00 ●
4.1.4 ICT services exports	52	20.19
2nd sub-pillar: Quality of Life	58	70.41
4.2.1 Happiness	55	65.56
4.2.2 Freedom to make life choices	78	70.95 ○
4.2.3 Income inequality	63	70.18 ○
4.2.4 Healthy life expectancy at birth	33	79.26
3rd sub-pillar: SDG Contribution	47	72.80
4.3.1 SDG 3: Good Health and Well-Being	34	83.87
4.3.2 SDG 4: Quality Education	1	100.00 ●
4.3.3 SDG 5: Women's economic opportunity	96	70.09 ○
4.3.4 SDG 7: Affordable and Clean Energy	106	61.92 ○
4.3.5 SDG 11: Sustainable Cities and Communities	119	34.51 ○

NOTE: ● Indicates a strength and ○ a weakness.

Colombia

	Rank (Out of 133)	Score
Network Readiness Index	64	49.64

Pillar/sub-pillar	Rank	Score
A. Technology pillar	60	44.26
1st sub-pillar: Access	59	66.87
2nd sub-pillar: Content	66	25.38
3rd sub-pillar: Future Technologies	50	40.52
B. People pillar	52	44.58
1st sub-pillar: Individuals	63	49.54
2nd sub-pillar: Businesses	52	38.18
3rd sub-pillar: Governments	46	46.03
C. Governance pillar	70	57.15
1st sub-pillar: Trust	79	40.19
2nd sub-pillar: Regulation	53	71.22
3rd sub-pillar: Inclusion	70	60.03
D. Impact pillar	76	52.58
1st sub-pillar: Economy	84	28.38
2nd sub-pillar: Quality of Life	85	60.59
3rd sub-pillar: SDG Contribution	56	68.77



The Network Readiness Index in detail

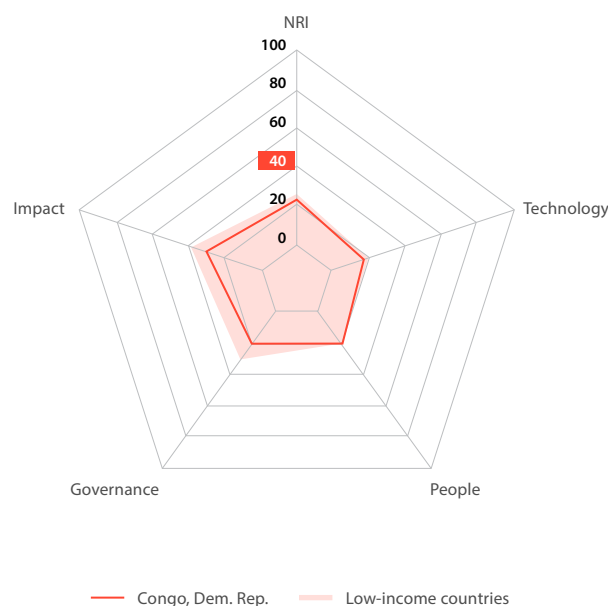
Indicator	Rank	Score
A. Technology pillar	60	44.26
1st sub-pillar: Access	59	66.87
1.1.1 Mobile tariffs	79	60.23
1.1.2 Handset prices	71	61.28
1.1.3 FTTH/building Internet subscriptions	20	48.19 ●
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	14	84.38 ●
1.1.6 Internet access in schools	65	47.17 ○
2nd sub-pillar: Content	66	25.38
2.2.1 GitHub commits	59	8.94
2.2.2 Internet domain registrations	41	13.98
2.2.3 Mobile apps development	73	62.54
2.2.4 AI scientific publications	44	16.05
3rd sub-pillar: Future Technologies	50	40.52
1.3.1 Adoption of emerging technologies	45	67.10
1.3.2 Investment in emerging technologies	66	38.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	79	15.71
B. People pillar	52	44.58
1st sub-pillar: Individuals	63	49.54
2.1.1 Mobile broadband internet traffic within the country	35	28.35 ●
2.1.2 ICT skills in the education system	55	60.02
2.1.3 Use of virtual social networks	50	60.96
2.1.4 Adult literacy rate	48	93.66
2.1.5 AI talent concentration	42	4.72 ○
2nd sub-pillar: Businesses	52	38.18
2.2.1 Firms with website	29	74.75 ●
2.2.2 Number of venture capital deals invested in AI	59	4.15 ○
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	32	35.62 ●
3rd sub-pillar: Governments	46	46.03
2.3.1 Government online services	59	71.46
2.3.2 Data Capabilities	14	67.92 ●
2.3.3 Government promotion of investment in emerging technologies	54	39.72
2.3.4 R&D expenditure by governments and higher education	80	5.03 ○

Indicator	Rank	Score
C. Governance pillar	70	57.15
1st sub-pillar: Trust	79	40.19
3.1.1 Secure Internet servers	79	47.91
3.1.2 Cybersecurity	88	63.75 ○
3.1.3 Online access to financial account	75	32.23
3.1.4 Internet shopping	77	16.89
2nd sub-pillar: Regulation	53	71.22
3.2.1 Regulatory quality	65	51.32
3.2.2 ICT regulatory environment	59	84.52
3.2.3 Regulation of emerging technologies	55	51.54
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	68	68.73
3rd sub-pillar: Inclusion	70	60.03
3.3.1 E-Participation	37	70.93
3.3.2 Socioeconomic gap in use of digital payments	93	55.54 ○
3.3.3 Availability of local online content	79	53.85
3.3.4 Gender gap in Internet use	15	74.15 ●
3.3.5 Rural gap in use of digital payments	95	45.66 ○
D. Impact pillar	76	52.58
1st sub-pillar: Economy	84	28.38
4.1.1 ICT patent applications	62	0.27 ○
4.1.2 Domestic market scale	31	66.54 ●
4.1.3 Prevalence of gig economy	79	35.17
4.1.4 ICT services exports	68	11.54
2nd sub-pillar: Quality of Life	85	60.59
4.2.1 Happiness	67	60.23
4.2.2 Freedom to make life choices	68	76.05
4.2.3 Income inequality	116	21.08 ○
4.2.4 Healthy life expectancy at birth	53	69.89
3rd sub-pillar: SDG Contribution	56	68.77
4.3.1 SDG 3: Good Health and Well-Being	37	82.26
4.3.2 SDG 4: Quality Education	61	26.24 ○
4.3.3 SDG 5: Women's economic opportunity	70	78.63
4.3.4 SDG 7: Affordable and Clean Energy	17	90.94 ●
4.3.5 SDG 11: Sustainable Cities and Communities	48	76.31

NOTE: ● Indicates a strength and ○ a weakness.

Congo, Dem. Rep.

	Rank (Out of 133)	Score
Network Readiness Index	131	21.49
Pillar/sub-pillar	Rank	Score
A. Technology pillar	125	15.75
1st sub-pillar: Access	129	18.39
2nd sub-pillar: Content	128	1.62
3rd sub-pillar: Future Technologies	97	27.25
B. People pillar	127	18.66
1st sub-pillar: Individuals	118	27.78
2nd sub-pillar: Businesses	125	17.04
3rd sub-pillar: Governments	132	11.17
C. Governance pillar	131	21.67
1st sub-pillar: Trust	133	5.80
2nd sub-pillar: Regulation	131	32.56
3rd sub-pillar: Inclusion	127	26.65
D. Impact pillar	131	29.89
1st sub-pillar: Economy	115	20.49
2nd sub-pillar: Quality of Life	129	32.09
3rd sub-pillar: SDG Contribution	133	37.09



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	125	15.75
1st sub-pillar: Access	129	18.39
1.1.1 Mobile tariffs	131	8.34 ○
1.1.2 Handset prices	126	23.28
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	131	0.09 ○
1.1.5 International Internet bandwidth	116	60.22
1.1.6 Internet access in schools	91	0.00 ○
2nd sub-pillar: Content	128	1.62
1.2.1 GitHub commits	129	0.11 ○
1.2.2 Internet domain registrations	132	0.01 ○
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	74	4.74
3rd sub-pillar: Future Technologies	97	27.25
1.3.1 Adoption of emerging technologies	96	37.01
1.3.2 Investment in emerging technologies	122	17.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	127	18.66
1st sub-pillar: Individuals	118	27.78
2.1.1 Mobile broadband internet traffic within the country	78	9.42
2.1.2 ICT skills in the education system	112	27.58
2.1.3 Use of virtual social networks	128	0.94
2.1.4 Adult literacy rate	78	73.19
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	125	17.04
2.2.1 Firms with website	124	1.69 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	73	48.28
2.2.4 Public cloud computing market scale	123	1.16 ○
3rd sub-pillar: Governments	132	11.17
2.3.1 Government online services	131	15.35 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	109	11.00
2.3.4 R&D expenditure by governments and higher education	67	7.14

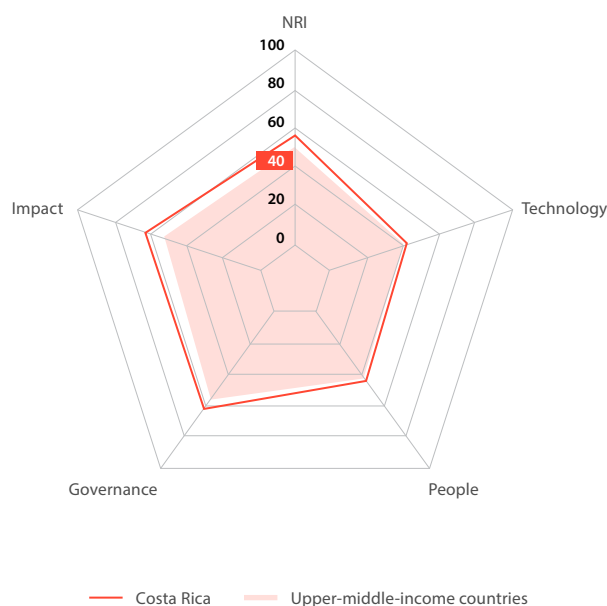
Indicator	Rank	Score
C. Governance pillar	131	21.67
1st sub-pillar: Trust	133	5.80
3.1.1 Secure Internet servers	132	9.89 ○
3.1.2 Cybersecurity	129	5.33
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	119	2.16
2nd sub-pillar: Regulation	131	32.56
3.2.1 Regulatory quality	130	13.37
3.2.2 ICT regulatory environment	100	67.86
3.2.3 Regulation of emerging technologies	116	7.95
3.2.4 E-commerce legislation	129	25.00 ○
3.2.5 Privacy protection by law content	105	48.60
3rd sub-pillar: Inclusion	127	26.65
3.3.1 E-Participation	113	23.26
3.3.2 Socioeconomic gap in use of digital payments	115	39.66
3.3.3 Availability of local online content	130	10.34 ○
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	107	33.34
D. Impact pillar	131	29.89
1st sub-pillar: Economy	115	20.49
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	79	48.03
4.1.3 Prevalence of gig economy	116	13.37
4.1.4 ICT services exports	132	0.07 ○
2nd sub-pillar: Quality of Life	129	32.09
4.2.1 Happiness	127	4.37
4.2.2 Freedom to make life choices	115	52.98
4.2.3 Income inequality	102	47.04
4.2.4 Healthy life expectancy at birth	122	30.78
3rd sub-pillar: SDG Contribution	133	37.09
4.3.1 SDG 3: Good Health and Well-Being	119	20.97
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	93	70.94
4.3.4 SDG 7: Affordable and Clean Energy	130	16.52 ○
4.3.5 SDG 11: Sustainable Cities and Communities	123	26.64

Costa Rica

Rank Score
(Out of 133)

Network Readiness Index **52** **53.44**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	70	42.38
1st sub-pillar: Access	79	60.19
2nd sub-pillar: Content	88	19.36
3rd sub-pillar: Future Technologies	34	47.59
B. People pillar	57	43.91
1st sub-pillar: Individuals	22	59.32
2nd sub-pillar: Businesses	47	39.71
3rd sub-pillar: Governments	87	32.69
C. Governance pillar	57	62.74
1st sub-pillar: Trust	64	50.67
2nd sub-pillar: Regulation	33	78.55
3rd sub-pillar: Inclusion	73	59.01
D. Impact pillar	29	64.74
1st sub-pillar: Economy	50	38.07
2nd sub-pillar: Quality of Life	19	83.27
3rd sub-pillar: SDG Contribution	46	72.89



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	70	42.38
1st sub-pillar: Access	79	60.19
1.1.1 Mobile tariffs	64	63.85
1.1.2 Handset prices	57	70.19
1.1.3 FTTH/building Internet subscriptions	72	28.74
1.1.4 Population covered by at least a 3G mobile network	104	37.66 ○
1.1.5 International Internet bandwidth	48	74.39
1.1.6 Internet access in schools	47	86.29
2nd sub-pillar: Content	88	19.36
1.2.1 GitHub commits	52	13.11
1.2.2 Internet domain registrations	54	5.78
1.2.3 Mobile apps development	87	57.77 ○
1.2.4 AI scientific publications	111	0.80 ○
3rd sub-pillar: Future Technologies	34	47.59
1.3.1 Adoption of emerging technologies	43	68.06
1.3.2 Investment in emerging technologies	48	48.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	46	26.47
B. People pillar	57	43.91
1st sub-pillar: Individuals	22	59.32
2.1.1 Mobile broadband internet traffic within the country	88	6.15 ○
2.1.2 ICT skills in the education system	36	69.79
2.1.3 Use of virtual social networks	37	64.23
2.1.4 Adult literacy rate	30	97.11
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	47	39.71
2.2.1 Firms with website	10	87.70 ●
2.2.2 Number of venture capital deals invested in AI	49	6.21
2.2.3 Annual investment in telecommunication services	74	48.02
2.2.4 Public cloud computing market scale	63	16.92
3rd sub-pillar: Governments	87	32.69
2.3.1 Government online services	70	64.77
2.3.2 Data Capabilities	60	30.93
2.3.3 Government promotion of investment in emerging technologies	80	28.54 ○
2.3.4 R&D expenditure by governments and higher education	69	6.51

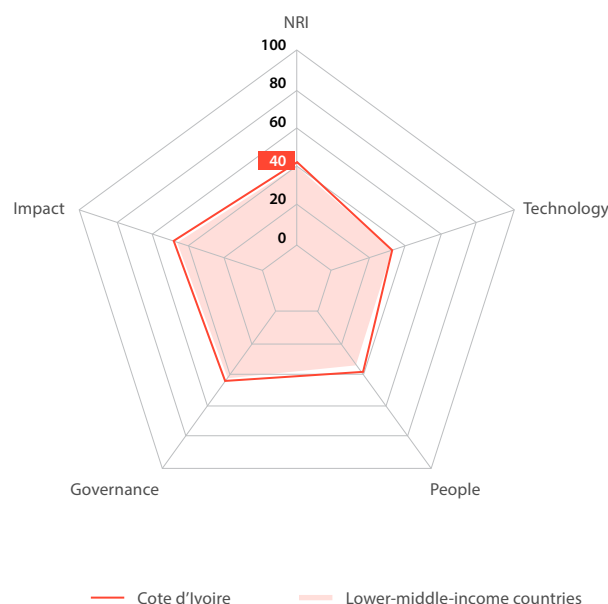
Indicator	Rank	Score
C. Governance pillar	57	62.74
1st sub-pillar: Trust	64	50.67
3.1.1 Secure Internet servers	63	57.29
3.1.2 Cybersecurity	83	67.42
3.1.3 Online access to financial account	47	51.79
3.1.4 Internet shopping	63	26.18
2nd sub-pillar: Regulation	33	78.55
3.2.1 Regulatory quality	44	61.33
3.2.2 ICT regulatory environment	28	90.48 ●
3.2.3 Regulation of emerging technologies	43	60.17
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	38	80.75
3rd sub-pillar: Inclusion	73	59.01
3.3.1 E-Participation	66	54.65
3.3.2 Socioeconomic gap in use of digital payments	91	55.92 ○
3.3.3 Availability of local online content	66	60.34
3.3.4 Gender gap in Internet use	20	71.61 ●
3.3.5 Rural gap in use of digital payments	85	52.52 ○
D. Impact pillar	29	64.74
1st sub-pillar: Economy	50	38.07
4.1.1 ICT patent applications	59	0.35 ○
4.1.2 Domestic market scale	82	47.40
4.1.3 Prevalence of gig economy	51	45.64
4.1.4 ICT services exports	11	58.91 ●
2nd sub-pillar: Quality of Life	19	83.27
4.2.1 Happiness	4	93.02 ●
4.2.2 Freedom to make life choices	8	94.67 ●
4.2.3 Income inequality	106	41.90 ○
4.2.4 Healthy life expectancy at birth	31	82.32 ●
3rd sub-pillar: SDG Contribution	46	72.89
4.3.1 SDG 3: Good Health and Well-Being	34	83.87 ●
4.3.2 SDG 4: Quality Education	57	27.38 ○
4.3.3 SDG 5: Women's economic opportunity	35	88.89 ●
4.3.4 SDG 7: Affordable and Clean Energy	10	93.42 ●
4.3.5 SDG 11: Sustainable Cities and Communities	38	79.86

NOTE: ● Indicates a strength and ○ a weakness.

Cote d'Ivoire

	Rank (Out of 133)	Score
Network Readiness Index	92	42.53

Pillar/sub-pillar	Rank	Score
A. Technology pillar	95	31.90
1st sub-pillar: Access	94	54.18
2nd sub-pillar: Content	118	10.39
3rd sub-pillar: Future Technologies	84	31.12
B. People pillar	74	39.52
1st sub-pillar: Individuals	80	46.11
2nd sub-pillar: Businesses	54	37.96
3rd sub-pillar: Governments	81	34.47
C. Governance pillar	98	47.39
1st sub-pillar: Trust	96	33.57
2nd sub-pillar: Regulation	89	61.87
3rd sub-pillar: Inclusion	99	46.73
D. Impact pillar	83	51.32
1st sub-pillar: Economy	69	31.90
2nd sub-pillar: Quality of Life	97	55.22
3rd sub-pillar: SDG Contribution	63	66.85



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	95	31.90
1st sub-pillar: Access	94	54.18
1.1.1 Mobile tariffs	110	38.49
1.1.2 Handset prices	89	48.28
1.1.3 FTTH/building Internet subscriptions	58	32.43
1.1.4 Population covered by at least a 3G mobile network	80	79.87
1.1.5 International Internet bandwidth	62	71.84
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	118	10.39
1.2.1 GitHub commits	121	0.40
1.2.2 Internet domain registrations	111	0.35
1.2.3 Mobile apps development	116	39.81
1.2.4 AI scientific publications	105	1.01
3rd sub-pillar: Future Technologies	84	31.12
1.3.1 Adoption of emerging technologies	56	63.75
1.3.2 Investment in emerging technologies	98	28.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	123	1.11
B. People pillar	74	39.52
1st sub-pillar: Individuals	80	46.11
2.1.1 Mobile broadband internet traffic within the country	64	12.61
2.1.2 ICT skills in the education system	39	67.65
2.1.3 Use of virtual social networks	109	17.51
2.1.4 Adult literacy rate	62	86.69
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	54	37.96
2.2.1 Firms with website	67	51.29
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	55	52.98
2.2.4 Public cloud computing market scale	84	9.62
3rd sub-pillar: Governments	81	34.47
2.3.1 Government online services	90	49.90
2.3.2 Data Capabilities	51	35.85
2.3.3 Government promotion of investment in emerging technologies	35	51.06
2.3.4 R&D expenditure by governments and higher education	107	1.09

Indicator	Rank	Score
C. Governance pillar	98	47.39
1st sub-pillar: Trust	96	33.57
3.1.1 Secure Internet servers	111	32.04
3.1.2 Cybersecurity	82	67.83
3.1.3 Online access to financial account	84	28.21
3.1.4 Internet shopping	103	6.21
2nd sub-pillar: Regulation	89	61.87
3.2.1 Regulatory quality	79	44.45
3.2.2 ICT regulatory environment	91	70.24
3.2.3 Regulation of emerging technologies	56	50.66
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	111	44.02
3rd sub-pillar: Inclusion	99	46.73
3.3.1 E-Participation	89	36.05
3.3.2 Socioeconomic gap in use of digital payments	66	74.56
3.3.3 Availability of local online content	109	33.17
3.3.4 Gender gap in Internet use	99	32.63
3.3.5 Rural gap in use of digital payments	74	57.24
D. Impact pillar	83	51.32
1st sub-pillar: Economy	69	31.90
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	71	50.92
4.1.3 Prevalence of gig economy	64	40.99
4.1.4 ICT services exports	100	3.81
2nd sub-pillar: Quality of Life	97	55.22
4.2.1 Happiness	91	47.65
4.2.2 Freedom to make life choices	95	64.14
4.2.3 Income inequality	62	71.21
4.2.4 Healthy life expectancy at birth	114	36.51
3rd sub-pillar: SDG Contribution	63	66.85
4.3.1 SDG 3: Good Health and Well-Being	117	22.58
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	25	93.16
4.3.4 SDG 7: Affordable and Clean Energy	50	83.85
4.3.5 SDG 11: Sustainable Cities and Communities	127	24.48

NOTE: ● Indicates a strength and ○ a weakness.

Croatia

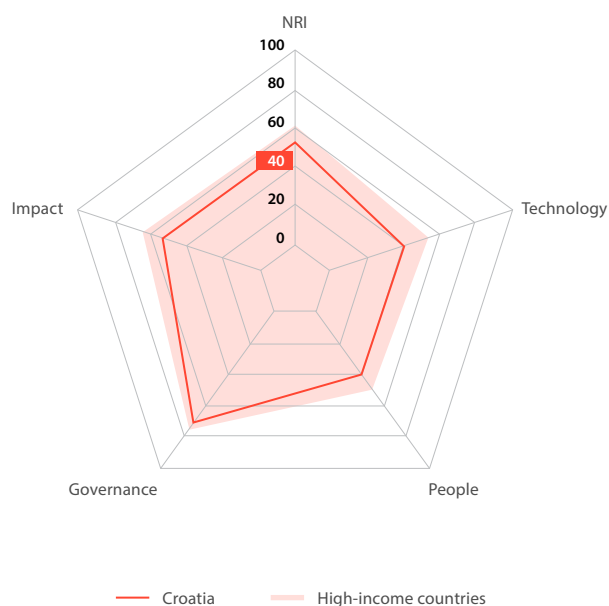
Rank
(Out of 133)

Score

Network Readiness Index

59 51.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	74	41.03
1st sub-pillar: Access	48	71.22
2nd sub-pillar: Content	54	29.43
3rd sub-pillar: Future Technologies	108	22.44
B. People pillar	68	41.53
1st sub-pillar: Individuals	77	47.03
2nd sub-pillar: Businesses	63	36.18
3rd sub-pillar: Governments	63	41.37
C. Governance pillar	43	71.29
1st sub-pillar: Trust	45	66.71
2nd sub-pillar: Regulation	39	76.58
3rd sub-pillar: Inclusion	48	70.59
D. Impact pillar	68	53.99
1st sub-pillar: Economy	97	25.59
2nd sub-pillar: Quality of Life	91	59.13
3rd sub-pillar: SDG Contribution	34	77.24



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	74	41.03
1st sub-pillar: Access	48	71.22
1.1.1 Mobile tariffs	21	83.37 ●
1.1.2 Handset prices	30	87.69 ●
1.1.3 FTTH/building Internet subscriptions	97	16.50 ○
1.1.4 Population covered by at least a 3G mobile network	42	97.57
1.1.5 International Internet bandwidth	66	71.00
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	54	29.43
1.2.1 GitHub commits	37	30.06
1.2.2 Internet domain registrations	39	14.69
1.2.3 Mobile apps development	53	68.59
1.2.4 AI scientific publications	79	4.38
3rd sub-pillar: Future Technologies	108	22.44
1.3.1 Adoption of emerging technologies	68	58.93
1.3.2 Investment in emerging technologies	107	25.25 ○
1.3.3 Robot density	46	2.17 ○
1.3.4 Computer software spending	112	3.40 ○
B. People pillar	68	41.53
1st sub-pillar: Individuals	77	47.03
2.1.1 Mobile broadband internet traffic within the country	57	14.54
2.1.2 ICT skills in the education system	89	43.57 ○
2.1.3 Use of virtual social networks	54	60.49
2.1.4 Adult literacy rate	15	99.17 ●
2.1.5 AI talent concentration	25	17.38
2nd sub-pillar: Businesses	63	36.18
2.2.1 Firms with website	43	64.84
2.2.2 Number of venture capital deals invested in AI	41	11.18
2.2.3 Annual investment in telecommunication services	54	53.08
2.2.4 Public cloud computing market scale	68	15.63
3rd sub-pillar: Governments	63	41.37
2.3.1 Government online services	36	79.09
2.3.2 Data Capabilities	48	37.71
2.3.3 Government promotion of investment in emerging technologies	84	26.51 ○
2.3.4 R&D expenditure by governments and higher education	33	22.17

Indicator	Rank	Score
C. Governance pillar	43	71.29
1st sub-pillar: Trust	45	66.71
3.1.1 Secure Internet servers	31	79.91 ●
3.1.2 Cybersecurity	40	92.50
3.1.3 Online access to financial account	58	44.04
3.1.4 Internet shopping	43	50.39
2nd sub-pillar: Regulation	39	76.58
3.2.1 Regulatory quality	47	59.82
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	69	47.08
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	34	81.95
3rd sub-pillar: Inclusion	48	70.59
3.3.1 E-Participation	29	73.25 ●
3.3.2 Socioeconomic gap in use of digital payments	62	77.08
3.3.3 Availability of local online content	56	65.87
3.3.4 Gender gap in Internet use	87	56.28 ○
3.3.5 Rural gap in use of digital payments	5	80.46 ●
D. Impact pillar	68	53.99
1st sub-pillar: Economy	97	25.59
4.1.1 ICT patent applications	44	1.58
4.1.2 Domestic market scale	77	48.88
4.1.3 Prevalence of gig economy	102	23.55 ○
4.1.4 ICT services exports	32	28.35 ●
2nd sub-pillar: Quality of Life	91	59.13
4.2.1 Happiness	61	61.43
4.2.2 Freedom to make life choices	125	33.66 ○
4.2.3 Income inequality	16	87.66 ●
4.2.4 Healthy life expectancy at birth	38	76.96
3rd sub-pillar: SDG Contribution	34	77.24
4.3.1 SDG 3: Good Health and Well-Being	37	82.26
4.3.2 SDG 4: Quality Education	34	56.42
4.3.3 SDG 5: Women's economic opportunity	28	91.45 ●
4.3.4 SDG 7: Affordable and Clean Energy	34	86.70
4.3.5 SDG 11: Sustainable Cities and Communities	67	66.54

NOTE: ● Indicates a strength and ○ a weakness.

Cyprus

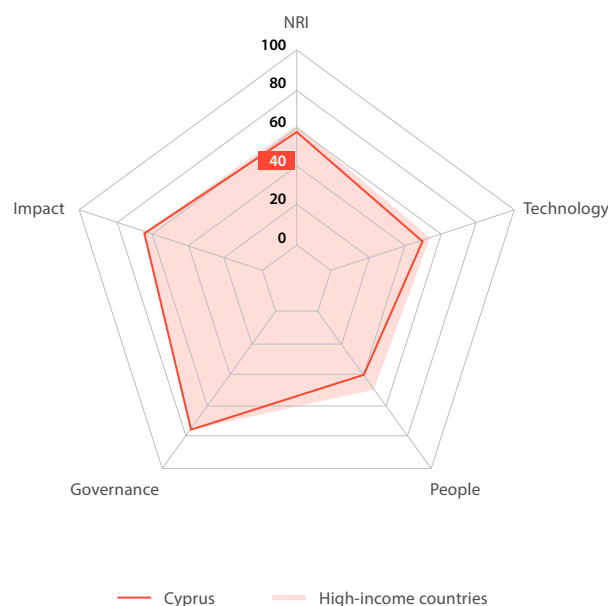
Rank
(Out of 133)

Score

Network Readiness Index

39 56.68

Pillar/sub-pillar	Rank	Score
A. Technology pillar	43	48.99
1st sub-pillar: Access	52	69.47
2nd sub-pillar: Content	27	45.43
3rd sub-pillar: Future Technologies	81	32.08
B. People pillar	69	41.01
1st sub-pillar: Individuals	40	54.74
2nd sub-pillar: Businesses	83	32.43
3rd sub-pillar: Governments	77	35.87
C. Governance pillar	35	73.84
1st sub-pillar: Trust	37	70.86
2nd sub-pillar: Regulation	40	76.02
3rd sub-pillar: Inclusion	37	74.63
D. Impact pillar	35	62.87
1st sub-pillar: Economy	27	43.36
2nd sub-pillar: Quality of Life	59	70.33
3rd sub-pillar: SDG Contribution	41	74.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	43	48.99
1st sub-pillar: Access	52	69.47
1.1.1 Mobile tariffs	65	63.56
1.1.2 Handset prices	10	96.63 ●
1.1.3 FTTH/building Internet subscriptions	108	11.93 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	41	75.24
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	27	45.43
1.2.1 GitHub commits	25	45.23
1.2.2 Internet domain registrations	24	33.73 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	88	2.76
3rd sub-pillar: Future Technologies	81	32.08
1.3.1 Adoption of emerging technologies	77	51.73 ○
1.3.2 Investment in emerging technologies	90	31.25 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	84	13.26
B. People pillar	69	41.01
1st sub-pillar: Individuals	40	54.74
2.1.1 Mobile broadband internet traffic within the country	104	2.90 ○
2.1.2 ICT skills in the education system	52	60.85
2.1.3 Use of virtual social networks	67	56.09
2.1.4 Adult literacy rate	16	99.12 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	83	32.43
2.2.1 Firms with website	38	67.62
2.2.2 Number of venture capital deals invested in AI	37	12.37
2.2.3 Annual investment in telecommunication services	90	44.78 ○
2.2.4 Public cloud computing market scale	106	4.95 ○
3rd sub-pillar: Governments	77	35.87
2.3.1 Government online services	46	75.60
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	103	16.52 ○
2.3.4 R&D expenditure by governments and higher education	45	15.50

Indicator	Rank	Score
C. Governance pillar	35	73.84
1st sub-pillar: Trust	37	70.86
3.1.1 Secure Internet servers	28	80.61
3.1.2 Cybersecurity	49	88.83
3.1.3 Online access to financial account	39	60.73
3.1.4 Internet shopping	41	53.27
2nd sub-pillar: Regulation	40	76.02
3.2.1 Regulatory quality	36	66.18
3.2.2 ICT regulatory environment	57	85.36
3.2.3 Regulation of emerging technologies	60	49.19
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	43	79.38
3rd sub-pillar: Inclusion	37	74.63
3.3.1 E-Participation	25	74.42
3.3.2 Socioeconomic gap in use of digital payments	50	83.94
3.3.3 Availability of local online content	44	72.36
3.3.4 Gender gap in Internet use	17	72.43 ●
3.3.5 Rural gap in use of digital payments	49	70.01
D. Impact pillar	35	62.87
1st sub-pillar: Economy	27	43.36
4.1.1 ICT patent applications	39	2.80
4.1.2 Domestic market scale	113	36.91 ○
4.1.3 Prevalence of gig economy	84	33.72
4.1.4 ICT services exports	1	100.00 ●
2nd sub-pillar: Quality of Life	59	70.33
4.2.1 Happiness	57	63.92
4.2.2 Freedom to make life choices	106	60.19 ○
4.2.3 Income inequality	26	81.49
4.2.4 Healthy life expectancy at birth	14	92.27 ●
3rd sub-pillar: SDG Contribution	41	74.91
4.3.1 SDG 3: Good Health and Well-Being	34	83.87
4.3.2 SDG 4: Quality Education	58	27.31 ○
4.3.3 SDG 5: Women's economic opportunity	20	95.73 ●
4.3.4 SDG 7: Affordable and Clean Energy	21	90.06 ●
4.3.5 SDG 11: Sustainable Cities and Communities	21	89.25 ●

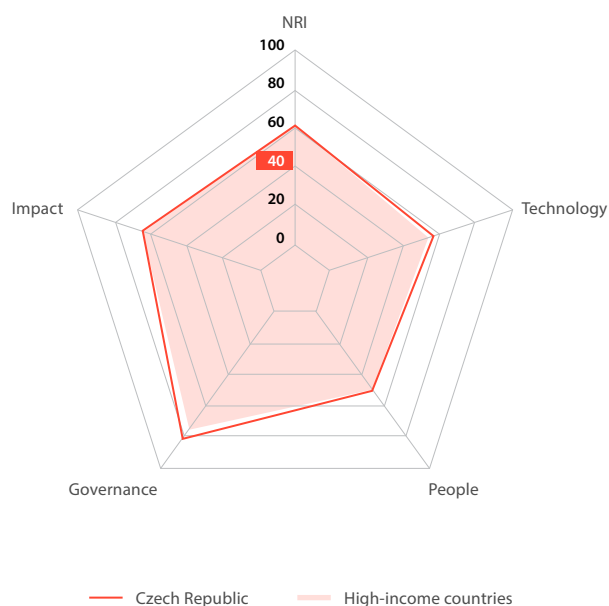
NOTE: ● Indicates a strength and ○ a weakness.

Czech Republic

Rank Score
(Out of 133)

Network Readiness Index 27 63.47

Pillar/sub-pillar	Rank	Score
A. Technology pillar	26	56.80
1st sub-pillar: Access	29	76.55
2nd sub-pillar: Content	23	46.81
3rd sub-pillar: Future Technologies	36	47.04
B. People pillar	34	49.59
1st sub-pillar: Individuals	90	42.37
2nd sub-pillar: Businesses	16	57.71
3rd sub-pillar: Governments	37	48.67
C. Governance pillar	19	81.37
1st sub-pillar: Trust	15	82.94
2nd sub-pillar: Regulation	16	85.57
3rd sub-pillar: Inclusion	32	75.60
D. Impact pillar	26	66.11
1st sub-pillar: Economy	58	33.80
2nd sub-pillar: Quality of Life	14	85.61
3rd sub-pillar: SDG Contribution	30	78.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	26	56.80
1st sub-pillar: Access	29	76.55
1.1.1 Mobile tariffs	33	77.86
1.1.2 Handset prices	27	88.61
1.1.3 FTTH/building Internet subscriptions	73	28.31 ○
1.1.4 Population covered by at least a 3G mobile network	38	97.68
1.1.5 International Internet bandwidth	83	68.13 ○
1.1.6 Internet access in schools	39	98.71
2nd sub-pillar: Content	23	46.81
1.2.1 GitHub commits	12	65.45 ●
1.2.2 Internet domain registrations	21	38.08
1.2.3 Mobile apps development	24	74.06
1.2.4 AI scientific publications	59	9.64
3rd sub-pillar: Future Technologies	36	47.04
1.3.1 Adoption of emerging technologies	27	77.83
1.3.2 Investment in emerging technologies	36	55.00
1.3.3 Robot density	17	26.81
1.3.4 Computer software spending	40	28.51
B. People pillar	34	49.59
1st sub-pillar: Individuals	90	42.37
2.1.1 Mobile broadband internet traffic within the country	59	14.23
2.1.2 ICT skills in the education system	31	72.20
2.1.3 Use of virtual social networks	33	66.95
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	27	16.09 ○
2nd sub-pillar: Businesses	16	57.71
2.2.1 Firms with website	17	81.45 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	47	56.70
2.2.4 Public cloud computing market scale	35	34.99
3rd sub-pillar: Governments	37	48.67
2.3.1 Government online services	72	63.45 ○
2.3.2 Data Capabilities	18	59.48
2.3.3 Government promotion of investment in emerging technologies	65	35.96 ○
2.3.4 R&D expenditure by governments and higher education	19	35.80

Indicator	Rank	Score
C. Governance pillar	19	81.37
1st sub-pillar: Trust	15	82.94
3.1.1 Secure Internet servers	12	88.74 ●
3.1.2 Cybersecurity	76	74.33 ○
3.1.3 Online access to financial account	11	82.58 ●
3.1.4 Internet shopping	10	86.12 ●
2nd sub-pillar: Regulation	16	85.57
3.2.1 Regulatory quality	19	80.55 ●
3.2.2 ICT regulatory environment	46	86.90
3.2.3 Regulation of emerging technologies	36	65.35
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	8	95.05 ●
3rd sub-pillar: Inclusion	32	75.60
3.3.1 E-Participation	57	59.31 ○
3.3.2 Socioeconomic gap in use of digital payments	14	96.86 ●
3.3.3 Availability of local online content	19	86.30
3.3.4 Gender gap in Internet use	71	65.46 ○
3.3.5 Rural gap in use of digital payments	48	70.07
D. Impact pillar	26	66.11
1st sub-pillar: Economy	58	33.80
4.1.1 ICT patent applications	38	2.86
4.1.2 Domestic market scale	46	60.42
4.1.3 Prevalence of gig economy	52	45.35
4.1.4 ICT services exports	39	26.56
2nd sub-pillar: Quality of Life	14	85.61
4.2.1 Happiness	17	80.68 ●
4.2.2 Freedom to make life choices	21	90.04
4.2.3 Income inequality	7	94.60 ●
4.2.4 Healthy life expectancy at birth	37	77.62
3rd sub-pillar: SDG Contribution	30	78.91
4.3.1 SDG 3: Good Health and Well-Being	21	88.71
4.3.2 SDG 4: Quality Education	15	63.61
4.3.3 SDG 5: Women's economic opportunity	28	91.45
4.3.4 SDG 7: Affordable and Clean Energy	76	77.56 ○
4.3.5 SDG 11: Sustainable Cities and Communities	43	77.34

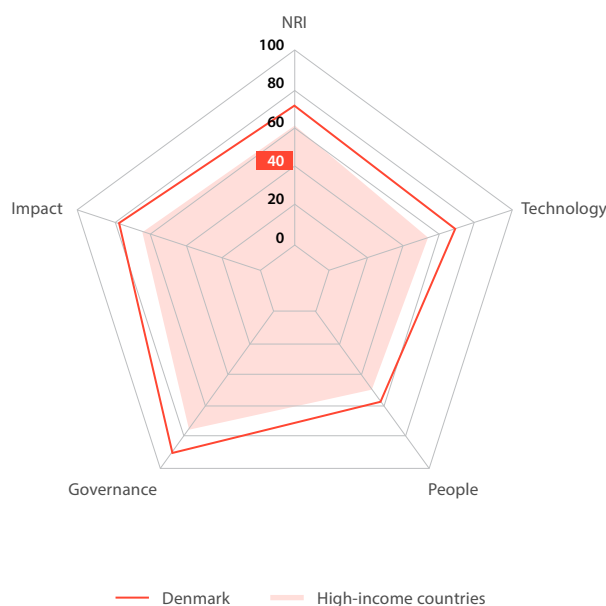
NOTE: ● Indicates a strength and ○ a weakness.

Denmark

Rank
(Out of 133)

Network Readiness Index 10 72.70

Pillar/sub-pillar	Rank	Score
A. Technology pillar	8	67.70
1st sub-pillar: Access	15	79.74
2nd sub-pillar: Content	8	58.30
3rd sub-pillar: Future Technologies	10	65.06
B. People pillar	18	56.30
1st sub-pillar: Individuals	78	46.37
2nd sub-pillar: Businesses	14	58.20
3rd sub-pillar: Governments	18	64.32
C. Governance pillar	1	89.92
1st sub-pillar: Trust	1	97.73
2nd sub-pillar: Regulation	7	89.42
3rd sub-pillar: Inclusion	11	82.62
D. Impact pillar	7	76.87
1st sub-pillar: Economy	17	51.35
2nd sub-pillar: Quality of Life	4	92.73
3rd sub-pillar: SDG Contribution	5	86.55



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	8	67.70
1st sub-pillar: Access	15	79.74
1.1.1 Mobile tariffs	8	91.58 ●
1.1.2 Handset prices	24	89.75 ○
1.1.3 FTTH/building Internet subscriptions	71	29.09 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	85	68.01 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	8	58.30
1.2.1 GitHub commits	9	76.80
1.2.2 Internet domain registrations	7	73.33 ●
1.2.3 Mobile apps development	22	74.38
1.2.4 AI scientific publications	62	8.67 ○
3rd sub-pillar: Future Technologies	10	65.06
1.3.1 Adoption of emerging technologies	11	90.64
1.3.2 Investment in emerging technologies	14	76.75
1.3.3 Robot density	8	39.73
1.3.4 Computer software spending	20	53.12
B. People pillar	18	56.30
1st sub-pillar: Individuals	78	46.37
2.1.1 Mobile broadband internet traffic within the country	44	20.15 ○
2.1.2 ICT skills in the education system	15	80.78
2.1.3 Use of virtual social networks	21	69.76
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	29	14.81 ○
2nd sub-pillar: Businesses	14	58.20
2.2.1 Firms with website	5	91.75 ●
2.2.2 Number of venture capital deals invested in AI	15	33.58
2.2.3 Annual investment in telecommunication services	31	62.63
2.2.4 Public cloud computing market scale	19	44.85
3rd sub-pillar: Governments	18	64.32
2.3.1 Government online services	4	97.76 ●
2.3.2 Data Capabilities	12	69.28
2.3.3 Government promotion of investment in emerging technologies	55	39.70 ○
2.3.4 R&D expenditure by governments and higher education	12	50.53

Indicator	Rank	Score
C. Governance pillar	1	89.92
1st sub-pillar: Trust	1	97.73
3.1.1 Secure Internet servers	1	100.00 ●
3.1.2 Cybersecurity	39	92.58
3.1.3 Online access to financial account	2	98.41 ●
3.1.4 Internet shopping	2	99.93 ●
2nd sub-pillar: Regulation	7	89.42
3.2.1 Regulatory quality	4	91.29 ●
3.2.2 ICT regulatory environment	9	95.24
3.2.3 Regulation of emerging technologies	17	79.45
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	36	81.12
3rd sub-pillar: Inclusion	11	82.62
3.3.1 E-Participation	12	88.38
3.3.2 Socioeconomic gap in use of digital payments	7	99.19 ●
3.3.3 Availability of local online content	34	79.09
3.3.4 Gender gap in Internet use	37	69.90 ○
3.3.5 Rural gap in use of digital payments	15	76.53
D. Impact pillar	7	76.87
1st sub-pillar: Economy	17	51.35
4.1.1 ICT patent applications	8	71.23
4.1.2 Domestic market scale	51	58.49 ○
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	43	24.33
2nd sub-pillar: Quality of Life	4	92.73
4.2.1 Happiness	3	95.68 ●
4.2.2 Freedom to make life choices	15	92.87
4.2.3 Income inequality	14	89.20
4.2.4 Healthy life expectancy at birth	21	90.05
3rd sub-pillar: SDG Contribution	5	86.55
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	16	63.41
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	8	93.64 ●
4.3.5 SDG 11: Sustainable Cities and Communities	15	92.79

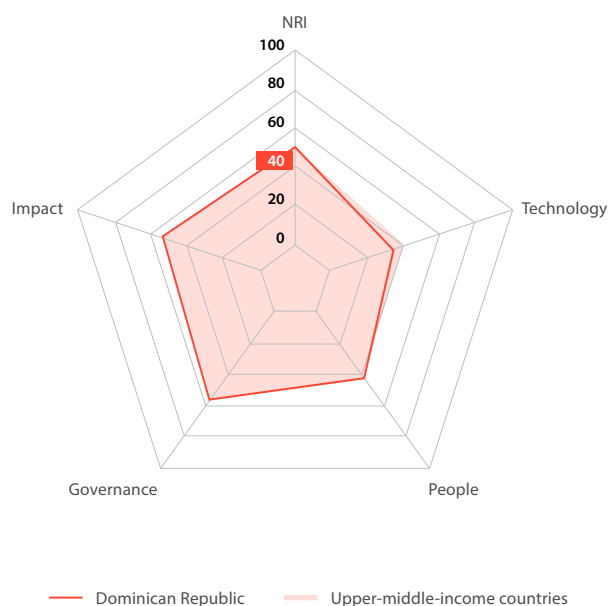
NOTE: ● Indicates a strength and ○ a weakness.

Dominican Republic

Rank Score
(Out of 133)

Network Readiness Index 80 45.27

Pillar/sub-pillar	Rank	Score
A. Technology pillar	91	33.19
1st sub-pillar: Access	81	59.44
2nd sub-pillar: Content	106	14.58
3rd sub-pillar: Future Technologies	101	25.56
B. People pillar	65	42.27
1st sub-pillar: Individuals	59	49.75
2nd sub-pillar: Businesses	80	33.28
3rd sub-pillar: Governments	54	43.79
C. Governance pillar	78	53.47
1st sub-pillar: Trust	93	34.38
2nd sub-pillar: Regulation	51	72.56
3rd sub-pillar: Inclusion	83	53.47
D. Impact pillar	80	52.15
1st sub-pillar: Economy	78	30.36
2nd sub-pillar: Quality of Life	60	70.17
3rd sub-pillar: SDG Contribution	101	55.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	91	33.19
1st sub-pillar: Access	81	59.44
1.1.1 Mobile tariffs	88	54.55
1.1.2 Handset prices	70	61.81
1.1.3 FTTH/building Internet subscriptions	67	30.21
1.1.4 Population covered by at least a 3G mobile network	74	85.79
1.1.5 International Internet bandwidth	63	71.73
1.1.6 Internet access in schools	61	52.55
2nd sub-pillar: Content	106	14.58
2.2.1 GitHub commits	90	3.85
2.2.2 Internet domain registrations	81	1.85
2.2.3 Mobile apps development	98	52.43 ○
2.2.4 AI scientific publications	128	0.18 ○
3rd sub-pillar: Future Technologies	101	25.56
3.3.1 Adoption of emerging technologies	86	46.36
3.3.2 Investment in emerging technologies	96	29.00
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	122	1.32 ○
B. People pillar	65	42.27
1st sub-pillar: Individuals	59	49.75
2.1.1 Mobile broadband internet traffic within the country	60	14.19 ●
2.1.2 ICT skills in the education system	92	41.59 ○
2.1.3 Use of virtual social networks	NA	NA
2.1.4 Adult literacy rate	49	93.47 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	80	33.28
2.2.1 Firms with website	95	31.93
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	61	51.61
2.2.4 Public cloud computing market scale	65	16.29
3rd sub-pillar: Governments	54	43.79
2.3.1 Government online services	79	57.81
2.3.2 Data Capabilities	53	34.55
2.3.3 Government promotion of investment in emerging technologies	59	39.00
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	78	53.47
1st sub-pillar: Trust	93	34.38
3.1.1 Secure Internet servers	100	38.51
3.1.2 Cybersecurity	73	75.08
3.1.3 Online access to financial account	102	15.75 ○
3.1.4 Internet shopping	100	8.19 ○
2nd sub-pillar: Regulation	51	72.56
3.2.1 Regulatory quality	69	49.65
3.2.2 ICT regulatory environment	3	97.62 ●
3.2.3 Regulation of emerging technologies	92	32.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	32	83.19 ●
3rd sub-pillar: Inclusion	83	53.47
3.3.1 E-Participation	82	44.18
3.3.2 Socioeconomic gap in use of digital payments	108	43.97 ○
3.3.3 Availability of local online content	69	60.10
3.3.4 Gender gap in Internet use	9	75.57 ●
3.3.5 Rural gap in use of digital payments	96	43.53
D. Impact pillar	80	52.15
1st sub-pillar: Economy	78	30.36
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	62	53.84 ●
4.1.3 Prevalence of gig economy	77	35.47
4.1.4 ICT services exports	119	1.78 ○
2nd sub-pillar: Quality of Life	60	70.17
4.2.1 Happiness	64	60.61
4.2.2 Freedom to make life choices	49	83.38 ●
4.2.3 Income inequality	72	66.84
4.2.4 Healthy life expectancy at birth	63	66.22
3rd sub-pillar: SDG Contribution	101	55.91
4.3.1 SDG 3: Good Health and Well-Being	49	77.42 ●
4.3.2 SDG 4: Quality Education	82	5.31 ○
4.3.3 SDG 5: Women's economic opportunity	59	81.20 ●
4.3.4 SDG 7: Affordable and Clean Energy	12	92.54 ●
4.3.5 SDG 11: Sustainable Cities and Communities	130	11.76 ○

NOTE: ● Indicates a strength and ○ a weakness.

Ecuador

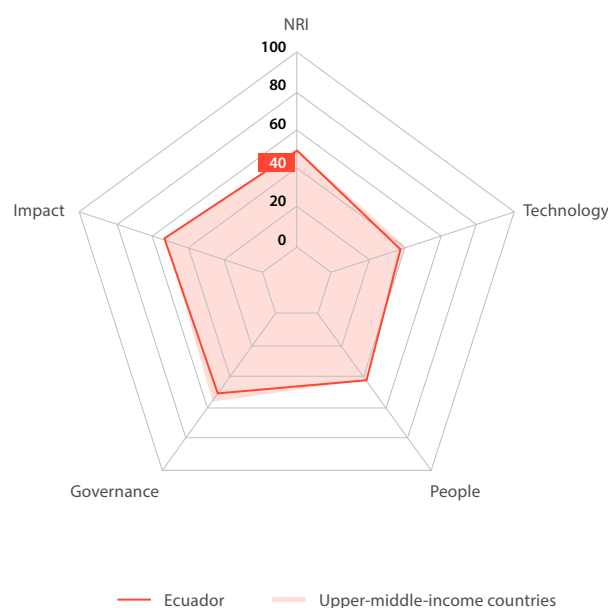
Rank
(Out of 133)

Score

Network Readiness Index

82 44.76

Pillar/sub-pillar	Rank	Score
A. Technology pillar	89	34.90
1st sub-pillar: Access	92	54.55
2nd sub-pillar: Content	86	19.49
3rd sub-pillar: Future Technologies	85	30.67
B. People pillar	63	42.73
1st sub-pillar: Individuals	66	49.07
2nd sub-pillar: Businesses	32	47.72
3rd sub-pillar: Governments	90	31.41
C. Governance pillar	92	48.65
1st sub-pillar: Trust	108	27.40
2nd sub-pillar: Regulation	92	61.09
3rd sub-pillar: Inclusion	74	57.47
D. Impact pillar	75	52.76
1st sub-pillar: Economy	121	17.32
2nd sub-pillar: Quality of Life	92	59.05
3rd sub-pillar: SDG Contribution	22	81.90



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	89	34.90
1st sub-pillar: Access	92	54.55
1.1.1 Mobile tariffs	89	54.17
1.1.2 Handset prices	98	43.59
1.1.3 FTTH/building Internet subscriptions	17	49.49 ●
1.1.4 Population covered by at least a 3G mobile network	94	59.54
1.1.5 International Internet bandwidth	100	64.93
1.1.6 Internet access in schools	60	55.56
2nd sub-pillar: Content	86	19.49
1.2.1 GitHub commits	77	4.66
1.2.2 Internet domain registrations	85	1.46
1.2.3 Mobile apps development	88	57.34
1.2.4 AI scientific publications	47	14.49 ●
3rd sub-pillar: Future Technologies	85	30.67
1.3.1 Adoption of emerging technologies	82	48.16
1.3.2 Investment in emerging technologies	112	23.25 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	70	20.59
B. People pillar	63	42.73
1st sub-pillar: Individuals	66	49.07
2.1.1 Mobile broadband internet traffic within the country	71	10.64
2.1.2 ICT skills in the education system	103	34.48 ○
2.1.3 Use of virtual social networks	56	59.93
2.1.4 Adult literacy rate	58	91.22
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	32	47.72
2.2.1 Firms with website	28	75.84 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	65	50.41
2.2.4 Public cloud computing market scale	63	16.92
3rd sub-pillar: Governments	90	31.41
2.3.1 Government online services	50	74.04 ●
2.3.2 Data Capabilities	64	26.73
2.3.3 Government promotion of investment in emerging technologies	102	17.09 ○
2.3.4 R&D expenditure by governments and higher education	65	7.80

Indicator	Rank	Score
C. Governance pillar	92	48.65
1st sub-pillar: Trust	108	27.40
3.1.1 Secure Internet servers	81	47.43
3.1.2 Cybersecurity	110	26.33 ○
3.1.3 Online access to financial account	92	21.05 ○
3.1.4 Internet shopping	83	14.79
2nd sub-pillar: Regulation	92	61.09
3.2.1 Regulatory quality	95	37.23
3.2.2 ICT regulatory environment	80	76.19
3.2.3 Regulation of emerging technologies	96	29.63 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	83	62.41
3rd sub-pillar: Inclusion	74	57.47
3.3.1 E-Participation	41	69.76 ●
3.3.2 Socioeconomic gap in use of digital payments	98	54.30
3.3.3 Availability of local online content	100	39.18
3.3.4 Gender gap in Internet use	19	71.64 ●
3.3.5 Rural gap in use of digital payments	86	52.47
D. Impact pillar	75	52.76
1st sub-pillar: Economy	121	17.32
4.1.1 ICT patent applications	57	0.42
4.1.2 Domestic market scale	65	52.67
4.1.3 Prevalence of gig economy	114	14.53 ○
4.1.4 ICT services exports	120	1.68 ○
2nd sub-pillar: Quality of Life	92	59.05
4.2.1 Happiness	73	59.07
4.2.2 Freedom to make life choices	105	60.34 ○
4.2.3 Income inequality	101	47.30 ○
4.2.4 Healthy life expectancy at birth	60	68.16
3rd sub-pillar: SDG Contribution	22	81.90
4.3.1 SDG 3: Good Health and Well-Being	49	77.42 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	46	85.47 ●
4.3.4 SDG 7: Affordable and Clean Energy	47	84.14 ●
4.3.5 SDG 11: Sustainable Cities and Communities	51	74.75 ●

NOTE: ● Indicates a strength and ○ a weakness.

Egypt

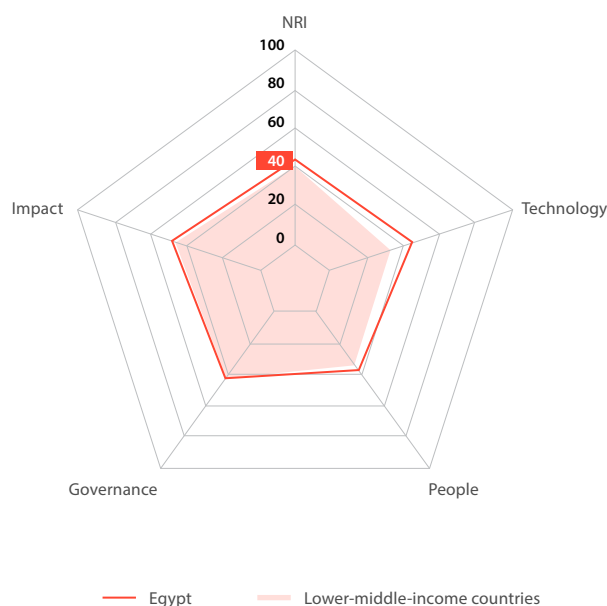
Rank
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Score

Network Readiness Index

85 44.42

Pillar/sub-pillar	Rank	Score
A. Technology pillar	56	44.83
1st sub-pillar: Access	38	74.79
2nd sub-pillar: Content	55	28.59
3rd sub-pillar: Future Technologies	83	31.12
B. People pillar	93	36.94
1st sub-pillar: Individuals	84	44.62
2nd sub-pillar: Businesses	90	31.27
3rd sub-pillar: Governments	79	34.93
C. Governance pillar	99	46.99
1st sub-pillar: Trust	98	31.97
2nd sub-pillar: Regulation	102	56.11
3rd sub-pillar: Inclusion	86	52.88
D. Impact pillar	95	48.94
1st sub-pillar: Economy	26	43.47
2nd sub-pillar: Quality of Life	114	41.53
3rd sub-pillar: SDG Contribution	83	61.82



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	56	44.83
1st sub-pillar: Access	38	74.79
1.1.1 Mobile tariffs	11	87.76 ●
1.1.2 Handset prices	67	62.27
1.1.3 FTTH/building Internet subscriptions	25	46.92 ●
1.1.4 Population covered by at least a 3G mobile network	38	97.68
1.1.5 International Internet bandwidth	16	82.86 ●
1.1.6 Internet access in schools	53	71.28
2nd sub-pillar: Content	55	28.59
1.2.1 GitHub commits	82	4.42
1.2.2 Internet domain registrations	106	0.46
1.2.3 Mobile apps development	79	61.35
1.2.4 AI scientific publications	23	48.12 ●
3rd sub-pillar: Future Technologies	83	31.12
1.3.1 Adoption of emerging technologies	61	62.31
1.3.2 Investment in emerging technologies	73	37.00
1.3.3 Robot density	54	0.09 ○
1.3.4 Computer software spending	50	25.09
B. People pillar	93	36.94
1st sub-pillar: Individuals	84	44.62
2.1.1 Mobile broadband internet traffic within the country	34	29.15 ●
2.1.2 ICT skills in the education system	68	53.06
2.1.3 Use of virtual social networks	100	32.58
2.1.4 Adult literacy rate	90	63.67 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	90	31.27
2.2.1 Firms with website	93	32.42
2.2.2 Number of venture capital deals invested in AI	70	1.93 ○
2.2.3 Annual investment in telecommunication services	22	66.14 ●
2.2.4 Public cloud computing market scale	50	24.59
3rd sub-pillar: Governments	79	34.93
2.3.1 Government online services	86	52.81
2.3.2 Data Capabilities	63	27.38
2.3.3 Government promotion of investment in emerging technologies	48	42.43
2.3.4 R&D expenditure by governments and higher education	42	17.09

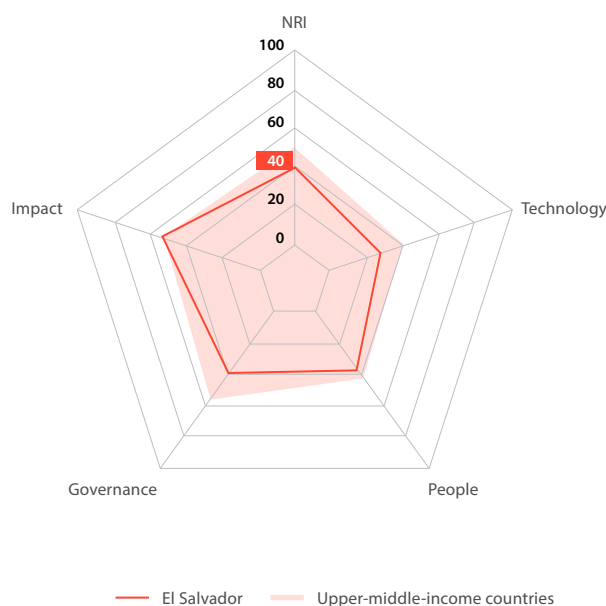
Indicator	Rank	Score
C. Governance pillar	99	46.99
1st sub-pillar: Trust	98	31.97
3.1.1 Secure Internet servers	114	29.76
3.1.2 Cybersecurity	30	95.50 ●
3.1.3 Online access to financial account	120	0.00 ○
3.1.4 Internet shopping	118	2.62 ○
2nd sub-pillar: Regulation	102	56.11
3.2.1 Regulatory quality	111	31.26
3.2.2 ICT regulatory environment	65	83.93
3.2.3 Regulation of emerging technologies	84	37.15
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	125	28.22 ○
3rd sub-pillar: Inclusion	86	52.88
3.3.1 E-Participation	94	33.73
3.3.2 Socioeconomic gap in use of digital payments	110	42.95
3.3.3 Availability of local online content	35	78.61 ●
3.3.4 Gender gap in Internet use	97	39.36 ○
3.3.5 Rural gap in use of digital payments	50	69.77
D. Impact pillar	95	48.94
1st sub-pillar: Economy	26	43.47
4.1.1 ICT patent applications	69	0.09
4.1.2 Domestic market scale	18	72.10 ●
4.1.3 Prevalence of gig economy	7	85.17 ●
4.1.4 ICT services exports	57	16.53
2nd sub-pillar: Quality of Life	114	41.53
4.2.1 Happiness	119	15.39 ○
4.2.2 Freedom to make life choices	120	42.49 ○
4.2.3 Income inequality	32	79.95
4.2.4 Healthy life expectancy at birth	93	53.46
3rd sub-pillar: SDG Contribution	83	61.82
4.3.1 SDG 3: Good Health and Well-Being	77	66.13
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	126	32.48 ○
4.3.4 SDG 7: Affordable and Clean Energy	40	85.60
4.3.5 SDG 11: Sustainable Cities and Communities	60	68.63

NOTE: ● Indicates a strength and ○ a weakness.

El Salvador

	Rank (Out of 133)	Score
Network Readiness Index	99	39.36

Pillar/sub-pillar	Rank	Score
A. Technology pillar	105	28.55
1st sub-pillar: Access	97	51.08
2nd sub-pillar: Content	109	14.01
3rd sub-pillar: Future Technologies	114	20.56
B. People pillar	98	35.54
1st sub-pillar: Individuals	86	44.21
2nd sub-pillar: Businesses	46	39.83
3rd sub-pillar: Governments	110	22.58
C. Governance pillar	110	39.83
1st sub-pillar: Trust	118	19.96
2nd sub-pillar: Regulation	93	60.35
3rd sub-pillar: Inclusion	116	39.17
D. Impact pillar	73	53.53
1st sub-pillar: Economy	114	20.88
2nd sub-pillar: Quality of Life	32	76.96
3rd sub-pillar: SDG Contribution	74	62.74



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	105	28.55
1st sub-pillar: Access	97	51.08
1.1.1 Mobile tariffs	111	38.31
1.1.2 Handset prices	74	59.36
1.1.3 FTTH/building Internet subscriptions	117	6.87 ○
1.1.4 Population covered by at least a 3G mobile network	104	37.66
1.1.5 International Internet bandwidth	71	69.92
1.1.6 Internet access in schools	44	94.37 ●
2nd sub-pillar: Content	109	14.01
1.2.1 GitHub commits	72	5.00
1.2.2 Internet domain registrations	86	1.42
1.2.3 Mobile apps development	102	49.37
1.2.4 AI scientific publications	124	0.25 ○
3rd sub-pillar: Future Technologies	114	20.56
1.3.1 Adoption of emerging technologies	94	38.94
1.3.2 Investment in emerging technologies	120	19.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	110	3.75
B. People pillar	98	35.54
1st sub-pillar: Individuals	86	44.21
2.1.1 Mobile broadband internet traffic within the country	119	1.58 ○
2.1.2 ICT skills in the education system	96	37.73
2.1.3 Use of virtual social networks	72	52.34
2.1.4 Adult literacy rate	64	85.17
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	46	39.83
2.2.1 Firms with website	41	65.20 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	77	47.83
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	110	22.58
2.3.1 Government online services	106	41.09
2.3.2 Data Capabilities	88	11.38 ○
2.3.3 Government promotion of investment in emerging technologies	68	35.05
2.3.4 R&D expenditure by governments and higher education	95	2.80

Indicator	Rank	Score
C. Governance pillar	110	39.83
1st sub-pillar: Trust	118	19.96
3.1.1 Secure Internet servers	97	39.37
3.1.2 Cybersecurity	121	13.33 ○
3.1.3 Online access to financial account	98	17.96
3.1.4 Internet shopping	96	9.16
2nd sub-pillar: Regulation	93	60.35
3.2.1 Regulatory quality	96	37.16
3.2.2 ICT regulatory environment	104	66.07
3.2.3 Regulation of emerging technologies	102	25.35
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	3	98.15 ●
3rd sub-pillar: Inclusion	116	39.17
3.3.1 E-Participation	94	33.73
3.3.2 Socioeconomic gap in use of digital payments	124	30.53 ○
3.3.3 Availability of local online content	105	35.82
3.3.4 Gender gap in Internet use	88	55.55
3.3.5 Rural gap in use of digital payments	100	40.24
D. Impact pillar	73	53.53
1st sub-pillar: Economy	114	20.88
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	98	41.03
4.1.3 Prevalence of gig economy	108	19.19
4.1.4 ICT services exports	45	23.31 ●
2nd sub-pillar: Quality of Life	32	76.96
4.2.1 Happiness	35	73.03 ●
4.2.2 Freedom to make life choices	6	96.14 ●
4.2.3 Income inequality	80	62.21
4.2.4 Healthy life expectancy at birth	79	61.22
3rd sub-pillar: SDG Contribution	74	62.74
4.3.1 SDG 3: Good Health and Well-Being	45	79.03 ●
4.3.2 SDG 4: Quality Education	76	9.54 ○
4.3.3 SDG 5: Women's economic opportunity	48	84.62 ●
4.3.4 SDG 7: Affordable and Clean Energy	47	84.14 ●
4.3.5 SDG 11: Sustainable Cities and Communities	69	66.27 ●

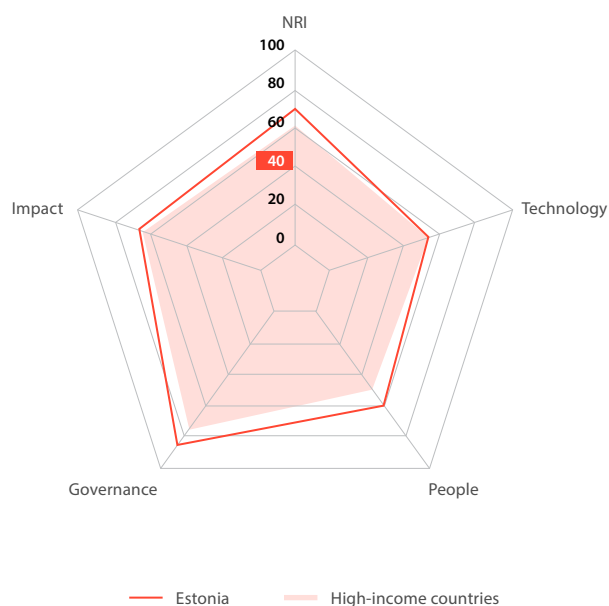
NOTE: ● Indicates a strength and ○ a weakness.

Estonia

Rank
(Out of 133)

Score
18 67.85

Pillar/sub-pillar	Rank	Score
A. Technology pillar	32	53.56
1st sub-pillar: Access	37	74.86
2nd sub-pillar: Content	21	48.03
3rd sub-pillar: Future Technologies	56	37.80
B. People pillar	13	60.42
1st sub-pillar: Individuals	35	55.83
2nd sub-pillar: Businesses	20	56.77
3rd sub-pillar: Governments	10	68.67
C. Governance pillar	5	88.28
1st sub-pillar: Trust	8	89.60
2nd sub-pillar: Regulation	9	88.68
3rd sub-pillar: Inclusion	3	86.56
D. Impact pillar	21	69.12
1st sub-pillar: Economy	25	43.65
2nd sub-pillar: Quality of Life	24	80.78
3rd sub-pillar: SDG Contribution	16	82.94



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	32	53.56
1st sub-pillar: Access	37	74.86
1.1.1 Mobile tariffs	40	75.91
1.1.2 Handset prices	15	93.86
1.1.3 FTTH/building Internet subscriptions	95	18.01 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	112	61.37 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	21	48.03
1.2.1 GitHub commits	10	75.06
1.2.2 Internet domain registrations	26	31.60
1.2.3 Mobile apps development	6	83.49 ●
1.2.4 AI scientific publications	92	1.96 ○
3rd sub-pillar: Future Technologies	56	37.80
1.3.1 Adoption of emerging technologies	30	76.83
1.3.2 Investment in emerging technologies	35	58.75
1.3.3 Robot density	36	5.54 ○
1.3.4 Computer software spending	92	10.07 ○
B. People pillar	13	60.42
1st sub-pillar: Individuals	35	55.83
2.1.1 Mobile broadband internet traffic within the country	70	10.95 ○
2.1.2 ICT skills in the education system	35	70.37
2.1.3 Use of virtual social networks	23	68.82
2.1.4 Adult literacy rate	5	99.82 ●
2.1.5 AI talent concentration	14	29.18
2nd sub-pillar: Businesses	20	56.77
2.2.1 Firms with website	31	74.69
2.2.2 Number of venture capital deals invested in AI	1	100.00 ●
2.2.3 Annual investment in telecommunication services	95	43.35 ○
2.2.4 Public cloud computing market scale	87	9.05 ○
3rd sub-pillar: Governments	10	68.67
2.3.1 Government online services	1	100.00 ●
2.3.2 Data Capabilities	1	100.00 ●
2.3.3 Government promotion of investment in emerging technologies	47	43.28
2.3.4 R&D expenditure by governments and higher education	22	31.41

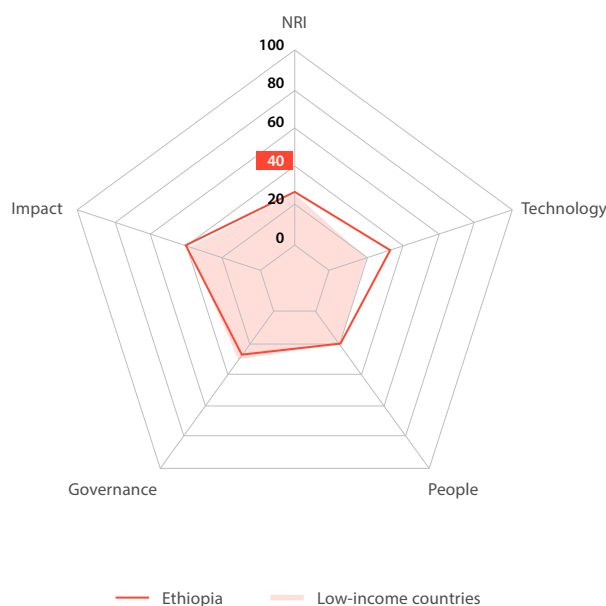
Indicator	Rank	Score
C. Governance pillar	5	88.28
1st sub-pillar: Trust	8	89.60
3.1.1 Secure Internet servers	8	90.51 ●
3.1.2 Cybersecurity	2	99.50 ●
3.1.3 Online access to financial account	7	89.51 ●
3.1.4 Internet shopping	15	78.87
2nd sub-pillar: Regulation	9	88.68
3.2.1 Regulatory quality	14	84.62
3.2.2 ICT regulatory environment	31	89.88
3.2.3 Regulation of emerging technologies	11	82.91
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	24	86.01
3rd sub-pillar: Inclusion	3	86.56
3.3.1 E-Participation	3	97.68 ●
3.3.2 Socioeconomic gap in use of digital payments	13	97.51
3.3.3 Availability of local online content	20	86.06
3.3.4 Gender gap in Internet use	13	74.97
3.3.5 Rural gap in use of digital payments	14	76.59
D. Impact pillar	21	69.12
1st sub-pillar: Economy	25	43.65
4.1.1 ICT patent applications	29	9.06
4.1.2 Domestic market scale	104	39.01 ○
4.1.3 Prevalence of gig economy	27	63.37
4.1.4 ICT services exports	7	63.18 ●
2nd sub-pillar: Quality of Life	24	80.78
4.2.1 Happiness	38	71.88
4.2.2 Freedom to make life choices	18	91.49
4.2.3 Income inequality	31	80.21
4.2.4 Healthy life expectancy at birth	36	77.77
3rd sub-pillar: SDG Contribution	16	82.94
4.3.1 SDG 3: Good Health and Well-Being	41	80.65
4.3.2 SDG 4: Quality Education	6	73.74 ●
4.3.3 SDG 5: Women's economic opportunity	15	96.58
4.3.4 SDG 7: Affordable and Clean Energy	64	80.70
4.3.5 SDG 11: Sustainable Cities and Communities	35	80.79

NOTE: ● Indicates a strength and ○ a weakness.

Ethiopia

	Rank (Out of 133)	Score
Network Readiness Index	122	29.60

Pillar/sub-pillar	Rank	Score
A. Technology pillar	98	31.06
1st sub-pillar: Access	96	52.99
2nd sub-pillar: Content	64	26.07
3rd sub-pillar: Future Technologies	126	14.12
B. People pillar	126	19.21
1st sub-pillar: Individuals	129	13.59
2nd sub-pillar: Businesses	107	26.30
3rd sub-pillar: Governments	122	17.73
C. Governance pillar	130	26.58
1st sub-pillar: Trust	130	12.29
2nd sub-pillar: Regulation	128	36.60
3rd sub-pillar: Inclusion	122	30.86
D. Impact pillar	115	41.53
1st sub-pillar: Economy	73	30.84
2nd sub-pillar: Quality of Life	115	41.45
3rd sub-pillar: SDG Contribution	110	52.30



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	98	31.06
1st sub-pillar: Access	96	52.99
1.1.1 Mobile tariffs	101	45.83
1.1.2 Handset prices	116	32.50
1.1.3 FTTH/building Internet subscriptions	55	34.19 ●
1.1.4 Population covered by at least a 3G mobile network	75	84.07 ●
1.1.5 International Internet bandwidth	82	68.35 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	64	26.07
1.2.1 GitHub commits	111	1.13
1.2.2 Internet domain registrations	133	0.00 ○
1.2.3 Mobile apps development	107	45.58
1.2.4 AI scientific publications	16	57.56 ●
3rd sub-pillar: Future Technologies	126	14.12
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	99	28.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	130	0.00 ○
B. People pillar	126	19.21
1st sub-pillar: Individuals	129	13.59
2.1.1 Mobile broadband internet traffic within the country	80	8.94 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	130	0.28 ○
2.1.4 Adult literacy rate	99	31.55
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	107	26.30
2.2.1 Firms with website	105	23.22
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	111	39.71
2.2.4 Public cloud computing market scale	67	15.96 ●
3rd sub-pillar: Governments	122	17.73
2.3.1 Government online services	116	30.70
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	82	4.76

Indicator	Rank	Score
C. Governance pillar	130	26.58
1st sub-pillar: Trust	130	12.29
3.1.1 Secure Internet servers	130	13.34 ○
3.1.2 Cybersecurity	108	27.75
3.1.3 Online access to financial account	116	7.03 ○
3.1.4 Internet shopping	124	1.06 ○
2nd sub-pillar: Regulation	128	36.60
3.2.1 Regulatory quality	120	25.76
3.2.2 ICT regulatory environment	131	21.43 ○
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	102	49.21
3rd sub-pillar: Inclusion	122	30.86
3.3.1 E-Participation	124	17.45 ○
3.3.2 Socioeconomic gap in use of digital payments	116	38.94
3.3.3 Availability of local online content	111	30.53
3.3.4 Gender gap in Internet use	103	17.19
3.3.5 Rural gap in use of digital payments	88	50.20
D. Impact pillar	115	41.53
1st sub-pillar: Economy	73	30.84
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	54	57.36 ●
4.1.3 Prevalence of gig economy	94	27.91
4.1.4 ICT services exports	85	7.26 ●
2nd sub-pillar: Quality of Life	115	41.45
4.2.1 Happiness	117	20.09
4.2.2 Freedom to make life choices	119	43.47
4.2.3 Income inequality	58	71.98 ●
4.2.4 Healthy life expectancy at birth	100	49.61
3rd sub-pillar: SDG Contribution	110	52.30
4.3.1 SDG 3: Good Health and Well-Being	129	9.68 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	86	72.65 ●
4.3.4 SDG 7: Affordable and Clean Energy	112	58.33
4.3.5 SDG 11: Sustainable Cities and Communities	108	42.15

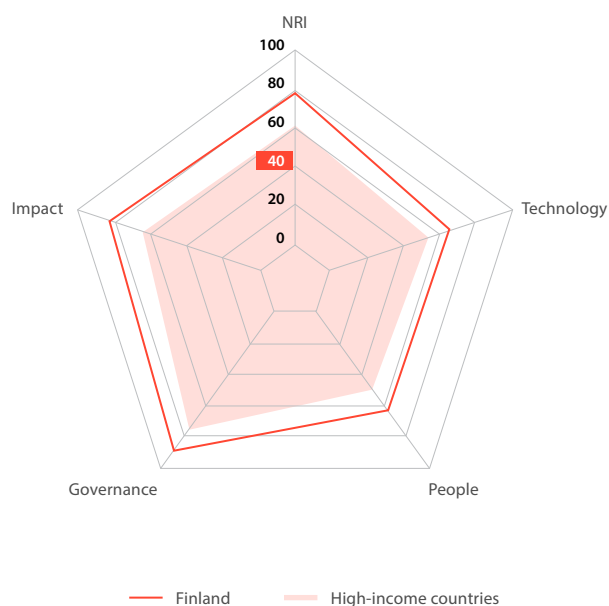
NOTE: ● Indicates a strength and ○ a weakness.

Finland

Rank Score
(Out of 133)

Network Readiness Index 3 75.76

Pillar/sub-pillar	Rank	Score
A. Technology pillar	11	66.63
1st sub-pillar: Access	19	79.35
2nd sub-pillar: Content	12	54.90
3rd sub-pillar: Future Technologies	9	65.64
B. People pillar	9	62.58
1st sub-pillar: Individuals	27	57.76
2nd sub-pillar: Businesses	11	59.30
3rd sub-pillar: Governments	7	70.69
C. Governance pillar	4	89.37
1st sub-pillar: Trust	4	90.60
2nd sub-pillar: Regulation	4	92.48
3rd sub-pillar: Inclusion	6	85.03
D. Impact pillar	1	84.44
1st sub-pillar: Economy	3	75.91
2nd sub-pillar: Quality of Life	1	95.77
3rd sub-pillar: SDG Contribution	24	81.64



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	11	66.63
1st sub-pillar: Access	19	79.35
1.1.1 Mobile tariffs	32	79.01
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	68	30.14 ○
1.1.4 Population covered by at least a 3G mobile network	24	99.88
1.1.5 International Internet bandwidth	89	67.05 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	12	54.90
1.2.1 GitHub commits	4	95.49 ●
1.2.2 Internet domain registrations	23	35.57
1.2.3 Mobile apps development	9	78.40
1.2.4 AI scientific publications	55	10.16 ○
3rd sub-pillar: Future Technologies	9	65.64
1.3.1 Adoption of emerging technologies	7	96.07
1.3.2 Investment in emerging technologies	5	87.75
1.3.3 Robot density	21	22.35 ○
1.3.4 Computer software spending	18	56.38
B. People pillar	9	62.58
1st sub-pillar: Individuals	27	57.76
2.1.1 Mobile broadband internet traffic within the country	32	30.15
2.1.2 ICT skills in the education system	1	100.00 ●
2.1.3 Use of virtual social networks	18	70.41
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	13	30.47
2nd sub-pillar: Businesses	11	59.30
2.2.1 Firms with website	1	100.00 ●
2.2.2 Number of venture capital deals invested in AI	11	40.52
2.2.3 Annual investment in telecommunication services	53	53.75 ○
2.2.4 Public cloud computing market scale	24	42.93
3rd sub-pillar: Governments	7	70.69
2.3.1 Government online services	2	98.15 ●
2.3.2 Data Capabilities	7	71.30
2.3.3 Government promotion of investment in emerging technologies	29	59.59
2.3.4 R&D expenditure by governments and higher education	10	53.71

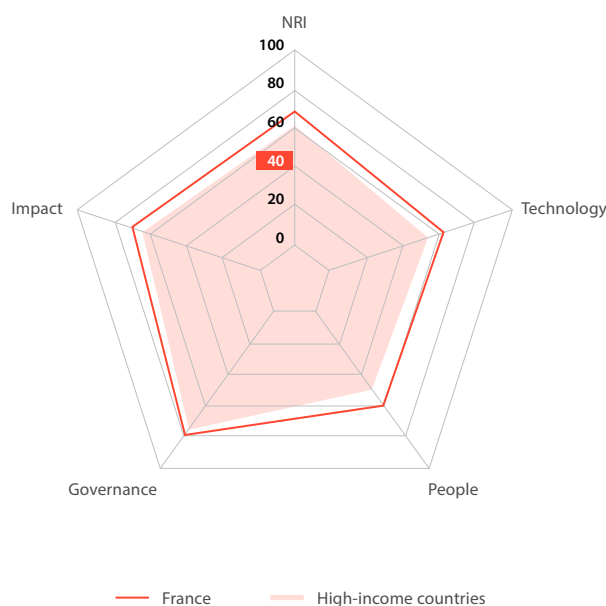
Indicator	Rank	Score
C. Governance pillar	4	89.37
1st sub-pillar: Trust	4	90.60
3.1.1 Secure Internet servers	9	90.25
3.1.2 Cybersecurity	29	95.75
3.1.3 Online access to financial account	3	95.29 ●
3.1.4 Internet shopping	13	81.10
2nd sub-pillar: Regulation	4	92.48
3.2.1 Regulatory quality	6	89.78 ●
3.2.2 ICT regulatory environment	3	97.62 ●
3.2.3 Regulation of emerging technologies	2	94.98 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	39	80.04
3rd sub-pillar: Inclusion	6	85.03
3.3.1 E-Participation	6	95.34
3.3.2 Socioeconomic gap in use of digital payments	22	95.97
3.3.3 Availability of local online content	13	90.14
3.3.4 Gender gap in Internet use	59	66.94 ○
3.3.5 Rural gap in use of digital payments	13	76.73
D. Impact pillar	1	84.44
1st sub-pillar: Economy	3	75.91
4.1.1 ICT patent applications	1	100.00 ●
4.1.2 Domestic market scale	58	55.83 ○
4.1.3 Prevalence of gig economy	23	64.83
4.1.4 ICT services exports	6	83.00 ●
2nd sub-pillar: Quality of Life	1	95.77
4.2.1 Happiness	1	100.00 ●
4.2.2 Freedom to make life choices	4	96.37 ●
4.2.3 Income inequality	11	90.75
4.2.4 Healthy life expectancy at birth	19	91.12
3rd sub-pillar: SDG Contribution	24	81.64
4.3.1 SDG 3: Good Health and Well-Being	10	91.94
4.3.2 SDG 4: Quality Education	11	65.26
4.3.3 SDG 5: Women's economic opportunity	15	96.58
4.3.4 SDG 7: Affordable and Clean Energy	95	70.32 ○
4.3.5 SDG 11: Sustainable Cities and Communities	5	96.88 ●

NOTE: ● Indicates a strength and ○ a weakness.

France

	Rank (Out of 133)	Score
Network Readiness Index	16	68.71

Pillar/sub-pillar	Rank	Score
A. Technology pillar	13	64.90
1st sub-pillar: Access	6	83.57
2nd sub-pillar: Content	14	53.04
3rd sub-pillar: Future Technologies	19	58.09
B. People pillar	14	60.27
1st sub-pillar: Individuals	44	52.99
2nd sub-pillar: Businesses	12	59.01
3rd sub-pillar: Governments	9	68.82
C. Governance pillar	25	79.72
1st sub-pillar: Trust	34	74.06
2nd sub-pillar: Regulation	15	86.04
3rd sub-pillar: Inclusion	23	79.06
D. Impact pillar	18	69.95
1st sub-pillar: Economy	18	49.85
2nd sub-pillar: Quality of Life	36	76.42
3rd sub-pillar: SDG Contribution	13	83.58



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	13	64.90
1st sub-pillar: Access	6	83.57
1.1.1 Mobile tariffs	28	80.92
1.1.2 Handset prices	8	98.58 ●
1.1.3 FTTH/building Internet subscriptions	15	56.72
1.1.4 Population covered by at least a 3G mobile network	60	88.89 ○
1.1.5 International Internet bandwidth	33	77.31
1.1.6 Internet access in schools	37	99.00 ○
2nd sub-pillar: Content	14	53.04
1.2.1 GitHub commits	21	50.48
1.2.2 Internet domain registrations	25	33.51
1.2.3 Mobile apps development	20	74.55
1.2.4 AI scientific publications	17	53.62
3rd sub-pillar: Future Technologies	19	58.09
1.3.1 Adoption of emerging technologies	22	79.78
1.3.2 Investment in emerging technologies	22	67.25
1.3.3 Robot density	19	24.09
1.3.4 Computer software spending	8	61.23 ●
B. People pillar	14	60.27
1st sub-pillar: Individuals	44	52.99
2.1.1 Mobile broadband internet traffic within the country	12	46.99 ●
2.1.2 ICT skills in the education system	30	73.44
2.1.3 Use of virtual social networks	28	68.35
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	18	23.18 ○
2nd sub-pillar: Businesses	12	59.01
2.2.1 Firms with website	46	64.40 ○
2.2.2 Number of venture capital deals invested in AI	19	25.53
2.2.3 Annual investment in telecommunication services	5	82.48 ●
2.2.4 Public cloud computing market scale	6	63.61 ●
3rd sub-pillar: Governments	9	68.82
2.3.1 Government online services	20	86.38
2.3.2 Data Capabilities	4	73.43 ●
2.3.3 Government promotion of investment in emerging technologies	16	75.77
2.3.4 R&D expenditure by governments and higher education	17	39.70

Indicator	Rank	Score
C. Governance pillar	25	79.72
1st sub-pillar: Trust	34	74.06
3.1.1 Secure Internet servers	22	83.74
3.1.2 Cybersecurity	14	97.58
3.1.3 Online access to financial account	44	54.49 ○
3.1.4 Internet shopping	31	60.40
2nd sub-pillar: Regulation	15	86.04
3.2.1 Regulatory quality	25	75.93
3.2.2 ICT regulatory environment	7	95.83 ●
3.2.3 Regulation of emerging technologies	10	83.26 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	52	75.20 ○
3rd sub-pillar: Inclusion	23	79.06
3.3.1 E-Participation	37	70.93
3.3.2 Socioeconomic gap in use of digital payments	17	96.60
3.3.3 Availability of local online content	28	83.65
3.3.4 Gender gap in Internet use	52	67.97 ○
3.3.5 Rural gap in use of digital payments	18	76.15
D. Impact pillar	18	69.95
1st sub-pillar: Economy	18	49.85
4.1.1 ICT patent applications	19	32.70
4.1.2 Domestic market scale	10	79.41 ●
4.1.3 Prevalence of gig economy	21	66.86
4.1.4 ICT services exports	50	20.43 ○
2nd sub-pillar: Quality of Life	36	76.42
4.2.1 Happiness	28	74.69
4.2.2 Freedom to make life choices	83	67.93 ○
4.2.3 Income inequality	29	80.98
4.2.4 Healthy life expectancy at birth	13	92.30 ●
3rd sub-pillar: SDG Contribution	13	83.58
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	26	58.32
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	44	84.36
4.3.5 SDG 11: Sustainable Cities and Communities	14	92.93

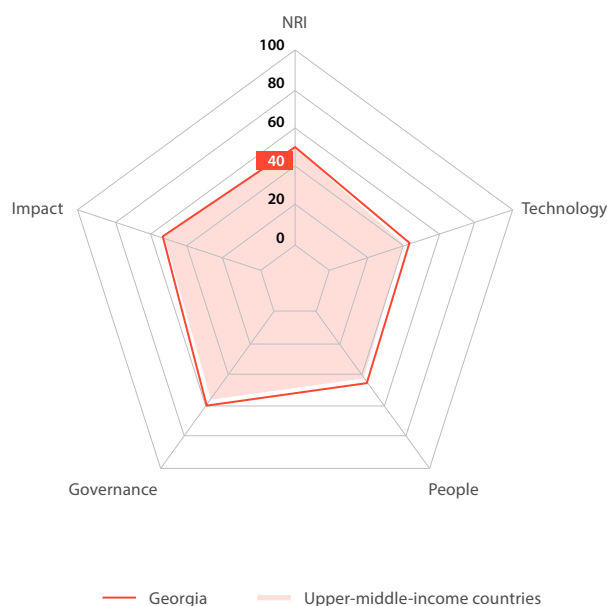
NOTE: ● Indicates a strength and ○ a weakness.

Georgia

Rank Score
(Out of 133)

Network Readiness Index 68 49.30

Pillar/sub-pillar	Rank	Score
A. Technology pillar	62	44.15
1st sub-pillar: Access	46	72.24
2nd sub-pillar: Content	60	26.87
3rd sub-pillar: Future Technologies	73	33.33
B. People pillar	55	44.10
1st sub-pillar: Individuals	32	56.73
2nd sub-pillar: Businesses	68	35.22
3rd sub-pillar: Governments	64	40.35
C. Governance pillar	64	59.11
1st sub-pillar: Trust	68	49.51
2nd sub-pillar: Regulation	65	67.55
3rd sub-pillar: Inclusion	69	60.27
D. Impact pillar	90	49.82
1st sub-pillar: Economy	93	26.00
2nd sub-pillar: Quality of Life	72	66.98
3rd sub-pillar: SDG Contribution	98	56.48



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	62	44.15
1st sub-pillar: Access	46	72.24
1.1.1 Mobile tariffs	46	73.49
1.1.2 Handset prices	83	52.36
1.1.3 FTTH/building Internet subscriptions	42	38.00
1.1.4 Population covered by at least a 3G mobile network	29	98.83 ●
1.1.5 International Internet bandwidth	67	70.74
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	60	26.87
1.2.1 GitHub commits	33	35.23 ●
1.2.2 Internet domain registrations	62	4.35
1.2.3 Mobile apps development	58	66.69
1.2.4 AI scientific publications	102	1.23 ○
3rd sub-pillar: Future Technologies	73	33.33
1.3.1 Adoption of emerging technologies	55	64.24
1.3.2 Investment in emerging technologies	95	30.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	102	5.75 ○
B. People pillar	55	44.10
1st sub-pillar: Individuals	32	56.73
2.1.1 Mobile broadband internet traffic within the country	83	7.71
2.1.2 ICT skills in the education system	69	52.99
2.1.3 Use of virtual social networks	34	66.85 ●
2.1.4 Adult literacy rate	13	99.39 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	68	35.22
2.2.1 Firms with website	56	58.67
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	104	41.27 ○
2.2.4 Public cloud computing market scale	102	5.73 ○
3rd sub-pillar: Governments	64	40.35
2.3.1 Government online services	82	57.02
2.3.2 Data Capabilities	54	34.33
2.3.3 Government promotion of investment in emerging technologies	22	65.71 ●
2.3.4 R&D expenditure by governments and higher education	83	4.35 ○

Indicator	Rank	Score
C. Governance pillar	64	59.11
1st sub-pillar: Trust	68	49.51
3.1.1 Secure Internet servers	51	65.11
3.1.2 Cybersecurity	62	81.08
3.1.3 Online access to financial account	71	35.18
3.1.4 Internet shopping	78	16.67
2nd sub-pillar: Regulation	65	67.55
3.2.1 Regulatory quality	30	72.25 ●
3.2.2 ICT regulatory environment	31	89.88 ●
3.2.3 Regulation of emerging technologies	58	50.06
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	51	75.56
3rd sub-pillar: Inclusion	69	60.27
3.3.1 E-Participation	71	52.33
3.3.2 Socioeconomic gap in use of digital payments	67	73.20
3.3.3 Availability of local online content	81	51.68
3.3.4 Gender gap in Internet use	24	71.17 ●
3.3.5 Rural gap in use of digital payments	84	52.98
D. Impact pillar	90	49.82
1st sub-pillar: Economy	93	26.00
4.1.1 ICT patent applications	50	0.97
4.1.2 Domestic market scale	94	42.01 ○
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	26	35.02 ●
2nd sub-pillar: Quality of Life	72	66.98
4.2.1 Happiness	90	47.96
4.2.2 Freedom to make life choices	35	85.11 ●
4.2.3 Income inequality	44	75.84
4.2.4 Healthy life expectancy at birth	82	59.92
3rd sub-pillar: SDG Contribution	98	56.48
4.3.1 SDG 3: Good Health and Well-Being	82	62.90
4.3.2 SDG 4: Quality Education	67	18.71 ○
4.3.3 SDG 5: Women's economic opportunity	52	83.76
4.3.4 SDG 7: Affordable and Clean Energy	69	79.75
4.3.5 SDG 11: Sustainable Cities and Communities	128	24.47 ○

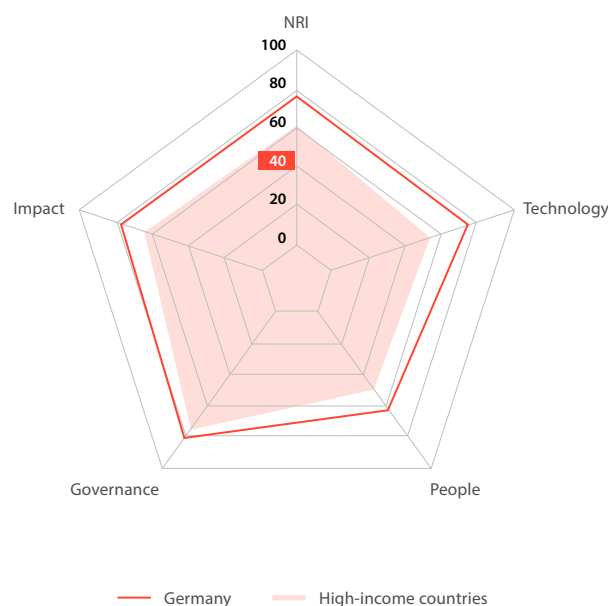
NOTE: ● Indicates a strength and ○ a weakness.

Germany

Rank
(Out of 133)

Network Readiness Index 9 73.54

Pillar/sub-pillar	Rank	Score
A. Technology pillar	4	72.54
1st sub-pillar: Access	25	78.06
2nd sub-pillar: Content	4	70.65
3rd sub-pillar: Future Technologies	7	68.89
B. People pillar	8	63.77
1st sub-pillar: Individuals	20	59.51
2nd sub-pillar: Businesses	6	65.36
3rd sub-pillar: Governments	15	66.44
C. Governance pillar	16	82.52
1st sub-pillar: Trust	22	79.81
2nd sub-pillar: Regulation	13	88.12
3rd sub-pillar: Inclusion	20	79.62
D. Impact pillar	9	75.35
1st sub-pillar: Economy	11	60.26
2nd sub-pillar: Quality of Life	23	80.96
3rd sub-pillar: SDG Contribution	9	84.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	4	72.54
1st sub-pillar: Access	25	78.06
1.1.1 Mobile tariffs	15	85.92
1.1.2 Handset prices	32	86.83
1.1.3 FTTH/building Internet subscriptions	38	39.29
1.1.4 Population covered by at least a 3G mobile network	27	99.53
1.1.5 International Internet bandwidth	27	78.74
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	4	70.65
1.2.1 GitHub commits	15	62.61
1.2.2 Internet domain registrations	8	70.69 ●
1.2.3 Mobile apps development	48	69.63 ○
1.2.4 AI scientific publications	9	79.66
3rd sub-pillar: Future Technologies	7	68.89
1.3.1 Adoption of emerging technologies	25	78.21
1.3.2 Investment in emerging technologies	7	86.75 ●
1.3.3 Robot density	4	55.73 ●
1.3.4 Computer software spending	19	54.88
B. People pillar	8	63.77
1st sub-pillar: Individuals	20	59.51
2.1.1 Mobile broadband internet traffic within the country	20	40.98
2.1.2 ICT skills in the education system	41	64.32 ○
2.1.3 Use of virtual social networks	17	71.35
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	5	61.37
2nd sub-pillar: Businesses	6	65.36
2.2.1 Firms with website	2	93.44 ●
2.2.2 Number of venture capital deals invested in AI	32	17.35 ○
2.2.3 Annual investment in telecommunication services	6	81.65 ●
2.2.4 Public cloud computing market scale	4	68.99 ●
3rd sub-pillar: Governments	15	66.44
2.3.1 Government online services	44	76.85 ○
2.3.2 Data Capabilities	9	71.15
2.3.3 Government promotion of investment in emerging technologies	26	61.47
2.3.4 R&D expenditure by governments and higher education	9	56.31

Indicator	Rank	Score
C. Governance pillar	16	82.52
1st sub-pillar: Trust	22	79.81
3.1.1 Secure Internet servers	7	91.67 ●
3.1.2 Cybersecurity	18	97.42
3.1.3 Online access to financial account	37	61.52 ○
3.1.4 Internet shopping	24	68.62
2nd sub-pillar: Regulation	13	88.12
3.2.1 Regulatory quality	15	83.75
3.2.2 ICT regulatory environment	21	93.45
3.2.3 Regulation of emerging technologies	21	76.30
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	21	87.11
3rd sub-pillar: Inclusion	20	79.62
3.3.1 E-Participation	32	72.10
3.3.2 Socioeconomic gap in use of digital payments	2	99.90 ●
3.3.3 Availability of local online content	26	84.38
3.3.4 Gender gap in Internet use	64	66.52 ○
3.3.5 Rural gap in use of digital payments	27	75.20
D. Impact pillar	9	75.35
1st sub-pillar: Economy	11	60.26
4.1.1 ICT patent applications	10	62.49
4.1.2 Domestic market scale	5	82.86 ●
4.1.3 Prevalence of gig economy	12	78.20
4.1.4 ICT services exports	55	17.49 ○
2nd sub-pillar: Quality of Life	23	80.96
4.2.1 Happiness	19	79.91
4.2.2 Freedom to make life choices	62	79.66 ○
4.2.3 Income inequality	35	78.66 ○
4.2.4 Healthy life expectancy at birth	25	87.96
3rd sub-pillar: SDG Contribution	9	84.84
4.3.1 SDG 3: Good Health and Well-Being	5	95.16 ●
4.3.2 SDG 4: Quality Education	23	59.98
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	28	88.23
4.3.5 SDG 11: Sustainable Cities and Communities	26	87.12

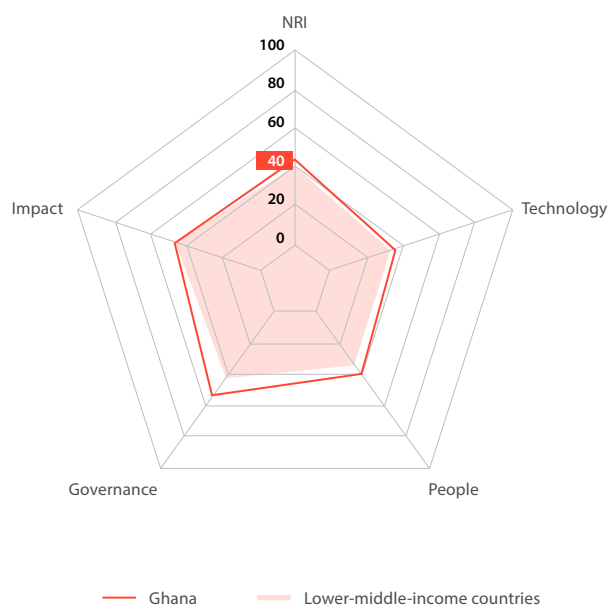
NOTE: ● Indicates a strength and ○ a weakness.

Ghana

Rank Score
(Out of 133)

Network Readiness Index 87 43.95

Pillar/sub-pillar	Rank	Score
A. Technology pillar	87	35.89
1st sub-pillar: Access	84	57.80
2nd sub-pillar: Content	97	17.24
3rd sub-pillar: Future Technologies	76	32.61
B. People pillar	82	38.68
1st sub-pillar: Individuals	102	38.12
2nd sub-pillar: Businesses	79	33.36
3rd sub-pillar: Governments	52	44.56
C. Governance pillar	79	53.17
1st sub-pillar: Trust	73	44.51
2nd sub-pillar: Regulation	59	68.39
3rd sub-pillar: Inclusion	100	46.61
D. Impact pillar	97	48.06
1st sub-pillar: Economy	68	31.91
2nd sub-pillar: Quality of Life	106	49.91
3rd sub-pillar: SDG Contribution	79	62.37



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	87	35.89
1st sub-pillar: Access	84	57.80
1.1.1 Mobile tariffs	70	62.43
1.1.2 Handset prices	110	36.38
1.1.3 FTTH/building Internet subscriptions	86	23.51
1.1.4 Population covered by at least a 3G mobile network	52	94.30
1.1.5 International Internet bandwidth	58	72.39
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	97	17.24
2.2.1 GitHub commits	76	4.76
2.2.2 Internet domain registrations	116	0.27
2.2.3 Mobile apps development	113	41.85
2.2.4 AI scientific publications	37	22.08
3rd sub-pillar: Future Technologies	76	32.61
3.3.1 Adoption of emerging technologies	85	47.78
3.3.2 Investment in emerging technologies	44	49.25
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	127	0.81
B. People pillar	82	38.68
1st sub-pillar: Individuals	102	38.12
2.1.1 Mobile broadband internet traffic within the country	51	18.59
2.1.2 ICT skills in the education system	82	47.12
2.1.3 Use of virtual social networks	111	15.26
2.1.4 Adult literacy rate	81	71.52
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	79	33.36
2.2.1 Firms with website	57	58.54
2.2.2 Number of venture capital deals invested in AI	39	11.33
2.2.3 Annual investment in telecommunication services	70	49.37
2.2.4 Public cloud computing market scale	70	14.19
3rd sub-pillar: Governments	52	44.56
2.3.1 Government online services	92	48.73
2.3.2 Data Capabilities	47	38.31
2.3.3 Government promotion of investment in emerging technologies	40	46.65
2.3.4 R&D expenditure by governments and higher education	NA	NA

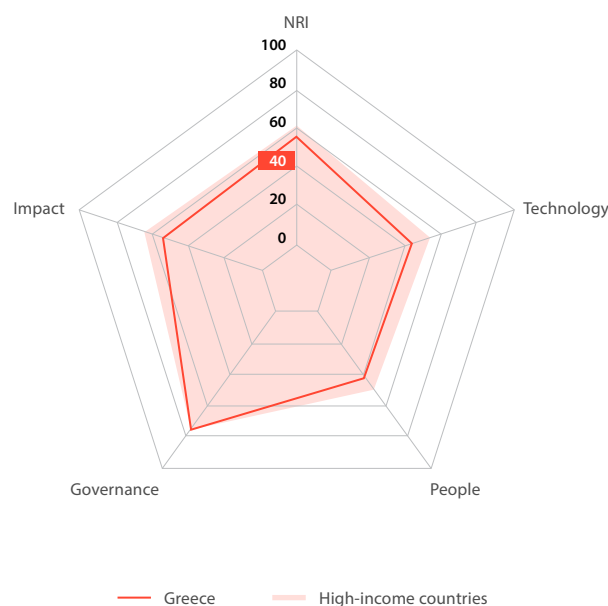
Indicator	Rank	Score
C. Governance pillar	79	53.17
1st sub-pillar: Trust	73	44.51
3.1.1 Secure Internet servers	110	32.28
3.1.2 Cybersecurity	51	86.67
3.1.3 Online access to financial account	50	49.81
3.1.4 Internet shopping	94	9.28
2nd sub-pillar: Regulation	59	68.39
3.2.1 Regulatory quality	82	43.82
3.2.2 ICT regulatory environment	80	76.19
3.2.3 Regulation of emerging technologies	83	37.37
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	28	84.58
3rd sub-pillar: Inclusion	100	46.61
3.3.1 E-Participation	82	44.18
3.3.2 Socioeconomic gap in use of digital payments	80	64.96
3.3.3 Availability of local online content	103	37.50
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	101	39.78
D. Impact pillar	97	48.06
1st sub-pillar: Economy	68	31.91
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	68	52.03
4.1.3 Prevalence of gig economy	73	36.63
4.1.4 ICT services exports	86	7.06
2nd sub-pillar: Quality of Life	106	49.91
4.2.1 Happiness	112	24.65
4.2.2 Freedom to make life choices	64	77.86
4.2.3 Income inequality	97	50.13
4.2.4 Healthy life expectancy at birth	107	44.33
3rd sub-pillar: SDG Contribution	79	62.37
4.3.1 SDG 3: Good Health and Well-Being	112	30.65
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	103	65.81
4.3.4 SDG 7: Affordable and Clean Energy	33	86.92
4.3.5 SDG 11: Sustainable Cities and Communities	113	38.13

NOTE: ● Indicates a strength and ○ a weakness.

Greece

	Rank (Out of 133)	Score
Network Readiness Index	56	52.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	61	44.25
1st sub-pillar: Access	68	65.61
2nd sub-pillar: Content	52	30.52
3rd sub-pillar: Future Technologies	62	36.63
B. People pillar	67	41.62
1st sub-pillar: Individuals	88	43.50
2nd sub-pillar: Businesses	67	35.25
3rd sub-pillar: Governments	44	46.10
C. Governance pillar	37	73.17
1st sub-pillar: Trust	28	76.72
2nd sub-pillar: Regulation	44	74.52
3rd sub-pillar: Inclusion	52	68.27
D. Impact pillar	77	52.55
1st sub-pillar: Economy	104	23.46
2nd sub-pillar: Quality of Life	94	58.50
3rd sub-pillar: SDG Contribution	39	75.67



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	61	44.25
1st sub-pillar: Access	68	65.61
1.1.1 Mobile tariffs	41	75.89
1.1.2 Handset prices	54	73.78
1.1.3 FTTH/building Internet subscriptions	123	4.12 ○
1.1.4 Population covered by at least a 3G mobile network	38	97.68
1.1.5 International Internet bandwidth	37	76.56
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	52	30.52
1.2.1 GitHub commits	41	23.23
1.2.2 Internet domain registrations	34	18.81 ●
1.2.3 Mobile apps development	80	61.34 ○
1.2.4 AI scientific publications	40	18.71
3rd sub-pillar: Future Technologies	62	36.63
1.3.1 Adoption of emerging technologies	65	60.14 ○
1.3.2 Investment in emerging technologies	110	23.50 ○
1.3.3 Robot density	40	4.12 ○
1.3.4 Computer software spending	14	58.75 ●
B. People pillar	67	41.62
1st sub-pillar: Individuals	88	43.50
2.1.1 Mobile broadband internet traffic within the country	52	16.53
2.1.2 ICT skills in the education system	60	57.66
2.1.3 Use of virtual social networks	48	62.27
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	7	37.55 ●
2nd sub-pillar: Businesses	67	35.25
2.2.1 Firms with website	61	54.79
2.2.2 Number of venture capital deals invested in AI	56	4.34 ○
2.2.3 Annual investment in telecommunication services	37	58.86
2.2.4 Public cloud computing market scale	54	23.04
3rd sub-pillar: Governments	44	46.10
2.3.1 Government online services	48	75.17
2.3.2 Data Capabilities	40	43.61
2.3.3 Government promotion of investment in emerging technologies	56	39.65
2.3.4 R&D expenditure by governments and higher education	28	25.97 ●

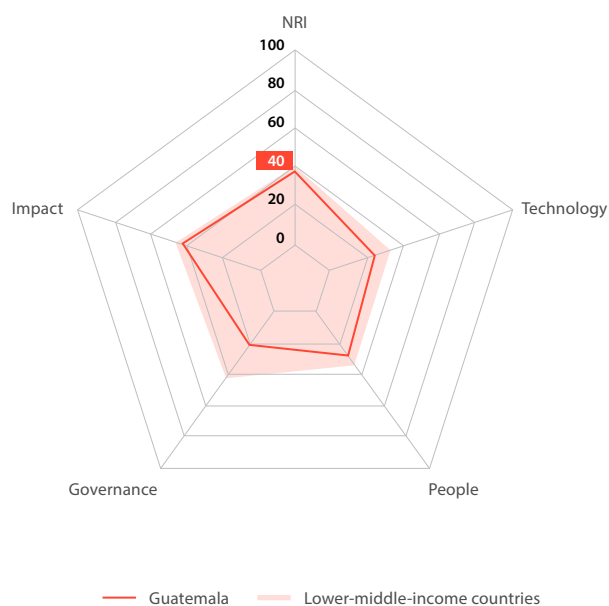
Indicator	Rank	Score
C. Governance pillar	37	73.17
1st sub-pillar: Trust	28	76.72
3.1.1 Secure Internet servers	45	72.57
3.1.2 Cybersecurity	35	94.00
3.1.3 Online access to financial account	27	69.78 ●
3.1.4 Internet shopping	22	70.53 ●
2nd sub-pillar: Regulation	44	74.52
3.2.1 Regulatory quality	48	58.92
3.2.2 ICT regulatory environment	28	90.48 ●
3.2.3 Regulation of emerging technologies	66	47.57
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	50	75.65
3rd sub-pillar: Inclusion	52	68.27
3.3.1 E-Participation	55	60.46
3.3.2 Socioeconomic gap in use of digital payments	42	86.52
3.3.3 Availability of local online content	64	61.30
3.3.4 Gender gap in Internet use	42	69.29
3.3.5 Rural gap in use of digital payments	65	63.76
D. Impact pillar	77	52.55
1st sub-pillar: Economy	104	23.46
4.1.1 ICT patent applications	36	3.18
4.1.2 Domestic market scale	53	57.93
4.1.3 Prevalence of gig economy	103	23.26 ○
4.1.4 ICT services exports	78	9.49 ○
2nd sub-pillar: Quality of Life	94	58.50
4.2.1 Happiness	76	57.83
4.2.2 Freedom to make life choices	122	36.35 ○
4.2.3 Income inequality	39	77.38
4.2.4 Healthy life expectancy at birth	28	85.26 ●
3rd sub-pillar: SDG Contribution	39	75.67
4.3.1 SDG 3: Good Health and Well-Being	49	77.42
4.3.2 SDG 4: Quality Education	43	40.98
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	29	88.16 ●
4.3.5 SDG 11: Sustainable Cities and Communities	59	69.65

NOTE: ● Indicates a strength and ○ a weakness.

Guatemala

	Rank (Out of 133)	Score
Network Readiness Index	105	36.52

Pillar/sub-pillar	Rank	Score
A. Technology pillar	110	26.78
1st sub-pillar: Access	111	38.10
2nd sub-pillar: Content	115	11.57
3rd sub-pillar: Future Technologies	86	30.66
B. People pillar	106	30.74
1st sub-pillar: Individuals	94	41.71
2nd sub-pillar: Businesses	84	32.35
3rd sub-pillar: Governments	121	18.16
C. Governance pillar	107	41.51
1st sub-pillar: Trust	122	17.50
2nd sub-pillar: Regulation	99	57.68
3rd sub-pillar: Inclusion	92	49.35
D. Impact pillar	100	47.05
1st sub-pillar: Economy	108	22.74
2nd sub-pillar: Quality of Life	71	67.05
3rd sub-pillar: SDG Contribution	113	51.34



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	110	26.78
1st sub-pillar: Access	111	38.10
1.1.1 Mobile tariffs	117	31.43
1.1.2 Handset prices	102	41.46
1.1.3 FTTH/building Internet subscriptions	109	10.35
1.1.4 Population covered by at least a 3G mobile network	96	54.83
1.1.5 International Internet bandwidth	113	60.79
1.1.6 Internet access in schools	75	29.72
2nd sub-pillar: Content	115	11.57
1.2.1 GitHub commits	100	2.27
1.2.2 Internet domain registrations	79	2.05 ●
1.2.3 Mobile apps development	114	41.18 ○
1.2.4 AI scientific publications	112	0.80
3rd sub-pillar: Future Technologies	86	30.66
1.3.1 Adoption of emerging technologies	74	53.46
1.3.2 Investment in emerging technologies	71	37.50 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	124	1.03 ○
B. People pillar	106	30.74
1st sub-pillar: Individuals	94	41.71
2.1.1 Mobile broadband internet traffic within the country	114	2.31
2.1.2 ICT skills in the education system	86	45.38
2.1.3 Use of virtual social networks	87	41.95
2.1.4 Adult literacy rate	72	77.19
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	84	32.35
2.2.1 Firms with website	67	51.29 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	74	13.41 ●
3rd sub-pillar: Governments	121	18.16
2.3.1 Government online services	91	49.26
2.3.2 Data Capabilities	90	10.02 ○
2.3.3 Government promotion of investment in emerging technologies	106	12.46 ○
2.3.4 R&D expenditure by governments and higher education	110	0.87 ○

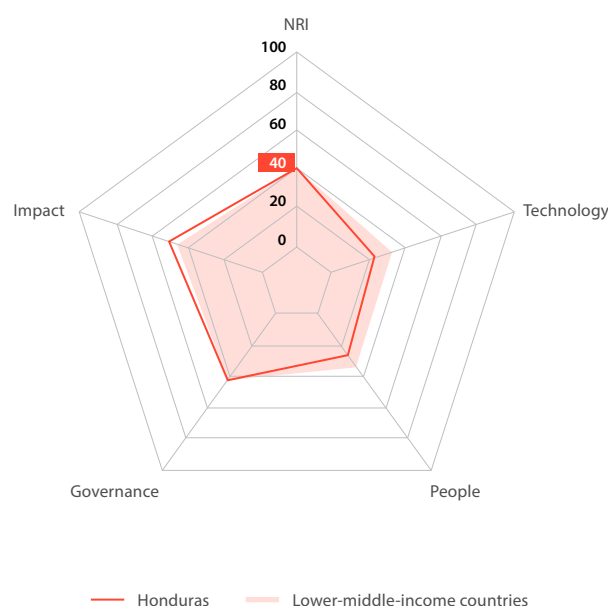
Indicator	Rank	Score
C. Governance pillar	107	41.51
1st sub-pillar: Trust	122	17.50
3.1.1 Secure Internet servers	102	37.24
3.1.2 Cybersecurity	123	13.17 ○
3.1.3 Online access to financial account	109	10.36 ○
3.1.4 Internet shopping	95	9.22
2nd sub-pillar: Regulation	99	57.68
3.2.1 Regulatory quality	87	41.17
3.2.2 ICT regulatory environment	120	56.79 ○
3.2.3 Regulation of emerging technologies	101	26.72
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	81	63.73
3rd sub-pillar: Inclusion	92	49.35
3.3.1 E-Participation	100	31.39
3.3.2 Socioeconomic gap in use of digital payments	88	58.29
3.3.3 Availability of local online content	101	38.70
3.3.4 Gender gap in Internet use	90	54.50
3.3.5 Rural gap in use of digital payments	64	63.86 ●
D. Impact pillar	100	47.05
1st sub-pillar: Economy	108	22.74
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	72	50.85 ●
4.1.3 Prevalence of gig economy	107	19.77
4.1.4 ICT services exports	51	20.36 ●
2nd sub-pillar: Quality of Life	71	67.05
4.2.1 Happiness	39	71.69 ●
4.2.2 Freedom to make life choices	41	84.46 ●
4.2.3 Income inequality	108	37.79 ○
4.2.4 Healthy life expectancy at birth	97	52.21
3rd sub-pillar: SDG Contribution	113	51.34
4.3.1 SDG 3: Good Health and Well-Being	97	48.39
4.3.2 SDG 4: Quality Education	74	10.89
4.3.3 SDG 5: Women's economic opportunity	108	64.10
4.3.4 SDG 7: Affordable and Clean Energy	85	75.66
4.3.5 SDG 11: Sustainable Cities and Communities	76	61.06 ●

NOTE: ● Indicates a strength and ○ a weakness.

Honduras

	Rank (Out of 133)	Score
Network Readiness Index	107	36.39

Pillar/sub-pillar	Rank	Score
A. Technology pillar	114	24.85
1st sub-pillar: Access	116	33.99
2nd sub-pillar: Content	113	11.77
3rd sub-pillar: Future Technologies	91	28.79
B. People pillar	114	27.07
1st sub-pillar: Individuals	98	40.59
2nd sub-pillar: Businesses	96	29.16
3rd sub-pillar: Governments	130	11.45
C. Governance pillar	108	41.48
1st sub-pillar: Trust	128	14.11
2nd sub-pillar: Regulation	87	62.63
3rd sub-pillar: Inclusion	97	47.71
D. Impact pillar	79	52.16
1st sub-pillar: Economy	103	23.80
2nd sub-pillar: Quality of Life	76	63.37
3rd sub-pillar: SDG Contribution	52	69.31



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	114	24.85
1st sub-pillar: Access	116	33.99
1.1.1 Mobile tariffs	125	17.44 ○
1.1.2 Handset prices	87	49.84
1.1.3 FTTH/building Internet subscriptions	84	23.82
1.1.4 Population covered by at least a 3G mobile network	117	17.57
1.1.5 International Internet bandwidth	69	70.60 ●
1.1.6 Internet access in schools	78	24.71
2nd sub-pillar: Content	113	11.77
1.2.1 GitHub commits	105	1.82
1.2.2 Internet domain registrations	109	0.40
1.2.3 Mobile apps development	110	43.93
1.2.4 AI scientific publications	108	0.94
3rd sub-pillar: Future Technologies	91	28.79
1.3.1 Adoption of emerging technologies	102	29.74 ○
1.3.2 Investment in emerging technologies	76	35.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	69	20.87 ●
B. People pillar	114	27.07
1st sub-pillar: Individuals	98	40.59
2.1.1 Mobile broadband internet traffic within the country	73	10.30 ●
2.1.2 ICT skills in the education system	104	33.91 ○
2.1.3 Use of virtual social networks	99	35.02
2.1.4 Adult literacy rate	68	83.13
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	96	29.16
2.2.1 Firms with website	90	33.75
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	75	47.99
2.2.4 Public cloud computing market scale	102	5.73
3rd sub-pillar: Governments	130	11.45
2.3.1 Government online services	130	16.19 ○
2.3.2 Data Capabilities	74	19.70
2.3.3 Government promotion of investment in emerging technologies	110	9.03 ○
2.3.4 R&D expenditure by governments and higher education	109	0.89 ○

Indicator	Rank	Score
C. Governance pillar	108	41.48
1st sub-pillar: Trust	128	14.11
3.1.1 Secure Internet servers	103	36.51
3.1.2 Cybersecurity	130	2.17 ○
3.1.3 Online access to financial account	112	9.19 ○
3.1.4 Internet shopping	99	8.58
2nd sub-pillar: Regulation	87	62.63
3.2.1 Regulatory quality	98	36.63
3.2.2 ICT regulatory environment	80	76.19
3.2.3 Regulation of emerging technologies	104	22.91
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	47	77.43 ●
3rd sub-pillar: Inclusion	97	47.71
3.3.1 E-Participation	131	8.14 ○
3.3.2 Socioeconomic gap in use of digital payments	104	49.12
3.3.3 Availability of local online content	96	43.51
3.3.4 Gender gap in Internet use	2	82.74 ●
3.3.5 Rural gap in use of digital payments	80	55.03
D. Impact pillar	79	52.16
1st sub-pillar: Economy	103	23.80
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	97	41.10
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	88	6.51
2nd sub-pillar: Quality of Life	76	63.37
4.2.1 Happiness	71	59.26 ●
4.2.2 Freedom to make life choices	34	85.32 ●
4.2.3 Income inequality	107	38.05 ○
4.2.4 Healthy life expectancy at birth	94	53.00
3rd sub-pillar: SDG Contribution	52	69.31
4.3.1 SDG 3: Good Health and Well-Being	93	56.45
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	103	65.81
4.3.4 SDG 7: Affordable and Clean Energy	79	77.12 ●
4.3.5 SDG 11: Sustainable Cities and Communities	53	73.53 ●

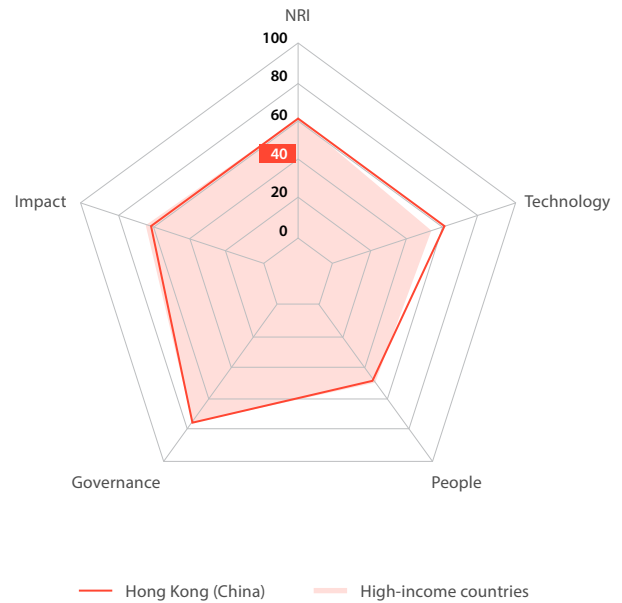
NOTE: ● Indicates a strength and ○ a weakness.

Hong Kong (China)

Rank Score
(Out of 133)

Network Readiness Index 29 61.77

Pillar/sub-pillar	Rank	Score
A. Technology pillar	17	62.31
1st sub-pillar: Access	5	84.53
2nd sub-pillar: Content	34	43.31
3rd sub-pillar: Future Technologies	18	59.10
B. People pillar	36	48.33
1st sub-pillar: Individuals	25	58.00
2nd sub-pillar: Businesses	28	49.60
3rd sub-pillar: Governments	73	37.39
C. Governance pillar	34	74.43
1st sub-pillar: Trust	27	77.55
2nd sub-pillar: Regulation	71	66.70
3rd sub-pillar: Inclusion	24	79.04
D. Impact pillar	36	62.01
1st sub-pillar: Economy	19	47.19
2nd sub-pillar: Quality of Life	102	50.86
3rd sub-pillar: SDG Contribution	2	87.98



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	17	62.31
1st sub-pillar: Access	5	84.53
1.1.1 Mobile tariffs	7	94.59 ●
1.1.2 Handset prices	29	87.98
1.1.3 FTTH/building Internet subscriptions	50	35.72 ○
1.1.4 Population covered by at least a 3G mobile network	60	88.89 ○
1.1.5 International Internet bandwidth	1	100.00 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	34	43.31
1.2.1 GitHub commits	NA	NA
1.2.2 Internet domain registrations	20	40.62
1.2.3 Mobile apps development	4	84.98 ●
1.2.4 AI scientific publications	80	4.33 ○
3rd sub-pillar: Future Technologies	18	59.10
1.3.1 Adoption of emerging technologies	18	83.93
1.3.2 Investment in emerging technologies	15	74.75 ●
1.3.3 Robot density	7	43.16
1.3.4 Computer software spending	31	34.57
B. People pillar	36	48.33
1st sub-pillar: Individuals	25	58.00
2.1.1 Mobile broadband internet traffic within the country	45	19.79
2.1.2 ICT skills in the education system	20	78.36
2.1.3 Use of virtual social networks	7	75.84 ●
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	28	49.60
2.2.1 Firms with website	64	53.34 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	42	57.87
2.2.4 Public cloud computing market scale	30	37.60
3rd sub-pillar: Governments	73	37.39
2.3.1 Government online services	NA	NA
2.3.2 Data Capabilities	21	57.49
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	41	17.30

Indicator	Rank	Score
C. Governance pillar	34	74.43
1st sub-pillar: Trust	27	77.55
3.1.1 Secure Internet servers	11	89.09 ●
3.1.2 Cybersecurity	NA	NA
3.1.3 Online access to financial account	21	73.50
3.1.4 Internet shopping	23	70.05
2nd sub-pillar: Regulation	71	66.70
3.2.1 Regulatory quality	12	85.34 ●
3.2.2 ICT regulatory environment	65	83.93 ○
3.2.3 Regulation of emerging technologies	28	69.89
3.2.4 E-commerce legislation	NA	NA
3.2.5 Privacy protection by law content	126	27.66 ○
3rd sub-pillar: Inclusion	24	79.04
3.3.1 E-Participation	NA	NA
3.3.2 Socioeconomic gap in use of digital payments	43	85.93
3.3.3 Availability of local online content	8	93.27 ●
3.3.4 Gender gap in Internet use	62	66.70 ○
3.3.5 Rural gap in use of digital payments	47	70.25
D. Impact pillar	36	62.01
1st sub-pillar: Economy	19	47.19
4.1.1 ICT patent applications	12	54.80
4.1.2 Domestic market scale	44	60.59
4.1.3 Prevalence of gig economy	18	68.90
4.1.4 ICT services exports	97	4.47 ○
2nd sub-pillar: Quality of Life	102	50.86
4.2.1 Happiness	92	47.09 ○
4.2.2 Freedom to make life choices	113	54.62 ○
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	NA	NA
3rd sub-pillar: SDG Contribution	2	87.98
4.3.1 SDG 3: Good Health and Well-Being	NA	NA
4.3.2 SDG 4: Quality Education	5	75.63 ●
4.3.3 SDG 5: Women's economic opportunity	35	88.89
4.3.4 SDG 7: Affordable and Clean Energy	2	99.42 ●
4.3.5 SDG 11: Sustainable Cities and Communities	NA	NA

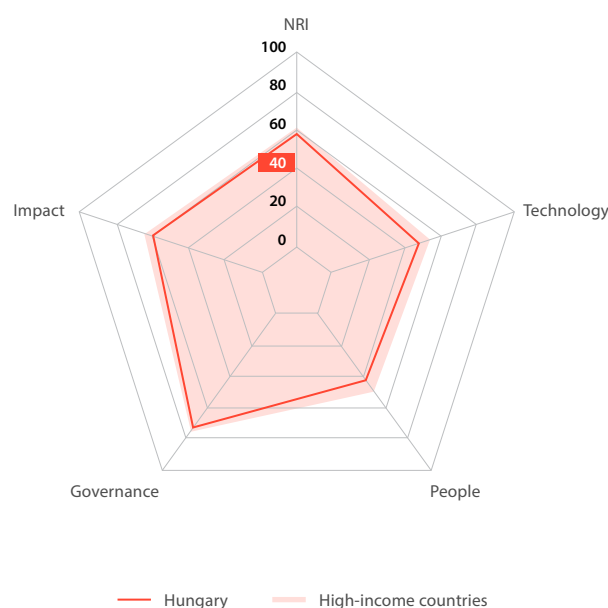
NOTE: ● Indicates a strength and ○ a weakness.

Hungary

Rank
(Out of 133)

Network Readiness Index 42 55.33

Pillar/sub-pillar	Rank	Score
A. Technology pillar	46	48.21
1st sub-pillar: Access	31	76.45
2nd sub-pillar: Content	47	33.08
3rd sub-pillar: Future Technologies	67	35.09
B. People pillar	64	42.59
1st sub-pillar: Individuals	65	49.16
2nd sub-pillar: Businesses	62	36.23
3rd sub-pillar: Governments	60	42.38
C. Governance pillar	38	72.72
1st sub-pillar: Trust	29	76.47
2nd sub-pillar: Regulation	38	76.95
3rd sub-pillar: Inclusion	57	64.74
D. Impact pillar	49	57.80
1st sub-pillar: Economy	82	28.77
2nd sub-pillar: Quality of Life	67	68.06
3rd sub-pillar: SDG Contribution	36	76.56



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	46	48.21
1st sub-pillar: Access	31	76.45
1.1.1 Mobile tariffs	26	81.65 ●
1.1.2 Handset prices	39	83.64
1.1.3 FTTH/building Internet subscriptions	53	34.70
1.1.4 Population covered by at least a 3G mobile network	58	91.02
1.1.5 International Internet bandwidth	87	67.67 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	47	33.08
1.2.1 GitHub commits	35	32.64
1.2.2 Internet domain registrations	28	24.69 ●
1.2.3 Mobile apps development	59	66.57
1.2.4 AI scientific publications	63	8.44
3rd sub-pillar: Future Technologies	67	35.09
1.3.1 Adoption of emerging technologies	38	71.84
1.3.2 Investment in emerging technologies	99	28.25 ○
1.3.3 Robot density	22	17.26
1.3.4 Computer software spending	59	23.02
B. People pillar	64	42.59
1st sub-pillar: Individuals	65	49.16
2.1.1 Mobile broadband internet traffic within the country	54	15.06
2.1.2 ICT skills in the education system	83	45.95 ○
2.1.3 Use of virtual social networks	45	62.92
2.1.4 Adult literacy rate	20	98.68 ●
2.1.5 AI talent concentration	18	23.18
2nd sub-pillar: Businesses	62	36.23
2.2.1 Firms with website	50	61.21
2.2.2 Number of venture capital deals invested in AI	57	4.29 ○
2.2.3 Annual investment in telecommunication services	52	54.11
2.2.4 Public cloud computing market scale	48	25.33
3rd sub-pillar: Governments	60	42.38
2.3.1 Government online services	56	71.98
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	89	25.66 ○
2.3.4 R&D expenditure by governments and higher education	24	29.50 ●

Indicator	Rank	Score
C. Governance pillar	38	72.72
1st sub-pillar: Trust	29	76.47
3.1.1 Secure Internet servers	24	82.98 ●
3.1.2 Cybersecurity	43	91.25
3.1.3 Online access to financial account	29	67.14 ●
3.1.4 Internet shopping	28	64.52 ●
2nd sub-pillar: Regulation	38	76.95
3.2.1 Regulatory quality	52	57.56
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	46	59.02
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	55	74.12
3rd sub-pillar: Inclusion	57	64.74
3.3.1 E-Participation	75	50.01 ○
3.3.2 Socioeconomic gap in use of digital payments	55	81.42
3.3.3 Availability of local online content	58	65.38
3.3.4 Gender gap in Internet use	21	71.46 ●
3.3.5 Rural gap in use of digital payments	78	55.43 ○
D. Impact pillar	49	57.80
1st sub-pillar: Economy	82	28.77
4.1.1 ICT patent applications	25	13.86
4.1.2 Domestic market scale	52	58.04
4.1.3 Prevalence of gig economy	97	27.33 ○
4.1.4 ICT services exports	59	15.87
2nd sub-pillar: Quality of Life	67	68.06
4.2.1 Happiness	59	61.58
4.2.2 Freedom to make life choices	90	64.40 ○
4.2.3 Income inequality	17	86.89 ●
4.2.4 Healthy life expectancy at birth	55	69.50
3rd sub-pillar: SDG Contribution	36	76.56
4.3.1 SDG 3: Good Health and Well-Being	41	80.65
4.3.2 SDG 4: Quality Education	29	57.85
4.3.3 SDG 5: Women's economic opportunity	28	91.45
4.3.4 SDG 7: Affordable and Clean Energy	58	82.53
4.3.5 SDG 11: Sustainable Cities and Communities	63	68.19

NOTE: ● Indicates a strength and ○ a weakness.

Iceland

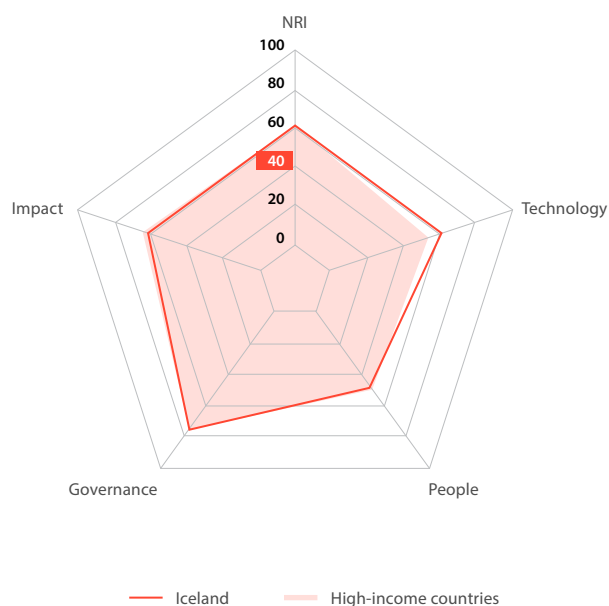
Rank
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Score

Network Readiness Index

25 64.86

Pillar/sub-pillar	Rank	Score
A. Technology pillar	22	58.85
1st sub-pillar: Access	54	69.02
2nd sub-pillar: Content	7	60.45
3rd sub-pillar: Future Technologies	35	47.09
B. People pillar	24	53.87
1st sub-pillar: Individuals	96	41.01
2nd sub-pillar: Businesses	15	58.14
3rd sub-pillar: Governments	21	62.47
C. Governance pillar	18	82.07
1st sub-pillar: Trust	10	85.92
2nd sub-pillar: Regulation	35	78.26
3rd sub-pillar: Inclusion	13	82.01
D. Impact pillar	30	64.66
1st sub-pillar: Economy	57	34.01
2nd sub-pillar: Quality of Life	2	94.56
3rd sub-pillar: SDG Contribution	69	65.42



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	22	58.85
1st sub-pillar: Access	54	69.02
1.1.1 Mobile tariffs	22	83.35
1.1.2 Handset prices	11	96.57
1.1.3 FTTH/building Internet subscriptions	112	9.89 ○
1.1.4 Population covered by at least a 3G mobile network	57	93.19
1.1.5 International Internet bandwidth	107	62.08 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	7	60.45
1.2.1 GitHub commits	8	81.98 ●
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	86	59.35 ○
1.2.4 AI scientific publications	120	0.49 ○
3rd sub-pillar: Future Technologies	35	47.09
1.3.1 Adoption of emerging technologies	20	82.24
1.3.2 Investment in emerging technologies	24	65.75
1.3.3 Robot density	27	11.36
1.3.4 Computer software spending	39	29.00
B. People pillar	24	53.87
1st sub-pillar: Individuals	96	41.01
2.1.1 Mobile broadband internet traffic within the country	108	2.53 ○
2.1.2 ICT skills in the education system	9	84.01 ●
2.1.3 Use of virtual social networks	40	63.76
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	30	13.73
2nd sub-pillar: Businesses	15	58.14
2.2.1 Firms with website	19	81.01 ●
2.2.2 Number of venture capital deals invested in AI	1	100.00 ●
2.2.3 Annual investment in telecommunication services	106	40.87 ○
2.2.4 Public cloud computing market scale	79	10.68 ○
3rd sub-pillar: Governments	21	62.47
2.3.1 Government online services	16	87.48
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	36	49.63
2.3.4 R&D expenditure by governments and higher education	13	50.30

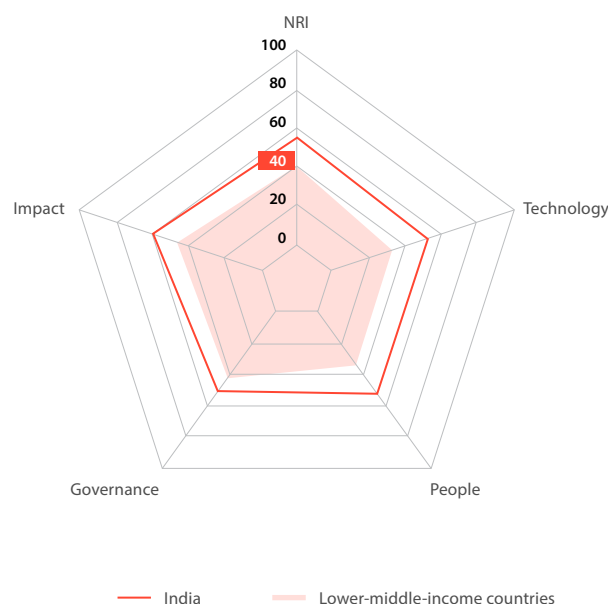
Indicator	Rank	Score
C. Governance pillar	18	82.07
1st sub-pillar: Trust	10	85.92
3.1.1 Secure Internet servers	10	89.63 ●
3.1.2 Cybersecurity	66	79.83
3.1.3 Online access to financial account	5	91.11 ●
3.1.4 Internet shopping	11	83.12
2nd sub-pillar: Regulation	35	78.26
3.2.1 Regulatory quality	20	78.71
3.2.2 ICT regulatory environment	46	86.90
3.2.3 Regulation of emerging technologies	23	75.90
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	54	74.81
3rd sub-pillar: Inclusion	13	82.01
3.3.1 E-Participation	17	79.08
3.3.2 Socioeconomic gap in use of digital payments	4	99.45 ●
3.3.3 Availability of local online content	33	79.33
3.3.4 Gender gap in Internet use	35	70.20
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	30	64.66
1st sub-pillar: Economy	57	34.01
4.1.1 ICT patent applications	26	11.83
4.1.2 Domestic market scale	127	30.52 ○
4.1.3 Prevalence of gig economy	29	62.21
4.1.4 ICT services exports	30	31.50
2nd sub-pillar: Quality of Life	2	94.56
4.2.1 Happiness	2	96.96 ●
4.2.2 Freedom to make life choices	17	92.13
4.2.3 Income inequality	6	94.86 ●
4.2.4 Healthy life expectancy at birth	10	94.30
3rd sub-pillar: SDG Contribution	69	65.42
4.3.1 SDG 3: Good Health and Well-Being	2	96.77 ●
4.3.2 SDG 4: Quality Education	40	45.46
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	129	17.84 ○
4.3.5 SDG 11: Sustainable Cities and Communities	1	100.00 ●

NOTE: ● Indicates a strength and ○ a weakness.

India

	Rank (Out of 133)	Score
Network Readiness Index	49	53.63

Pillar/sub-pillar	Rank	Score
A. Technology pillar	34	52.56
1st sub-pillar: Access	41	73.93
2nd sub-pillar: Content	33	44.33
3rd sub-pillar: Future Technologies	52	39.40
B. People pillar	29	51.62
1st sub-pillar: Individuals	17	62.91
2nd sub-pillar: Businesses	36	46.11
3rd sub-pillar: Governments	48	45.83
C. Governance pillar	88	49.79
1st sub-pillar: Trust	76	41.19
2nd sub-pillar: Regulation	79	64.13
3rd sub-pillar: Inclusion	105	44.04
D. Impact pillar	40	60.56
1st sub-pillar: Economy	13	57.49
2nd sub-pillar: Quality of Life	82	61.59
3rd sub-pillar: SDG Contribution	75	62.60



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	34	52.56
1st sub-pillar: Access	41	73.93
1.1.1 Mobile tariffs	50	71.76
1.1.2 Handset prices	58	69.75
1.1.3 FTTH/building Internet subscriptions	2	78.92
1.1.4 Population covered by at least a 3G mobile network	72	87.84
1.1.5 International Internet bandwidth	2	96.41
1.1.6 Internet access in schools	69	38.91
2nd sub-pillar: Content	33	44.33
1.2.1 GitHub commits	75	4.77
1.2.2 Internet domain registrations	99	0.84
1.2.3 Mobile apps development	36	71.71
1.2.4 AI scientific publications	1	100.00
3rd sub-pillar: Future Technologies	52	39.40
1.3.1 Adoption of emerging technologies	42	68.49
1.3.2 Investment in emerging technologies	26	64.25
1.3.3 Robot density	49	0.94
1.3.4 Computer software spending	55	23.94
B. People pillar	29	51.62
1st sub-pillar: Individuals	17	62.91
2.1.1 Mobile broadband internet traffic within the country	2	93.08
2.1.2 ICT skills in the education system	110	28.46
2.1.3 Use of virtual social networks	102	25.28
2.1.4 Adult literacy rate	86	67.76
2.1.5 AI talent concentration	1	100.00
2nd sub-pillar: Businesses	36	46.11
2.2.1 Firms with website	84	37.50
2.2.2 Number of venture capital deals invested in AI	43	9.85
2.2.3 Annual investment in telecommunication services	4	82.90
2.2.4 Public cloud computing market scale	11	54.18
3rd sub-pillar: Governments	48	45.83
2.3.1 Government online services	42	77.17
2.3.2 Data Capabilities	31	48.86
2.3.3 Government promotion of investment in emerging technologies	42	45.81
2.3.4 R&D expenditure by governments and higher education	55	11.49

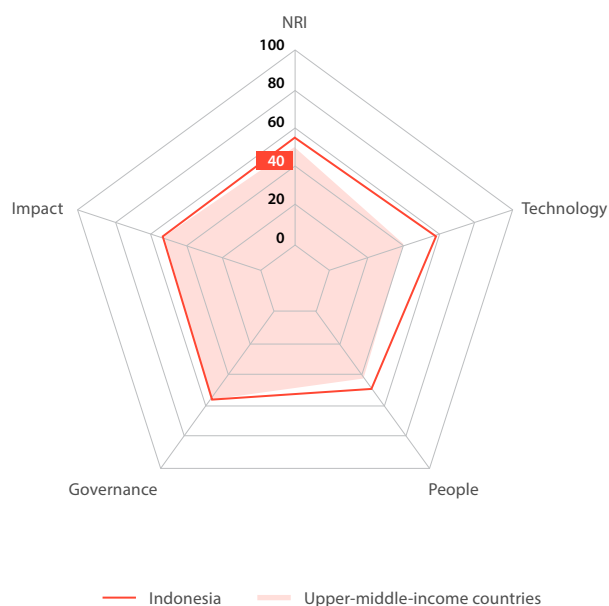
Indicator	Rank	Score
C. Governance pillar	88	49.79
1st sub-pillar: Trust	76	41.19
3.1.1 Secure Internet servers	71	49.16
3.1.2 Cybersecurity	15	97.50
3.1.3 Online access to financial account	111	9.21
3.1.4 Internet shopping	97	8.89
2nd sub-pillar: Regulation	79	64.13
3.2.1 Regulatory quality	74	46.84
3.2.2 ICT regulatory environment	71	83.33
3.2.3 Regulation of emerging technologies	34	66.81
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	104	48.65
3rd sub-pillar: Inclusion	105	44.04
3.3.1 E-Participation	61	58.14
3.3.2 Socioeconomic gap in use of digital payments	97	54.30
3.3.3 Availability of local online content	73	58.17
3.3.4 Gender gap in Internet use	105	0.00
3.3.5 Rural gap in use of digital payments	90	49.60
D. Impact pillar	40	60.56
1st sub-pillar: Economy	13	57.49
4.1.1 ICT patent applications	47	1.31
4.1.2 Domestic market scale	3	91.16
4.1.3 Prevalence of gig economy	70	37.50
4.1.4 ICT services exports	1	100.00
2nd sub-pillar: Quality of Life	82	61.59
4.2.1 Happiness	100	33.01
4.2.2 Freedom to make life choices	29	88.95
4.2.3 Income inequality	38	77.63
4.2.4 Healthy life expectancy at birth	103	48.00
3rd sub-pillar: SDG Contribution	75	62.60
4.3.1 SDG 3: Good Health and Well-Being	95	54.84
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	106	64.96
4.3.4 SDG 7: Affordable and Clean Energy	77	77.19
4.3.5 SDG 11: Sustainable Cities and Communities	115	36.45

NOTE: ● Indicates a strength and ○ a weakness.

Indonesia

	Rank (Out of 133)	Score
Network Readiness Index	48	53.84

Pillar/sub-pillar	Rank	Score
A. Technology pillar	27	56.08
1st sub-pillar: Access	20	79.26
2nd sub-pillar: Content	35	42.86
3rd sub-pillar: Future Technologies	38	46.12
B. People pillar	37	48.26
1st sub-pillar: Individuals	29	57.42
2nd sub-pillar: Businesses	72	34.53
3rd sub-pillar: Governments	28	52.83
C. Governance pillar	69	57.53
1st sub-pillar: Trust	70	48.41
2nd sub-pillar: Regulation	86	62.68
3rd sub-pillar: Inclusion	67	61.51
D. Impact pillar	74	53.49
1st sub-pillar: Economy	43	39.30
2nd sub-pillar: Quality of Life	65	68.23
3rd sub-pillar: SDG Contribution	106	52.94



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	27	56.08
1st sub-pillar: Access	20	79.26
1.1.1 Mobile tariffs	34	77.10
1.1.2 Handset prices	48	79.30
1.1.3 FTTH/building Internet subscriptions	7	66.87 ●
1.1.4 Population covered by at least a 3G mobile network	86	78.36
1.1.5 International Internet bandwidth	6	89.86 ●
1.1.6 Internet access in schools	48	84.08
2nd sub-pillar: Content	35	42.86
1.2.1 GitHub commits	87	4.19
1.2.2 Internet domain registrations	89	1.39
1.2.3 Mobile apps development	63	65.87
1.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	38	46.12
1.3.1 Adoption of emerging technologies	17	83.94 ●
1.3.2 Investment in emerging technologies	28	62.75
1.3.3 Robot density	51	0.67 ○
1.3.4 Computer software spending	27	37.11
B. People pillar	37	48.26
1st sub-pillar: Individuals	29	57.42
2.1.1 Mobile broadband internet traffic within the country	6	60.38 ●
2.1.2 ICT skills in the education system	13	81.80 ●
2.1.3 Use of virtual social networks	88	41.85
2.1.4 Adult literacy rate	45	94.25
2.1.5 AI talent concentration	37	8.80 ○
2nd sub-pillar: Businesses	72	34.53
2.2.1 Firms with website	90	33.75
2.2.2 Number of venture capital deals invested in AI	65	2.56 ○
2.2.3 Annual investment in telecommunication services	14	72.35 ●
2.2.4 Public cloud computing market scale	41	29.46
3rd sub-pillar: Governments	28	52.83
2.3.1 Government online services	51	73.96
2.3.2 Data Capabilities	43	42.17
2.3.3 Government promotion of investment in emerging technologies	4	90.30 ●
2.3.4 R&D expenditure by governments and higher education	81	4.88

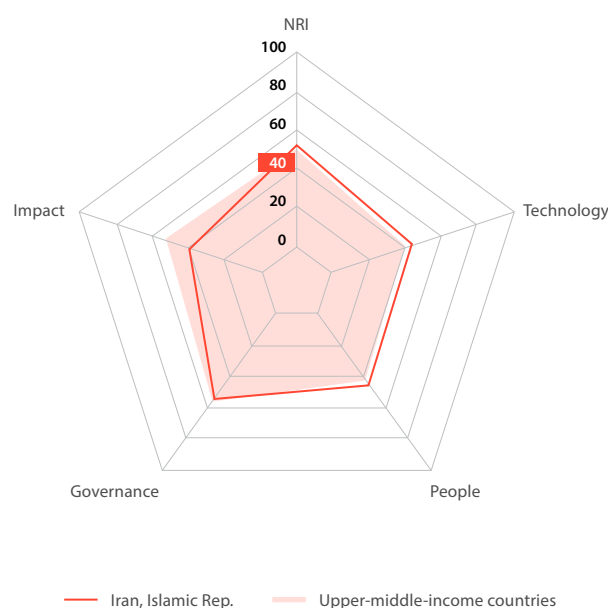
Indicator	Rank	Score
C. Governance pillar	69	57.53
1st sub-pillar: Trust	70	48.41
3.1.1 Secure Internet servers	58	60.20
3.1.2 Cybersecurity	31	94.92
3.1.3 Online access to financial account	97	18.07 ○
3.1.4 Internet shopping	69	20.45
2nd sub-pillar: Regulation	86	62.68
3.2.1 Regulatory quality	59	52.86
3.2.2 ICT regulatory environment	121	55.95 ○
3.2.3 Regulation of emerging technologies	37	65.09
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	116	39.51 ○
3rd sub-pillar: Inclusion	67	61.51
3.3.1 E-Participation	37	70.93
3.3.2 Socioeconomic gap in use of digital payments	59	78.99
3.3.3 Availability of local online content	46	70.19
3.3.4 Gender gap in Internet use	86	56.42
3.3.5 Rural gap in use of digital payments	109	30.99 ○
D. Impact pillar	74	53.49
1st sub-pillar: Economy	43	39.30
4.1.1 ICT patent applications	76	0.02 ○
4.1.2 Domestic market scale	7	80.64 ●
4.1.3 Prevalence of gig economy	17	69.77 ●
4.1.4 ICT services exports	87	6.77
2nd sub-pillar: Quality of Life	65	68.23
4.2.1 Happiness	80	55.59
4.2.2 Freedom to make life choices	28	89.09
4.2.3 Income inequality	66	69.15
4.2.4 Healthy life expectancy at birth	98	50.88
3rd sub-pillar: SDG Contribution	106	52.94
4.3.1 SDG 3: Good Health and Well-Being	101	41.94
4.3.2 SDG 4: Quality Education	72	13.06 ○
4.3.3 SDG 5: Women's economic opportunity	112	59.83 ○
4.3.4 SDG 7: Affordable and Clean Energy	38	85.75
4.3.5 SDG 11: Sustainable Cities and Communities	71	64.30

NOTE: ● Indicates a strength and ○ a weakness.

Iran, Islamic Rep.

	Rank (Out of 133)	Score
Network Readiness Index	79	45.51

Pillar/sub-pillar	Rank	Score
A. Technology pillar	54	45.40
1st sub-pillar: Access	104	42.63
2nd sub-pillar: Content	38	40.21
3rd sub-pillar: Future Technologies	24	53.35
B. People pillar	47	45.83
1st sub-pillar: Individuals	39	54.88
2nd sub-pillar: Businesses	18	57.25
3rd sub-pillar: Governments	104	25.36
C. Governance pillar	81	52.62
1st sub-pillar: Trust	55	57.84
2nd sub-pillar: Regulation	124	40.41
3rd sub-pillar: Inclusion	72	59.62
D. Impact pillar	120	38.18
1st sub-pillar: Economy	99	24.93
2nd sub-pillar: Quality of Life	103	50.85
3rd sub-pillar: SDG Contribution	132	38.75



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	54	45.40
1st sub-pillar: Access	104	42.63
1.1.1 Mobile tariffs	81	58.91
1.1.2 Handset prices	96	44.36
1.1.3 FTTH/building Internet subscriptions	83	25.52
1.1.4 Population covered by at least a 3G mobile network	104	37.66
1.1.5 International Internet bandwidth	26	78.77 ●
1.1.6 Internet access in schools	82	10.55 ○
2nd sub-pillar: Content	38	40.21
1.2.1 GitHub commits	103	1.94
1.2.2 Internet domain registrations	61	4.59
1.2.3 Mobile apps development	95	54.31
1.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	24	53.35
1.3.1 Adoption of emerging technologies	59	62.60
1.3.2 Investment in emerging technologies	101	27.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	3	69.72 ●
B. People pillar	47	45.83
1st sub-pillar: Individuals	39	54.88
2.1.1 Mobile broadband internet traffic within the country	9	48.08 ●
2.1.2 ICT skills in the education system	91	41.90
2.1.3 Use of virtual social networks	85	45.32
2.1.4 Adult literacy rate	67	84.21
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	18	57.25
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	15	72.12 ●
2.2.4 Public cloud computing market scale	25	42.37 ●
3rd sub-pillar: Governments	104	25.36
2.3.1 Government online services	111	35.85 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	85	26.19
2.3.4 R&D expenditure by governments and higher education	46	14.03

Indicator	Rank	Score
C. Governance pillar	81	52.62
1st sub-pillar: Trust	55	57.84
3.1.1 Secure Internet servers	56	61.87
3.1.2 Cybersecurity	62	81.08
3.1.3 Online access to financial account	45	52.75 ●
3.1.4 Internet shopping	56	35.68
2nd sub-pillar: Regulation	124	40.41 ○
3.2.1 Regulatory quality	131	10.64 ○
3.2.2 ICT regulatory environment	59	84.52
3.2.3 Regulation of emerging technologies	99	28.51
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	132	3.36 ○
3rd sub-pillar: Inclusion	72	59.62
3.3.1 E-Participation	127	16.28 ○
3.3.2 Socioeconomic gap in use of digital payments	38	88.98 ●
3.3.3 Availability of local online content	91	47.84
3.3.4 Gender gap in Internet use	67	66.24
3.3.5 Rural gap in use of digital payments	9	78.75 ●
D. Impact pillar	120	38.18
1st sub-pillar: Economy	99	24.93
4.1.1 ICT patent applications	56	0.54
4.1.2 Domestic market scale	19	71.64 ●
4.1.3 Prevalence of gig economy	99	26.16
4.1.4 ICT services exports	124	1.38 ○
2nd sub-pillar: Quality of Life	103	50.85
4.2.1 Happiness	97	40.29
4.2.2 Freedom to make life choices	121	40.80 ○
4.2.3 Income inequality	55	72.49
4.2.4 Healthy life expectancy at birth	50	70.44
3rd sub-pillar: SDG Contribution	132	38.75
4.3.1 SDG 3: Good Health and Well-Being	64	72.58
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	132	5.98 ○
4.3.4 SDG 7: Affordable and Clean Energy	124	39.84 ○
4.3.5 SDG 11: Sustainable Cities and Communities	62	68.25

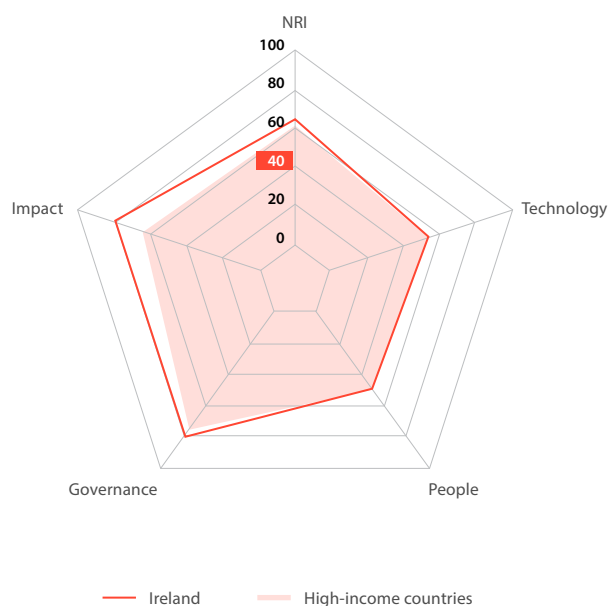
NOTE: ● Indicates a strength and ○ a weakness.

Ireland

Rank Score
(Out of 133)

Network Readiness Index 19 66.20

Pillar/sub-pillar	Rank	Score
A. Technology pillar	30	54.54
1st sub-pillar: Access	60	66.79
2nd sub-pillar: Content	36	42.74
3rd sub-pillar: Future Technologies	21	54.09
B. People pillar	35	48.59
1st sub-pillar: Individuals	70	48.35
2nd sub-pillar: Businesses	31	47.79
3rd sub-pillar: Governments	33	49.64
C. Governance pillar	23	80.78
1st sub-pillar: Trust	14	83.60
2nd sub-pillar: Regulation	28	81.31
3rd sub-pillar: Inclusion	28	77.42
D. Impact pillar	3	80.90
1st sub-pillar: Economy	6	66.48
2nd sub-pillar: Quality of Life	12	85.96
3rd sub-pillar: SDG Contribution	1	90.27



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	30	54.54
1st sub-pillar: Access	60	66.79
1.1.1 Mobile tariffs	3	98.04 ●
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	100	15.37 ○
1.1.4 Population covered by at least a 3G mobile network	96	54.83 ○
1.1.5 International Internet bandwidth	96	65.71 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	36	42.74
1.2.1 GitHub commits	17	59.59
1.2.2 Internet domain registrations	22	35.64
1.2.3 Mobile apps development	30	72.75
1.2.4 AI scientific publications	85	2.97 ○
3rd sub-pillar: Future Technologies	21	54.09
1.3.1 Adoption of emerging technologies	23	79.09
1.3.2 Investment in emerging technologies	18	70.50
1.3.3 Robot density	30	9.59 ○
1.3.4 Computer software spending	17	57.17
B. People pillar	35	48.59
1st sub-pillar: Individuals	70	48.35
2.1.1 Mobile broadband internet traffic within the country	94	5.17 ○
2.1.2 ICT skills in the education system	4	88.22 ●
2.1.3 Use of virtual social networks	22	69.10
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	12	30.90
2nd sub-pillar: Businesses	31	47.79
2.2.1 Firms with website	24	77.19
2.2.2 Number of venture capital deals invested in AI	28	19.61
2.2.3 Annual investment in telecommunication services	36	59.09
2.2.4 Public cloud computing market scale	34	35.26
3rd sub-pillar: Governments	33	49.64
2.3.1 Government online services	45	75.64
2.3.2 Data Capabilities	13	68.28
2.3.3 Government promotion of investment in emerging technologies	66	35.76 ○
2.3.4 R&D expenditure by governments and higher education	38	18.86

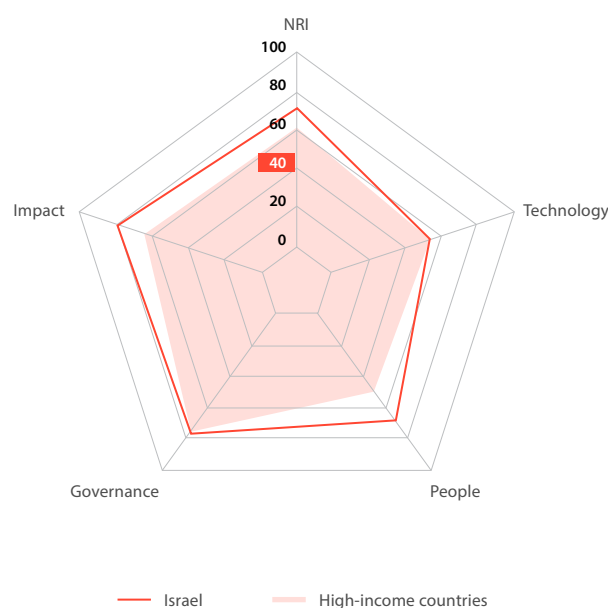
Indicator	Rank	Score
C. Governance pillar	23	80.78
1st sub-pillar: Trust	14	83.60
3.1.1 Secure Internet servers	6	93.04 ●
3.1.2 Cybersecurity	54	85.83 ○
3.1.3 Online access to financial account	23	73.00
3.1.4 Internet shopping	12	82.53
2nd sub-pillar: Regulation	28	81.31
3.2.1 Regulatory quality	10	86.51 ●
3.2.2 ICT regulatory environment	3	97.62 ●
3.2.3 Regulation of emerging technologies	35	65.91
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	91	56.52 ○
3rd sub-pillar: Inclusion	28	77.42
3.3.1 E-Participation	47	67.44
3.3.2 Socioeconomic gap in use of digital payments	25	93.94
3.3.3 Availability of local online content	38	77.16
3.3.4 Gender gap in Internet use	16	74.07
3.3.5 Rural gap in use of digital payments	31	74.48
D. Impact pillar	3	80.90
1st sub-pillar: Economy	6	66.48
4.1.1 ICT patent applications	16	41.03
4.1.2 Domestic market scale	38	63.25
4.1.3 Prevalence of gig economy	31	61.63
4.1.4 ICT services exports	1	100.00 ●
2nd sub-pillar: Quality of Life	12	85.96
4.2.1 Happiness	18	80.45
4.2.2 Freedom to make life choices	24	89.49
4.2.3 Income inequality	23	84.58
4.2.4 Healthy life expectancy at birth	17	91.33
3rd sub-pillar: SDG Contribution	1	90.27
4.3.1 SDG 3: Good Health and Well-Being	24	87.10
4.3.2 SDG 4: Quality Education	8	68.87 ●
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	1	100.00 ●
4.3.5 SDG 11: Sustainable Cities and Communities	4	97.34 ●

NOTE: ● Indicates a strength and ○ a weakness.

Israel

	Rank (Out of 133)	Score
Network Readiness Index	13	70.46

Pillar/sub-pillar	Rank	Score
A. Technology pillar	28	55.18
1st sub-pillar: Access	44	73.24
2nd sub-pillar: Content	19	49.01
3rd sub-pillar: Future Technologies	43	43.28
B. People pillar	5	68.91
1st sub-pillar: Individuals	11	68.17
2nd sub-pillar: Businesses	7	65.00
3rd sub-pillar: Governments	5	73.55
C. Governance pillar	29	77.76
1st sub-pillar: Trust	36	71.37
2nd sub-pillar: Regulation	21	84.00
3rd sub-pillar: Inclusion	26	77.90
D. Impact pillar	4	80.00
1st sub-pillar: Economy	1	86.09
2nd sub-pillar: Quality of Life	35	76.47
3rd sub-pillar: SDG Contribution	33	77.44



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	28	55.18
1st sub-pillar: Access	44	73.24
1.1.1 Mobile tariffs	27	80.99
1.1.2 Handset prices	31	87.48
1.1.3 FTTH/building Internet subscriptions	87	23.29 ○
1.1.4 Population covered by at least a 3G mobile network	60	88.89 ○
1.1.5 International Internet bandwidth	92	66.78 ○
1.1.6 Internet access in schools	45	92.01
2nd sub-pillar: Content	19	49.01
1.2.1 GitHub commits	7	83.42 ●
1.2.2 Internet domain registrations	37	16.62
1.2.3 Mobile apps development	3	85.07 ●
1.2.4 AI scientific publications	54	10.92
3rd sub-pillar: Future Technologies	43	43.28
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	2	96.25 ●
1.3.3 Robot density	26	11.37
1.3.4 Computer software spending	65	22.23 ○
B. People pillar	5	68.91
1st sub-pillar: Individuals	11	68.17
2.1.1 Mobile broadband internet traffic within the country	50	18.65
2.1.2 ICT skills in the education system	3	88.78 ●
2.1.3 Use of virtual social networks	35	65.26
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	1	100.00 ●
2nd sub-pillar: Businesses	7	65.00
2.2.1 Firms with website	60	56.42
2.2.2 Number of venture capital deals invested in AI	1	100.00 ●
2.2.3 Annual investment in telecommunication services	44	57.20
2.2.4 Public cloud computing market scale	16	46.38
3rd sub-pillar: Governments	5	73.55
2.3.1 Government online services	21	86.13
2.3.2 Data Capabilities	36	46.44
2.3.3 Government promotion of investment in emerging technologies	25	61.64
2.3.4 R&D expenditure by governments and higher education	1	100.00 ●

Indicator	Rank	Score
C. Governance pillar	29	77.76
1st sub-pillar: Trust	36	71.37
3.1.1 Secure Internet servers	42	75.18
3.1.2 Cybersecurity	44	90.92
3.1.3 Online access to financial account	38	61.11
3.1.4 Internet shopping	37	58.28
2nd sub-pillar: Regulation	21	84.00
3.2.1 Regulatory quality	24	76.34
3.2.2 ICT regulatory environment	93	69.64 ○
3.2.3 Regulation of emerging technologies	4	92.28 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	35	81.75
3rd sub-pillar: Inclusion	26	77.90
3.3.1 E-Participation	37	70.93
3.3.2 Socioeconomic gap in use of digital payments	36	89.70
3.3.3 Availability of local online content	5	95.91 ●
3.3.4 Gender gap in Internet use	30	70.35
3.3.5 Rural gap in use of digital payments	67	62.61 ○
D. Impact pillar	4	80.00
1st sub-pillar: Economy	1	86.09
4.1.1 ICT patent applications	6	99.66 ●
4.1.2 Domestic market scale	47	60.38
4.1.3 Prevalence of gig economy	8	84.30 ●
4.1.4 ICT services exports	1	100.00 ●
2nd sub-pillar: Quality of Life	35	76.47
4.2.1 Happiness	20	79.71
4.2.2 Freedom to make life choices	76	71.57 ○
4.2.3 Income inequality	77	64.52 ○
4.2.4 Healthy life expectancy at birth	16	91.75
3rd sub-pillar: SDG Contribution	33	77.44
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	36	53.00
4.3.3 SDG 5: Women's economic opportunity	83	73.50 ○
4.3.4 SDG 7: Affordable and Clean Energy	18	90.50
4.3.5 SDG 11: Sustainable Cities and Communities	10	95.18

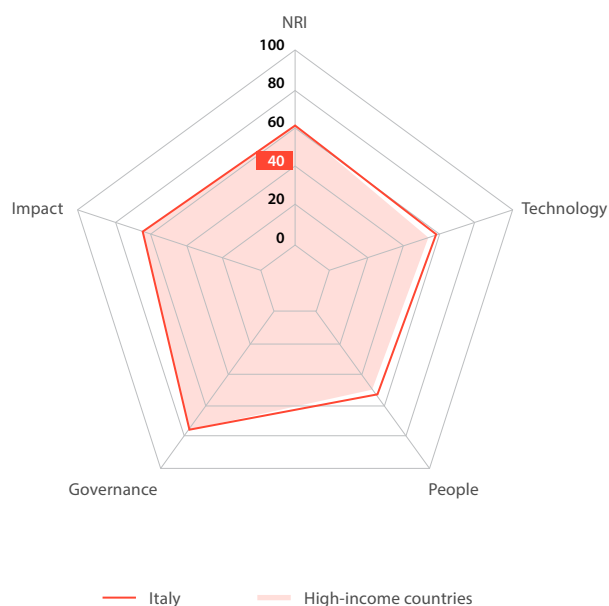
NOTE: ● Indicates a strength and ○ a weakness.

Italy

Rank Score
(Out of 133)

Network Readiness Index 26 63.60

Pillar/sub-pillar	Rank	Score
A. Technology pillar	24	57.84
1st sub-pillar: Access	35	75.49
2nd sub-pillar: Content	30	44.87
3rd sub-pillar: Future Technologies	25	53.15
B. People pillar	21	54.87
1st sub-pillar: Individuals	30	57.00
2nd sub-pillar: Businesses	26	51.47
3rd sub-pillar: Governments	25	56.15
C. Governance pillar	28	77.92
1st sub-pillar: Trust	30	75.07
2nd sub-pillar: Regulation	27	81.49
3rd sub-pillar: Inclusion	29	77.22
D. Impact pillar	34	63.75
1st sub-pillar: Economy	37	40.21
2nd sub-pillar: Quality of Life	64	68.50
3rd sub-pillar: SDG Contribution	19	82.55



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	24	57.84
1st sub-pillar: Access	35	75.49
1.1.1 Mobile tariffs	13	86.72 ●
1.1.2 Handset prices	44	81.60
1.1.3 FTTH/building Internet subscriptions	35	41.43
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	53	73.21
1.1.6 Internet access in schools	55	70.00 ○
2nd sub-pillar: Content	30	44.87
1.2.1 GitHub commits	44	20.24
1.2.2 Internet domain registrations	29	23.82
1.2.3 Mobile apps development	60	66.55 ○
1.2.4 AI scientific publications	12	68.86 ●
3rd sub-pillar: Future Technologies	25	53.15
1.3.1 Adoption of emerging technologies	26	77.91
1.3.2 Investment in emerging technologies	61	41.00 ○
1.3.3 Robot density	14	29.57
1.3.4 Computer software spending	6	64.12 ●
B. People pillar	21	54.87
1st sub-pillar: Individuals	30	57.00
2.1.1 Mobile broadband internet traffic within the country	10	47.97 ●
2.1.2 ICT skills in the education system	45	62.68
2.1.3 Use of virtual social networks	43	63.30
2.1.4 Adult literacy rate	17	99.05
2.1.5 AI talent concentration	32	12.02 ○
2nd sub-pillar: Businesses	26	51.47
2.2.1 Firms with website	35	70.91
2.2.2 Number of venture capital deals invested in AI	51	5.51 ○
2.2.3 Annual investment in telecommunication services	8	75.64 ●
2.2.4 Public cloud computing market scale	12	53.83 ●
3rd sub-pillar: Governments	25	56.15
2.3.1 Government online services	23	85.18
2.3.2 Data Capabilities	28	52.77
2.3.3 Government promotion of investment in emerging technologies	28	60.08
2.3.4 R&D expenditure by governments and higher education	27	26.56

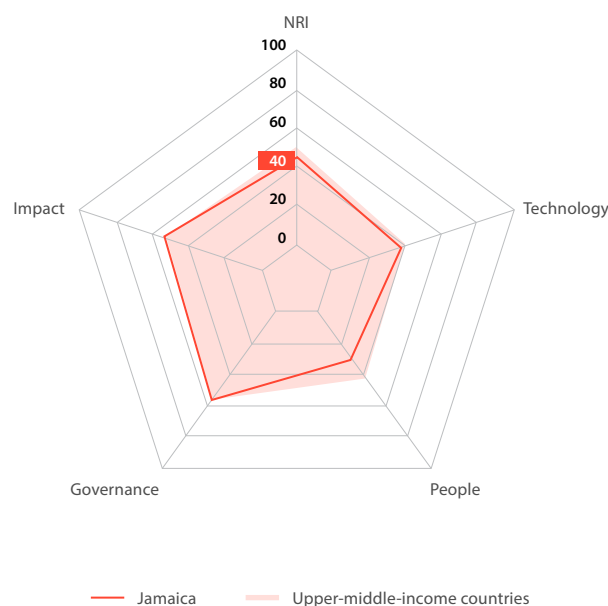
Indicator	Rank	Score
C. Governance pillar	28	77.92
1st sub-pillar: Trust	30	75.07
3.1.1 Secure Internet servers	35	79.29
3.1.2 Cybersecurity	27	96.17
3.1.3 Online access to financial account	40	60.61
3.1.4 Internet shopping	29	64.19
2nd sub-pillar: Regulation	27	81.49
3.2.1 Regulatory quality	46	60.02
3.2.2 ICT regulatory environment	1	100.00 ●
3.2.3 Regulation of emerging technologies	38	64.91
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	33	82.51
3rd sub-pillar: Inclusion	29	77.22
3.3.1 E-Participation	32	72.10
3.3.2 Socioeconomic gap in use of digital payments	28	92.67
3.3.3 Availability of local online content	41	75.00
3.3.4 Gender gap in Internet use	63	66.56 ○
3.3.5 Rural gap in use of digital payments	6	79.77 ●
D. Impact pillar	34	63.75
1st sub-pillar: Economy	37	40.21
4.1.1 ICT patent applications	27	11.05
4.1.2 Domestic market scale	13	77.57 ●
4.1.3 Prevalence of gig economy	32	61.34
4.1.4 ICT services exports	72	10.90 ○
2nd sub-pillar: Quality of Life	64	68.50
4.2.1 Happiness	50	67.78
4.2.2 Freedom to make life choices	112	54.89 ○
4.2.3 Income inequality	55	72.49 ○
4.2.4 Healthy life expectancy at birth	11	93.15 ●
3rd sub-pillar: SDG Contribution	19	82.55
4.3.1 SDG 3: Good Health and Well-Being	21	88.71
4.3.2 SDG 4: Quality Education	31	57.67
4.3.3 SDG 5: Women's economic opportunity	15	96.58
4.3.4 SDG 7: Affordable and Clean Energy	24	89.62
4.3.5 SDG 11: Sustainable Cities and Communities	30	83.93

NOTE: ● Indicates a strength and ○ a weakness.

Jamaica

	Rank (Out of 133)	Score
Network Readiness Index	93	42.50

Pillar/sub-pillar	Rank	Score
A. Technology pillar	86	36.06
1st sub-pillar: Access	87	56.72
2nd sub-pillar: Content	108	14.05
3rd sub-pillar: Future Technologies	59	37.41
B. People pillar	108	29.56
1st sub-pillar: Individuals	115	30.58
2nd sub-pillar: Businesses	117	24.11
3rd sub-pillar: Governments	82	33.99
C. Governance pillar	75	53.92
1st sub-pillar: Trust	105	27.96
2nd sub-pillar: Regulation	31	80.48
3rd sub-pillar: Inclusion	84	53.31
D. Impact pillar	89	50.48
1st sub-pillar: Economy	106	23.08
2nd sub-pillar: Quality of Life	70	67.24
3rd sub-pillar: SDG Contribution	84	61.10



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	86	36.06
1st sub-pillar: Access	87	56.72
1.1.1 Mobile tariffs	114	34.87 ○
1.1.2 Handset prices	91	45.69
1.1.3 FTTH/building Internet subscriptions	77	26.64
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	98	65.42
1.1.6 Internet access in schools	51	78.83
2nd sub-pillar: Content	108	14.05
1.2.1 GitHub commits	93	3.18
1.2.2 Internet domain registrations	91	1.32
1.2.3 Mobile apps development	101	51.18 ○
1.2.4 AI scientific publications	119	0.51 ○
3rd sub-pillar: Future Technologies	59	37.41
1.3.1 Adoption of emerging technologies	89	42.13 ○
1.3.2 Investment in emerging technologies	70	38.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	32	32.11 ●
B. People pillar	108	29.56
1st sub-pillar: Individuals	115	30.58
2.1.1 Mobile broadband internet traffic within the country	84	6.57
2.1.2 ICT skills in the education system	97	36.75 ○
2.1.3 Use of virtual social networks	77	48.41
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	117	24.11
2.2.1 Firms with website	104	25.16 ○
2.2.2 Number of venture capital deals invested in AI	25	21.09 ●
2.2.3 Annual investment in telecommunication services	94	43.71
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	82	33.99
2.3.1 Government online services	99	43.79
2.3.2 Data Capabilities	71	22.15
2.3.3 Government promotion of investment in emerging technologies	64	36.03
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	75	53.92
1st sub-pillar: Trust	105	27.96
3.1.1 Secure Internet servers	96	40.89
3.1.2 Cybersecurity	106	32.50 ○
3.1.3 Online access to financial account	93	20.52
3.1.4 Internet shopping	75	17.93
2nd sub-pillar: Regulation	31	80.48
3.2.1 Regulatory quality	60	52.49 ●
3.2.2 ICT regulatory environment	88	73.21
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	7	96.22 ●
3rd sub-pillar: Inclusion	84	53.31
3.3.1 E-Participation	105	26.75 ○
3.3.2 Socioeconomic gap in use of digital payments	90	56.09
3.3.3 Availability of local online content	66	60.34 ●
3.3.4 Gender gap in Internet use	3	82.51 ●
3.3.5 Rural gap in use of digital payments	99	40.88
D. Impact pillar	89	50.48
1st sub-pillar: Economy	106	23.08
4.1.1 ICT patent applications	53	0.73
4.1.2 Domestic market scale	122	33.48 ○
4.1.3 Prevalence of gig economy	55	44.77 ●
4.1.4 ICT services exports	65	13.36 ●
2nd sub-pillar: Quality of Life	70	67.24
4.2.1 Happiness	68	59.48
4.2.2 Freedom to make life choices	39	84.66 ●
4.2.3 Income inequality	84	58.61
4.2.4 Healthy life expectancy at birth	88	56.58
3rd sub-pillar: SDG Contribution	84	61.10
4.3.1 SDG 3: Good Health and Well-Being	64	72.58
4.3.2 SDG 4: Quality Education	63	24.51
4.3.3 SDG 5: Women's economic opportunity	106	64.96 ○
4.3.4 SDG 7: Affordable and Clean Energy	67	79.82 ●
4.3.5 SDG 11: Sustainable Cities and Communities	42	77.67 ●

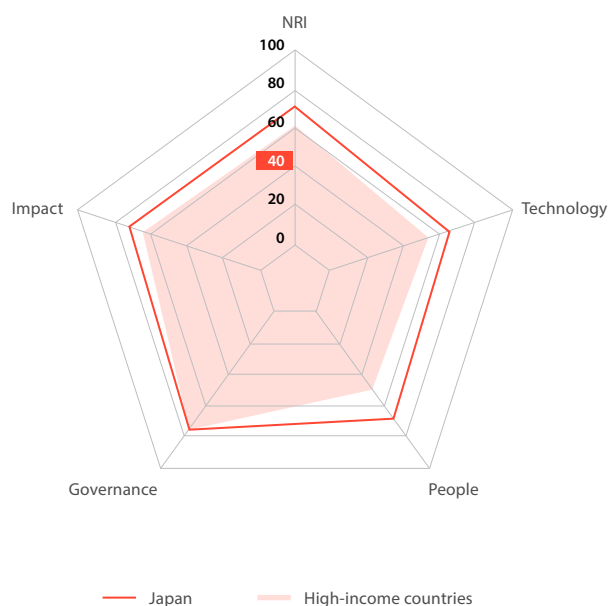
NOTE: ● Indicates a strength and ○ a weakness.

Japan

Rank Score
(Out of 133)

Network Readiness Index **12** **70.96**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	14	63.78
1st sub-pillar: Access	7	82.85
2nd sub-pillar: Content	32	44.34
3rd sub-pillar: Future Technologies	11	64.14
B. People pillar	4	69.33
1st sub-pillar: Individuals	3	77.44
2nd sub-pillar: Businesses	8	63.76
3rd sub-pillar: Governments	13	66.79
C. Governance pillar	26	79.36
1st sub-pillar: Trust	40	70.23
2nd sub-pillar: Regulation	24	82.97
3rd sub-pillar: Inclusion	7	84.87
D. Impact pillar	15	71.39
1st sub-pillar: Economy	10	60.84
2nd sub-pillar: Quality of Life	46	72.41
3rd sub-pillar: SDG Contribution	27	80.91



The Network Readiness Index in detail

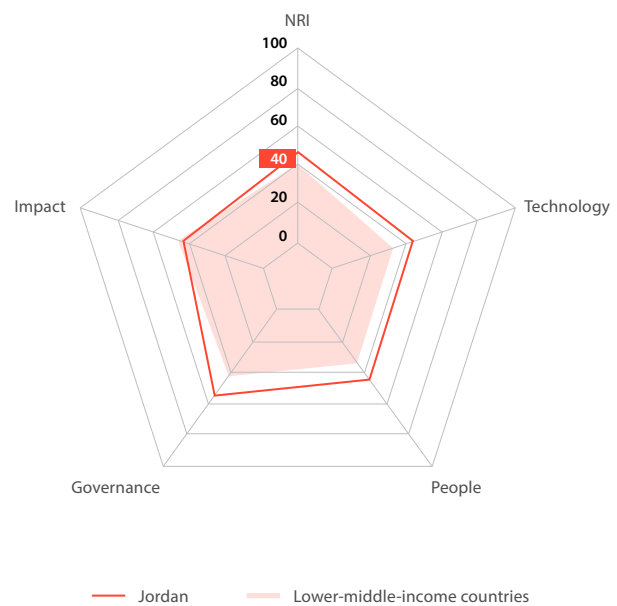
Indicator	Rank	Score
A. Technology pillar	14	63.78
1st sub-pillar: Access	7	82.85
1.1.1 Mobile tariffs	44	74.35
1.1.2 Handset prices	9	98.29
1.1.3 FTTH/building Internet subscriptions	8	65.34
1.1.4 Population covered by at least a 3G mobile network	29	98.83
1.1.5 International Internet bandwidth	32	77.40
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	32	44.34
1.2.1 GitHub commits	40	24.66
1.2.2 Internet domain registrations	42	11.05
1.2.3 Mobile apps development	41	71.04
1.2.4 AI scientific publications	11	70.60
3rd sub-pillar: Future Technologies	11	64.14
1.3.1 Adoption of emerging technologies	10	91.43
1.3.2 Investment in emerging technologies	9	80.00
1.3.3 Robot density	5	54.36
1.3.4 Computer software spending	34	30.78
B. People pillar	4	69.33
1st sub-pillar: Individuals	3	77.44
2.1.1 Mobile broadband internet traffic within the country	7	60.19 ●
2.1.2 ICT skills in the education system	14	81.30
2.1.3 Use of virtual social networks	29	68.26
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	1	100.00 ●
2nd sub-pillar: Businesses	8	63.76
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	14	34.93
2.2.3 Annual investment in telecommunication services	3	89.49 ●
2.2.4 Public cloud computing market scale	5	66.85 ●
3rd sub-pillar: Governments	13	66.79
2.3.1 Government online services	10	89.99
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	34	51.15
2.3.4 R&D expenditure by governments and higher education	5	59.24 ●

Indicator	Rank	Score
C. Governance pillar	26	79.36
1st sub-pillar: Trust	40	70.23
3.1.1 Secure Internet servers	30	80.09
3.1.2 Cybersecurity	12	97.83
3.1.3 Online access to financial account	61	42.67 ○
3.1.4 Internet shopping	32	60.33
2nd sub-pillar: Regulation	24	82.97
3.2.1 Regulatory quality	17	81.79
3.2.2 ICT regulatory environment	93	69.64 ○
3.2.3 Regulation of emerging technologies	26	74.91
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	18	88.50
3rd sub-pillar: Inclusion	7	84.87
3.3.1 E-Participation	1	100.00 ●
3.3.2 Socioeconomic gap in use of digital payments	21	96.17
3.3.3 Availability of local online content	2	97.60 ●
3.3.4 Gender gap in Internet use	82	58.83 ○
3.3.5 Rural gap in use of digital payments	41	71.73
D. Impact pillar	15	71.39
1st sub-pillar: Economy	10	60.84
4.1.1 ICT patent applications	1	100.00 ●
4.1.2 Domestic market scale	4	84.40 ●
4.1.3 Prevalence of gig economy	49	50.29 ○
4.1.4 ICT services exports	79	8.68 ○
2nd sub-pillar: Quality of Life	46	72.41
4.2.1 Happiness	65	60.36 ○
4.2.2 Freedom to make life choices	81	68.18 ○
4.2.3 Income inequality	39	77.38
4.2.4 Healthy life expectancy at birth	1	100.00 ●
3rd sub-pillar: SDG Contribution	27	80.91
4.3.1 SDG 3: Good Health and Well-Being	24	87.10
4.3.2 SDG 4: Quality Education	3	80.82 ●
4.3.3 SDG 5: Women's economic opportunity	93	70.94 ○
4.3.4 SDG 7: Affordable and Clean Energy	45	84.21 ○
4.3.5 SDG 11: Sustainable Cities and Communities	22	88.26

NOTE: ● Indicates a strength and ○ a weakness.

Jordan

	Rank (Out of 133)	Score
Network Readiness Index	74	47.04
Pillar/sub-pillar	Rank	Score
A. Technology pillar	58	44.69
1st sub-pillar: Access	88	56.33
2nd sub-pillar: Content	65	25.71
3rd sub-pillar: Future Technologies	27	52.04
B. People pillar	48	45.68
1st sub-pillar: Individuals	21	59.36
2nd sub-pillar: Businesses	71	34.61
3rd sub-pillar: Governments	58	43.09
C. Governance pillar	73	55.22
1st sub-pillar: Trust	94	34.06
2nd sub-pillar: Regulation	83	63.49
3rd sub-pillar: Inclusion	53	68.11
D. Impact pillar	112	42.55
1st sub-pillar: Economy	91	26.35
2nd sub-pillar: Quality of Life	104	50.20
3rd sub-pillar: SDG Contribution	114	51.09



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	58	44.69
1st sub-pillar: Access	88	56.33
1.1.1 Mobile tariffs	107	41.03 ○
1.1.2 Handset prices	72	60.63
1.1.3 FTTH/building Internet subscriptions	48	35.74
1.1.4 Population covered by at least a 3G mobile network	52	94.30
1.1.5 International Internet bandwidth	46	74.75
1.1.6 Internet access in schools	74	31.56 ○
2nd sub-pillar: Content	65	25.71
1.2.1 GitHub commits	79	4.58
1.2.2 Internet domain registrations	80	2.02
1.2.3 Mobile apps development	27	73.59 ●
1.2.4 AI scientific publications	36	22.64 ●
3rd sub-pillar: Future Technologies	27	52.04
1.3.1 Adoption of emerging technologies	29	76.84 ●
1.3.2 Investment in emerging technologies	44	49.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	35	30.03 ●
B. People pillar	48	45.68
1st sub-pillar: Individuals	21	59.36
2.1.1 Mobile broadband internet traffic within the country	48	19.31
2.1.2 ICT skills in the education system	22	77.52 ●
2.1.3 Use of virtual social networks	79	47.75
2.1.4 Adult literacy rate	51	92.84
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	71	34.61
2.2.1 Firms with website	32	74.39 ●
2.2.2 Number of venture capital deals invested in AI	55	4.57
2.2.3 Annual investment in telecommunication services	72	48.78
2.2.4 Public cloud computing market scale	79	10.68
3rd sub-pillar: Governments	58	43.09
2.3.1 Government online services	73	62.36
2.3.2 Data Capabilities	65	25.98
2.3.3 Government promotion of investment in emerging technologies	19	71.67 ●
2.3.4 R&D expenditure by governments and higher education	50	12.36

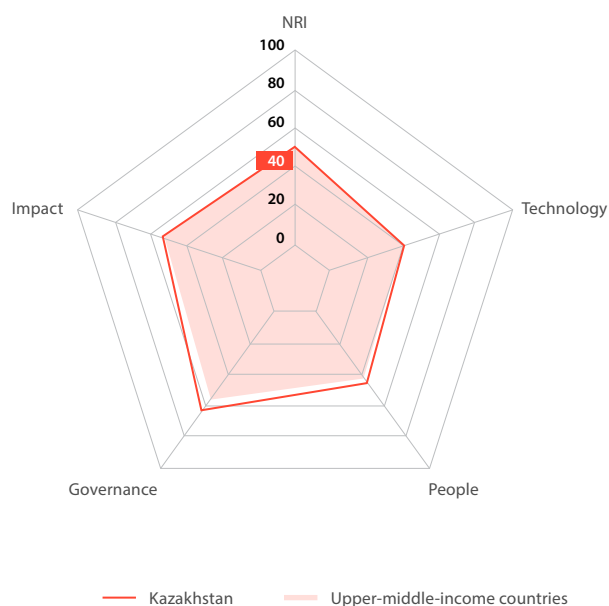
Indicator	Rank	Score
C. Governance pillar	73	55.22
1st sub-pillar: Trust	94	34.06
3.1.1 Secure Internet servers	99	38.62
3.1.2 Cybersecurity	78	70.92
3.1.3 Online access to financial account	108	10.85 ○
3.1.4 Internet shopping	79	15.85
2nd sub-pillar: Regulation	83	63.49
3.2.1 Regulatory quality	64	51.70
3.2.2 ICT regulatory environment	65	83.93
3.2.3 Regulation of emerging technologies	45	59.24
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	107	47.57 ○
3rd sub-pillar: Inclusion	53	68.11
3.3.1 E-Participation	67	53.49
3.3.2 Socioeconomic gap in use of digital payments	95	54.42
3.3.3 Availability of local online content	42	74.52 ●
3.3.4 Gender gap in Internet use	84	58.09 ○
3.3.5 Rural gap in use of digital payments	1	100.00 ●
D. Impact pillar	112	42.55
1st sub-pillar: Economy	91	26.35
4.1.1 ICT patent applications	55	0.55
4.1.2 Domestic market scale	85	46.72
4.1.3 Prevalence of gig economy	38	57.27 ●
4.1.4 ICT services exports	129	0.84 ○
2nd sub-pillar: Quality of Life	104	50.20
4.2.1 Happiness	114	24.51 ○
4.2.2 Freedom to make life choices	91	64.35
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	44	73.29
3rd sub-pillar: SDG Contribution	114	51.09
4.3.1 SDG 3: Good Health and Well-Being	90	58.06
4.3.2 SDG 4: Quality Education	78	9.05 ○
4.3.3 SDG 5: Women's economic opportunity	123	44.44 ○
4.3.4 SDG 7: Affordable and Clean Energy	51	83.19
4.3.5 SDG 11: Sustainable Cities and Communities	44	77.30

Kazakhstan

Rank Score
(Out of 133)

Network Readiness Index 61 50.52

Pillar/sub-pillar	Rank	Score
A. Technology pillar	81	38.29
1st sub-pillar: Access	56	68.65
2nd sub-pillar: Content	85	19.64
3rd sub-pillar: Future Technologies	100	26.59
B. People pillar	53	44.56
1st sub-pillar: Individuals	34	56.21
2nd sub-pillar: Businesses	99	28.74
3rd sub-pillar: Governments	36	48.74
C. Governance pillar	53	65.06
1st sub-pillar: Trust	47	66.25
2nd sub-pillar: Regulation	106	54.73
3rd sub-pillar: Inclusion	39	74.19
D. Impact pillar	66	54.15
1st sub-pillar: Economy	95	25.84
2nd sub-pillar: Quality of Life	34	76.69
3rd sub-pillar: SDG Contribution	90	59.93



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	81	38.29
1st sub-pillar: Access	56	68.65
1.1.1 Mobile tariffs	17	84.81 ●
1.1.2 Handset prices	62	66.16
1.1.3 FTTH/building Internet subscriptions	41	38.64
1.1.4 Population covered by at least a 3G mobile network	87	76.14
1.1.5 International Internet bandwidth	30	77.51 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	85	19.64
1.2.1 GitHub commits	70	5.79
1.2.2 Internet domain registrations	77	2.25
1.2.3 Mobile apps development	66	65.00
1.2.4 AI scientific publications	72	5.50
3rd sub-pillar: Future Technologies	100	26.59
1.3.1 Adoption of emerging technologies	91	41.78 ○
1.3.2 Investment in emerging technologies	73	37.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	125	0.99 ○
B. People pillar	53	44.56
1st sub-pillar: Individuals	34	56.21
2.1.1 Mobile broadband internet traffic within the country	27	34.00 ●
2.1.2 ICT skills in the education system	109	28.97 ○
2.1.3 Use of virtual social networks	49	62.08
2.1.4 Adult literacy rate	6	99.78 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	99	28.74
2.2.1 Firms with website	75	42.09
2.2.2 Number of venture capital deals invested in AI	68	2.32 ○
2.2.3 Annual investment in telecommunication services	83	45.96
2.2.4 Public cloud computing market scale	50	24.59
3rd sub-pillar: Governments	36	48.74
2.3.1 Government online services	8	92.75 ●
2.3.2 Data Capabilities	25	54.05 ●
2.3.3 Government promotion of investment in emerging technologies	41	45.98
2.3.4 R&D expenditure by governments and higher education	101	2.16 ○

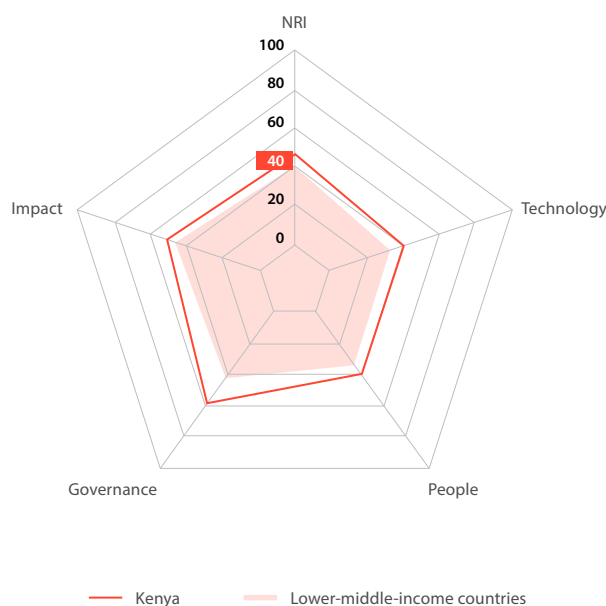
Indicator	Rank	Score
C. Governance pillar	53	65.06
1st sub-pillar: Trust	47	66.25
3.1.1 Secure Internet servers	52	64.66
3.1.2 Cybersecurity	38	93.17
3.1.3 Online access to financial account	34	63.62
3.1.4 Internet shopping	49	43.53
2nd sub-pillar: Regulation	106	54.73
3.2.1 Regulatory quality	71	47.76
3.2.2 ICT regulatory environment	129	45.24 ○
3.2.3 Regulation of emerging technologies	72	45.92
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	119	34.75 ○
3rd sub-pillar: Inclusion	39	74.19
3.3.1 E-Participation	15	80.23 ●
3.3.2 Socioeconomic gap in use of digital payments	9	98.66 ●
3.3.3 Availability of local online content	71	59.86
3.3.4 Gender gap in Internet use	70	65.95
3.3.5 Rural gap in use of digital payments	58	66.23
D. Impact pillar	66	54.15
1st sub-pillar: Economy	95	25.84
4.1.1 ICT patent applications	68	0.12 ○
4.1.2 Domestic market scale	40	62.29
4.1.3 Prevalence of gig economy	76	35.76
4.1.4 ICT services exports	94	5.20
2nd sub-pillar: Quality of Life	34	76.69
4.2.1 Happiness	45	68.99
4.2.2 Freedom to make life choices	27	89.14 ●
4.2.3 Income inequality	17	86.89 ●
4.2.4 Healthy life expectancy at birth	86	57.00
3rd sub-pillar: SDG Contribution	90	59.93
4.3.1 SDG 3: Good Health and Well-Being	37	82.26
4.3.2 SDG 4: Quality Education	52	30.71
4.3.3 SDG 5: Women's economic opportunity	101	66.67 ○
4.3.4 SDG 7: Affordable and Clean Energy	103	65.50 ○
4.3.5 SDG 11: Sustainable Cities and Communities	56	71.43

NOTE: ● Indicates a strength and ○ a weakness.

Kenya

	Rank (Out of 133)	Score
Network Readiness Index	73	47.06

Pillar/sub-pillar	Rank	Score
A. Technology pillar	73	41.09
1st sub-pillar: Access	82	59.12
2nd sub-pillar: Content	83	20.69
3rd sub-pillar: Future Technologies	42	43.45
B. People pillar	89	37.85
1st sub-pillar: Individuals	89	43.29
2nd sub-pillar: Businesses	89	31.38
3rd sub-pillar: Governments	65	38.89
C. Governance pillar	68	57.77
1st sub-pillar: Trust	71	48.38
2nd sub-pillar: Regulation	60	68.39
3rd sub-pillar: Inclusion	76	56.56
D. Impact pillar	82	51.51
1st sub-pillar: Economy	40	39.92
2nd sub-pillar: Quality of Life	109	48.22
3rd sub-pillar: SDG Contribution	65	66.39



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	73	41.09
1st sub-pillar: Access	82	59.12
1.1.1 Mobile tariffs	73	61.79
1.1.2 Handset prices	128	18.13 ○
1.1.3 FTTH/building Internet subscriptions	28	45.74 ●
1.1.4 Population covered by at least a 3G mobile network	81	78.92
1.1.5 International Internet bandwidth	5	91.04 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	83	20.69
1.2.1 GitHub commits	55	10.01
1.2.2 Internet domain registrations	98	0.88 ○
1.2.3 Mobile apps development	90	56.55
1.2.4 AI scientific publications	45	15.31 ●
3rd sub-pillar: Future Technologies	42	43.45
1.3.1 Adoption of emerging technologies	71	56.41
1.3.2 Investment in emerging technologies	32	60.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	83	13.95
B. People pillar	89	37.85
1st sub-pillar: Individuals	89	43.29
2.1.1 Mobile broadband internet traffic within the country	62	13.10
2.1.2 ICT skills in the education system	40	67.54 ●
2.1.3 Use of virtual social networks	110	17.13 ○
2.1.4 Adult literacy rate	74	75.37
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	89	31.38
2.2.1 Firms with website	83	38.34
2.2.2 Number of venture capital deals invested in AI	47	7.20
2.2.3 Annual investment in telecommunication services	51	54.59 ●
2.2.4 Public cloud computing market scale	47	25.37 ●
3rd sub-pillar: Governments	65	38.89
2.3.1 Government online services	68	64.87
2.3.2 Data Capabilities	89	10.84 ○
2.3.3 Government promotion of investment in emerging technologies	50	40.97
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	68	57.77
1st sub-pillar: Trust	71	48.38
3.1.1 Secure Internet servers	87	43.98
3.1.2 Cybersecurity	59	81.67
3.1.3 Online access to financial account	51	49.65
3.1.4 Internet shopping	74	18.23
2nd sub-pillar: Regulation	60	68.39
3.2.1 Regulatory quality	91	39.08
3.2.2 ICT regulatory environment	34	89.29 ●
3.2.3 Regulation of emerging technologies	75	44.45
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	67	69.12
3rd sub-pillar: Inclusion	76	56.56
3.3.1 E-Participation	64	56.97
3.3.2 Socioeconomic gap in use of digital payments	69	72.59
3.3.3 Availability of local online content	82	51.44
3.3.4 Gender gap in Internet use	98	36.09 ○
3.3.5 Rural gap in use of digital payments	60	65.69
D. Impact pillar	82	51.51
1st sub-pillar: Economy	40	39.92
4.1.1 ICT patent applications	71	0.08 ○
4.1.2 Domestic market scale	57	55.92
4.1.3 Prevalence of gig economy	40	56.10 ●
4.1.4 ICT services exports	17	47.58 ●
2nd sub-pillar: Quality of Life	109	48.22
4.2.1 Happiness	105	29.03 ○
4.2.2 Freedom to make life choices	102	61.22 ○
4.2.3 Income inequality	79	62.47
4.2.4 Healthy life expectancy at birth	105	46.33 ○
3rd sub-pillar: SDG Contribution	65	66.39
4.3.1 SDG 3: Good Health and Well-Being	105	38.71 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	71	77.78
4.3.4 SDG 7: Affordable and Clean Energy	90	73.17
4.3.5 SDG 11: Sustainable Cities and Communities	79	57.73

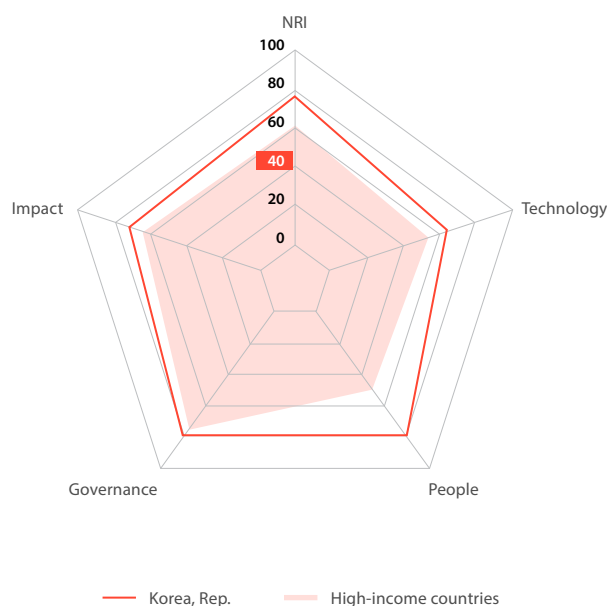
NOTE: ● Indicates a strength and ○ a weakness.

Korea, Rep.

Rank Score
(Out of 133)

Network Readiness Index 5 74.85

Pillar/sub-pillar	Rank	Score
A. Technology pillar	10	66.78
1st sub-pillar: Access	14	79.89
2nd sub-pillar: Content	18	49.98
3rd sub-pillar: Future Technologies	5	70.46
B. People pillar	1	79.28
1st sub-pillar: Individuals	1	81.87
2nd sub-pillar: Businesses	2	70.95
3rd sub-pillar: Governments	1	85.02
C. Governance pillar	22	80.93
1st sub-pillar: Trust	9	86.29
2nd sub-pillar: Regulation	41	75.88
3rd sub-pillar: Inclusion	18	80.62
D. Impact pillar	13	72.40
1st sub-pillar: Economy	8	64.29
2nd sub-pillar: Quality of Life	44	72.74
3rd sub-pillar: SDG Contribution	28	80.16



The Network Readiness Index in detail

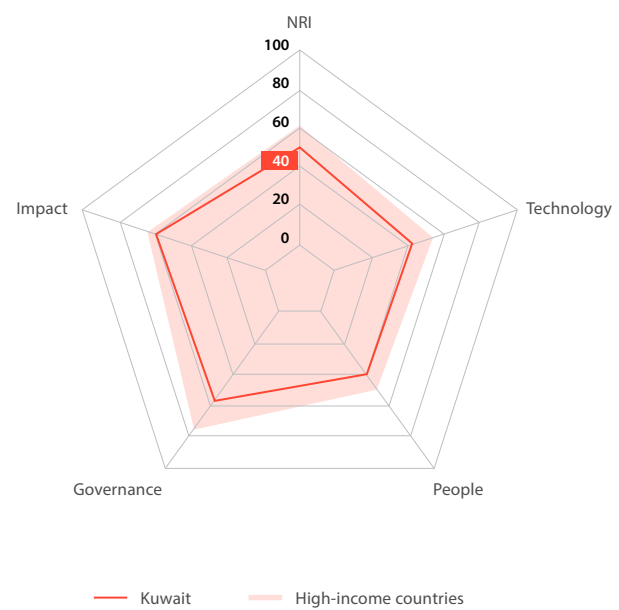
Indicator	Rank	Score
A. Technology pillar	10	66.78
1st sub-pillar: Access	14	79.89
1.1.1 Mobile tariffs	74	61.23 ○
1.1.2 Handset prices	45	81.32
1.1.3 FTTH/building Internet subscriptions	13	58.48
1.1.4 Population covered by at least a 3G mobile network	29	98.83
1.1.5 International Internet bandwidth	23	79.50
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	18	49.98
1.2.1 GitHub commits	20	56.13
1.2.2 Internet domain registrations	48	8.04
1.2.3 Mobile apps development	18	74.73
1.2.4 AI scientific publications	15	61.03
3rd sub-pillar: Future Technologies	5	70.46
1.3.1 Adoption of emerging technologies	1	100.00 ●
1.3.2 Investment in emerging technologies	34	59.50
1.3.3 Robot density	1	100.00 ●
1.3.4 Computer software spending	64	22.34 ○
B. People pillar	1	79.28
1st sub-pillar: Individuals	1	81.87
2.1.1 Mobile broadband internet traffic within the country	15	45.18
2.1.2 ICT skills in the education system	10	83.32
2.1.3 Use of virtual social networks	6	82.58 ●
2.1.4 Adult literacy rate	23	98.25
2.1.5 AI talent concentration	1	100.00 ●
2nd sub-pillar: Businesses	2	70.95
2.2.1 Firms with website	40	66.03
2.2.2 Number of venture capital deals invested in AI	1	100.00 ●
2.2.3 Annual investment in telecommunication services	9	74.35
2.2.4 Public cloud computing market scale	21	43.44
3rd sub-pillar: Governments	1	85.02
2.3.1 Government online services	3	98.08 ●
2.3.2 Data Capabilities	2	86.13 ●
2.3.3 Government promotion of investment in emerging technologies	21	67.16
2.3.4 R&D expenditure by governments and higher education	2	88.70 ●

Indicator	Rank	Score
C. Governance pillar	22	80.93
1st sub-pillar: Trust	9	86.29
3.1.1 Secure Internet servers	48	69.34
3.1.2 Cybersecurity	5	98.50
3.1.3 Online access to financial account	8	87.41
3.1.4 Internet shopping	5	89.92 ●
2nd sub-pillar: Regulation	41	75.88
3.2.1 Regulatory quality	28	74.90
3.2.2 ICT regulatory environment	105	65.71 ○
3.2.3 Regulation of emerging technologies	32	67.11
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	61	71.68 ○
3rd sub-pillar: Inclusion	18	80.62
3.3.1 E-Participation	9	94.19
3.3.2 Socioeconomic gap in use of digital payments	26	93.43
3.3.3 Availability of local online content	32	81.01
3.3.4 Gender gap in Internet use	53	67.80 ○
3.3.5 Rural gap in use of digital payments	56	66.67 ○
D. Impact pillar	13	72.40
1st sub-pillar: Economy	8	64.29
4.1.1 ICT patent applications	1	100.00 ●
4.1.2 Domestic market scale	14	76.72
4.1.3 Prevalence of gig economy	20	68.31
4.1.4 ICT services exports	67	12.14 ○
2nd sub-pillar: Quality of Life	44	72.74
4.2.1 Happiness	56	64.83
4.2.2 Freedom to make life choices	87	65.70 ○
4.2.3 Income inequality	39	77.38
4.2.4 Healthy life expectancy at birth	3	98.00 ●
3rd sub-pillar: SDG Contribution	28	80.16
4.3.1 SDG 3: Good Health and Well-Being	2	96.77 ●
4.3.2 SDG 4: Quality Education	4	77.02 ●
4.3.3 SDG 5: Women's economic opportunity	52	83.76
4.3.4 SDG 7: Affordable and Clean Energy	97	69.08 ○
4.3.5 SDG 11: Sustainable Cities and Communities	29	84.81

NOTE: ● Indicates a strength and ○ a weakness.

Kuwait

	Rank (Out of 133)	Score
Network Readiness Index	67	49.30
Pillar/sub-pillar	Rank	Score
A. Technology pillar	68	43.06
1st sub-pillar: Access	53	69.39
2nd sub-pillar: Content	91	17.99
3rd sub-pillar: Future Technologies	46	41.80
B. People pillar	70	40.55
1st sub-pillar: Individuals	19	61.72
2nd sub-pillar: Businesses	102	27.35
3rd sub-pillar: Governments	88	32.59
C. Governance pillar	71	55.79
1st sub-pillar: Trust	69	48.59
2nd sub-pillar: Regulation	84	63.41
3rd sub-pillar: Inclusion	79	55.39
D. Impact pillar	50	57.80
1st sub-pillar: Economy	48	38.36
2nd sub-pillar: Quality of Life	9	87.06
3rd sub-pillar: SDG Contribution	118	47.97



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	68	43.06
1st sub-pillar: Access	53	69.39
1.1.1 Mobile tariffs	61	65.68
1.1.2 Handset prices	56	72.92
1.1.3 FTTH/building Internet subscriptions	122	4.97 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	55	72.75
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	91	17.99
1.2.1 GitHub commits	102	1.98 ○
1.2.2 Internet domain registrations	70	3.08
1.2.3 Mobile apps development	65	65.54
1.2.4 AI scientific publications	97	1.36
3rd sub-pillar: Future Technologies	46	41.80
1.3.1 Adoption of emerging technologies	99	33.55 ○
1.3.2 Investment in emerging technologies	57	42.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	22	49.34 ●
B. People pillar	70	40.55
1st sub-pillar: Individuals	19	61.72
2.1.1 Mobile broadband internet traffic within the country	30	30.80 ●
2.1.2 ICT skills in the education system	98	36.44 ○
2.1.3 Use of virtual social networks	3	84.93 ●
2.1.4 Adult literacy rate	43	94.71
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	102	27.35
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	96	43.05 ○
2.2.4 Public cloud computing market scale	78	11.66
3rd sub-pillar: Governments	88	32.59
2.3.1 Government online services	66	66.55
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	83	28.04
2.3.4 R&D expenditure by governments and higher education	91	3.18 ○

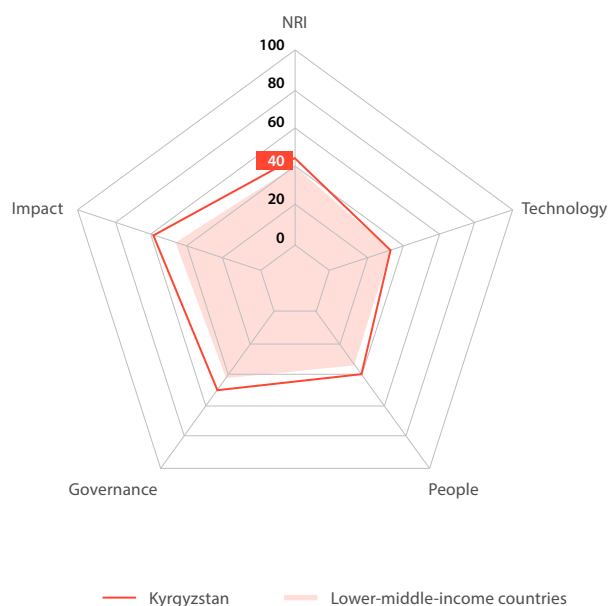
Indicator	Rank	Score
C. Governance pillar	71	55.79
1st sub-pillar: Trust	69	48.59
3.1.1 Secure Internet servers	78	47.92
3.1.2 Cybersecurity	73	75.08
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	65	22.76
2nd sub-pillar: Regulation	84	63.41
3.2.1 Regulatory quality	57	52.95
3.2.2 ICT regulatory environment	96	69.05
3.2.3 Regulation of emerging technologies	76	43.35
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	98	51.68
3rd sub-pillar: Inclusion	79	55.39
3.3.1 E-Participation	67	53.49
3.3.2 Socioeconomic gap in use of digital payments	63	76.49
3.3.3 Availability of local online content	48	68.51
3.3.4 Gender gap in Internet use	26	70.93 ●
3.3.5 Rural gap in use of digital payments	122	7.53 ○
D. Impact pillar	50	57.80
1st sub-pillar: Economy	48	38.36
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	64	53.22
4.1.3 Prevalence of gig economy	45	53.20
4.1.4 ICT services exports	18	47.04 ●
2nd sub-pillar: Quality of Life	9	87.06
4.2.1 Happiness	8	87.40 ●
4.2.2 Freedom to make life choices	30	88.60 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	30	83.29 ●
3rd sub-pillar: SDG Contribution	118	47.97
4.3.1 SDG 3: Good Health and Well-Being	45	79.03
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	130	15.38 ○
4.3.4 SDG 7: Affordable and Clean Energy	119	51.32 ○
4.3.5 SDG 11: Sustainable Cities and Communities	50	75.41

NOTE: ● Indicates a strength and ○ a weakness.

Kyrgyzstan

	Rank (Out of 133)	Score
Network Readiness Index	86	44.16

Pillar/sub-pillar	Rank	Score
A. Technology pillar	97	31.54
1st sub-pillar: Access	89	56.07
2nd sub-pillar: Content	90	18.58
3rd sub-pillar: Future Technologies	115	19.97
B. People pillar	80	39.00
1st sub-pillar: Individuals	58	49.90
2nd sub-pillar: Businesses	57	37.33
3rd sub-pillar: Governments	96	29.77
C. Governance pillar	89	49.69
1st sub-pillar: Trust	97	32.78
2nd sub-pillar: Regulation	111	52.70
3rd sub-pillar: Inclusion	58	63.59
D. Impact pillar	55	56.39
1st sub-pillar: Economy	107	22.97
2nd sub-pillar: Quality of Life	29	78.38
3rd sub-pillar: SDG Contribution	59	67.82



The Network Readiness Index in detail

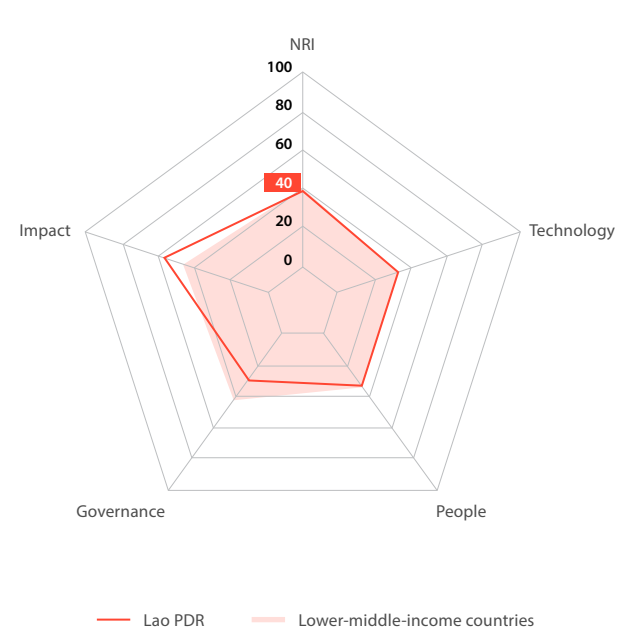
Indicator	Rank	Score
A. Technology pillar	97	31.54
1st sub-pillar: Access	89	56.07
1.1.1 Mobile tariffs	96	46.99
1.1.2 Handset prices	99	43.31
1.1.3 FTTH/building Internet subscriptions	39	39.13 ●
1.1.4 Population covered by at least a 3G mobile network	52	94.30 ●
1.1.5 International Internet bandwidth	65	71.31
1.1.6 Internet access in schools	67	41.37
2nd sub-pillar: Content	90	18.58
1.2.1 GitHub commits	61	8.31
1.2.2 Internet domain registrations	104	0.54
1.2.3 Mobile apps development	70	63.94
1.2.4 AI scientific publications	96	1.53
3rd sub-pillar: Future Technologies	115	19.97
1.3.1 Adoption of emerging technologies	97	36.26 ○
1.3.2 Investment in emerging technologies	119	19.25 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	106	4.39 ○
B. People pillar	80	39.00
1st sub-pillar: Individuals	58	49.90
2.1.1 Mobile broadband internet traffic within the country	49	18.85 ●
2.1.2 ICT skills in the education system	85	45.45
2.1.3 Use of virtual social networks	96	35.86
2.1.4 Adult literacy rate	11	99.44 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	57	37.33
2.2.1 Firms with website	47	63.50 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	88	45.29
2.2.4 Public cloud computing market scale	112	3.20 ○
3rd sub-pillar: Governments	96	29.77
2.3.1 Government online services	80	57.74
2.3.2 Data Capabilities	75	19.11 ○
2.3.3 Government promotion of investment in emerging technologies	51	40.80 ●
2.3.4 R&D expenditure by governments and higher education	106	1.42 ○

Indicator	Rank	Score
C. Governance pillar	89	49.69
1st sub-pillar: Trust	97	32.78
3.1.1 Secure Internet servers	77	48.21
3.1.2 Cybersecurity	96	49.67
3.1.3 Online access to financial account	90	22.38
3.1.4 Internet shopping	88	10.87
2nd sub-pillar: Regulation	111	52.70
3.2.1 Regulatory quality	105	33.17 ○
3.2.2 ICT regulatory environment	106	65.48 ○
3.2.3 Regulation of emerging technologies	91	32.43
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	89	57.43
3rd sub-pillar: Inclusion	58	63.59
3.3.1 E-Participation	78	48.84
3.3.2 Socioeconomic gap in use of digital payments	29	92.28 ●
3.3.3 Availability of local online content	98	41.35
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	40	71.88 ●
D. Impact pillar	55	56.39
1st sub-pillar: Economy	107	22.97
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	114	35.81 ○
4.1.3 Prevalence of gig economy	93	28.49
4.1.4 ICT services exports	95	4.62
2nd sub-pillar: Quality of Life	29	78.38
4.2.1 Happiness	66	60.35
4.2.2 Freedom to make life choices	5	96.35 ●
4.2.3 Income inequality	8	94.09 ●
4.2.4 Healthy life expectancy at birth	76	62.80
3rd sub-pillar: SDG Contribution	59	67.82
4.3.1 SDG 3: Good Health and Well-Being	80	64.52
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	98	68.38
4.3.4 SDG 7: Affordable and Clean Energy	95	70.32
4.3.5 SDG 11: Sustainable Cities and Communities	70	65.02

NOTE: ● Indicates a strength and ○ a weakness.

Lao PDR

	Rank (Out of 133)	Score
Network Readiness Index	108	36.36
Pillar/sub-pillar	Rank	Score
A. Technology pillar	101	30.32
1st sub-pillar: Access	105	41.75
2nd sub-pillar: Content	129	1.03
3rd sub-pillar: Future Technologies	31	48.17
B. People pillar	101	32.12
1st sub-pillar: Individuals	76	47.38
2nd sub-pillar: Businesses	131	7.24
3rd sub-pillar: Governments	62	41.75
C. Governance pillar	129	28.23
1st sub-pillar: Trust	117	20.13
2nd sub-pillar: Regulation	130	34.51
3rd sub-pillar: Inclusion	123	30.05
D. Impact pillar	63	54.79
1st sub-pillar: Economy	64	32.55
2nd sub-pillar: Quality of Life	74	65.73
3rd sub-pillar: SDG Contribution	66	66.10



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	101	30.32
1st sub-pillar: Access	105	41.75
1.1.1 Mobile tariffs	95	48.04
1.1.2 Handset prices	84	51.76
1.1.3 FTTH/building Internet subscriptions	104	14.53
1.1.4 Population covered by at least a 3G mobile network	108	33.91
1.1.5 International Internet bandwidth	115	60.49
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	129	1.03
1.2.1 GitHub commits	118	0.56 ○
1.2.2 Internet domain registrations	75	2.36 ●
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	129	0.18 ○
3rd sub-pillar: Future Technologies	31	48.17
1.3.1 Adoption of emerging technologies	35	74.46 ●
1.3.2 Investment in emerging technologies	52	46.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	56	23.81 ●
B. People pillar	101	32.12
1st sub-pillar: Individuals	76	47.38
2.1.1 Mobile broadband internet traffic within the country	105	2.86
2.1.2 ICT skills in the education system	42	63.88 ●
2.1.3 Use of virtual social networks	89	40.82
2.1.4 Adult literacy rate	70	81.96
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	131	7.24
2.2.1 Firms with website	108	18.51
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	123	0.00 ○
2.2.4 Public cloud computing market scale	112	3.20 ○
3rd sub-pillar: Governments	62	41.75
2.3.1 Government online services	126	22.69 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	27	60.82 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	129	28.23
1st sub-pillar: Trust	117	20.13
3.1.1 Secure Internet servers	112	31.56
3.1.2 Cybersecurity	116	20.33
3.1.3 Online access to financial account	96	18.12
3.1.4 Internet shopping	90	10.48
2nd sub-pillar: Regulation	130	34.51
3.2.1 Regulatory quality	121	24.85 ○
3.2.2 ICT regulatory environment	130	25.83 ○
3.2.3 Regulation of emerging technologies	70	46.85
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	133	0.00 ○
3rd sub-pillar: Inclusion	123	30.05
3.3.1 E-Participation	112	24.42
3.3.2 Socioeconomic gap in use of digital payments	127	14.18 ○
3.3.3 Availability of local online content	74	56.49 ●
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	113	25.09 ○
D. Impact pillar	63	54.79
1st sub-pillar: Economy	64	32.55
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	99	40.99
4.1.3 Prevalence of gig economy	42	54.36 ●
4.1.4 ICT services exports	114	2.29
2nd sub-pillar: Quality of Life	74	65.73
4.2.1 Happiness	85	50.97
4.2.2 Freedom to make life choices	22	89.72 ●
4.2.3 Income inequality	80	62.21
4.2.4 Healthy life expectancy at birth	99	50.79
3rd sub-pillar: SDG Contribution	66	66.10
4.3.1 SDG 3: Good Health and Well-Being	107	37.10
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	62	80.34 ●
4.3.4 SDG 7: Affordable and Clean Energy	82	76.90
4.3.5 SDG 11: Sustainable Cities and Communities	103	45.00

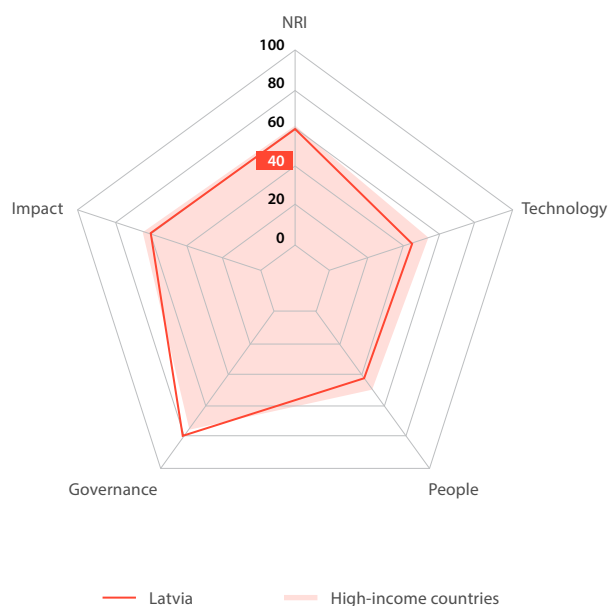
NOTE: ● Indicates a strength and ○ a weakness.

Latvia

Rank Score
(Out of 133)

Network Readiness Index **37** **57.68**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	55	45.04
1st sub-pillar: Access	47	71.71
2nd sub-pillar: Content	45	34.87
3rd sub-pillar: Future Technologies	92	28.53
B. People pillar	61	43.25
1st sub-pillar: Individuals	68	48.66
2nd sub-pillar: Businesses	60	36.69
3rd sub-pillar: Governments	53	44.41
C. Governance pillar	20	81.35
1st sub-pillar: Trust	19	81.15
2nd sub-pillar: Regulation	20	85.21
3rd sub-pillar: Inclusion	27	77.68
D. Impact pillar	39	61.08
1st sub-pillar: Economy	59	33.59
2nd sub-pillar: Quality of Life	53	71.14
3rd sub-pillar: SDG Contribution	32	78.51



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	55	45.04
1st sub-pillar: Access	47	71.71
1.1.1 Mobile tariffs	58	66.00
1.1.2 Handset prices	25	88.83 ●
1.1.3 FTTH/building Internet subscriptions	88	23.02 ○
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	104	63.52 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	45	34.87
1.2.1 GitHub commits	29	38.76
1.2.2 Internet domain registrations	32	21.52
1.2.3 Mobile apps development	11	77.58 ●
1.2.4 AI scientific publications	94	1.62 ○
3rd sub-pillar: Future Technologies	92	28.53
1.3.1 Adoption of emerging technologies	69	58.75
1.3.2 Investment in emerging technologies	54	44.75
1.3.3 Robot density	47	1.81 ○
1.3.4 Computer software spending	94	8.81 ○
B. People pillar	61	43.25
1st sub-pillar: Individuals	68	48.66
2.1.1 Mobile broadband internet traffic within the country	58	14.42
2.1.2 ICT skills in the education system	65	54.75
2.1.3 Use of virtual social networks	19	70.22 ●
2.1.4 Adult literacy rate	4	99.83 ●
2.1.5 AI talent concentration	43	4.08 ○
2nd sub-pillar: Businesses	60	36.69
2.2.1 Firms with website	49	62.49
2.2.2 Number of venture capital deals invested in AI	16	32.29
2.2.3 Annual investment in telecommunication services	99	42.34 ○
2.2.4 Public cloud computing market scale	84	9.62 ○
3rd sub-pillar: Governments	53	44.41
2.3.1 Government online services	35	79.39
2.3.2 Data Capabilities	32	47.48
2.3.3 Government promotion of investment in emerging technologies	60	38.48
2.3.4 R&D expenditure by governments and higher education	51	12.28

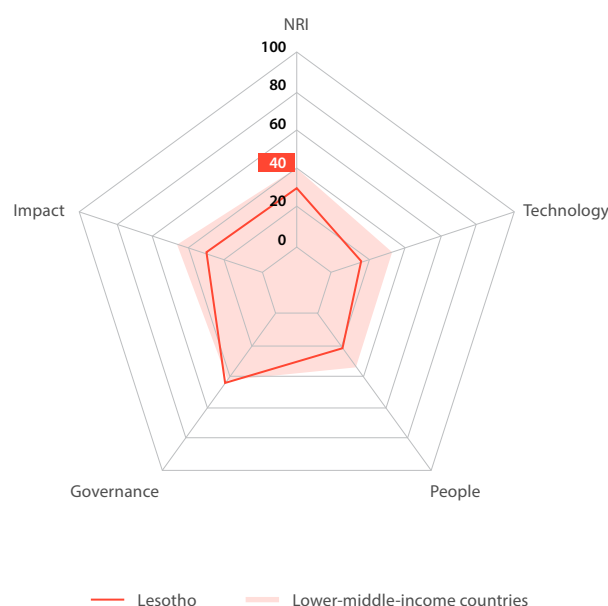
Indicator	Rank	Score
C. Governance pillar	20	81.35
1st sub-pillar: Trust	19	81.15
3.1.1 Secure Internet servers	37	79.16
3.1.2 Cybersecurity	21	97.25 ●
3.1.3 Online access to financial account	14	81.87 ●
3.1.4 Internet shopping	27	66.34
2nd sub-pillar: Regulation	20	85.21
3.2.1 Regulatory quality	26	75.51 ●
3.2.2 ICT regulatory environment	46	86.90
3.2.3 Regulation of emerging technologies	39	63.65
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	1	100.00 ●
3rd sub-pillar: Inclusion	27	77.68
3.3.1 E-Participation	29	73.25
3.3.2 Socioeconomic gap in use of digital payments	30	91.94
3.3.3 Availability of local online content	31	81.25
3.3.4 Gender gap in Internet use	28	70.66
3.3.5 Rural gap in use of digital payments	44	71.31
D. Impact pillar	39	61.08
1st sub-pillar: Economy	59	33.59
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	96	41.30 ○
4.1.3 Prevalence of gig economy	39	56.40
4.1.4 ICT services exports	23	36.66 ●
2nd sub-pillar: Quality of Life	53	71.14
4.2.1 Happiness	46	68.90
4.2.2 Freedom to make life choices	71	74.71
4.2.3 Income inequality	50	73.78
4.2.4 Healthy life expectancy at birth	64	65.86
3rd sub-pillar: SDG Contribution	32	78.51
4.3.1 SDG 3: Good Health and Well-Being	57	74.19
4.3.2 SDG 4: Quality Education	22	60.60
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	41	85.31
4.3.5 SDG 11: Sustainable Cities and Communities	73	62.07

NOTE: ● Indicates a strength and ○ a weakness.

Lesotho

	Rank (Out of 133)	Score
Network Readiness Index	123	27.65

Pillar/sub-pillar	Rank	Score
A. Technology pillar	128	13.75
1st sub-pillar: Access	126	25.40
2nd sub-pillar: Content	131	0.73
3rd sub-pillar: Future Technologies	124	15.12
B. People pillar	121	23.58
1st sub-pillar: Individuals	116	28.73
2nd sub-pillar: Businesses	112	24.72
3rd sub-pillar: Governments	124	17.30
C. Governance pillar	104	43.99
1st sub-pillar: Trust	112	22.84
2nd sub-pillar: Regulation	118	47.40
3rd sub-pillar: Inclusion	66	61.72
D. Impact pillar	132	29.29
1st sub-pillar: Economy	128	15.37
2nd sub-pillar: Quality of Life	132	26.65
3rd sub-pillar: SDG Contribution	124	45.85



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	128	13.75
1st sub-pillar: Access	126	25.40
1.1.1 Mobile tariffs	122	20.92
1.1.2 Handset prices	109	36.49
1.1.3 FTTH/building Internet subscriptions	114	9.11
1.1.4 Population covered by at least a 3G mobile network	93	60.49
1.1.5 International Internet bandwidth	133	0.00 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	131	0.73
1.2.1 GitHub commits	116	0.77
1.2.2 Internet domain registrations	112	0.34
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	104	1.08
3rd sub-pillar: Future Technologies	124	15.12
1.3.1 Adoption of emerging technologies	109	1.05 ○
1.3.2 Investment in emerging technologies	76	35.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	95	8.56
B. People pillar	121	23.58
1st sub-pillar: Individuals	116	28.73
2.1.1 Mobile broadband internet traffic within the country	127	0.24 ○
2.1.2 ICT skills in the education system	114	22.35 ○
2.1.3 Use of virtual social networks	106	19.19
2.1.4 Adult literacy rate	79	73.14
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	112	24.72
2.2.1 Firms with website	78	41.37 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	120	31.62 ○
2.2.4 Public cloud computing market scale	123	1.16 ○
3rd sub-pillar: Governments	124	17.30
2.3.1 Government online services	122	27.67
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	92	23.49
2.3.4 R&D expenditure by governments and higher education	111	0.74

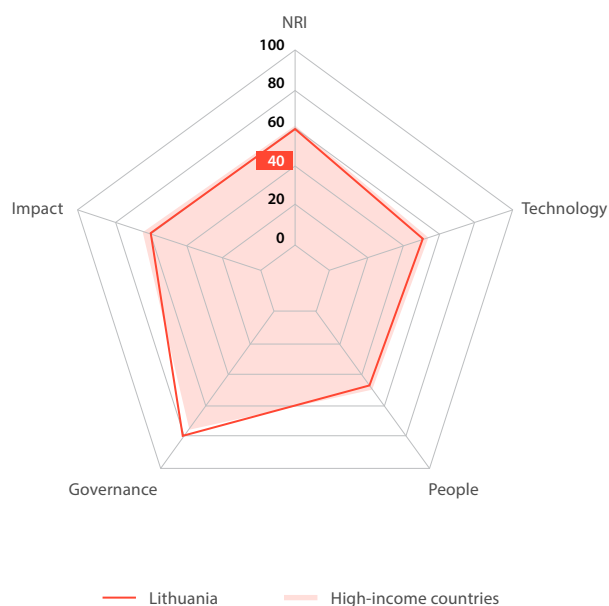
Indicator	Rank	Score
C. Governance pillar	104	43.99
1st sub-pillar: Trust	112	22.84
3.1.1 Secure Internet servers	109	33.47
3.1.2 Cybersecurity	127	9.08
3.1.3 Online access to financial account	83	28.25 ●
3.1.4 Internet shopping	68	20.57 ●
2nd sub-pillar: Regulation	118	47.40
3.2.1 Regulatory quality	104	33.58
3.2.2 ICT regulatory environment	102	66.43
3.2.3 Regulation of emerging technologies	108	16.43
3.2.4 E-commerce legislation	119	50.00
3.2.5 Privacy protection by law content	63	70.58 ●
3rd sub-pillar: Inclusion	66	61.72
3.3.1 E-Participation	103	29.07
3.3.2 Socioeconomic gap in use of digital payments	57	80.15 ●
3.3.3 Availability of local online content	118	26.44
3.3.4 Gender gap in Internet use	1	100.00 ●
3.3.5 Rural gap in use of digital payments	38	72.92 ●
D. Impact pillar	132	29.29
1st sub-pillar: Economy	128	15.37
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	131	12.68 ○
4.1.3 Prevalence of gig economy	86	33.43 ●
4.1.4 ICT services exports	133	0.00 ○
2nd sub-pillar: Quality of Life	132	26.65
4.2.1 Happiness	131	0.00 ○
4.2.2 Freedom to make life choices	110	56.68
4.2.3 Income inequality	103	46.53
4.2.4 Healthy life expectancy at birth	131	0.00 ○
3rd sub-pillar: SDG Contribution	124	45.85
4.3.1 SDG 3: Good Health and Well-Being	105	38.71
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	83	73.50 ●
4.3.4 SDG 7: Affordable and Clean Energy	127	31.80
4.3.5 SDG 11: Sustainable Cities and Communities	126	25.76

NOTE: ● Indicates a strength and ○ a weakness.

Lithuania

Network Readiness Index Rank (Out of 133) **31** Score **59.95**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	36	51.33
1st sub-pillar: Access	21	79.16
2nd sub-pillar: Content	43	36.55
3rd sub-pillar: Future Technologies	54	38.29
B. People pillar	41	47.23
1st sub-pillar: Individuals	43	53.81
2nd sub-pillar: Businesses	51	38.49
3rd sub-pillar: Governments	35	49.39
C. Governance pillar	17	82.17
1st sub-pillar: Trust	24	79.30
2nd sub-pillar: Regulation	8	89.01
3rd sub-pillar: Inclusion	25	78.20
D. Impact pillar	46	59.08
1st sub-pillar: Economy	61	32.67
2nd sub-pillar: Quality of Life	68	67.88
3rd sub-pillar: SDG Contribution	35	76.70



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	36	51.33
1st sub-pillar: Access	21	79.16
1.1.1 Mobile tariffs	19	84.17
1.1.2 Handset prices	16	93.67 ●
1.1.3 FTTH/building Internet subscriptions	79	26.32 ○
1.1.4 Population covered by at least a 3G mobile network	24	99.88
1.1.5 International Internet bandwidth	39	75.92
1.1.6 Internet access in schools	42	95.00
2nd sub-pillar: Content	43	36.55
1.2.1 GitHub commits	28	38.91
1.2.2 Internet domain registrations	30	23.75
1.2.3 Mobile apps development	8	81.09 ●
1.2.4 AI scientific publications	89	2.44 ○
3rd sub-pillar: Future Technologies	54	38.29
1.3.1 Adoption of emerging technologies	24	78.90
1.3.2 Investment in emerging technologies	29	61.75
1.3.3 Robot density	35	6.83 ○
1.3.4 Computer software spending	103	5.69 ○
B. People pillar	41	47.23
1st sub-pillar: Individuals	43	53.81
2.1.1 Mobile broadband internet traffic within the country	55	15.04
2.1.2 ICT skills in the education system	29	74.45
2.1.3 Use of virtual social networks	30	67.79
2.1.4 Adult literacy rate	7	99.75 ●
2.1.5 AI talent concentration	32	12.02 ○
2nd sub-pillar: Businesses	51	38.49
2.2.1 Firms with website	34	73.71
2.2.2 Number of venture capital deals invested in AI	22	22.46
2.2.3 Annual investment in telecommunication services	93	43.98 ○
2.2.4 Public cloud computing market scale	71	13.81
3rd sub-pillar: Governments	35	49.39
2.3.1 Government online services	28	81.73
2.3.2 Data Capabilities	35	46.65
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	36	19.79

Indicator	Rank	Score
C. Governance pillar	17	82.17
1st sub-pillar: Trust	24	79.30
3.1.1 Secure Internet servers	16	85.86 ●
3.1.2 Cybersecurity	11	97.92 ●
3.1.3 Online access to financial account	22	73.11
3.1.4 Internet shopping	33	60.32
2nd sub-pillar: Regulation	8	89.01
3.2.1 Regulatory quality	21	78.51
3.2.2 ICT regulatory environment	2	99.40 ●
3.2.3 Regulation of emerging technologies	27	73.97
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	10	93.19 ●
3rd sub-pillar: Inclusion	25	78.20
3.3.1 E-Participation	67	53.49
3.3.2 Socioeconomic gap in use of digital payments	32	91.15
3.3.3 Availability of local online content	16	87.74 ●
3.3.4 Gender gap in Internet use	6	79.43 ●
3.3.5 Rural gap in use of digital payments	8	79.18 ●
D. Impact pillar	46	59.08
1st sub-pillar: Economy	61	32.67
4.1.1 ICT patent applications	34	4.82
4.1.2 Domestic market scale	83	47.10 ○
4.1.3 Prevalence of gig economy	43	53.78
4.1.4 ICT services exports	42	24.98
2nd sub-pillar: Quality of Life	68	67.88
4.2.1 Happiness	30	74.60
4.2.2 Freedom to make life choices	104	60.89 ○
4.2.3 Income inequality	69	67.61 ○
4.2.4 Healthy life expectancy at birth	57	68.68
3rd sub-pillar: SDG Contribution	35	76.70
4.3.1 SDG 3: Good Health and Well-Being	57	74.19
4.3.2 SDG 4: Quality Education	30	57.83
4.3.3 SDG 5: Women's economic opportunity	28	91.45
4.3.4 SDG 7: Affordable and Clean Energy	35	86.48
4.3.5 SDG 11: Sustainable Cities and Communities	64	67.89

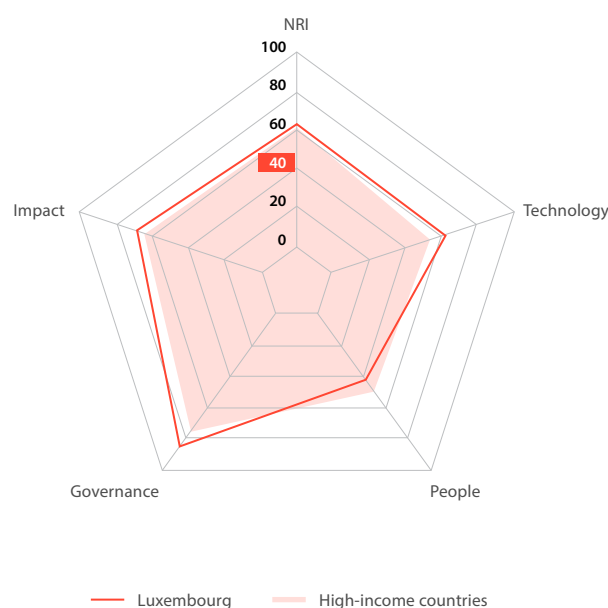
NOTE: ● Indicates a strength and ○ a weakness.

Luxembourg

Rank
(Out of 133)

Network Readiness Index **23** **65.45**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	16	62.90
1st sub-pillar: Access	18	79.43
2nd sub-pillar: Content	20	48.90
3rd sub-pillar: Future Technologies	15	60.36
B. People pillar	66	41.72
1st sub-pillar: Individuals	114	31.40
2nd sub-pillar: Businesses	40	41.67
3rd sub-pillar: Governments	30	52.09
C. Governance pillar	11	85.60
1st sub-pillar: Trust	20	80.54
2nd sub-pillar: Regulation	1	95.43
3rd sub-pillar: Inclusion	17	80.83
D. Impact pillar	14	71.57
1st sub-pillar: Economy	32	41.78
2nd sub-pillar: Quality of Life	8	87.37
3rd sub-pillar: SDG Contribution	6	85.57



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	16	62.90
1st sub-pillar: Access	18	79.43
1.1.1 Mobile tariffs	2	98.56 ●
1.1.2 Handset prices	23	90.95
1.1.3 FTTH/building Internet subscriptions	116	7.04 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	21	80.03
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	20	48.90
1.2.1 GitHub commits	22	49.62
1.2.2 Internet domain registrations	6	74.79 ●
1.2.3 Mobile apps development	44	70.59
1.2.4 AI scientific publications	115	0.59 ○
3rd sub-pillar: Future Technologies	15	60.36
1.3.1 Adoption of emerging technologies	15	85.29
1.3.2 Investment in emerging technologies	10	79.50 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	78	16.30 ○
B. People pillar	66	41.72
1st sub-pillar: Individuals	114	31.40
2.1.1 Mobile broadband internet traffic within the country	121	1.54 ○
2.1.2 ICT skills in the education system	43	63.60
2.1.3 Use of virtual social networks	92	38.76 ○
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	23	21.67 ○
2nd sub-pillar: Businesses	40	41.67
2.2.1 Firms with website	14	82.27
2.2.2 Number of venture capital deals invested in AI	27	19.64
2.2.3 Annual investment in telecommunication services	92	44.18 ○
2.2.4 Public cloud computing market scale	57	20.58 ○
3rd sub-pillar: Governments	30	52.09
2.3.1 Government online services	29	81.42
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	30	56.59
2.3.4 R&D expenditure by governments and higher education	39	18.26

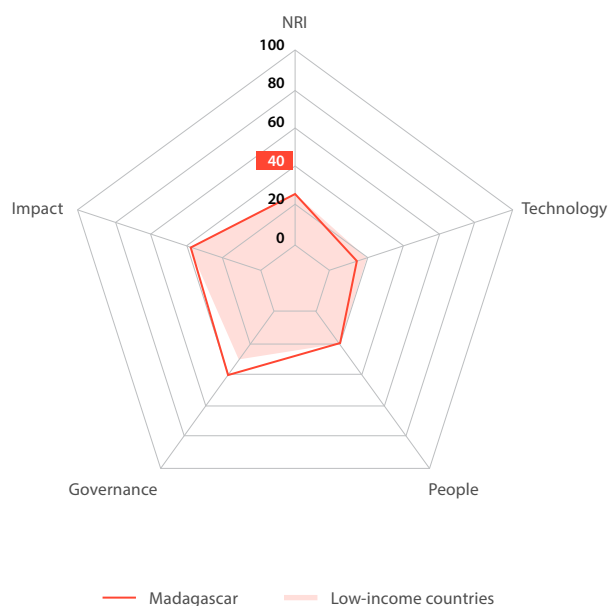
Indicator	Rank	Score
C. Governance pillar	11	85.60
1st sub-pillar: Trust	20	80.54
3.1.1 Secure Internet servers	17	85.48
3.1.2 Cybersecurity	18	97.42
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	35	58.71
2nd sub-pillar: Regulation	1	95.43
3.2.1 Regulatory quality	5	91.07 ●
3.2.2 ICT regulatory environment	38	88.69
3.2.3 Regulation of emerging technologies	1	100.00 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	5	97.37 ●
3rd sub-pillar: Inclusion	17	80.83
3.3.1 E-Participation	25	74.42
3.3.2 Socioeconomic gap in use of digital payments	15	96.82
3.3.3 Availability of local online content	17	86.54
3.3.4 Gender gap in Internet use	36	70.10
3.3.5 Rural gap in use of digital payments	17	76.25
D. Impact pillar	14	71.57
1st sub-pillar: Economy	32	41.78
4.1.1 ICT patent applications	15	46.65
4.1.2 Domestic market scale	92	43.37 ○
4.1.3 Prevalence of gig economy	49	50.29
4.1.4 ICT services exports	37	26.80
2nd sub-pillar: Quality of Life	8	87.37
4.2.1 Happiness	10	84.87 ●
4.2.2 Freedom to make life choices	19	90.85
4.2.3 Income inequality	37	77.89
4.2.4 Healthy life expectancy at birth	7	94.91 ●
3rd sub-pillar: SDG Contribution	6	85.57
4.3.1 SDG 3: Good Health and Well-Being	24	87.10
4.3.2 SDG 4: Quality Education	32	57.65
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	9	93.49 ●
4.3.5 SDG 11: Sustainable Cities and Communities	11	95.15 ●

NOTE: ● Indicates a strength and ○ a weakness.

Madagascar

	Rank (Out of 133)	Score
Network Readiness Index	125	27.00

Pillar/sub-pillar	Rank	Score
A. Technology pillar	130	13.66
1st sub-pillar: Access	128	22.29
2nd sub-pillar: Content	130	0.82
3rd sub-pillar: Future Technologies	120	17.88
B. People pillar	122	20.24
1st sub-pillar: Individuals	121	25.95
2nd sub-pillar: Businesses	123	20.58
3rd sub-pillar: Governments	127	14.19
C. Governance pillar	113	38.70
1st sub-pillar: Trust	123	17.36
2nd sub-pillar: Regulation	69	67.13
3rd sub-pillar: Inclusion	121	31.59
D. Impact pillar	125	35.40
1st sub-pillar: Economy	49	38.31
2nd sub-pillar: Quality of Life	131	26.75
3rd sub-pillar: SDG Contribution	129	41.14



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	130	13.66
1st sub-pillar: Access	128	22.29
1.1.1 Mobile tariffs	130	10.93 ○
1.1.2 Handset prices	112	35.59
1.1.3 FTTH/building Internet subscriptions	81	26.17 ●
1.1.4 Population covered by at least a 3G mobile network	127	1.12 ○
1.1.5 International Internet bandwidth	118	59.82
1.1.6 Internet access in schools	90	0.12 ○
2nd sub-pillar: Content	130	0.82
1.2.1 GitHub commits	114	0.88
1.2.2 Internet domain registrations	125	0.09
1.2.3 Mobile apps development	124	0.00 ○
1.2.4 AI scientific publications	90	2.29 ●
3rd sub-pillar: Future Technologies	120	17.88
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	85	33.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	118	2.02
B. People pillar	122	20.24
1st sub-pillar: Individuals	121	25.95
2.1.1 Mobile broadband internet traffic within the country	102	3.03 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	118	6.74
2.1.4 Adult literacy rate	85	68.07
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	123	20.58
2.2.1 Firms with website	115	11.73
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	81	46.81 ●
2.2.4 Public cloud computing market scale	112	3.20
3rd sub-pillar: Governments	127	14.19
2.3.1 Government online services	121	28.33
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	113	0.05 ○

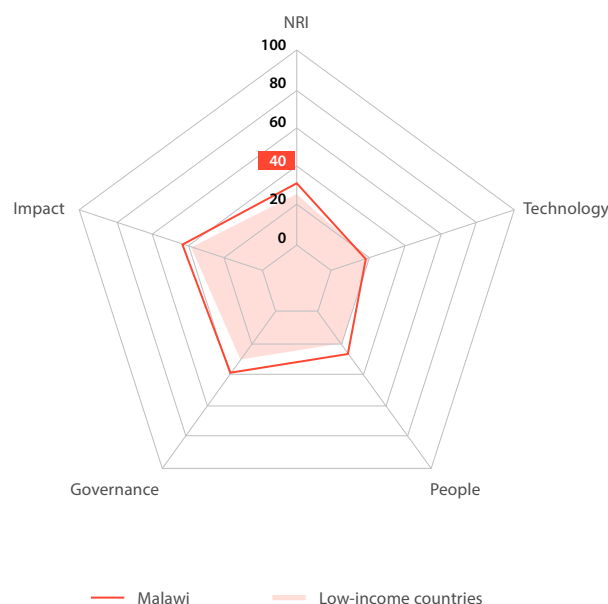
Indicator	Rank	Score
C. Governance pillar	113	38.70
1st sub-pillar: Trust	123	17.36
3.1.1 Secure Internet servers	126	18.27 ○
3.1.2 Cybersecurity	114	23.33
3.1.3 Online access to financial account	89	22.83 ●
3.1.4 Internet shopping	107	5.02
2nd sub-pillar: Regulation	69	67.13
3.2.1 Regulatory quality	114	28.88
3.2.2 ICT regulatory environment	114	61.31
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	46	78.35 ●
3rd sub-pillar: Inclusion	121	31.59
3.3.1 E-Participation	105	26.75
3.3.2 Socioeconomic gap in use of digital payments	125	26.77 ○
3.3.3 Availability of local online content	108	34.13
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	102	38.73
D. Impact pillar	125	35.40
1st sub-pillar: Economy	49	38.31
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	107	38.28
4.1.3 Prevalence of gig economy	58	44.19 ●
4.1.4 ICT services exports	29	32.45 ●
2nd sub-pillar: Quality of Life	131	26.75
4.2.1 Happiness	109	27.63
4.2.2 Freedom to make life choices	128	21.88 ○
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	116	34.72
3rd sub-pillar: SDG Contribution	129	41.14
4.3.1 SDG 3: Good Health and Well-Being	129	9.68 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	113	58.12
4.3.4 SDG 7: Affordable and Clean Energy	125	39.62 ○
4.3.5 SDG 11: Sustainable Cities and Communities	109	41.67

NOTE: ● Indicates a strength and ○ a weakness.

Malawi

	Rank (Out of 133)	Score
Network Readiness Index	119	31.75

Pillar/sub-pillar	Rank	Score
A. Technology pillar	124	16.33
1st sub-pillar: Access	124	26.73
2nd sub-pillar: Content	124	2.70
3rd sub-pillar: Future Technologies	116	19.57
B. People pillar	117	25.85
1st sub-pillar: Individuals	117	28.62
2nd sub-pillar: Businesses	114	24.49
3rd sub-pillar: Governments	107	24.46
C. Governance pillar	111	39.68
1st sub-pillar: Trust	114	22.33
2nd sub-pillar: Regulation	108	53.62
3rd sub-pillar: Inclusion	108	43.08
D. Impact pillar	106	45.14
1st sub-pillar: Economy	63	32.62
2nd sub-pillar: Quality of Life	122	37.24
3rd sub-pillar: SDG Contribution	68	65.57



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	124	16.33
1st sub-pillar: Access	124	26.73
1.1.1 Mobile tariffs	126	16.11 ○
1.1.2 Handset prices	124	26.59
1.1.3 FTTH/building Internet subscriptions	120	6.38
1.1.4 Population covered by at least a 3G mobile network	114	24.52
1.1.5 International Internet bandwidth	117	60.08
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	124	2.70
1.2.1 GitHub commits	119	0.44
1.2.2 Internet domain registrations	126	0.09 ○
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	65	7.57 ●
3rd sub-pillar: Future Technologies	116	19.57
1.3.1 Adoption of emerging technologies	98	35.67
1.3.2 Investment in emerging technologies	117	19.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	113	3.28
B. People pillar	117	25.85
1st sub-pillar: Individuals	117	28.62
2.1.1 Mobile broadband internet traffic within the country	99	3.25
2.1.2 ICT skills in the education system	64	55.26 ●
2.1.3 Use of virtual social networks	129	0.84 ○
2.1.4 Adult literacy rate	93	55.11
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	114	24.49
2.2.1 Firms with website	87	35.44
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	118	35.80 ○
2.2.4 Public cloud computing market scale	119	2.22 ○
3rd sub-pillar: Governments	107	24.46
2.3.1 Government online services	119	29.34
2.3.2 Data Capabilities	92	4.99 ○
2.3.3 Government promotion of investment in emerging technologies	58	39.04 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	111	39.68
1st sub-pillar: Trust	114	22.33
3.1.1 Secure Internet servers	123	22.35
3.1.2 Cybersecurity	101	36.83
3.1.3 Online access to financial account	80	28.85 ●
3.1.4 Internet shopping	122	1.29 ○
2nd sub-pillar: Regulation	108	53.62
3.2.1 Regulatory quality	113	30.66
3.2.2 ICT regulatory environment	59	84.52 ●
3.2.3 Regulation of emerging technologies	112	11.46
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	76	66.45 ●
3rd sub-pillar: Inclusion	108	43.08
3.3.1 E-Participation	89	36.05
3.3.2 Socioeconomic gap in use of digital payments	89	56.69
3.3.3 Availability of local online content	128	16.59 ○
3.3.4 Gender gap in Internet use	93	45.25
3.3.5 Rural gap in use of digital payments	71	60.81 ●
D. Impact pillar	106	45.14
1st sub-pillar: Economy	63	32.62
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	120	34.11
4.1.3 Prevalence of gig economy	123	3.49 ○
4.1.4 ICT services exports	9	60.25 ●
2nd sub-pillar: Quality of Life	122	37.24
4.2.1 Happiness	129	1.90 ○
4.2.2 Freedom to make life choices	100	61.64
4.2.3 Income inequality	78	62.98 ●
4.2.4 Healthy life expectancy at birth	117	33.38
3rd sub-pillar: SDG Contribution	68	65.57
4.3.1 SDG 3: Good Health and Well-Being	112	30.65
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	86	72.65
4.3.4 SDG 7: Affordable and Clean Energy	38	85.75 ●
4.3.5 SDG 11: Sustainable Cities and Communities	100	45.96

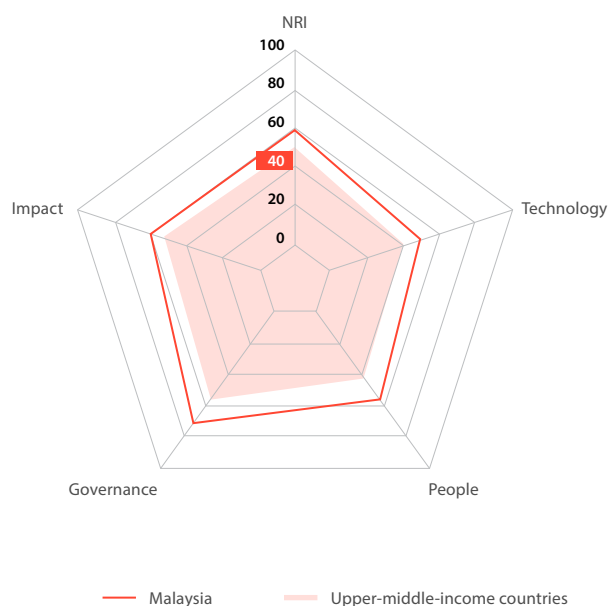
NOTE: ● Indicates a strength and ○ a weakness.

Malaysia

Rank Score
(Out of 133)

Network Readiness Index 36 57.88

Pillar/sub-pillar	Rank	Score
A. Technology pillar	40	49.33
1st sub-pillar: Access	42	73.39
2nd sub-pillar: Content	61	26.72
3rd sub-pillar: Future Technologies	33	47.89
B. People pillar	23	53.95
1st sub-pillar: Individuals	9	68.79
2nd sub-pillar: Businesses	78	33.39
3rd sub-pillar: Governments	23	59.68
C. Governance pillar	41	71.44
1st sub-pillar: Trust	42	69.32
2nd sub-pillar: Regulation	48	73.36
3rd sub-pillar: Inclusion	44	71.64
D. Impact pillar	54	56.81
1st sub-pillar: Economy	31	41.86
2nd sub-pillar: Quality of Life	43	73.48
3rd sub-pillar: SDG Contribution	103	55.09



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	40	49.33
1st sub-pillar: Access	42	73.39
1.1.1 Mobile tariffs	76	61.10
1.1.2 Handset prices	53	74.24
1.1.3 FTTH/building Internet subscriptions	24	46.95 ●
1.1.4 Population covered by at least a 3G mobile network	88	70.84 ○
1.1.5 International Internet bandwidth	10	87.22 ●
1.1.6 Internet access in schools	34	99.96
2nd sub-pillar: Content	61	26.72
1.2.1 GitHub commits	67	7.06
1.2.2 Internet domain registrations	58	4.73
1.2.3 Mobile apps development	71	62.72 ○
1.2.4 AI scientific publications	27	32.39
3rd sub-pillar: Future Technologies	33	47.89
1.3.1 Adoption of emerging technologies	39	71.76
1.3.2 Investment in emerging technologies	12	78.75 ●
1.3.3 Robot density	31	8.98
1.3.4 Computer software spending	33	32.08
B. People pillar	23	53.95
1st sub-pillar: Individuals	9	68.79
2.1.1 Mobile broadband internet traffic within the country	13	46.98 ●
2.1.2 ICT skills in the education system	49	61.24
2.1.3 Use of virtual social networks	12	72.94 ●
2.1.4 Adult literacy rate	46	93.99
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	78	33.39
2.2.1 Firms with website	81	39.43 ○
2.2.2 Number of venture capital deals invested in AI	73	1.40 ○
2.2.3 Annual investment in telecommunication services	34	60.89
2.2.4 Public cloud computing market scale	39	31.84
3rd sub-pillar: Governments	23	59.68
2.3.1 Government online services	53	73.81
2.3.2 Data Capabilities	8	71.20 ●
2.3.3 Government promotion of investment in emerging technologies	15	76.77 ●
2.3.4 R&D expenditure by governments and higher education	43	16.96

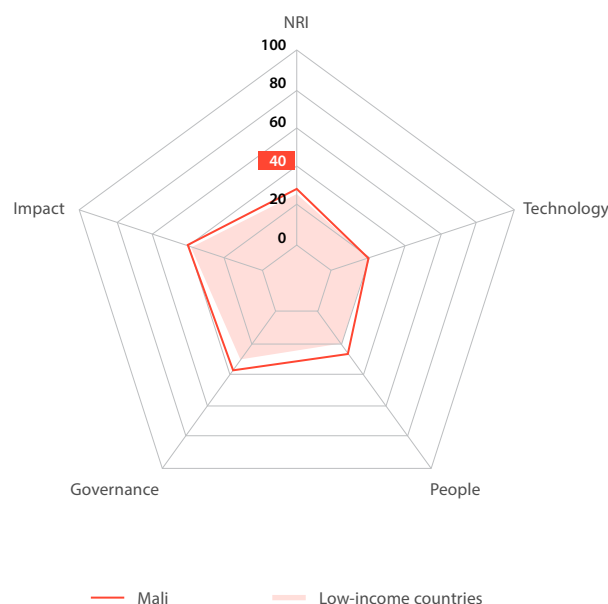
Indicator	Rank	Score
C. Governance pillar	41	71.44
1st sub-pillar: Trust	42	69.32
3.1.1 Secure Internet servers	46	70.99
3.1.2 Cybersecurity	8	98.08 ●
3.1.3 Online access to financial account	48	50.34
3.1.4 Internet shopping	39	57.86
2nd sub-pillar: Regulation	48	73.36
3.2.1 Regulatory quality	42	63.14
3.2.2 ICT regulatory environment	71	83.33
3.2.3 Regulation of emerging technologies	40	62.78
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	88	57.53 ○
3rd sub-pillar: Inclusion	44	71.64
3.3.1 E-Participation	47	67.44
3.3.2 Socioeconomic gap in use of digital payments	58	79.29
3.3.3 Availability of local online content	39	76.68
3.3.4 Gender gap in Internet use	48	68.50
3.3.5 Rural gap in use of digital payments	57	66.29
D. Impact pillar	54	56.81
1st sub-pillar: Economy	31	41.86
4.1.1 ICT patent applications	37	3.11
4.1.2 Domestic market scale	30	68.35
4.1.3 Prevalence of gig economy	6	85.76 ●
4.1.4 ICT services exports	76	10.21
2nd sub-pillar: Quality of Life	43	73.48
4.2.1 Happiness	69	59.43
4.2.2 Freedom to make life choices	1	100.00 ●
4.2.3 Income inequality	88	57.33 ○
4.2.4 Healthy life expectancy at birth	70	64.68
3rd sub-pillar: SDG Contribution	103	55.09
4.3.1 SDG 3: Good Health and Well-Being	52	75.81
4.3.2 SDG 4: Quality Education	56	27.70 ○
4.3.3 SDG 5: Women's economic opportunity	121	46.15 ○
4.3.4 SDG 7: Affordable and Clean Energy	87	75.15 ○
4.3.5 SDG 11: Sustainable Cities and Communities	66	66.91

NOTE: ● Indicates a strength and ○ a weakness.

Mali

	Rank (Out of 133)	Score
Network Readiness Index	120	30.82

Pillar/sub-pillar	Rank	Score
A. Technology pillar	123	17.62
1st sub-pillar: Access	127	24.03
2nd sub-pillar: Content	132	0.43
3rd sub-pillar: Future Technologies	93	28.39
B. People pillar	113	27.17
1st sub-pillar: Individuals	127	16.73
2nd sub-pillar: Businesses	48	39.17
3rd sub-pillar: Governments	102	25.63
C. Governance pillar	120	36.70
1st sub-pillar: Trust	126	15.51
2nd sub-pillar: Regulation	110	53.44
3rd sub-pillar: Inclusion	113	41.15
D. Impact pillar	114	41.78
1st sub-pillar: Economy	80	30.05
2nd sub-pillar: Quality of Life	108	48.26
3rd sub-pillar: SDG Contribution	122	47.04



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	123	17.62
1st sub-pillar: Access	127	24.03
1.1.1 Mobile tariffs	123	18.35
1.1.2 Handset prices	127	21.27 ○
1.1.3 FTTH/building Internet subscriptions	96	17.04
1.1.4 Population covered by at least a 3G mobile network	125	1.54 ○
1.1.5 International Internet bandwidth	109	61.94
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	132	0.43
1.2.1 GitHub commits	128	0.14 ○
1.2.2 Internet domain registrations	120	0.16
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	106	0.99
3rd sub-pillar: Future Technologies	93	28.39
1.3.1 Adoption of emerging technologies	78	50.30
1.3.2 Investment in emerging technologies	87	33.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	121	1.61 ○
B. People pillar	113	27.17
1st sub-pillar: Individuals	127	16.73
2.1.1 Mobile broadband internet traffic within the country	129	0.00 ○
2.1.2 ICT skills in the education system	57	58.90 ●
2.1.3 Use of virtual social networks	124	3.65 ○
2.1.4 Adult literacy rate	103	4.35 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	48	39.17
2.2.1 Firms with website	94	32.18
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	82	46.16 ●
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	102	25.63
2.3.1 Government online services	118	29.84
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	45	44.07 ●
2.3.4 R&D expenditure by governments and higher education	92	2.98

Indicator	Rank	Score
C. Governance pillar	120	36.70
1st sub-pillar: Trust	126	15.51
3.1.1 Secure Internet servers	125	18.34 ○
3.1.2 Cybersecurity	126	10.17 ○
3.1.3 Online access to financial account	79	30.31 ●
3.1.4 Internet shopping	116	3.21
2nd sub-pillar: Regulation	110	53.44
3.2.1 Regulatory quality	106	33.14
3.2.2 ICT regulatory environment	80	76.19 ●
3.2.3 Regulation of emerging technologies	94	30.47
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	97	52.41
3rd sub-pillar: Inclusion	113	41.15
3.3.1 E-Participation	109	25.58
3.3.2 Socioeconomic gap in use of digital payments	82	63.47 ●
3.3.3 Availability of local online content	112	29.57
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	93	45.97
D. Impact pillar	114	41.78
1st sub-pillar: Economy	80	30.05
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	103	39.11
4.1.3 Prevalence of gig economy	88	31.10
4.1.4 ICT services exports	53	19.94 ●
2nd sub-pillar: Quality of Life	108	48.26
4.2.1 Happiness	111	26.23
4.2.2 Freedom to make life choices	82	68.00 ●
4.2.3 Income inequality	63	70.18 ●
4.2.4 Healthy life expectancy at birth	121	30.90
3rd sub-pillar: SDG Contribution	122	47.04
4.3.1 SDG 3: Good Health and Well-Being	121	19.35 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	119	50.43
4.3.4 SDG 7: Affordable and Clean Energy	108	60.96
4.3.5 SDG 11: Sustainable Cities and Communities	111	40.08

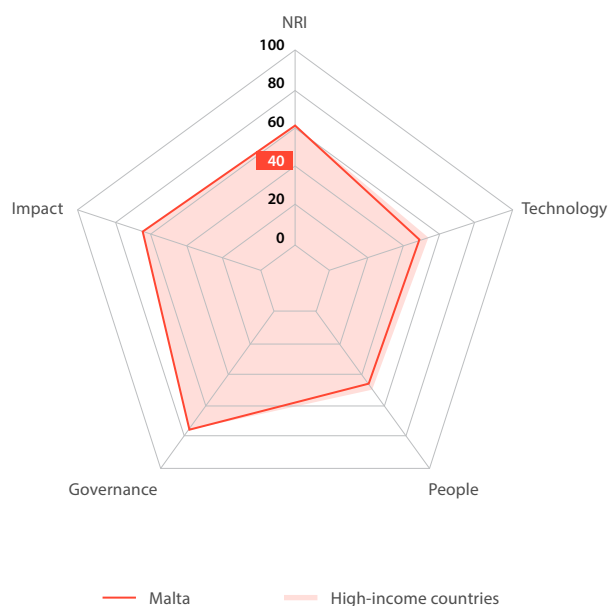
NOTE: ● Indicates a strength and ○ a weakness.

Malta

Rank Score
(Out of 133)

Network Readiness Index 33 59.75

Pillar/sub-pillar	Rank	Score
A. Technology pillar	38	50.51
1st sub-pillar: Access	70	64.58
2nd sub-pillar: Content	40	38.69
3rd sub-pillar: Future Technologies	30	48.26
B. People pillar	44	46.04
1st sub-pillar: Individuals	42	54.03
2nd sub-pillar: Businesses	58	37.29
3rd sub-pillar: Governments	42	46.81
C. Governance pillar	33	75.90
1st sub-pillar: Trust	38	70.84
2nd sub-pillar: Regulation	29	81.02
3rd sub-pillar: Inclusion	31	75.83
D. Impact pillar	25	66.55
1st sub-pillar: Economy	42	39.35
2nd sub-pillar: Quality of Life	28	78.72
3rd sub-pillar: SDG Contribution	25	81.58



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	38	50.51
1st sub-pillar: Access	70	64.58
1.1.1 Mobile tariffs	43	75.35
1.1.2 Handset prices	47	80.12
1.1.3 FTTH/building Internet subscriptions	118	6.75 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	114	60.70 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	40	38.69
1.2.1 GitHub commits	32	35.55
1.2.2 Internet domain registrations	18	44.04 ●
1.2.3 Mobile apps development	19	74.71 ●
1.2.4 AI scientific publications	122	0.46 ○
3rd sub-pillar: Future Technologies	30	48.26
1.3.1 Adoption of emerging technologies	62	61.50 ○
1.3.2 Investment in emerging technologies	38	53.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	36	29.77
B. People pillar	44	46.04
1st sub-pillar: Individuals	42	54.03
2.1.1 Mobile broadband internet traffic within the country	115	1.97 ○
2.1.2 ICT skills in the education system	46	62.43
2.1.3 Use of virtual social networks	58	59.18
2.1.4 Adult literacy rate	52	92.55
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	58	37.29
2.2.1 Firms with website	16	81.89 ●
2.2.2 Number of venture capital deals invested in AI	20	22.81
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	93	7.17 ○
3rd sub-pillar: Governments	42	46.81
2.3.1 Government online services	18	87.28 ●
2.3.2 Data Capabilities	45	40.35
2.3.3 Government promotion of investment in emerging technologies	38	48.26
2.3.4 R&D expenditure by governments and higher education	56	11.35

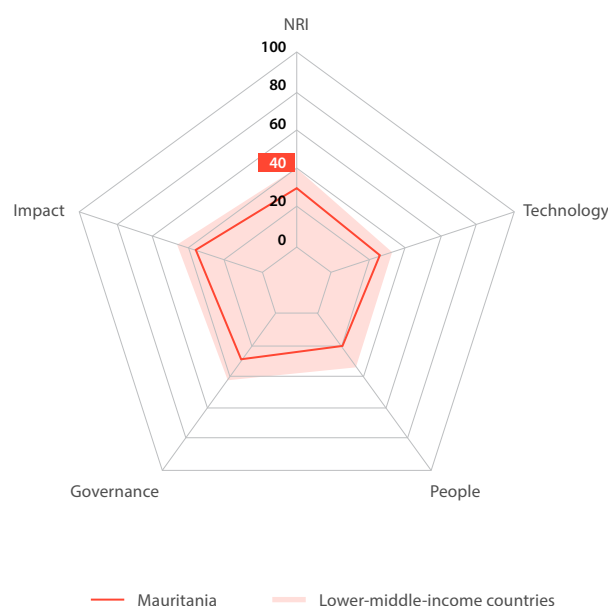
Indicator	Rank	Score
C. Governance pillar	33	75.90
1st sub-pillar: Trust	38	70.84
3.1.1 Secure Internet servers	39	76.43
3.1.2 Cybersecurity	57	83.67
3.1.3 Online access to financial account	35	63.20
3.1.4 Internet shopping	34	60.06
2nd sub-pillar: Regulation	29	81.02
3.2.1 Regulatory quality	41	63.84
3.2.2 ICT regulatory environment	9	95.24 ●
3.2.3 Regulation of emerging technologies	14	81.74 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	80	64.26 ○
3rd sub-pillar: Inclusion	31	75.83
3.3.1 E-Participation	22	75.59
3.3.2 Socioeconomic gap in use of digital payments	47	84.38
3.3.3 Availability of local online content	54	66.35
3.3.4 Gender gap in Internet use	7	77.89 ●
3.3.5 Rural gap in use of digital payments	29	74.97
D. Impact pillar	25	66.55
1st sub-pillar: Economy	42	39.35
4.1.1 ICT patent applications	13	54.32 ●
4.1.2 Domestic market scale	124	32.74 ○
4.1.3 Prevalence of gig economy	33	59.59
4.1.4 ICT services exports	73	10.73 ○
2nd sub-pillar: Quality of Life	28	78.72
4.2.1 Happiness	47	68.89
4.2.2 Freedom to make life choices	55	80.68
4.2.3 Income inequality	27	81.23
4.2.4 Healthy life expectancy at birth	15	91.96 ●
3rd sub-pillar: SDG Contribution	25	81.58
4.3.1 SDG 3: Good Health and Well-Being	14	90.32 ●
4.3.2 SDG 4: Quality Education	38	50.30
4.3.3 SDG 5: Women's economic opportunity	38	88.03
4.3.4 SDG 7: Affordable and Clean Energy	3	99.12 ●
4.3.5 SDG 11: Sustainable Cities and Communities	25	87.38

NOTE: ● Indicates a strength and ○ a weakness.

Mauritania

	Rank (Out of 133)	Score
Network Readiness Index	124	27.16

Pillar/sub-pillar	Rank	Score
A. Technology pillar	112	25.26
1st sub-pillar: Access	121	30.11
2nd sub-pillar: Content	119	10.27
3rd sub-pillar: Future Technologies	65	35.39
B. People pillar	123	20.04
1st sub-pillar: Individuals	122	24.44
2nd sub-pillar: Businesses	65	35.67
3rd sub-pillar: Governments	133	0.00
C. Governance pillar	127	28.67
1st sub-pillar: Trust	124	17.25
2nd sub-pillar: Regulation	126	39.22
3rd sub-pillar: Inclusion	124	29.55
D. Impact pillar	126	34.66
1st sub-pillar: Economy	122	17.19
2nd sub-pillar: Quality of Life	121	39.56
3rd sub-pillar: SDG Contribution	120	47.25



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	112	25.26
1st sub-pillar: Access	121	30.11
1.1.1 Mobile tariffs	104	42.75 ●
1.1.2 Handset prices	104	40.22 ●
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	133	0.00 ○
1.1.5 International Internet bandwidth	132	37.48 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	119	10.27
1.2.1 GitHub commits	125	0.34
1.2.2 Internet domain registrations	122	0.13
1.2.3 Mobile apps development	115	40.40
1.2.4 AI scientific publications	126	0.24 ○
3rd sub-pillar: Future Technologies	65	35.39
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	59	41.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	38	29.53 ●
B. People pillar	123	20.04
1st sub-pillar: Individuals	122	24.44
2.1.1 Mobile broadband internet traffic within the country	110	2.53
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	107	18.63
2.1.4 Adult literacy rate	94	52.15
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	65	35.67
2.2.1 Firms with website	96	30.24 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	105	41.11
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	133	0.00
2.3.1 Government online services	132	0.00 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	114	0.00 ○

Indicator	Rank	Score
C. Governance pillar	127	28.67
1st sub-pillar: Trust	124	17.25
3.1.1 Secure Internet servers	124	21.16
3.1.2 Cybersecurity	118	18.92
3.1.3 Online access to financial account	88	25.02 ●
3.1.4 Internet shopping	114	3.88
2nd sub-pillar: Regulation	126	39.22
3.2.1 Regulatory quality	123	23.09
3.2.2 ICT regulatory environment	115	60.71
3.2.3 Regulation of emerging technologies	117	7.67 ○
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	124	29.65
3rd sub-pillar: Inclusion	124	29.55
3.3.1 E-Participation	132	0.00 ○
3.3.2 Socioeconomic gap in use of digital payments	52	82.96 ●
3.3.3 Availability of local online content	121	25.00
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	121	10.24 ○
D. Impact pillar	126	34.66
1st sub-pillar: Economy	122	17.19
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	123	32.78
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	121	1.59
2nd sub-pillar: Quality of Life	121	39.56
4.2.1 Happiness	113	24.51
4.2.2 Freedom to make life choices	126	27.96 ○
4.2.3 Income inequality	33	79.69 ●
4.2.4 Healthy life expectancy at birth	96	52.73 ●
3rd sub-pillar: SDG Contribution	120	47.25
4.3.1 SDG 3: Good Health and Well-Being	124	17.74
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	128	29.06 ○
4.3.4 SDG 7: Affordable and Clean Energy	61	82.09 ●
4.3.5 SDG 11: Sustainable Cities and Communities	107	43.43

NOTE: ● Indicates a strength and ○ a weakness.

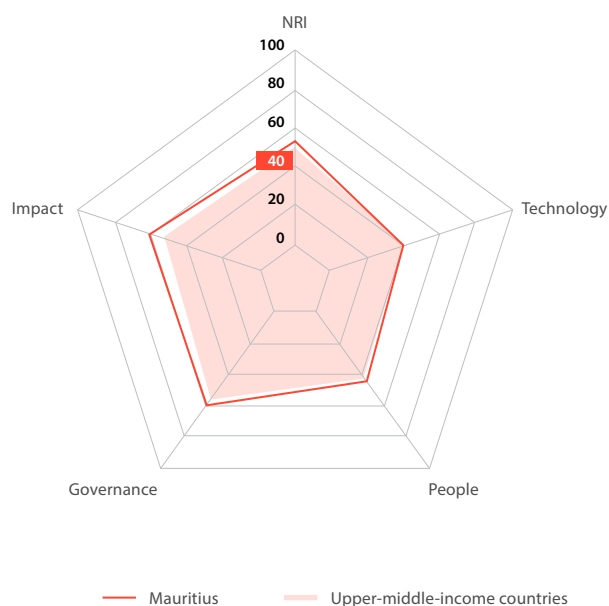
Mauritius

	Rank (Out of 133)	Score
Network Readiness Index	60	51.17

Pillar/sub-pillar	Rank	Score
A. Technology pillar	76	39.92
1st sub-pillar: Access	67	65.82
2nd sub-pillar: Content	87	19.46
3rd sub-pillar: Future Technologies	71	34.48
B. People pillar	51	44.92
1st sub-pillar: Individuals	75	47.57
2nd sub-pillar: Businesses	23	53.57
3rd sub-pillar: Governments	84	33.62
C. Governance pillar	62	60.98
1st sub-pillar: Trust	62	51.84
2nd sub-pillar: Regulation	61	68.29
3rd sub-pillar: Inclusion	60	62.81
D. Impact pillar	47	58.84
1st sub-pillar: Economy	81	29.60
2nd sub-pillar: Quality of Life	75	65.15
3rd sub-pillar: SDG Contribution	23	81.76

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	76	39.92
1st sub-pillar: Access	67	65.82
1.1.1 Mobile tariffs	66	63.01
1.1.2 Handset prices	79	54.29
1.1.3 FTTH/building Internet subscriptions	85	23.78
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	99	64.95 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	87	19.46
1.2.1 GitHub commits	63	7.83
1.2.2 Internet domain registrations	50	7.54
1.2.3 Mobile apps development	74	62.01
1.2.4 AI scientific publications	121	0.46 ○
3rd sub-pillar: Future Technologies	71	34.48
1.3.1 Adoption of emerging technologies	72	55.65
1.3.2 Investment in emerging technologies	79	35.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	85	12.79
B. People pillar	51	44.92
1st sub-pillar: Individuals	75	47.57
2.1.1 Mobile broadband internet traffic within the country	117	1.73 ○
2.1.2 ICT skills in the education system	84	45.82 ○
2.1.3 Use of virtual social networks	70	54.21
2.1.4 Adult literacy rate	61	88.50
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	23	53.57
2.2.1 Firms with website	45	64.59 ●
2.2.2 Number of venture capital deals invested in AI	7	91.18 ●
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	106	4.95 ○
3rd sub-pillar: Governments	84	33.62
2.3.1 Government online services	77	58.91
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	67	35.54
2.3.4 R&D expenditure by governments and higher education	70	6.42



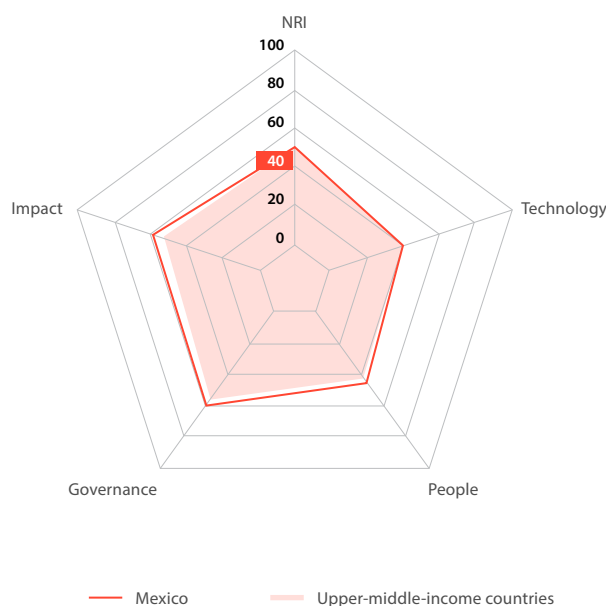
Indicator	Rank	Score
C. Governance pillar	62	60.98
1st sub-pillar: Trust	62	51.84
3.1.1 Secure Internet servers	66	54.41
3.1.2 Cybersecurity	23	96.92 ●
3.1.3 Online access to financial account	73	34.42
3.1.4 Internet shopping	67	21.64
2nd sub-pillar: Regulation	61	68.29
3.2.1 Regulatory quality	27	75.39 ●
3.2.2 ICT regulatory environment	78	76.79
3.2.3 Regulation of emerging technologies	65	47.71
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	115	41.56 ○
3rd sub-pillar: Inclusion	60	62.81
3.3.1 E-Participation	86	40.70
3.3.2 Socioeconomic gap in use of digital payments	49	83.94
3.3.3 Availability of local online content	78	54.09
3.3.4 Gender gap in Internet use	75	63.90 ○
3.3.5 Rural gap in use of digital payments	43	71.42 ●
D. Impact pillar	47	58.84
1st sub-pillar: Economy	81	29.60
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	121	33.86 ○
4.1.3 Prevalence of gig economy	82	34.01 ○
4.1.4 ICT services exports	49	20.94 ●
2nd sub-pillar: Quality of Life	75	65.15
4.2.1 Happiness	78	57.02
4.2.2 Freedom to make life choices	77	71.51
4.2.3 Income inequality	71	67.35
4.2.4 Healthy life expectancy at birth	62	66.53
3rd sub-pillar: SDG Contribution	23	81.76
4.3.1 SDG 3: Good Health and Well-Being	87	59.68 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	46	85.47 ●
4.3.4 SDG 7: Affordable and Clean Energy	13	92.25 ●
4.3.5 SDG 11: Sustainable Cities and Communities	49	75.46 ●

NOTE: ● Indicates a strength and ○ a weakness.

Mexico

	Rank (Out of 133)	Score
Network Readiness Index	62	50.32

Pillar/sub-pillar	Rank	Score
A. Technology pillar	80	39.32
1st sub-pillar: Access	75	62.92
2nd sub-pillar: Content	68	24.63
3rd sub-pillar: Future Technologies	88	30.41
B. People pillar	50	45.24
1st sub-pillar: Individuals	64	49.24
2nd sub-pillar: Businesses	30	48.95
3rd sub-pillar: Governments	72	37.53
C. Governance pillar	65	58.73
1st sub-pillar: Trust	66	50.47
2nd sub-pillar: Regulation	45	73.99
3rd sub-pillar: Inclusion	88	51.73
D. Impact pillar	48	58.01
1st sub-pillar: Economy	77	30.55
2nd sub-pillar: Quality of Life	40	74.33
3rd sub-pillar: SDG Contribution	54	69.15



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	80	39.32
1st sub-pillar: Access	75	62.92
1.1.1 Mobile tariffs	87	54.60
1.1.2 Handset prices	35	85.28
1.1.3 FTTH/building Internet subscriptions	11	60.36 ●
1.1.4 Population covered by at least a 3G mobile network	89	70.07
1.1.5 International Internet bandwidth	29	77.58 ●
1.1.6 Internet access in schools	76	29.61 ○
2nd sub-pillar: Content	68	24.63
1.2.1 GitHub commits	81	4.44
1.2.2 Internet domain registrations	65	3.46
1.2.3 Mobile apps development	75	61.98
1.2.4 AI scientific publications	29	28.65
3rd sub-pillar: Future Technologies	88	30.41
1.3.1 Adoption of emerging technologies	67	59.51
1.3.2 Investment in emerging technologies	64	39.75
1.3.3 Robot density	33	7.59
1.3.4 Computer software spending	81	14.80
B. People pillar	50	45.24
1st sub-pillar: Individuals	64	49.24
2.1.1 Mobile broadband internet traffic within the country	22	40.29 ●
2.1.2 ICT skills in the education system	87	45.30 ○
2.1.3 Use of virtual social networks	53	60.67
2.1.4 Adult literacy rate	50	93.09
2.1.5 AI talent concentration	40	6.87 ○
2nd sub-pillar: Businesses	30	48.95
2.2.1 Firms with website	26	76.45 ●
2.2.2 Number of venture capital deals invested in AI	69	2.15 ○
2.2.3 Annual investment in telecommunication services	16	71.65 ●
2.2.4 Public cloud computing market scale	18	45.54 ●
3rd sub-pillar: Governments	72	37.53
2.3.1 Government online services	31	80.60
2.3.2 Data Capabilities	41	43.04
2.3.3 Government promotion of investment in emerging technologies	94	21.31 ○
2.3.4 R&D expenditure by governments and higher education	77	5.16

Indicator	Rank	Score
C. Governance pillar	65	58.73
1st sub-pillar: Trust	66	50.47
3.1.1 Secure Internet servers	82	46.27
3.1.2 Cybersecurity	59	81.67
3.1.3 Online access to financial account	53	49.30
3.1.4 Internet shopping	64	24.64
2nd sub-pillar: Regulation	45	73.99
3.2.1 Regulatory quality	78	44.54
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	73	45.33
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	23	86.03 ●
3rd sub-pillar: Inclusion	88	51.73
3.3.1 E-Participation	32	72.10
3.3.2 Socioeconomic gap in use of digital payments	123	31.18 ○
3.3.3 Availability of local online content	66	60.34
3.3.4 Gender gap in Internet use	25	71.03
3.3.5 Rural gap in use of digital payments	114	24.03 ○
D. Impact pillar	48	58.01
1st sub-pillar: Economy	77	30.55
4.1.1 ICT patent applications	63	0.23 ○
4.1.2 Domestic market scale	12	77.82 ●
4.1.3 Prevalence of gig economy	60	42.73
4.1.4 ICT services exports	123	1.42 ○
2nd sub-pillar: Quality of Life	40	74.33
4.2.1 Happiness	11	84.64 ●
4.2.2 Freedom to make life choices	44	83.95
4.2.3 Income inequality	97	50.13 ○
4.2.4 Healthy life expectancy at birth	85	58.67
3rd sub-pillar: SDG Contribution	54	69.15
4.3.1 SDG 3: Good Health and Well-Being	57	74.19
4.3.2 SDG 4: Quality Education	53	28.69
4.3.3 SDG 5: Women's economic opportunity	48	84.62
4.3.4 SDG 7: Affordable and Clean Energy	37	86.11
4.3.5 SDG 11: Sustainable Cities and Communities	37	80.15

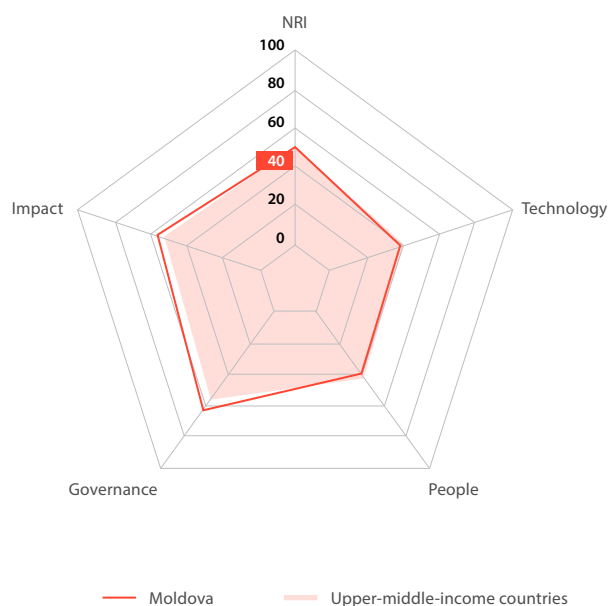
NOTE: ● Indicates a strength and ○ a weakness.

Moldova

Rank Score
(Out of 133)

Network Readiness Index 70 48.11

Pillar/sub-pillar	Rank	Score
A. Technology pillar	84	37.31
1st sub-pillar: Access	39	74.49
2nd sub-pillar: Content	71	24.02
3rd sub-pillar: Future Technologies	129	13.42
B. People pillar	90	37.53
1st sub-pillar: Individuals	73	47.78
2nd sub-pillar: Businesses	100	28.23
3rd sub-pillar: Governments	75	36.58
C. Governance pillar	59	61.79
1st sub-pillar: Trust	60	52.30
2nd sub-pillar: Regulation	52	71.66
3rd sub-pillar: Inclusion	68	61.41
D. Impact pillar	57	55.83
1st sub-pillar: Economy	60	32.86
2nd sub-pillar: Quality of Life	54	70.97
3rd sub-pillar: SDG Contribution	71	63.66



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	84	37.31
1st sub-pillar: Access	39	74.49
1.1.1 Mobile tariffs	78	60.55
1.1.2 Handset prices	49	79.20 ●
1.1.3 FTTH/building Internet subscriptions	44	37.44 ●
1.1.4 Population covered by at least a 3G mobile network	29	98.83 ●
1.1.5 International Internet bandwidth	49	73.96 ●
1.1.6 Internet access in schools	41	96.96
2nd sub-pillar: Content	71	24.02
2.1.1 GitHub commits	48	14.49 ●
2.2.2 Internet domain registrations	66	3.44
2.2.3 Mobile apps development	14	76.89 ●
2.2.4 AI scientific publications	101	1.24 ○
3rd sub-pillar: Future Technologies	129	13.42
3.1.1 Adoption of emerging technologies	NA	NA
3.1.2 Investment in emerging technologies	118	19.50 ○
3.1.3 Robot density	NA	NA
3.1.4 Computer software spending	97	7.34 ○
B. People pillar	90	37.53
1st sub-pillar: Individuals	73	47.78
2.1.1 Mobile broadband internet traffic within the country	95	5.00
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	91	38.95
2.1.4 Adult literacy rate	12	99.39 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	100	28.23
2.2.1 Firms with website	82	39.31
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	112	39.65 ○
2.2.4 Public cloud computing market scale	102	5.73 ○
3rd sub-pillar: Governments	75	36.58
2.3.1 Government online services	60	71.04
2.3.2 Data Capabilities	52	34.69
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	85	3.99 ○

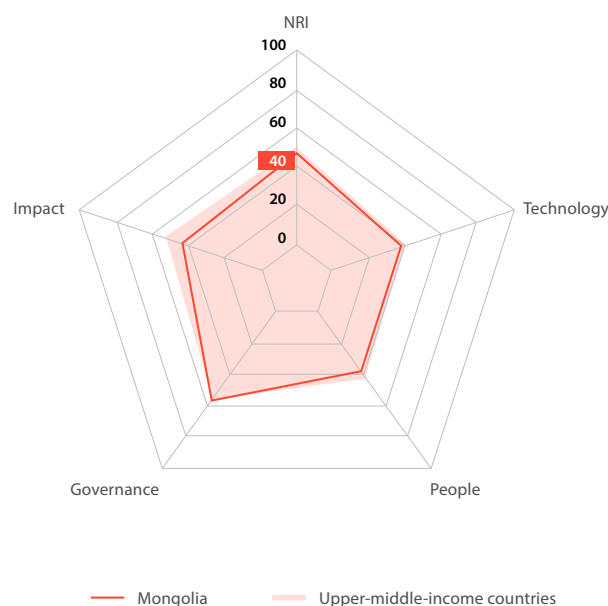
Indicator	Rank	Score
C. Governance pillar	59	61.79
1st sub-pillar: Trust	60	52.30
3.1.1 Secure Internet servers	49	68.84 ●
3.1.2 Cybersecurity	71	75.75
3.1.3 Online access to financial account	69	36.18
3.1.4 Internet shopping	61	28.43
2nd sub-pillar: Regulation	52	71.66
3.2.1 Regulatory quality	68	50.41
3.2.2 ICT regulatory environment	34	89.29 ●
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	60	71.96
3rd sub-pillar: Inclusion	68	61.41
3.3.1 E-Participation	47	67.44
3.3.2 Socioeconomic gap in use of digital payments	77	66.08
3.3.3 Availability of local online content	61	62.74
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	91	49.37 ○
D. Impact pillar	57	55.83
1st sub-pillar: Economy	60	32.86
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	119	35.23 ○
4.1.3 Prevalence of gig economy	62	42.15
4.1.4 ICT services exports	14	54.04 ●
2nd sub-pillar: Quality of Life	54	70.97
4.2.1 Happiness	75	57.95
4.2.2 Freedom to make life choices	63	79.61
4.2.3 Income inequality	4	95.89 ●
4.2.4 Healthy life expectancy at birth	92	54.82
3rd sub-pillar: SDG Contribution	71	63.66
4.3.1 SDG 3: Good Health and Well-Being	73	67.74
4.3.2 SDG 4: Quality Education	51	31.69
4.3.3 SDG 5: Women's economic opportunity	41	87.18 ●
4.3.4 SDG 7: Affordable and Clean Energy	92	72.00
4.3.5 SDG 11: Sustainable Cities and Communities	77	59.81

NOTE: ● Indicates a strength and ○ a weakness.

Mongolia

	Rank (Out of 133)	Score
Network Readiness Index	88	43.88

Pillar/sub-pillar	Rank	Score
A. Technology pillar	88	35.81
1st sub-pillar: Access	73	63.40
2nd sub-pillar: Content	100	16.59
3rd sub-pillar: Future Technologies	95	27.43
B. People pillar	96	35.78
1st sub-pillar: Individuals	52	51.28
2nd sub-pillar: Businesses	109	25.15
3rd sub-pillar: Governments	93	30.92
C. Governance pillar	63	59.69
1st sub-pillar: Trust	61	52.19
2nd sub-pillar: Regulation	96	58.81
3rd sub-pillar: Inclusion	54	68.07
D. Impact pillar	109	44.25
1st sub-pillar: Economy	120	17.72
2nd sub-pillar: Quality of Life	93	58.96
3rd sub-pillar: SDG Contribution	100	56.06



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	88	35.81
1st sub-pillar: Access	73	63.40
1.1.1 Mobile tariffs	47	73.16 ●
1.1.2 Handset prices	111	36.11 ○
1.1.3 FTTH/building Internet subscriptions	56	33.60
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	91	66.85
1.1.6 Internet access in schools	54	70.66
2nd sub-pillar: Content	100	16.59
1.2.1 GitHub commits	68	7.04
1.2.2 Internet domain registrations	82	1.77
1.2.3 Mobile apps development	92	56.37
1.2.4 AI scientific publications	103	1.21
3rd sub-pillar: Future Technologies	95	27.43
1.3.1 Adoption of emerging technologies	95	37.26 ○
1.3.2 Investment in emerging technologies	89	33.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	86	12.02
B. People pillar	96	35.78
1st sub-pillar: Individuals	52	51.28
2.1.1 Mobile broadband internet traffic within the country	79	8.98
2.1.2 ICT skills in the education system	101	34.81 ○
2.1.3 Use of virtual social networks	47	62.55 ●
2.1.4 Adult literacy rate	18	98.80 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	109	25.15
2.2.1 Firms with website	103	26.49
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	98	42.47
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	93	30.92
2.3.1 Government online services	78	58.70
2.3.2 Data Capabilities	67	24.69
2.3.3 Government promotion of investment in emerging technologies	61	38.06
2.3.4 R&D expenditure by governments and higher education	99	2.21 ○

Indicator	Rank	Score
C. Governance pillar	63	59.69
1st sub-pillar: Trust	61	52.19
3.1.1 Secure Internet servers	60	59.48
3.1.2 Cybersecurity	111	26.17 ○
3.1.3 Online access to financial account	20	74.52 ●
3.1.4 Internet shopping	44	48.61 ●
2nd sub-pillar: Regulation	96	58.81
3.2.1 Regulatory quality	86	41.66
3.2.2 ICT regulatory environment	77	79.17
3.2.3 Regulation of emerging technologies	88	35.36
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	82	62.85
3rd sub-pillar: Inclusion	54	68.07
3.3.1 E-Participation	57	59.31
3.3.2 Socioeconomic gap in use of digital payments	6	99.34 ●
3.3.3 Availability of local online content	97	42.55
3.3.4 Gender gap in Internet use	72	64.97
3.3.5 Rural gap in use of digital payments	32	74.19 ●
D. Impact pillar	109	44.25
1st sub-pillar: Economy	120	17.72
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	110	37.58 ○
4.1.3 Prevalence of gig economy	90	29.65
4.1.4 ICT services exports	104	3.67
2nd sub-pillar: Quality of Life	93	58.96
4.2.1 Happiness	83	53.04
4.2.2 Freedom to make life choices	111	55.00 ○
4.2.3 Income inequality	27	81.23 ●
4.2.4 Healthy life expectancy at birth	89	56.46
3rd sub-pillar: SDG Contribution	100	56.06
4.3.1 SDG 3: Good Health and Well-Being	90	58.06
4.3.2 SDG 4: Quality Education	54	28.02
4.3.3 SDG 5: Women's economic opportunity	41	87.18 ●
4.3.4 SDG 7: Affordable and Clean Energy	114	57.09 ○
4.3.5 SDG 11: Sustainable Cities and Communities	101	45.81

NOTE: ● Indicates a strength and ○ a weakness.

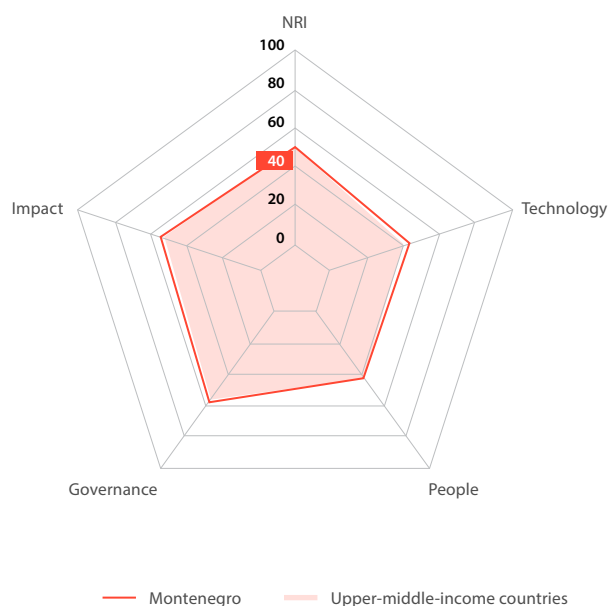
Montenegro

	Rank (Out of 133)	Score
Network Readiness Index	65	49.58

Pillar/sub-pillar	Rank	Score
A. Technology pillar	53	45.51
1st sub-pillar: Access	93	54.20
2nd sub-pillar: Content	13	53.24
3rd sub-pillar: Future Technologies	90	29.10
B. People pillar	75	39.48
1st sub-pillar: Individuals	46	52.25
2nd sub-pillar: Businesses	55	37.73
3rd sub-pillar: Governments	98	28.47
C. Governance pillar	66	58.22
1st sub-pillar: Trust	77	40.44
2nd sub-pillar: Regulation	63	68.13
3rd sub-pillar: Inclusion	55	66.09
D. Impact pillar	62	55.12
1st sub-pillar: Economy	54	36.05
2nd sub-pillar: Quality of Life	69	67.40
3rd sub-pillar: SDG Contribution	81	61.91

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	53	45.51
1st sub-pillar: Access	93	54.20
1.1.1 Mobile tariffs	112	37.84 ○
1.1.2 Handset prices	55	73.18
1.1.3 FTTH/building Internet subscriptions	103	14.75 ○
1.1.4 Population covered by at least a 3G mobile network	85	78.64
1.1.5 International Internet bandwidth	94	66.58 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	13	53.24
1.2.1 GitHub commits	31	35.75 ●
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	16	76.70 ●
1.2.4 AI scientific publications	118	0.52 ○
3rd sub-pillar: Future Technologies	90	29.10
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	86	33.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	52	24.70
B. People pillar	75	39.48
1st sub-pillar: Individuals	46	52.25
2.1.1 Mobile broadband internet traffic within the country	111	2.49 ○
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	69	55.81
2.1.4 Adult literacy rate	21	98.44 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	55	37.73
2.2.1 Firms with website	37	69.19 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	108	40.81 ○
2.2.4 Public cloud computing market scale	112	3.20 ○
3rd sub-pillar: Governments	98	28.47
2.3.1 Government online services	89	50.57
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	71	6.37



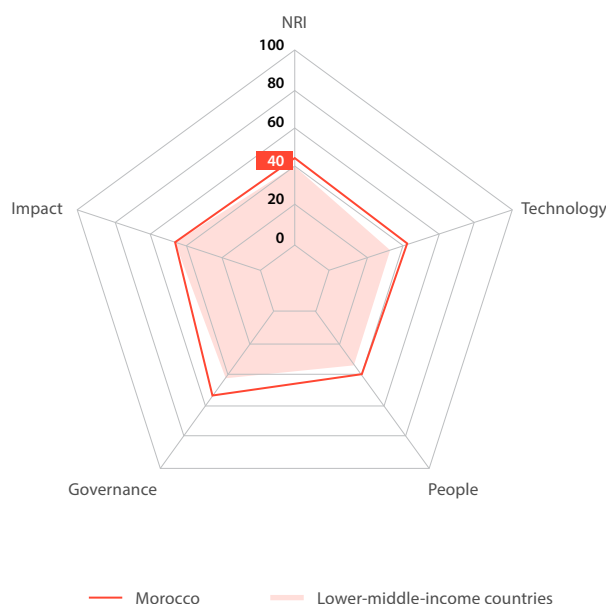
Indicator	Rank	Score
C. Governance pillar	66	58.22
1st sub-pillar: Trust	77	40.44
3.1.1 Secure Internet servers	68	53.17
3.1.2 Cybersecurity	92	53.25
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	82	14.90
2nd sub-pillar: Regulation	63	68.13
3.2.1 Regulatory quality	45	60.77 ●
3.2.2 ICT regulatory environment	26	92.86 ●
3.2.3 Regulation of emerging technologies	79	39.66
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	58	72.37
3rd sub-pillar: Inclusion	55	66.09
3.3.1 E-Participation	80	45.35
3.3.2 Socioeconomic gap in use of digital payments	71	71.40
3.3.3 Availability of local online content	57	65.62
3.3.4 Gender gap in Internet use	57	67.00
3.3.5 Rural gap in use of digital payments	4	81.06 ●
D. Impact pillar	62	55.12
1st sub-pillar: Economy	54	36.05
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	129	25.55 ○
4.1.3 Prevalence of gig economy	63	41.57
4.1.4 ICT services exports	21	41.03 ●
2nd sub-pillar: Quality of Life	69	67.40
4.2.1 Happiness	74	58.21
4.2.2 Freedom to make life choices	74	71.88
4.2.3 Income inequality	50	73.78
4.2.4 Healthy life expectancy at birth	50	70.44 ●
3rd sub-pillar: SDG Contribution	81	61.91
4.3.1 SDG 3: Good Health and Well-Being	70	69.35
4.3.2 SDG 4: Quality Education	55	27.79
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	60	82.16
4.3.5 SDG 11: Sustainable Cities and Communities	98	47.07 ○

NOTE: ● Indicates a strength and ○ a weakness.

Morocco

	Rank (Out of 133)	Score
Network Readiness Index	76	45.93

Pillar/sub-pillar	Rank	Score
A. Technology pillar	64	43.82
1st sub-pillar: Access	72	63.40
2nd sub-pillar: Content	51	30.59
3rd sub-pillar: Future Technologies	58	37.46
B. People pillar	72	40.12
1st sub-pillar: Individuals	54	51.23
2nd sub-pillar: Businesses	66	35.41
3rd sub-pillar: Governments	83	33.73
C. Governance pillar	83	51.95
1st sub-pillar: Trust	80	40.15
2nd sub-pillar: Regulation	37	77.04
3rd sub-pillar: Inclusion	118	38.65
D. Impact pillar	99	47.85
1st sub-pillar: Economy	71	31.02
2nd sub-pillar: Quality of Life	96	55.56
3rd sub-pillar: SDG Contribution	96	56.97



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	64	43.82
1st sub-pillar: Access	72	63.40
1.1.1 Mobile tariffs	97	46.93
1.1.2 Handset prices	97	43.61
1.1.3 FTTH/building Internet subscriptions	47	36.86 ●
1.1.4 Population covered by at least a 3G mobile network	52	94.30
1.1.5 International Internet bandwidth	22	79.74 ●
1.1.6 Internet access in schools	50	78.98
2nd sub-pillar: Content	51	30.59
1.2.1 GitHub commits	66	7.25
1.2.2 Internet domain registrations	88	1.40
1.2.3 Mobile apps development	77	61.70
1.2.4 AI scientific publications	19	52.01 ●
3rd sub-pillar: Future Technologies	58	37.46
1.3.1 Adoption of emerging technologies	73	54.73
1.3.2 Investment in emerging technologies	79	35.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	62	22.64
B. People pillar	72	40.12
1st sub-pillar: Individuals	54	51.23
2.1.1 Mobile broadband internet traffic within the country	33	29.62 ●
2.1.2 ICT skills in the education system	51	60.86
2.1.3 Use of virtual social networks	81	47.28
2.1.4 Adult literacy rate	87	67.15 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	66	35.41
2.2.1 Firms with website	54	60.12
2.2.2 Number of venture capital deals invested in AI	53	4.71
2.2.3 Annual investment in telecommunication services	49	56.22 ●
2.2.4 Public cloud computing market scale	57	20.58
3rd sub-pillar: Governments	83	33.73
2.3.1 Government online services	103	41.66 ○
2.3.2 Data Capabilities	85	12.31 ○
2.3.3 Government promotion of investment in emerging technologies	39	47.21 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	83	51.95
1st sub-pillar: Trust	80	40.15
3.1.1 Secure Internet servers	76	48.60
3.1.2 Cybersecurity	58	82.42
3.1.3 Online access to financial account	95	19.10 ○
3.1.4 Internet shopping	89	10.50
2nd sub-pillar: Regulation	37	77.04
3.2.1 Regulatory quality	76	45.98
3.2.2 ICT regulatory environment	58	85.12
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	48	77.06 ●
3rd sub-pillar: Inclusion	118	38.65
3.3.1 E-Participation	109	25.58 ○
3.3.2 Socioeconomic gap in use of digital payments	107	44.22 ○
3.3.3 Availability of local online content	69	60.10
3.3.4 Gender gap in Internet use	76	63.34
3.3.5 Rural gap in use of digital payments	124	0.00 ○
D. Impact pillar	99	47.85
1st sub-pillar: Economy	71	31.02
4.1.1 ICT patent applications	65	0.17
4.1.2 Domestic market scale	55	57.17 ●
4.1.3 Prevalence of gig economy	66	39.83
4.1.4 ICT services exports	36	26.92 ●
2nd sub-pillar: Quality of Life	96	55.56
4.2.1 Happiness	106	28.81 ○
4.2.2 Freedom to make life choices	69	75.60
4.2.3 Income inequality	83	60.41
4.2.4 Healthy life expectancy at birth	73	64.10
3rd sub-pillar: SDG Contribution	96	56.97
4.3.1 SDG 3: Good Health and Well-Being	80	64.52
4.3.2 SDG 4: Quality Education	79	7.89 ○
4.3.3 SDG 5: Women's economic opportunity	101	66.67 ○
4.3.4 SDG 7: Affordable and Clean Energy	43	85.01 ●
4.3.5 SDG 11: Sustainable Cities and Communities	55	72.07

NOTE: ● Indicates a strength and ○ a weakness.

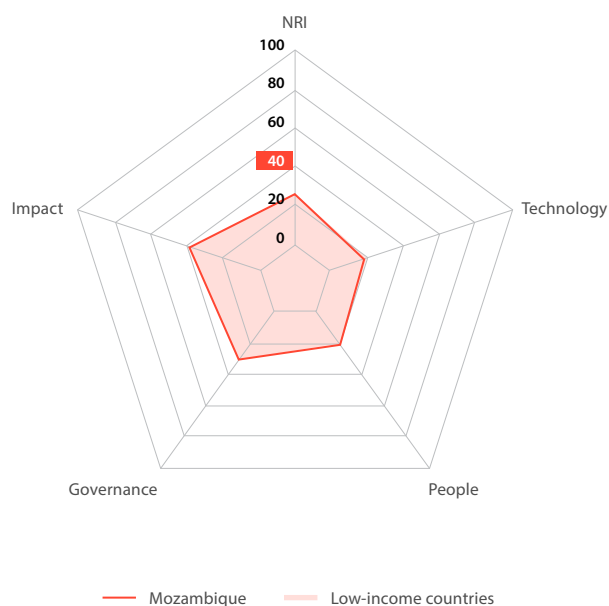
Mozambique

	Rank (Out of 133)	Score
Network Readiness Index	126	26.63

Pillar/sub-pillar	Rank	Score
A. Technology pillar	126	15.00
1st sub-pillar: Access	123	28.30
2nd sub-pillar: Content	123	2.81
3rd sub-pillar: Future Technologies	128	13.90
B. People pillar	128	18.07
1st sub-pillar: Individuals	128	16.34
2nd sub-pillar: Businesses	105	26.43
3rd sub-pillar: Governments	131	11.44
C. Governance pillar	123	35.52
1st sub-pillar: Trust	115	22.10
2nd sub-pillar: Regulation	103	55.13
3rd sub-pillar: Inclusion	125	29.34
D. Impact pillar	121	37.92
1st sub-pillar: Economy	129	14.78
2nd sub-pillar: Quality of Life	98	54.98
3rd sub-pillar: SDG Contribution	127	44.01

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	126	15.00
1st sub-pillar: Access	123	28.30
1.1.1 Mobile tariffs	121	23.67
1.1.2 Handset prices	117	29.93
1.1.3 FTTH/building Internet subscriptions	101	15.01
1.1.4 Population covered by at least a 3G mobile network	120	14.91
1.1.5 International Internet bandwidth	120	57.97
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	123	2.81
2.2.1 GitHub commits	122	0.40
2.2.2 Internet domain registrations	127	0.08 ○
2.2.3 Mobile apps development	122	6.06 ○
2.2.4 AI scientific publications	75	4.71 ●
3rd sub-pillar: Future Technologies	128	13.90
3.3.1 Adoption of emerging technologies	NA	NA
3.3.2 Investment in emerging technologies	106	26.00
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	119	1.80
B. People pillar	128	18.07
1st sub-pillar: Individuals	128	16.34
2.1.1 Mobile broadband internet traffic within the country	96	4.61 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	123	3.84
2.1.4 Adult literacy rate	98	40.58
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	105	26.43
2.2.1 Firms with website	98	29.88
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	100	42.23
2.2.4 Public cloud computing market scale	93	7.17 ●
3rd sub-pillar: Governments	131	11.44
2.3.1 Government online services	120	28.86
2.3.2 Data Capabilities	94	0.00 ○
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	75	5.46 ●



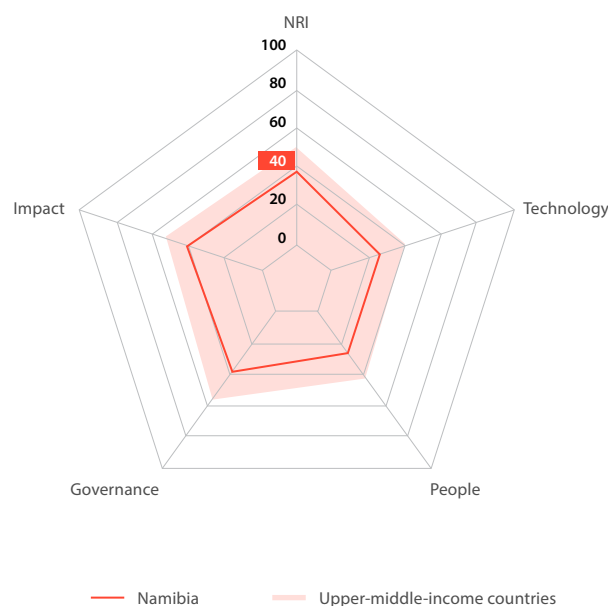
Indicator	Rank	Score
C. Governance pillar	123	35.52
1st sub-pillar: Trust	115	22.10
3.1.1 Secure Internet servers	118	26.92
3.1.2 Cybersecurity	113	24.17
3.1.3 Online access to financial account	74	32.32 ●
3.1.4 Internet shopping	108	5.00
2nd sub-pillar: Regulation	103	55.13
3.2.1 Regulatory quality	112	30.98
3.2.2 ICT regulatory environment	106	65.48
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	56	74.06 ●
3rd sub-pillar: Inclusion	125	29.34
3.3.1 E-Participation	124	17.45 ○
3.3.2 Socioeconomic gap in use of digital payments	118	38.26
3.3.3 Availability of local online content	127	18.27 ○
3.3.4 Gender gap in Internet use	104	7.13 ○
3.3.5 Rural gap in use of digital payments	61	65.60 ●
D. Impact pillar	121	37.92
1st sub-pillar: Economy	129	14.78
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	109	37.71
4.1.3 Prevalence of gig economy	119	5.52 ○
4.1.4 ICT services exports	126	1.09
2nd sub-pillar: Quality of Life	98	54.98
4.2.1 Happiness	79	55.80 ●
4.2.2 Freedom to make life choices	48	83.44 ●
4.2.3 Income inequality	110	32.65
4.2.4 Healthy life expectancy at birth	130	18.74 ○
3rd sub-pillar: SDG Contribution	127	44.01
4.3.1 SDG 3: Good Health and Well-Being	115	24.19
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	74	76.07 ●
4.3.4 SDG 7: Affordable and Clean Energy	128	20.61 ○
4.3.5 SDG 11: Sustainable Cities and Communities	99	46.50

NOTE: ● Indicates a strength and ○ a weakness.

Namibia

	Rank (Out of 133)	Score
Network Readiness Index	117	33.50

Pillar/sub-pillar	Rank	Score
A. Technology pillar	107	28.24
1st sub-pillar: Access	112	37.74
2nd sub-pillar: Content	67	24.98
3rd sub-pillar: Future Technologies	109	21.99
B. People pillar	116	25.86
1st sub-pillar: Individuals	106	35.80
2nd sub-pillar: Businesses	120	22.79
3rd sub-pillar: Governments	119	18.98
C. Governance pillar	118	37.22
1st sub-pillar: Trust	107	27.65
2nd sub-pillar: Regulation	122	41.21
3rd sub-pillar: Inclusion	111	42.78
D. Impact pillar	111	42.69
1st sub-pillar: Economy	102	24.18
2nd sub-pillar: Quality of Life	124	36.87
3rd sub-pillar: SDG Contribution	62	67.01



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	107	28.24
1st sub-pillar: Access	112	37.74
1.1.1 Mobile tariffs	98	46.47
1.1.2 Handset prices	92	45.56
1.1.3 FTTH/building Internet subscriptions	113	9.19
1.1.4 Population covered by at least a 3G mobile network	113	25.54
1.1.5 International Internet bandwidth	131	47.17 ○
1.1.6 Internet access in schools	62	52.52
2nd sub-pillar: Content	67	24.98
1.2.1 GitHub commits	98	2.33
1.2.2 Internet domain registrations	64	3.98 ●
1.2.3 Mobile apps development	52	68.64 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	109	21.99
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	81	34.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	93	9.24
B. People pillar	116	25.86
1st sub-pillar: Individuals	106	35.80
2.1.1 Mobile broadband internet traffic within the country	116	1.84 ○
2.1.2 ICT skills in the education system	108	31.42 ○
2.1.3 Use of virtual social networks	105	20.22
2.1.4 Adult literacy rate	59	89.71 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	120	22.79
2.2.1 Firms with website	100	28.79
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	116	37.35 ○
2.2.4 Public cloud computing market scale	119	2.22 ○
3rd sub-pillar: Governments	119	18.98
2.3.1 Government online services	110	37.18
2.3.2 Data Capabilities	83	12.59
2.3.3 Government promotion of investment in emerging technologies	95	20.03
2.3.4 R&D expenditure by governments and higher education	72	6.12 ●

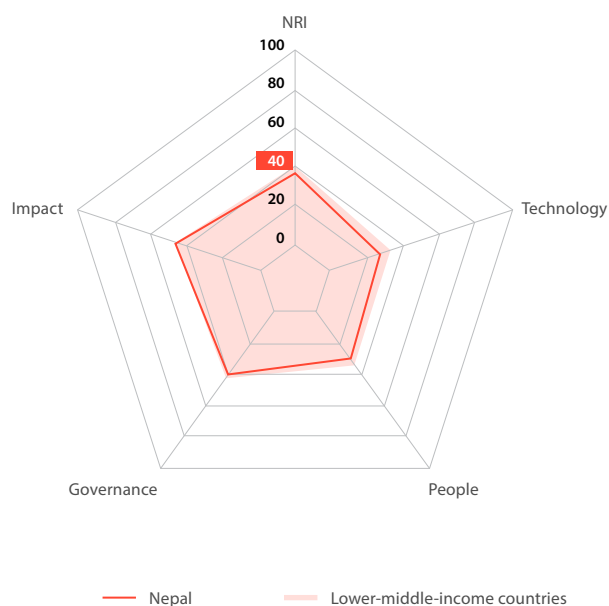
Indicator	Rank	Score
C. Governance pillar	118	37.22
1st sub-pillar: Trust	107	27.65
3.1.1 Secure Internet servers	90	42.98
3.1.2 Cybersecurity	125	11.50 ○
3.1.3 Online access to financial account	59	43.66 ●
3.1.4 Internet shopping	86	12.48
2nd sub-pillar: Regulation	122	41.21
3.2.1 Regulatory quality	72	47.67 ●
3.2.2 ICT regulatory environment	89	72.26
3.2.3 Regulation of emerging technologies	85	37.15
3.2.4 E-commerce legislation	132	0.00 ○
3.2.5 Privacy protection by law content	103	48.98
3rd sub-pillar: Inclusion	111	42.78
3.3.1 E-Participation	113	23.26
3.3.2 Socioeconomic gap in use of digital payments	99	53.45
3.3.3 Availability of local online content	102	37.74
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	75	56.68 ●
D. Impact pillar	111	42.69
1st sub-pillar: Economy	102	24.18
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	126	31.86 ○
4.1.3 Prevalence of gig economy	70	37.50 ●
4.1.4 ICT services exports	108	3.18
2nd sub-pillar: Quality of Life	124	36.87
4.2.1 Happiness	96	41.42
4.2.2 Freedom to make life choices	116	50.72
4.2.3 Income inequality	117	10.03 ○
4.2.4 Healthy life expectancy at birth	127	26.93 ○
3rd sub-pillar: SDG Contribution	62	67.01
4.3.1 SDG 3: Good Health and Well-Being	95	54.84
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	86	72.65
4.3.4 SDG 7: Affordable and Clean Energy	56	82.75 ●
4.3.5 SDG 11: Sustainable Cities and Communities	116	36.42

NOTE: ● Indicates a strength and ○ a weakness.

Nepal

	Rank (Out of 133)	Score
Network Readiness Index	109	35.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	111	26.57
1st sub-pillar: Access	118	32.82
2nd sub-pillar: Content	73	23.93
3rd sub-pillar: Future Technologies	107	22.97
B. People pillar	111	28.46
1st sub-pillar: Individuals	110	33.52
2nd sub-pillar: Businesses	108	26.28
3rd sub-pillar: Governments	103	25.58
C. Governance pillar	112	39.22
1st sub-pillar: Trust	111	24.51
2nd sub-pillar: Regulation	114	50.26
3rd sub-pillar: Inclusion	109	42.89
D. Impact pillar	93	49.59
1st sub-pillar: Economy	88	27.04
2nd sub-pillar: Quality of Life	80	61.82
3rd sub-pillar: SDG Contribution	91	59.90



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	111	26.57
1st sub-pillar: Access	118	32.82
1.1.1 Mobile tariffs	84	56.68 ●
1.1.2 Handset prices	119	29.82 ○
1.1.3 FTTH/building Internet subscriptions	61	31.64 ●
1.1.4 Population covered by at least a 3G mobile network	130	0.14 ○
1.1.5 International Internet bandwidth	97	65.45
1.1.6 Internet access in schools	81	13.20
2nd sub-pillar: Content	73	23.93
2.2.1 GitHub commits	73	4.91 ●
2.2.2 Internet domain registrations	94	1.08
2.2.3 Mobile apps development	54	68.38 ●
2.2.4 AI scientific publications	38	21.34 ●
3rd sub-pillar: Future Technologies	107	22.97
3.3.1 Adoption of emerging technologies	93	41.00
3.3.2 Investment in emerging technologies	105	26.25
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	120	1.67 ○
B. People pillar	111	28.46
1st sub-pillar: Individuals	110	33.52
2.1.1 Mobile broadband internet traffic within the country	124	0.55 ○
2.1.2 ICT skills in the education system	95	39.33
2.1.3 Use of virtual social networks	96	35.86
2.1.4 Adult literacy rate	92	58.34 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	108	26.28
2.2.1 Firms with website	73	46.09 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	103	25.58
2.3.1 Government online services	107	40.23
2.3.2 Data Capabilities	86	12.27 ○
2.3.3 Government promotion of investment in emerging technologies	91	24.24
2.3.4 R&D expenditure by governments and higher education	NA	NA

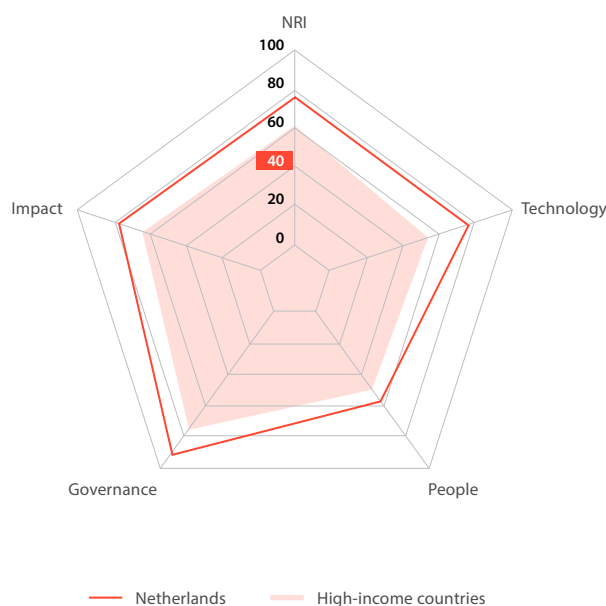
Indicator	Rank	Score
C. Governance pillar	112	39.22
1st sub-pillar: Trust	111	24.51
3.1.1 Secure Internet servers	91	42.57
3.1.2 Cybersecurity	98	45.00
3.1.3 Online access to financial account	117	6.10 ○
3.1.4 Internet shopping	110	4.38
2nd sub-pillar: Regulation	114	50.26
3.2.1 Regulatory quality	107	32.76
3.2.2 ICT regulatory environment	127	53.57 ○
3.2.3 Regulation of emerging technologies	111	12.05 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	96	52.90
3rd sub-pillar: Inclusion	109	42.89
3.3.1 E-Participation	117	22.09 ○
3.3.2 Socioeconomic gap in use of digital payments	100	52.44
3.3.3 Availability of local online content	106	34.38
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	66	62.65 ●
D. Impact pillar	93	49.59
1st sub-pillar: Economy	88	27.04
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	80	48.02 ●
4.1.3 Prevalence of gig economy	104	22.09
4.1.4 ICT services exports	71	11.00 ●
2nd sub-pillar: Quality of Life	80	61.82
4.2.1 Happiness	89	48.81
4.2.2 Freedom to make life choices	86	66.09
4.2.3 Income inequality	22	84.83 ●
4.2.4 Healthy life expectancy at birth	90	56.31
3rd sub-pillar: SDG Contribution	91	59.90
4.3.1 SDG 3: Good Health and Well-Being	104	40.32
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	83	73.50
4.3.4 SDG 7: Affordable and Clean Energy	102	66.81
4.3.5 SDG 11: Sustainable Cities and Communities	112	38.42

NOTE: ● Indicates a strength and ○ a weakness.

Netherlands

	Rank (Out of 133)	Score
Network Readiness Index	6	73.94

Pillar/sub-pillar	Rank	Score
A. Technology pillar	3	73.71
1st sub-pillar: Access	23	78.35
2nd sub-pillar: Content	2	73.44
3rd sub-pillar: Future Technologies	6	69.35
B. People pillar	20	55.30
1st sub-pillar: Individuals	87	44.20
2nd sub-pillar: Businesses	17	57.70
3rd sub-pillar: Governments	19	64.01
C. Governance pillar	3	89.37
1st sub-pillar: Trust	5	90.43
2nd sub-pillar: Regulation	5	91.22
3rd sub-pillar: Inclusion	4	86.47
D. Impact pillar	6	77.39
1st sub-pillar: Economy	9	62.43
2nd sub-pillar: Quality of Life	7	87.71
3rd sub-pillar: SDG Contribution	21	82.03



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	3	73.71
1st sub-pillar: Access	23	78.35
1.1.1 Mobile tariffs	23	82.83
1.1.2 Handset prices	26	88.67
1.1.3 FTTH/building Internet subscriptions	54	34.50 ○
1.1.4 Population covered by at least a 3G mobile network	60	88.89 ○
1.1.5 International Internet bandwidth	42	75.19 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	2	73.44
1.2.1 GitHub commits	3	97.80 ●
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	28	72.84
1.2.4 AI scientific publications	35	23.13
3rd sub-pillar: Future Technologies	6	69.35
1.3.1 Adoption of emerging technologies	6	96.37
1.3.2 Investment in emerging technologies	5	87.75 ●
1.3.3 Robot density	12	34.30
1.3.4 Computer software spending	13	58.98
B. People pillar	20	55.30
1st sub-pillar: Individuals	87	44.20
2.1.1 Mobile broadband internet traffic within the country	47	19.66 ○
2.1.2 ICT skills in the education system	34	70.38
2.1.3 Use of virtual social networks	8	74.72
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	32	12.02 ○
2nd sub-pillar: Businesses	17	57.70
2.2.1 Firms with website	9	87.97
2.2.2 Number of venture capital deals invested in AI	23	21.88
2.2.3 Annual investment in telecommunication services	23	66.01
2.2.4 Public cloud computing market scale	9	54.94
3rd sub-pillar: Governments	19	64.01
2.3.1 Government online services	11	89.24
2.3.2 Data Capabilities	5	73.29 ●
2.3.3 Government promotion of investment in emerging technologies	32	53.05
2.3.4 R&D expenditure by governments and higher education	15	40.48

Indicator	Rank	Score
C. Governance pillar	3	89.37
1st sub-pillar: Trust	5	90.43
3.1.1 Secure Internet servers	3	94.37 ●
3.1.2 Cybersecurity	22	97.08
3.1.3 Online access to financial account	10	83.05
3.1.4 Internet shopping	8	87.19
2nd sub-pillar: Regulation	5	91.22
3.2.1 Regulatory quality	7	88.21
3.2.2 ICT regulatory environment	21	93.45
3.2.3 Regulation of emerging technologies	12	82.79
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	12	91.64
3rd sub-pillar: Inclusion	4	86.47
3.3.1 E-Participation	5	96.51 ●
3.3.2 Socioeconomic gap in use of digital payments	18	96.46
3.3.3 Availability of local online content	3	97.12 ●
3.3.4 Gender gap in Internet use	66	66.41 ○
3.3.5 Rural gap in use of digital payments	21	75.85
D. Impact pillar	6	77.39
1st sub-pillar: Economy	9	62.43
4.1.1 ICT patent applications	11	55.01
4.1.2 Domestic market scale	27	68.89
4.1.3 Prevalence of gig economy	3	90.12 ●
4.1.4 ICT services exports	25	35.69
2nd sub-pillar: Quality of Life	7	87.71
4.2.1 Happiness	5	90.16 ●
4.2.2 Freedom to make life choices	58	80.09 ○
4.2.3 Income inequality	4	95.89 ●
4.2.4 Healthy life expectancy at birth	23	89.87
3rd sub-pillar: SDG Contribution	21	82.03
4.3.1 SDG 3: Good Health and Well-Being	NA	NA
4.3.2 SDG 4: Quality Education	25	59.04 ○
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	NA	NA
4.3.5 SDG 11: Sustainable Cities and Communities	17	92.05

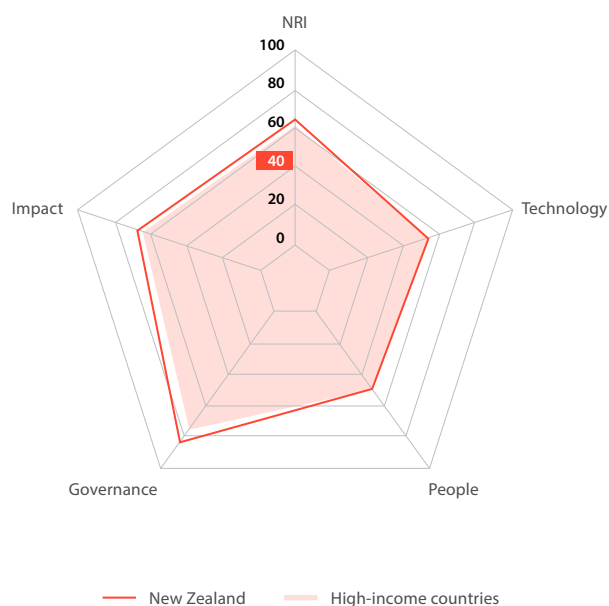
NOTE: ● Indicates a strength and ○ a weakness.

New Zealand

Rank Score
(Out of 133)

Network Readiness Index 22 65.83

Pillar/sub-pillar	Rank	Score
A. Technology pillar	29	54.67
1st sub-pillar: Access	49	70.61
2nd sub-pillar: Content	28	45.38
3rd sub-pillar: Future Technologies	32	48.04
B. People pillar	27	51.88
1st sub-pillar: Individuals	101	39.81
2nd sub-pillar: Businesses	25	52.01
3rd sub-pillar: Governments	20	63.82
C. Governance pillar	10	86.15
1st sub-pillar: Trust	12	85.46
2nd sub-pillar: Regulation	18	85.39
3rd sub-pillar: Inclusion	2	87.61
D. Impact pillar	17	70.60
1st sub-pillar: Economy	30	42.30
2nd sub-pillar: Quality of Life	11	86.24
3rd sub-pillar: SDG Contribution	15	83.24



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	29	54.67
1st sub-pillar: Access	49	70.61
1.1.1 Mobile tariffs	39	75.99
1.1.2 Handset prices	20	92.15
1.1.3 FTTH/building Internet subscriptions	60	31.69 ○
1.1.4 Population covered by at least a 3G mobile network	78	83.17 ○
1.1.5 International Internet bandwidth	70	70.03 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	28	45.38
1.2.1 GitHub commits	16	59.73
1.2.2 Internet domain registrations	17	45.85
1.2.3 Mobile apps development	51	69.24
1.2.4 AI scientific publications	69	6.71 ○
3rd sub-pillar: Future Technologies	32	48.04
1.3.1 Adoption of emerging technologies	9	92.79 ●
1.3.2 Investment in emerging technologies	19	68.50
1.3.3 Robot density	34	6.89 ○
1.3.4 Computer software spending	54	23.96
B. People pillar	27	51.88
1st sub-pillar: Individuals	101	39.81
2.1.1 Mobile broadband internet traffic within the country	90	5.89 ○
2.1.2 ICT skills in the education system	17	79.15
2.1.3 Use of virtual social networks	23	68.82
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	41	5.36 ○
2nd sub-pillar: Businesses	25	52.01
2.2.1 Firms with website	3	92.17 ●
2.2.2 Number of venture capital deals invested in AI	31	17.65
2.2.3 Annual investment in telecommunication services	38	58.62
2.2.4 Public cloud computing market scale	26	39.59
3rd sub-pillar: Governments	20	63.82
2.3.1 Government online services	6	95.35 ●
2.3.2 Data Capabilities	17	62.93
2.3.3 Government promotion of investment in emerging technologies	18	71.86
2.3.4 R&D expenditure by governments and higher education	31	25.13

Indicator	Rank	Score
C. Governance pillar	10	86.15
1st sub-pillar: Trust	12	85.46
3.1.1 Secure Internet servers	36	79.23
3.1.2 Cybersecurity	56	84.00
3.1.3 Online access to financial account	6	90.01 ●
3.1.4 Internet shopping	7	88.60 ●
2nd sub-pillar: Regulation	18	85.39
3.2.1 Regulatory quality	3	91.80 ●
3.2.2 ICT regulatory environment	38	88.69
3.2.3 Regulation of emerging technologies	20	77.99
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	69	68.47 ○
3rd sub-pillar: Inclusion	2	87.61
3.3.1 E-Participation	6	95.34 ●
3.3.2 Socioeconomic gap in use of digital payments	24	94.64
3.3.3 Availability of local online content	17	86.54
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	33	73.94
D. Impact pillar	17	70.60
1st sub-pillar: Economy	30	42.30
4.1.1 ICT patent applications	20	30.57
4.1.2 Domestic market scale	61	54.04
4.1.3 Prevalence of gig economy	15	70.35 ●
4.1.4 ICT services exports	61	14.24
2nd sub-pillar: Quality of Life	11	86.24
4.2.1 Happiness	12	83.98 ●
4.2.2 Freedom to make life choices	36	85.05
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	11	93.15 ●
3rd sub-pillar: SDG Contribution	15	83.24
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	12	65.09
4.3.3 SDG 5: Women's economic opportunity	15	96.58
4.3.4 SDG 7: Affordable and Clean Energy	65	80.41 ○
4.3.5 SDG 11: Sustainable Cities and Communities	20	91.47

NOTE: ● Indicates a strength and ○ a weakness.

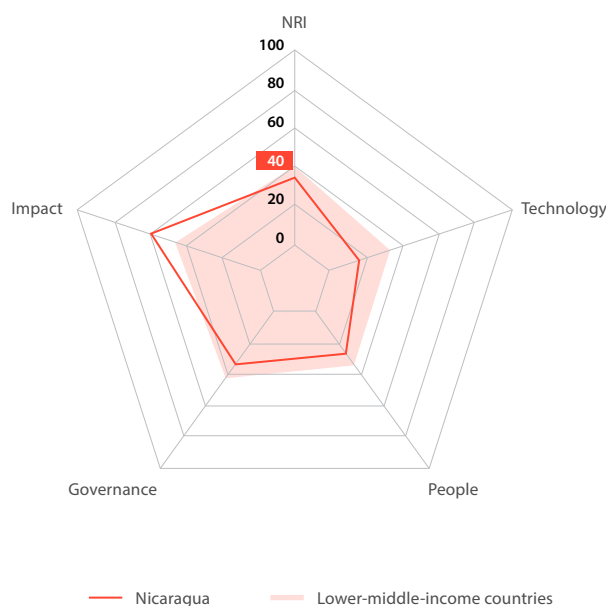
Nicaragua

	Rank (Out of 133)	Score
Network Readiness Index	116	33.51

Pillar/sub-pillar	Rank	Score
A. Technology pillar	129	13.74
1st sub-pillar: Access	125	26.37
2nd sub-pillar: Content	122	6.11
3rd sub-pillar: Future Technologies	133	8.74
B. People pillar	115	26.64
1st sub-pillar: Individuals	97	40.86
2nd sub-pillar: Businesses	126	16.87
3rd sub-pillar: Governments	112	22.19
C. Governance pillar	124	33.53
1st sub-pillar: Trust	125	16.03
2nd sub-pillar: Regulation	119	45.73
3rd sub-pillar: Inclusion	117	38.83
D. Impact pillar	41	60.14
1st sub-pillar: Economy	65	32.33
2nd sub-pillar: Quality of Life	45	72.60
3rd sub-pillar: SDG Contribution	40	75.50

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	129	13.74
1st sub-pillar: Access	125	26.37
1.1.1 Mobile tariffs	119	27.92
1.1.2 Handset prices	106	37.42
1.1.3 FTTH/building Internet subscriptions	92	19.30
1.1.4 Population covered by at least a 3G mobile network	120	14.91 ○
1.1.5 International Internet bandwidth	122	55.20 ○
1.1.6 Internet access in schools	86	3.47 ○
2nd sub-pillar: Content	122	6.11
1.2.1 GitHub commits	106	1.76
1.2.2 Internet domain registrations	90	1.35
1.2.3 Mobile apps development	121	21.08 ○
1.2.4 AI scientific publications	125	0.25 ○
3rd sub-pillar: Future Technologies	133	8.74
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	125	13.25 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	107	4.23
B. People pillar	115	26.64
1st sub-pillar: Individuals	97	40.86
2.1.1 Mobile broadband internet traffic within the country	98	4.34
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	86	44.01 ●
2.1.4 Adult literacy rate	75	74.24
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	126	16.87
2.2.1 Firms with website	99	29.64
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	109	4.11
3rd sub-pillar: Governments	112	22.19
2.3.1 Government online services	102	42.63
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	104	1.75 ○

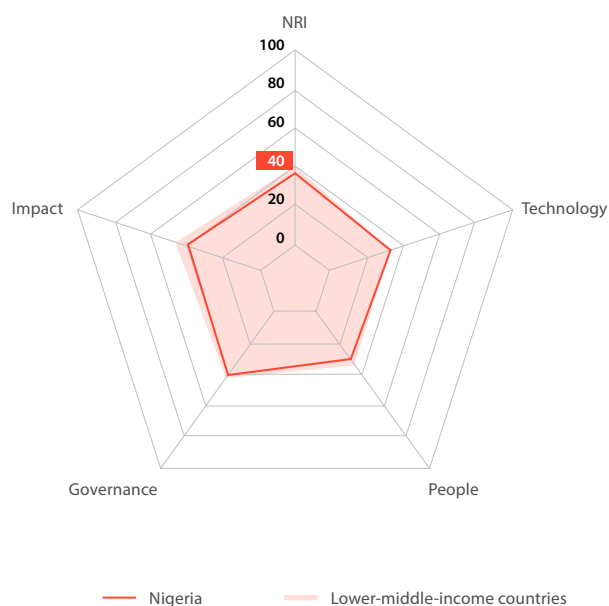


Indicator	Rank	Score
C. Governance pillar	124	33.53
1st sub-pillar: Trust	125	16.03
3.1.1 Secure Internet servers	104	35.91
3.1.2 Cybersecurity	128	9.00 ○
3.1.3 Online access to financial account	105	11.97
3.1.4 Internet shopping	101	7.23
2nd sub-pillar: Regulation	119	45.73
3.2.1 Regulatory quality	117	26.55
3.2.2 ICT regulatory environment	99	68.45
3.2.3 Regulation of emerging technologies	114	9.65 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	129	24.02 ○
3rd sub-pillar: Inclusion	117	38.83
3.3.1 E-Participation	113	23.26
3.3.2 Socioeconomic gap in use of digital payments	72	71.20 ●
3.3.3 Availability of local online content	106	34.38
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	112	26.49
D. Impact pillar	41	60.14
1st sub-pillar: Economy	65	32.33
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	112	37.19
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	34	27.47 ●
2nd sub-pillar: Quality of Life	45	72.60
4.2.1 Happiness	43	70.38 ●
4.2.2 Freedom to make life choices	20	90.12 ●
4.2.3 Income inequality	105	43.19
4.2.4 Healthy life expectancy at birth	47	71.41 ●
3rd sub-pillar: SDG Contribution	40	75.50
4.3.1 SDG 3: Good Health and Well-Being	77	66.13 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	59	81.20 ●
4.3.4 SDG 7: Affordable and Clean Energy	83	76.61 ●
4.3.5 SDG 11: Sustainable Cities and Communities	57	71.25 ●

Nigeria

	Rank (Out of 133)	Score
Network Readiness Index	112	34.87

Pillar/sub-pillar	Rank	Score
A. Technology pillar	94	32.50
1st sub-pillar: Access	110	38.87
2nd sub-pillar: Content	49	31.77
3rd sub-pillar: Future Technologies	99	26.87
B. People pillar	112	28.40
1st sub-pillar: Individuals	119	27.35
2nd sub-pillar: Businesses	113	24.62
3rd sub-pillar: Governments	85	33.24
C. Governance pillar	114	38.69
1st sub-pillar: Trust	84	37.66
2nd sub-pillar: Regulation	113	52.24
3rd sub-pillar: Inclusion	128	26.17
D. Impact pillar	118	39.89
1st sub-pillar: Economy	98	25.52
2nd sub-pillar: Quality of Life	105	49.92
3rd sub-pillar: SDG Contribution	126	44.23



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	94	32.50
1st sub-pillar: Access	110	38.87
1.1.1 Mobile tariffs	105	42.09
1.1.2 Handset prices	114	33.12
1.1.3 FTTH/building Internet subscriptions	91	19.78
1.1.4 Population covered by at least a 3G mobile network	111	26.99
1.1.5 International Internet bandwidth	59	72.36 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	49	31.77
2.2.1 GitHub commits	86	4.20
2.2.2 Internet domain registrations	107	0.45
2.2.3 Mobile apps development	83	60.67
2.2.4 AI scientific publications	13	61.77 ●
3rd sub-pillar: Future Technologies	99	26.87
3.3.1 Adoption of emerging technologies	88	43.79
3.3.2 Investment in emerging technologies	113	22.75
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	82	14.06
B. People pillar	112	28.40
1st sub-pillar: Individuals	119	27.35
2.1.1 Mobile broadband internet traffic within the country	76	9.52 ●
2.1.2 ICT skills in the education system	90	42.19
2.1.3 Use of virtual social networks	115	10.30
2.1.4 Adult literacy rate	95	47.38 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	113	24.62
2.2.1 Firms with website	117	8.10 ○
2.2.2 Number of venture capital deals invested in AI	74	1.24 ○
2.2.3 Annual investment in telecommunication services	27	63.90 ●
2.2.4 Public cloud computing market scale	49	25.22 ●
3rd sub-pillar: Governments	85	33.24
2.3.1 Government online services	93	47.50
2.3.2 Data Capabilities	55	34.08 ●
2.3.3 Government promotion of investment in emerging technologies	98	18.14
2.3.4 R&D expenditure by governments and higher education	NA	NA

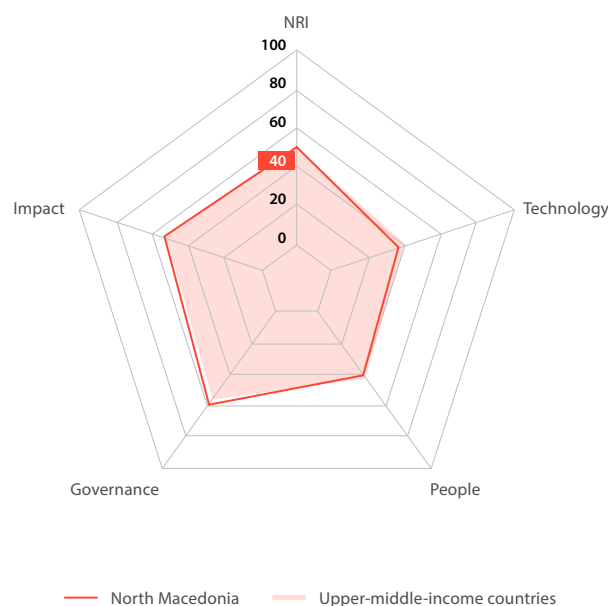
Indicator	Rank	Score
C. Governance pillar	114	38.69
1st sub-pillar: Trust	84	37.66
3.1.1 Secure Internet servers	106	34.23
3.1.2 Cybersecurity	55	84.75 ●
3.1.3 Online access to financial account	82	28.42
3.1.4 Internet shopping	115	3.23 ○
2nd sub-pillar: Regulation	113	52.24
3.2.1 Regulatory quality	127	20.89 ○
3.2.2 ICT regulatory environment	46	86.90 ●
3.2.3 Regulation of emerging technologies	103	24.23
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	93	54.17
3rd sub-pillar: Inclusion	128	26.17
3.3.1 E-Participation	103	29.07
3.3.2 Socioeconomic gap in use of digital payments	121	33.24 ○
3.3.3 Availability of local online content	117	27.40
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	120	14.97 ○
D. Impact pillar	118	39.89
1st sub-pillar: Economy	98	25.52
4.1.1 ICT patent applications	78	0.01
4.1.2 Domestic market scale	26	69.39 ●
4.1.3 Prevalence of gig economy	90	29.65
4.1.4 ICT services exports	109	3.04
2nd sub-pillar: Quality of Life	105	49.92
4.2.1 Happiness	99	37.29
4.2.2 Freedom to make life choices	108	58.54
4.2.3 Income inequality	59	71.72 ●
4.2.4 Healthy life expectancy at birth	115	36.14
3rd sub-pillar: SDG Contribution	126	44.23
4.3.1 SDG 3: Good Health and Well-Being	126	14.52 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	115	53.85
4.3.4 SDG 7: Affordable and Clean Energy	110	59.94
4.3.5 SDG 11: Sustainable Cities and Communities	129	23.29 ○

NOTE: ● Indicates a strength and ○ a weakness.

North Macedonia

	Rank (Out of 133)	Score
Network Readiness Index	77	45.92

Pillar/sub-pillar	Rank	Score
A. Technology pillar	90	34.74
1st sub-pillar: Access	76	62.74
2nd sub-pillar: Content	75	22.62
3rd sub-pillar: Future Technologies	117	18.85
B. People pillar	87	38.07
1st sub-pillar: Individuals	91	42.31
2nd sub-pillar: Businesses	74	33.85
3rd sub-pillar: Governments	70	38.05
C. Governance pillar	61	61.28
1st sub-pillar: Trust	59	53.23
2nd sub-pillar: Regulation	62	68.26
3rd sub-pillar: Inclusion	64	62.34
D. Impact pillar	92	49.62
1st sub-pillar: Economy	86	27.50
2nd sub-pillar: Quality of Life	86	60.42
3rd sub-pillar: SDG Contribution	86	60.93



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	90	34.74
1st sub-pillar: Access	76	62.74
1.1.1 Mobile tariffs	100	46.02
1.1.2 Handset prices	17	93.67 ●
1.1.3 FTTH/building Internet subscriptions	90	20.30
1.1.4 Population covered by at least a 3G mobile network	28	99.18 ●
1.1.5 International Internet bandwidth	124	54.52 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	75	22.62
1.2.1 GitHub commits	53	12.83
1.2.2 Internet domain registrations	49	7.84 ●
1.2.3 Mobile apps development	55	67.78
1.2.4 AI scientific publications	91	2.04
3rd sub-pillar: Future Technologies	117	18.85
1.3.1 Adoption of emerging technologies	104	28.95 ○
1.3.2 Investment in emerging technologies	122	17.50 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	91	10.10
B. People pillar	87	38.07
1st sub-pillar: Individuals	91	42.31
2.1.1 Mobile broadband internet traffic within the country	112	2.43 ○
2.1.2 ICT skills in the education system	105	32.92 ○
2.1.3 Use of virtual social networks	93	37.64
2.1.4 Adult literacy rate	35	96.24 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	74	33.85
2.2.1 Firms with website	22	77.54 ●
2.2.2 Number of venture capital deals invested in AI	36	13.96
2.2.3 Annual investment in telecommunication services	103	41.69
2.2.4 Public cloud computing market scale	119	2.22 ○
3rd sub-pillar: Governments	70	38.05
2.3.1 Government online services	65	67.06
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	52	40.46
2.3.4 R&D expenditure by governments and higher education	68	6.62

Indicator	Rank	Score
C. Governance pillar	61	61.28
1st sub-pillar: Trust	59	53.23
3.1.1 Secure Internet servers	64	56.18
3.1.2 Cybersecurity	46	89.92 ●
3.1.3 Online access to financial account	76	32.08
3.1.4 Internet shopping	58	34.75
2nd sub-pillar: Regulation	62	68.26
3.2.1 Regulatory quality	49	58.65 ●
3.2.2 ICT regulatory environment	46	86.90
3.2.3 Regulation of emerging technologies	89	35.22
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	25	85.51 ●
3rd sub-pillar: Inclusion	64	62.34
3.3.1 E-Participation	43	68.61 ●
3.3.2 Socioeconomic gap in use of digital payments	73	69.91
3.3.3 Availability of local online content	80	52.40
3.3.4 Gender gap in Internet use	78	61.28
3.3.5 Rural gap in use of digital payments	73	59.52
D. Impact pillar	92	49.62
1st sub-pillar: Economy	86	27.50
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	116	35.68 ○
4.1.3 Prevalence of gig economy	68	38.37
4.1.4 ICT services exports	24	35.94 ●
2nd sub-pillar: Quality of Life	86	60.42
4.2.1 Happiness	88	49.12
4.2.2 Freedom to make life choices	101	61.59
4.2.3 Income inequality	44	75.84
4.2.4 Healthy life expectancy at birth	67	65.25
3rd sub-pillar: SDG Contribution	86	60.93
4.3.1 SDG 3: Good Health and Well-Being	64	72.58
4.3.2 SDG 4: Quality Education	70	15.82 ○
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	45	84.21 ●
4.3.5 SDG 11: Sustainable Cities and Communities	81	55.82

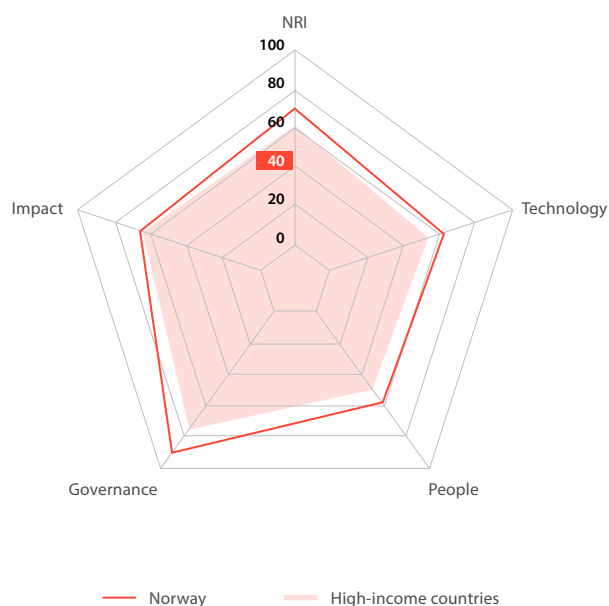
NOTE: ● Indicates a strength and ○ a weakness.

Norway

Rank Score
(Out of 133)

Network Readiness Index 14 69.70

Pillar/sub-pillar	Rank	Score
A. Technology pillar	15	63.47
1st sub-pillar: Access	13	80.00
2nd sub-pillar: Content	10	56.90
3rd sub-pillar: Future Technologies	22	53.52
B. People pillar	17	56.56
1st sub-pillar: Individuals	74	47.66
2nd sub-pillar: Businesses	22	54.41
3rd sub-pillar: Governments	12	67.62
C. Governance pillar	2	89.46
1st sub-pillar: Trust	2	95.32
2nd sub-pillar: Regulation	2	93.65
3rd sub-pillar: Inclusion	22	79.40
D. Impact pillar	20	69.30
1st sub-pillar: Economy	67	32.17
2nd sub-pillar: Quality of Life	3	92.80
3rd sub-pillar: SDG Contribution	17	82.92



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	15	63.47
1st sub-pillar: Access	13	80.00
1.1.1 Mobile tariffs	12	87.42
1.1.2 Handset prices	13	94.81
1.1.3 FTTH/building Internet subscriptions	65	30.87 ○
1.1.4 Population covered by at least a 3G mobile network	29	98.83
1.1.5 International Internet bandwidth	84	68.05 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	10	56.90
1.2.1 GitHub commits	5	89.18 ●
1.2.2 Internet domain registrations	13	56.75
1.2.3 Mobile apps development	32	72.35
1.2.4 AI scientific publications	61	9.33 ○
3rd sub-pillar: Future Technologies	22	53.52
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	16	73.50
1.3.3 Robot density	24	15.25 ○
1.3.4 Computer software spending	2	71.80 ●
B. People pillar	17	56.56
1st sub-pillar: Individuals	74	47.66
2.1.1 Mobile broadband internet traffic within the country	68	11.41 ○
2.1.2 ICT skills in the education system	16	80.56
2.1.3 Use of virtual social networks	15	71.63
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	16	27.04
2nd sub-pillar: Businesses	22	54.41
2.2.1 Firms with website	18	81.31
2.2.2 Number of venture capital deals invested in AI	17	30.00
2.2.3 Annual investment in telecommunication services	28	63.21
2.2.4 Public cloud computing market scale	22	43.13
3rd sub-pillar: Governments	12	67.62
2.3.1 Government online services	39	77.97
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	5	90.12 ●
2.3.4 R&D expenditure by governments and higher education	20	34.76

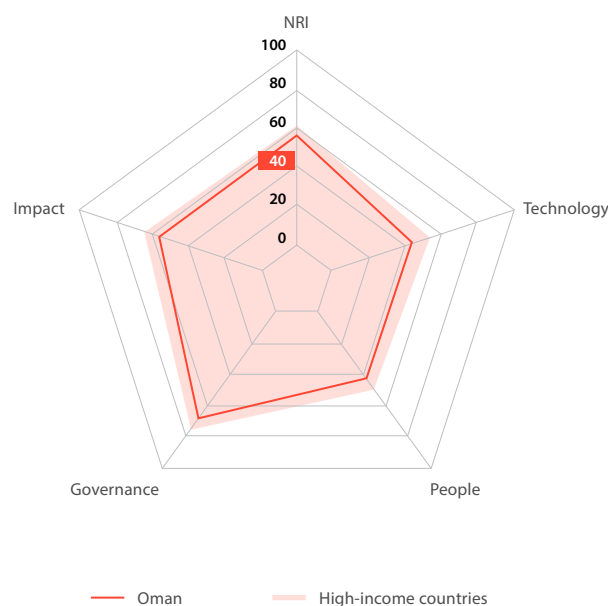
Indicator	Rank	Score
C. Governance pillar	2	89.46
1st sub-pillar: Trust	2	95.32
3.1.1 Secure Internet servers	20	84.36
3.1.2 Cybersecurity	23	96.92
3.1.3 Online access to financial account	1	100.00 ●
3.1.4 Internet shopping	1	100.00 ●
2nd sub-pillar: Regulation	2	93.65
3.2.1 Regulatory quality	16	83.61
3.2.2 ICT regulatory environment	11	94.64
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	6	96.34 ●
3rd sub-pillar: Inclusion	22	79.40
3.3.1 E-Participation	43	68.61
3.3.2 Socioeconomic gap in use of digital payments	12	97.56
3.3.3 Availability of local online content	27	84.13
3.3.4 Gender gap in Internet use	31	70.21
3.3.5 Rural gap in use of digital payments	16	76.50
D. Impact pillar	20	69.30
1st sub-pillar: Economy	67	32.17
4.1.1 ICT patent applications	22	25.03
4.1.2 Domestic market scale	50	58.73 ○
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	66	12.76 ○
2nd sub-pillar: Quality of Life	3	92.80
4.2.1 Happiness	6	90.02 ●
4.2.2 Freedom to make life choices	7	95.39 ●
4.2.3 Income inequality	11	90.75
4.2.4 Healthy life expectancy at birth	6	95.21 ●
3rd sub-pillar: SDG Contribution	17	82.92
4.3.1 SDG 3: Good Health and Well-Being	8	93.55
4.3.2 SDG 4: Quality Education	33	56.69 ○
4.3.3 SDG 5: Women's economic opportunity	20	95.73
4.3.4 SDG 7: Affordable and Clean Energy	55	82.89 ○
4.3.5 SDG 11: Sustainable Cities and Communities	2	99.19 ●

NOTE: ● Indicates a strength and ○ a weakness.

Oman

	Rank (Out of 133)	Score
Network Readiness Index	50	53.52

Pillar/sub-pillar	Rank	Score
A. Technology pillar	67	43.18
1st sub-pillar: Access	50	70.43
2nd sub-pillar: Content	95	17.55
3rd sub-pillar: Future Technologies	48	41.56
B. People pillar	43	46.26
1st sub-pillar: Individuals	16	63.44
2nd sub-pillar: Businesses	85	32.33
3rd sub-pillar: Governments	59	43.00
C. Governance pillar	47	68.46
1st sub-pillar: Trust	41	70.21
2nd sub-pillar: Regulation	82	63.54
3rd sub-pillar: Inclusion	45	71.64
D. Impact pillar	56	56.16
1st sub-pillar: Economy	47	38.80
2nd sub-pillar: Quality of Life	33	76.90
3rd sub-pillar: SDG Contribution	108	52.78



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	67	43.18
1st sub-pillar: Access	50	70.43
1.1.1 Mobile tariffs	68	62.80
1.1.2 Handset prices	60	68.42
1.1.3 FTTH/building Internet subscriptions	93	19.09 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	54	72.99
1.1.6 Internet access in schools	36	99.26
2nd sub-pillar: Content	95	17.55
1.2.1 GitHub commits	110	1.35 ○
1.2.2 Internet domain registrations	95	0.99 ○
1.2.3 Mobile apps development	62	65.91
1.2.4 AI scientific publications	93	1.94
3rd sub-pillar: Future Technologies	48	41.56
1.3.1 Adoption of emerging technologies	41	69.97
1.3.2 Investment in emerging technologies	42	50.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	105	4.71 ○
B. People pillar	43	46.26
1st sub-pillar: Individuals	16	63.44
2.1.1 Mobile broadband internet traffic within the country	87	6.24
2.1.2 ICT skills in the education system	23	76.76 ●
2.1.3 Use of virtual social networks	10	74.53 ●
2.1.4 Adult literacy rate	36	96.24
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	85	32.33
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	50	55.04
2.2.4 Public cloud computing market scale	84	9.62
3rd sub-pillar: Governments	59	43.00
2.3.1 Government online services	58	71.52
2.3.2 Data Capabilities	81	14.98 ○
2.3.3 Government promotion of investment in emerging technologies	9	80.47 ●
2.3.4 R&D expenditure by governments and higher education	79	5.04

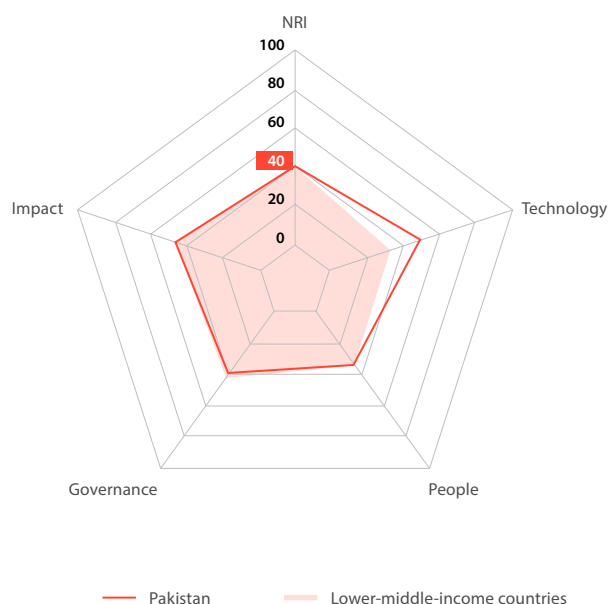
Indicator	Rank	Score
C. Governance pillar	47	68.46
1st sub-pillar: Trust	41	70.21
3.1.1 Secure Internet servers	86	44.42
3.1.2 Cybersecurity	28	96.00 ●
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	82	63.54
3.2.1 Regulatory quality	50	58.18
3.2.2 ICT regulatory environment	34	89.29
3.2.3 Regulation of emerging technologies	47	59.00
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	118	36.25 ○
3rd sub-pillar: Inclusion	45	71.64
3.3.1 E-Participation	50	65.12
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	42	74.52
3.3.4 Gender gap in Internet use	11	75.27 ●
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	56	56.16
1st sub-pillar: Economy	47	38.80
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	73	50.80
4.1.3 Prevalence of gig economy	30	61.92 ●
4.1.4 ICT services exports	103	3.69 ○
2nd sub-pillar: Quality of Life	33	76.90
4.2.1 Happiness	32	74.02 ●
4.2.2 Freedom to make life choices	33	86.39 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	74	63.67
3rd sub-pillar: SDG Contribution	108	52.78
4.3.1 SDG 3: Good Health and Well-Being	77	66.13
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	129	26.50 ○
4.3.4 SDG 7: Affordable and Clean Energy	116	55.26 ○
4.3.5 SDG 11: Sustainable Cities and Communities	27	87.04 ●

NOTE: ● Indicates a strength and ○ a weakness.

Pakistan

	Rank (Out of 133)	Score
Network Readiness Index	97	41.43

Pillar/sub-pillar	Rank	Score
A. Technology pillar	42	49.14
1st sub-pillar: Access	100	49.28
2nd sub-pillar: Content	31	44.66
3rd sub-pillar: Future Technologies	23	53.47
B. People pillar	103	31.87
1st sub-pillar: Individuals	100	39.82
2nd sub-pillar: Businesses	91	31.04
3rd sub-pillar: Governments	106	24.75
C. Governance pillar	116	38.17
1st sub-pillar: Trust	109	26.87
2nd sub-pillar: Regulation	105	54.82
3rd sub-pillar: Inclusion	119	32.82
D. Impact pillar	102	46.56
1st sub-pillar: Economy	46	38.85
2nd sub-pillar: Quality of Life	110	47.91
3rd sub-pillar: SDG Contribution	107	52.92



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	42	49.14
1st sub-pillar: Access	100	49.28
1.1.1 Mobile tariffs	67	63.01
1.1.2 Handset prices	94	45.43
1.1.3 FTTH/building Internet subscriptions	22	47.44 ●
1.1.4 Population covered by at least a 3G mobile network	123	8.73 ○
1.1.5 International Internet bandwidth	19	81.80 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	31	44.66
2.2.1 GitHub commits	101	2.20
2.2.2 Internet domain registrations	110	0.35
2.2.3 Mobile apps development	17	76.10 ●
2.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	23	53.47
3.3.1 Adoption of emerging technologies	40	71.45
3.3.2 Investment in emerging technologies	48	48.25
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	24	40.71 ●
B. People pillar	103	31.87
1st sub-pillar: Individuals	100	39.82
2.1.1 Mobile broadband internet traffic within the country	16	45.00 ●
2.1.2 ICT skills in the education system	75	50.74
2.1.3 Use of virtual social networks	104	22.75
2.1.4 Adult literacy rate	97	40.77 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	91	31.04
2.2.1 Firms with website	80	40.16
2.2.2 Number of venture capital deals invested in AI	76	0.67 ○
2.2.3 Annual investment in telecommunication services	35	60.69 ●
2.2.4 Public cloud computing market scale	55	22.65
3rd sub-pillar: Governments	106	24.75
2.3.1 Government online services	87	52.01
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	96	19.47
2.3.4 R&D expenditure by governments and higher education	96	2.78

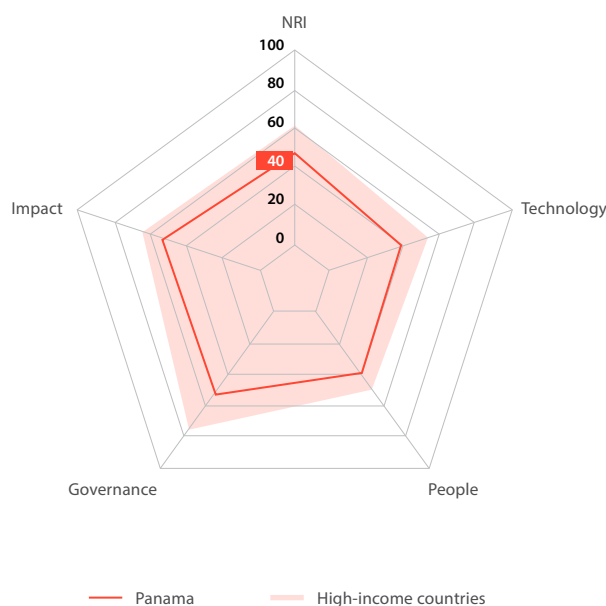
Indicator	Rank	Score
C. Governance pillar	116	38.17
1st sub-pillar: Trust	109	26.87
3.1.1 Secure Internet servers	107	34.06
3.1.2 Cybersecurity	86	64.92
3.1.3 Online access to financial account	114	8.48 ○
3.1.4 Internet shopping	127	0.00 ○
2nd sub-pillar: Regulation	105	54.82
3.2.1 Regulatory quality	115	27.22
3.2.2 ICT regulatory environment	43	87.50
3.2.3 Regulation of emerging technologies	50	55.36
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	94	54.01
3rd sub-pillar: Inclusion	119	32.82
3.3.1 E-Participation	93	34.88
3.3.2 Socioeconomic gap in use of digital payments	70	72.53
3.3.3 Availability of local online content	82	51.44
3.3.4 Gender gap in Internet use	105	0.00 ○
3.3.5 Rural gap in use of digital payments	123	5.25 ○
D. Impact pillar	102	46.56
1st sub-pillar: Economy	46	38.85
4.1.1 ICT patent applications	72	0.07
4.1.2 Domestic market scale	23	70.72 ●
4.1.3 Prevalence of gig economy	52	45.35
4.1.4 ICT services exports	22	39.27 ●
2nd sub-pillar: Quality of Life	110	47.91
4.2.1 Happiness	102	30.21
4.2.2 Freedom to make life choices	117	48.59 ○
4.2.3 Income inequality	20	85.86 ●
4.2.4 Healthy life expectancy at birth	108	44.00
3rd sub-pillar: SDG Contribution	107	52.92
4.3.1 SDG 3: Good Health and Well-Being	114	25.81
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	124	43.59 ○
4.3.4 SDG 7: Affordable and Clean Energy	77	77.19
4.3.5 SDG 11: Sustainable Cities and Communities	91	50.12

NOTE: ● Indicates a strength and ○ a weakness.

Panama

	Rank (Out of 133)	Score
Network Readiness Index	50	53.52

Pillar/sub-pillar	Rank	Score
A. Technology pillar	83	37.47
1st sub-pillar: Access	91	55.11
2nd sub-pillar: Content	76	22.45
3rd sub-pillar: Future Technologies	70	34.83
B. People pillar	76	39.46
1st sub-pillar: Individuals	31	56.76
2nd sub-pillar: Businesses	92	30.59
3rd sub-pillar: Governments	92	31.04
C. Governance pillar	84	51.88
1st sub-pillar: Trust	91	35.62
2nd sub-pillar: Regulation	70	67.11
3rd sub-pillar: Inclusion	85	52.92
D. Impact pillar	72	53.63
1st sub-pillar: Economy	105	23.40
2nd sub-pillar: Quality of Life	55	70.81
3rd sub-pillar: SDG Contribution	64	66.67



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	83	37.47
1st sub-pillar: Access	91	55.11
1.1.1 Mobile tariffs	71	62.26
1.1.2 Handset prices	22	91.66 ●
1.1.3 FTTH/building Internet subscriptions	107	11.99 ○
1.1.4 Population covered by at least a 3G mobile network	96	54.83
1.1.5 International Internet bandwidth	105	63.34 ○
1.1.6 Internet access in schools	66	46.58
2nd sub-pillar: Content	76	22.45
1.2.1 GitHub commits	91	3.49
1.2.2 Internet domain registrations	38	15.81 ●
1.2.3 Mobile apps development	47	70.33 ●
1.2.4 AI scientific publications	127	0.19 ○
3rd sub-pillar: Future Technologies	70	34.83
1.3.1 Adoption of emerging technologies	84	47.80
1.3.2 Investment in emerging technologies	63	40.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	77	16.45
B. People pillar	76	39.46
1st sub-pillar: Individuals	31	56.76
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	111	27.89 ○
2.1.3 Use of virtual social networks	76	48.50
2.1.4 Adult literacy rate	47	93.87
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	92	30.59
2.2.1 Firms with website	97	30.12
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	68	49.54
2.2.4 Public cloud computing market scale	76	12.12
3rd sub-pillar: Governments	92	31.04
2.3.1 Government online services	71	63.98
2.3.2 Data Capabilities	42	42.41
2.3.3 Government promotion of investment in emerging technologies	104	14.97 ○
2.3.4 R&D expenditure by governments and higher education	94	2.80 ○

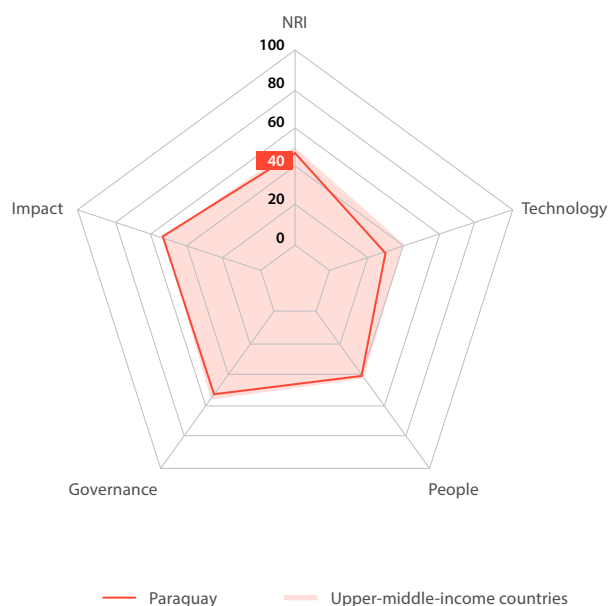
Indicator	Rank	Score
C. Governance pillar	84	51.88
1st sub-pillar: Trust	91	35.62
3.1.1 Secure Internet servers	62	58.27
3.1.2 Cybersecurity	104	34.08
3.1.3 Online access to financial account	72	34.86
3.1.4 Internet shopping	81	15.26
2nd sub-pillar: Regulation	70	67.11
3.2.1 Regulatory quality	67	51.01
3.2.2 ICT regulatory environment	78	76.79
3.2.3 Regulation of emerging technologies	64	47.98
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	27	84.76 ●
3rd sub-pillar: Inclusion	85	52.92
3.3.1 E-Participation	75	50.01
3.3.2 Socioeconomic gap in use of digital payments	106	44.45 ○
3.3.3 Availability of local online content	75	56.01
3.3.4 Gender gap in Internet use	23	71.25 ●
3.3.5 Rural gap in use of digital payments	97	42.90
D. Impact pillar	72	53.63
1st sub-pillar: Economy	105	23.40
4.1.1 ICT patent applications	61	0.28
4.1.2 Domestic market scale	75	50.30
4.1.3 Prevalence of gig economy	87	31.98
4.1.4 ICT services exports	70	11.06
2nd sub-pillar: Quality of Life	55	70.81
4.2.1 Happiness	31	74.39 ●
4.2.2 Freedom to make life choices	54	80.87
4.2.3 Income inequality	109	36.25 ○
4.2.4 Healthy life expectancy at birth	34	78.11 ●
3rd sub-pillar: SDG Contribution	64	66.67
4.3.1 SDG 3: Good Health and Well-Being	45	79.03 ●
4.3.2 SDG 4: Quality Education	69	17.10 ○
4.3.3 SDG 5: Women's economic opportunity	90	71.79
4.3.4 SDG 7: Affordable and Clean Energy	4	97.66 ●
4.3.5 SDG 11: Sustainable Cities and Communities	33	81.21 ●

NOTE: ● Indicates a strength and ○ a weakness.

Paraguay

	Rank (Out of 133)	Score
Network Readiness Index	94	42.26

Pillar/sub-pillar	Rank	Score
A. Technology pillar	100	30.40
1st sub-pillar: Access	85	57.35
2nd sub-pillar: Content	102	15.50
3rd sub-pillar: Future Technologies	119	18.34
B. People pillar	86	38.08
1st sub-pillar: Individuals	92	42.11
2nd sub-pillar: Businesses	29	49.17
3rd sub-pillar: Governments	109	22.96
C. Governance pillar	85	50.81
1st sub-pillar: Trust	95	33.73
2nd sub-pillar: Regulation	90	61.75
3rd sub-pillar: Inclusion	75	56.95
D. Impact pillar	91	49.75
1st sub-pillar: Economy	123	17.18
2nd sub-pillar: Quality of Life	63	69.29
3rd sub-pillar: SDG Contribution	73	62.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	100	30.40
1st sub-pillar: Access	85	57.35
1.1.1 Mobile tariffs	86	56.26
1.1.2 Handset prices	50	78.37 ●
1.1.3 FTTH/building Internet subscriptions	62	31.63 ●
1.1.4 Population covered by at least a 3G mobile network	47	95.52 ●
1.1.5 International Internet bandwidth	119	58.08 ○
1.1.6 Internet access in schools	79	24.21
2nd sub-pillar: Content	102	15.50
1.2.1 GitHub commits	95	2.93
1.2.2 Internet domain registrations	84	1.72
1.2.3 Mobile apps development	89	56.79
1.2.4 AI scientific publications	116	0.57
3rd sub-pillar: Future Technologies	119	18.34
1.3.1 Adoption of emerging technologies	101	32.23 ○
1.3.2 Investment in emerging technologies	120	19.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	109	3.78
B. People pillar	86	38.08
1st sub-pillar: Individuals	92	42.11
2.1.1 Mobile broadband internet traffic within the country	108	2.53
2.1.2 ICT skills in the education system	115	21.47 ○
2.1.3 Use of virtual social networks	72	52.34
2.1.4 Adult literacy rate	54	92.10
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	29	49.17
2.2.1 Firms with website	6	91.33 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	79	47.71
2.2.4 Public cloud computing market scale	88	8.46
3rd sub-pillar: Governments	109	22.96
2.3.1 Government online services	84	56.44
2.3.2 Data Capabilities	72	21.74
2.3.3 Government promotion of investment in emerging technologies	108	11.02 ○
2.3.4 R&D expenditure by governments and higher education	97	2.65

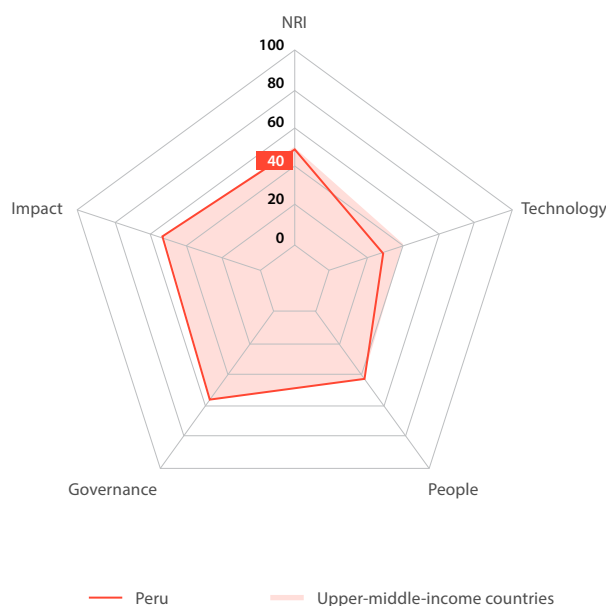
Indicator	Rank	Score
C. Governance pillar	85	50.81
1st sub-pillar: Trust	95	33.73
3.1.1 Secure Internet servers	70	49.78
3.1.2 Cybersecurity	90	57.08
3.1.3 Online access to financial account	91	21.16
3.1.4 Internet shopping	102	6.91
2nd sub-pillar: Regulation	90	61.75
3.2.1 Regulatory quality	81	44.03
3.2.2 ICT regulatory environment	118	58.57 ○
3.2.3 Regulation of emerging technologies	105	22.75
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	30	83.42 ●
3rd sub-pillar: Inclusion	75	56.95
3.3.1 E-Participation	75	50.01
3.3.2 Socioeconomic gap in use of digital payments	64	76.27
3.3.3 Availability of local online content	104	37.26
3.3.4 Gender gap in Internet use	10	75.41 ●
3.3.5 Rural gap in use of digital payments	94	45.81
D. Impact pillar	91	49.75
1st sub-pillar: Economy	123	17.18
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	87	45.55
4.1.3 Prevalence of gig economy	121	4.94 ○
4.1.4 ICT services exports	127	1.06 ○
2nd sub-pillar: Quality of Life	63	69.29
4.2.1 Happiness	52	67.09 ●
4.2.2 Freedom to make life choices	26	89.29 ●
4.2.3 Income inequality	104	46.02 ○
4.2.4 Healthy life expectancy at birth	87	56.97
3rd sub-pillar: SDG Contribution	73	62.79
4.3.1 SDG 3: Good Health and Well-Being	70	69.35
4.3.2 SDG 4: Quality Education	77	9.20 ○
4.3.3 SDG 5: Women's economic opportunity	27	92.31 ●
4.3.4 SDG 7: Affordable and Clean Energy	53	83.11 ●
4.3.5 SDG 11: Sustainable Cities and Communities	72	63.70

NOTE: ● Indicates a strength and ○ a weakness.

Peru

	Rank (Out of 133)	Score
Network Readiness Index	83	44.76

Pillar/sub-pillar	Rank	Score
A. Technology pillar	99	30.75
1st sub-pillar: Access	101	48.85
2nd sub-pillar: Content	84	19.75
3rd sub-pillar: Future Technologies	105	23.64
B. People pillar	56	44.07
1st sub-pillar: Individuals	26	57.83
2nd sub-pillar: Businesses	41	41.45
3rd sub-pillar: Governments	86	32.92
C. Governance pillar	77	53.61
1st sub-pillar: Trust	82	38.72
2nd sub-pillar: Regulation	76	65.83
3rd sub-pillar: Inclusion	77	56.27
D. Impact pillar	87	50.62
1st sub-pillar: Economy	116	20.05
2nd sub-pillar: Quality of Life	79	61.83
3rd sub-pillar: SDG Contribution	50	69.99



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	99	30.75
1st sub-pillar: Access	101	48.85
1.1.1 Mobile tariffs	63	64.12
1.1.2 Handset prices	78	54.66
1.1.3 FTTH/building Internet subscriptions	46	37.19 ●
1.1.4 Population covered by at least a 3G mobile network	115	19.26 ○
1.1.5 International Internet bandwidth	80	68.58
1.1.6 Internet access in schools	64	49.27
2nd sub-pillar: Content	84	19.75
1.2.1 GitHub commits	69	6.15
1.2.2 Internet domain registrations	68	3.20
1.2.3 Mobile apps development	84	60.00
1.2.4 AI scientific publications	58	9.66
3rd sub-pillar: Future Technologies	105	23.64
1.3.1 Adoption of emerging technologies	83	47.94 ○
1.3.2 Investment in emerging technologies	107	25.25 ○
1.3.3 Robot density	56	0.00 ○
1.3.4 Computer software spending	68	21.37
B. People pillar	56	44.07
1st sub-pillar: Individuals	26	57.83
2.1.1 Mobile broadband internet traffic within the country	25	34.49 ●
2.1.2 ICT skills in the education system	88	44.46
2.1.3 Use of virtual social networks	55	60.39
2.1.4 Adult literacy rate	55	91.99
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	41	41.45
2.2.1 Firms with website	20	80.56 ●
2.2.2 Number of venture capital deals invested in AI	75	1.01 ○
2.2.3 Annual investment in telecommunication services	43	57.52 ●
2.2.4 Public cloud computing market scale	44	26.70 ●
3rd sub-pillar: Governments	86	32.92
2.3.1 Government online services	37	78.99 ●
2.3.2 Data Capabilities	58	31.11
2.3.3 Government promotion of investment in emerging technologies	97	18.67 ○
2.3.4 R&D expenditure by governments and higher education	93	2.92 ○

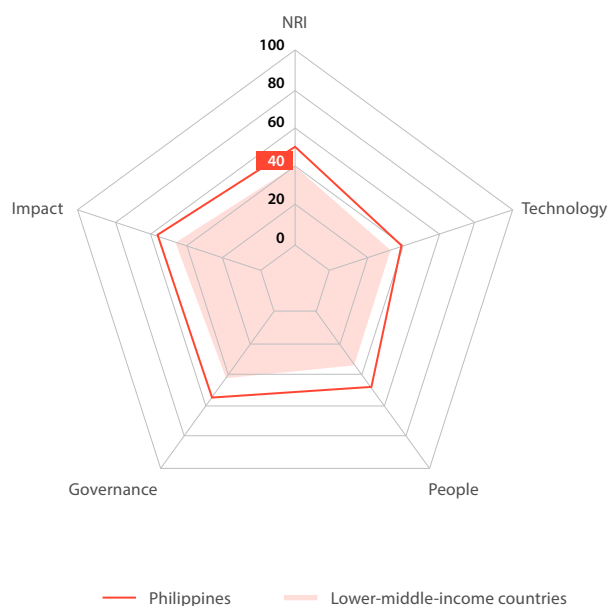
Indicator	Rank	Score
C. Governance pillar	77	53.61
1st sub-pillar: Trust	82	38.72
3.1.1 Secure Internet servers	75	48.76
3.1.2 Cybersecurity	91	55.67
3.1.3 Online access to financial account	77	32.06
3.1.4 Internet shopping	73	18.38
2nd sub-pillar: Regulation	76	65.83
3.2.1 Regulatory quality	58	52.92
3.2.2 ICT regulatory environment	59	84.52
3.2.3 Regulation of emerging technologies	97	29.51 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	84	62.18
3rd sub-pillar: Inclusion	77	56.27
3.3.1 E-Participation	22	75.59 ●
3.3.2 Socioeconomic gap in use of digital payments	86	58.83
3.3.3 Availability of local online content	99	40.38
3.3.4 Gender gap in Internet use	80	60.56
3.3.5 Rural gap in use of digital payments	92	46.01
D. Impact pillar	87	50.62
1st sub-pillar: Economy	116	20.05
4.1.1 ICT patent applications	66	0.16
4.1.2 Domestic market scale	45	60.58 ●
4.1.3 Prevalence of gig economy	111	18.02 ○
4.1.4 ICT services exports	122	1.44 ○
2nd sub-pillar: Quality of Life	79	61.83
4.2.1 Happiness	63	60.93
4.2.2 Freedom to make life choices	88	64.79
4.2.3 Income inequality	85	58.35
4.2.4 Healthy life expectancy at birth	79	61.22
3rd sub-pillar: SDG Contribution	50	69.99
4.3.1 SDG 3: Good Health and Well-Being	73	67.74
4.3.2 SDG 4: Quality Education	60	26.89
4.3.3 SDG 5: Women's economic opportunity	25	93.16 ●
4.3.4 SDG 7: Affordable and Clean Energy	16	91.15 ●
4.3.5 SDG 11: Sustainable Cities and Communities	58	69.72

NOTE: ● Indicates a strength and ○ a weakness.

Philippines

	Rank (Out of 133)	Score
Network Readiness Index	63	49.93

Pillar/sub-pillar	Rank	Score
A. Technology pillar	79	39.46
1st sub-pillar: Access	86	57.07
2nd sub-pillar: Content	72	23.95
3rd sub-pillar: Future Technologies	60	37.35
B. People pillar	33	50.40
1st sub-pillar: Individuals	7	71.10
2nd sub-pillar: Businesses	53	38.14
3rd sub-pillar: Governments	61	41.95
C. Governance pillar	74	54.23
1st sub-pillar: Trust	72	47.93
2nd sub-pillar: Regulation	85	63.09
3rd sub-pillar: Inclusion	89	51.67
D. Impact pillar	58	55.63
1st sub-pillar: Economy	28	42.88
2nd sub-pillar: Quality of Life	57	70.71
3rd sub-pillar: SDG Contribution	105	53.30



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	79	39.46
1st sub-pillar: Access	86	57.07
1.1.1 Mobile tariffs	59	65.72
1.1.2 Handset prices	121	28.54 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	77	83.27
1.1.5 International Internet bandwidth	56	72.74
1.1.6 Internet access in schools	70	35.09
2nd sub-pillar: Content	72	23.95
1.2.1 GitHub commits	88	4.03
1.2.2 Internet domain registrations	102	0.70
1.2.3 Mobile apps development	57	67.38
1.2.4 AI scientific publications	33	23.67
3rd sub-pillar: Future Technologies	60	37.35
1.3.1 Adoption of emerging technologies	53	64.90
1.3.2 Investment in emerging technologies	31	61.00 ●
1.3.3 Robot density	50	0.70 ○
1.3.4 Computer software spending	61	22.81
B. People pillar	33	50.40
1st sub-pillar: Individuals	7	71.10
2.1.1 Mobile broadband internet traffic within the country	18	43.80 ●
2.1.2 ICT skills in the education system	18	78.95 ●
2.1.3 Use of virtual social networks	39	63.86
2.1.4 Adult literacy rate	26	97.80
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	53	38.14
2.2.1 Firms with website	53	60.48 ○
2.2.2 Number of venture capital deals invested in AI	77	0.36 ○
2.2.3 Annual investment in telecommunication services	29	63.18 ●
2.2.4 Public cloud computing market scale	43	28.54
3rd sub-pillar: Governments	61	41.95
2.3.1 Government online services	76	59.14
2.3.2 Data Capabilities	66	25.59
2.3.3 Government promotion of investment in emerging technologies	14	77.44 ●
2.3.4 R&D expenditure by governments and higher education	74	5.63

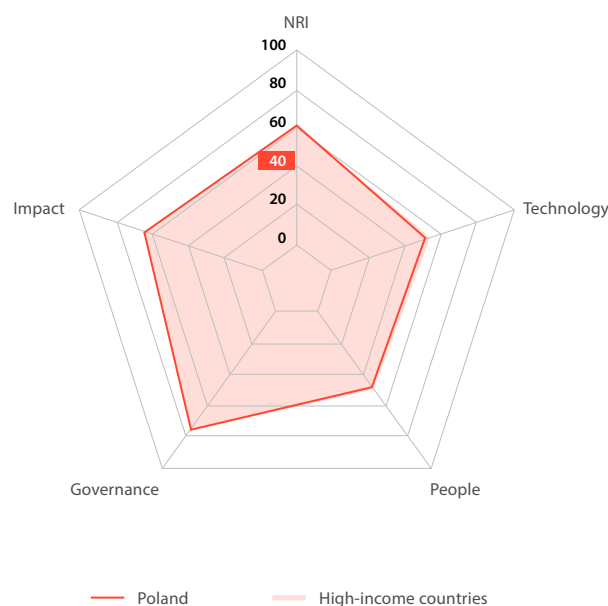
Indicator	Rank	Score
C. Governance pillar	74	54.23
1st sub-pillar: Trust	72	47.93
3.1.1 Secure Internet servers	101	37.56
3.1.2 Cybersecurity	69	77.00
3.1.3 Online access to financial account	70	36.13
3.1.4 Internet shopping	51	41.03
2nd sub-pillar: Regulation	85	63.09
3.2.1 Regulatory quality	70	49.50
3.2.2 ICT regulatory environment	109	64.52 ○
3.2.3 Regulation of emerging technologies	93	31.48 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	64	69.97
3rd sub-pillar: Inclusion	89	51.67
3.3.1 E-Participation	79	47.67
3.3.2 Socioeconomic gap in use of digital payments	114	39.89 ○
3.3.3 Availability of local online content	50	67.55
3.3.4 Gender gap in Internet use	5	81.63 ●
3.3.5 Rural gap in use of digital payments	116	21.61 ○
D. Impact pillar	58	55.63
1st sub-pillar: Economy	28	42.88
4.1.1 ICT patent applications	70	0.09 ○
4.1.2 Domestic market scale	28	68.75 ●
4.1.3 Prevalence of gig economy	35	57.85
4.1.4 ICT services exports	19	44.83 ●
2nd sub-pillar: Quality of Life	57	70.71
4.2.1 Happiness	54	66.42
4.2.2 Freedom to make life choices	9	94.42 ●
4.2.3 Income inequality	88	57.33
4.2.4 Healthy life expectancy at birth	106	45.27 ○
3rd sub-pillar: SDG Contribution	105	53.30
4.3.1 SDG 3: Good Health and Well-Being	98	46.77
4.3.2 SDG 4: Quality Education	80	6.22 ○
4.3.3 SDG 5: Women's economic opportunity	93	70.94
4.3.4 SDG 7: Affordable and Clean Energy	30	87.65 ●
4.3.5 SDG 11: Sustainable Cities and Communities	92	50.03

NOTE: ● Indicates a strength and ○ a weakness.

Poland

	Rank (Out of 133)	Score
Network Readiness Index	32	59.94

Pillar/sub-pillar	Rank	Score
A. Technology pillar	37	51.27
1st sub-pillar: Access	17	79.45
2nd sub-pillar: Content	39	39.13
3rd sub-pillar: Future Technologies	66	35.24
B. People pillar	39	47.86
1st sub-pillar: Individuals	33	56.60
2nd sub-pillar: Businesses	39	41.72
3rd sub-pillar: Governments	50	45.28
C. Governance pillar	32	76.23
1st sub-pillar: Trust	17	82.58
2nd sub-pillar: Regulation	50	72.80
3rd sub-pillar: Inclusion	41	73.30
D. Impact pillar	32	64.39
1st sub-pillar: Economy	44	38.97
2nd sub-pillar: Quality of Life	37	75.33
3rd sub-pillar: SDG Contribution	31	78.86



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	37	51.27
1st sub-pillar: Access	17	79.45
1.1.1 Mobile tariffs	30	80.05
1.1.2 Handset prices	41	83.03
1.1.3 FTTH/building Internet subscriptions	30	43.94
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	72	69.64 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	39	39.13
1.2.1 GitHub commits	26	40.89
1.2.2 Internet domain registrations	36	17.44
1.2.3 Mobile apps development	38	71.59
1.2.4 AI scientific publications	30	26.59
3rd sub-pillar: Future Technologies	66	35.24
1.3.1 Adoption of emerging technologies	44	67.28
1.3.2 Investment in emerging technologies	72	37.25 ○
1.3.3 Robot density	28	10.01 ○
1.3.4 Computer software spending	47	26.42
B. People pillar	39	47.86
1st sub-pillar: Individuals	33	56.60
2.1.1 Mobile broadband internet traffic within the country	21	40.42 ●
2.1.2 ICT skills in the education system	54	60.13
2.1.3 Use of virtual social networks	57	59.55
2.1.4 Adult literacy rate	8	99.70 ●
2.1.5 AI talent concentration	18	23.18
2nd sub-pillar: Businesses	39	41.72
2.2.1 Firms with website	48	62.52
2.2.2 Number of venture capital deals invested in AI	67	2.41 ○
2.2.3 Annual investment in telecommunication services	19	66.46 ●
2.2.4 Public cloud computing market scale	33	35.47
3rd sub-pillar: Governments	50	45.28
2.3.1 Government online services	43	77.11
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	74	33.02 ○
2.3.4 R&D expenditure by governments and higher education	29	25.70

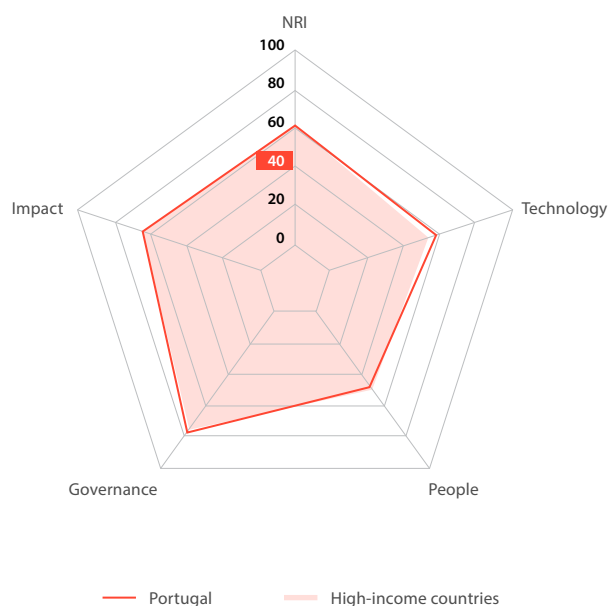
Indicator	Rank	Score
C. Governance pillar	32	76.23
1st sub-pillar: Trust	17	82.58
3.1.1 Secure Internet servers	27	80.86
3.1.2 Cybersecurity	37	93.83
3.1.3 Online access to financial account	18	77.53 ●
3.1.4 Internet shopping	18	78.11 ●
2nd sub-pillar: Regulation	50	72.80
3.2.1 Regulatory quality	38	64.86
3.2.2 ICT regulatory environment	43	87.50
3.2.3 Regulation of emerging technologies	74	45.02 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	75	66.63 ○
3rd sub-pillar: Inclusion	41	73.30
3.3.1 E-Participation	51	63.95
3.3.2 Socioeconomic gap in use of digital payments	34	90.29
3.3.3 Availability of local online content	52	67.07
3.3.4 Gender gap in Internet use	22	71.41
3.3.5 Rural gap in use of digital payments	35	73.79
D. Impact pillar	32	64.39
1st sub-pillar: Economy	44	38.97
4.1.1 ICT patent applications	32	5.02
4.1.2 Domestic market scale	21	71.57 ●
4.1.3 Prevalence of gig economy	46	52.62
4.1.4 ICT services exports	38	26.67
2nd sub-pillar: Quality of Life	37	75.33
4.2.1 Happiness	23	77.52 ●
4.2.2 Freedom to make life choices	84	67.87 ○
4.2.3 Income inequality	15	88.69 ●
4.2.4 Healthy life expectancy at birth	45	72.53
3rd sub-pillar: SDG Contribution	31	78.86
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	14	64.09 ●
4.3.3 SDG 5: Women's economic opportunity	28	91.45
4.3.4 SDG 7: Affordable and Clean Energy	54	82.97
4.3.5 SDG 11: Sustainable Cities and Communities	61	68.39 ○

NOTE: ● Indicates a strength and ○ a weakness.

Portugal

	Rank (Out of 133)	Score
Network Readiness Index	30	61.73

Pillar/sub-pillar	Rank	Score
A. Technology pillar	25	57.52
1st sub-pillar: Access	28	76.58
2nd sub-pillar: Content	25	45.70
3rd sub-pillar: Future Technologies	28	50.28
B. People pillar	42	47.16
1st sub-pillar: Individuals	45	52.28
2nd sub-pillar: Businesses	45	40.65
3rd sub-pillar: Governments	38	48.56
C. Governance pillar	30	76.68
1st sub-pillar: Trust	43	69.22
2nd sub-pillar: Regulation	17	85.47
3rd sub-pillar: Inclusion	34	75.36
D. Impact pillar	27	65.54
1st sub-pillar: Economy	51	37.39
2nd sub-pillar: Quality of Life	41	74.28
3rd sub-pillar: SDG Contribution	8	84.94



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	25	57.52
1st sub-pillar: Access	28	76.58
1.1.1 Mobile tariffs	80	59.70 ○
1.1.2 Handset prices	38	83.97
1.1.3 FTTH/building Internet subscriptions	36	41.38
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	40	75.43
1.1.6 Internet access in schools	38	98.97
2nd sub-pillar: Content	25	45.70
1.2.1 GitHub commits	24	45.65
1.2.2 Internet domain registrations	16	47.09 ●
1.2.3 Mobile apps development	46	70.47
1.2.4 AI scientific publications	39	19.57
3rd sub-pillar: Future Technologies	28	50.28
1.3.1 Adoption of emerging technologies	32	76.64
1.3.2 Investment in emerging technologies	39	52.75
1.3.3 Robot density	25	12.35
1.3.4 Computer software spending	11	59.39 ●
B. People pillar	42	47.16
1st sub-pillar: Individuals	45	52.28
2.1.1 Mobile broadband internet traffic within the country	61	13.81 ○
2.1.2 ICT skills in the education system	24	76.48
2.1.3 Use of virtual social networks	44	63.11
2.1.4 Adult literacy rate	41	95.34
2.1.5 AI talent concentration	31	12.66 ○
2nd sub-pillar: Businesses	45	40.65
2.2.1 Firms with website	59	56.61 ○
2.2.2 Number of venture capital deals invested in AI	30	18.55
2.2.3 Annual investment in telecommunication services	41	58.28
2.2.4 Public cloud computing market scale	42	29.15
3rd sub-pillar: Governments	38	48.56
2.3.1 Government online services	40	77.39
2.3.2 Data Capabilities	33	47.32
2.3.3 Government promotion of investment in emerging technologies	57	39.42 ○
2.3.4 R&D expenditure by governments and higher education	23	30.11

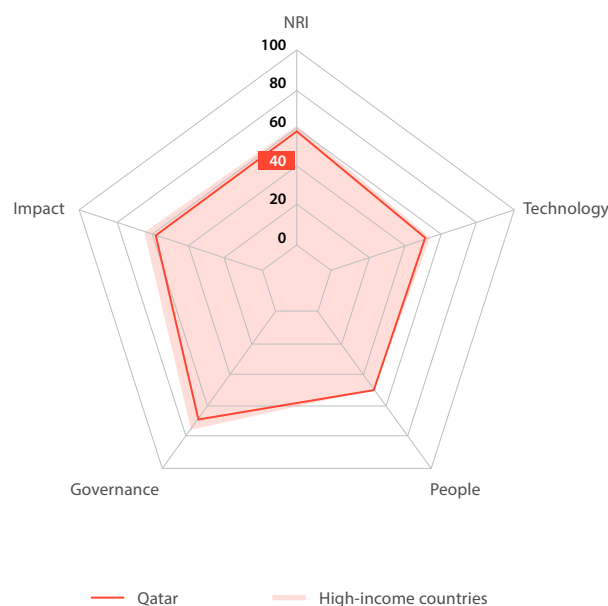
Indicator	Rank	Score
C. Governance pillar	30	76.68
1st sub-pillar: Trust	43	69.22
3.1.1 Secure Internet servers	32	79.85
3.1.2 Cybersecurity	20	97.33 ●
3.1.3 Online access to financial account	46	52.70
3.1.4 Internet shopping	46	47.00
2nd sub-pillar: Regulation	17	85.47
3.2.1 Regulatory quality	37	65.92
3.2.2 ICT regulatory environment	14	94.05 ●
3.2.3 Regulation of emerging technologies	24	75.73
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	11	91.66 ●
3rd sub-pillar: Inclusion	34	75.36
3.3.1 E-Participation	32	72.10
3.3.2 Socioeconomic gap in use of digital payments	48	84.24
3.3.3 Availability of local online content	37	77.64
3.3.4 Gender gap in Internet use	58	66.98 ○
3.3.5 Rural gap in use of digital payments	22	75.82
D. Impact pillar	27	65.54
1st sub-pillar: Economy	51	37.39
4.1.1 ICT patent applications	30	7.12
4.1.2 Domestic market scale	49	58.99
4.1.3 Prevalence of gig economy	35	57.85
4.1.4 ICT services exports	41	25.61
2nd sub-pillar: Quality of Life	41	74.28
4.2.1 Happiness	62	61.33 ○
4.2.2 Freedom to make life choices	61	79.97 ○
4.2.3 Income inequality	54	73.01 ○
4.2.4 Healthy life expectancy at birth	21	90.05 ●
3rd sub-pillar: SDG Contribution	8	84.94
4.3.1 SDG 3: Good Health and Well-Being	5	95.16 ●
4.3.2 SDG 4: Quality Education	27	58.02
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	20	90.28 ●
4.3.5 SDG 11: Sustainable Cities and Communities	24	87.79

NOTE: ● Indicates a strength and ○ a weakness.

Qatar

	Rank (Out of 133)	Score
Network Readiness Index	38	57.31

Pillar/sub-pillar	Rank	Score
A. Technology pillar	35	52.09
1st sub-pillar: Access	34	76.04
2nd sub-pillar: Content	96	17.28
3rd sub-pillar: Future Technologies	13	62.96
B. People pillar	31	50.80
1st sub-pillar: Individuals	8	69.27
2nd sub-pillar: Businesses	70	34.62
3rd sub-pillar: Governments	39	48.52
C. Governance pillar	45	69.29
1st sub-pillar: Trust	35	71.64
2nd sub-pillar: Regulation	47	73.87
3rd sub-pillar: Inclusion	63	62.35
D. Impact pillar	53	57.07
1st sub-pillar: Economy	23	45.03
2nd sub-pillar: Quality of Life	25	79.30
3rd sub-pillar: SDG Contribution	123	46.88



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	35	52.09
1st sub-pillar: Access	34	76.04
1.1.1 Mobile tariffs	29	80.35
1.1.2 Handset prices	21	91.86
1.1.3 FTTH/building Internet subscriptions	105	13.40
1.1.4 Population covered by at least a 3G mobile network	1	100.00
1.1.5 International Internet bandwidth	68	70.62
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	96	17.28
1.2.1 GitHub commits	89	3.94
1.2.2 Internet domain registrations	69	3.08
1.2.3 Mobile apps development	81	60.81
1.2.4 AI scientific publications	100	1.27
3rd sub-pillar: Future Technologies	13	62.96
1.3.1 Adoption of emerging technologies	19	83.10
1.3.2 Investment in emerging technologies	17	71.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	30	34.78
B. People pillar	31	50.80
1st sub-pillar: Individuals	8	69.27
2.1.1 Mobile broadband internet traffic within the country	74	10.21
2.1.2 ICT skills in the education system	8	85.75
2.1.3 Use of virtual social networks	4	84.27
2.1.4 Adult literacy rate	32	96.87
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	70	34.62
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	60	52.01
2.2.4 Public cloud computing market scale	61	17.22
3rd sub-pillar: Governments	39	48.52
2.3.1 Government online services	83	56.83
2.3.2 Data Capabilities	44	40.43
2.3.3 Government promotion of investment in emerging technologies	8	84.73
2.3.4 R&D expenditure by governments and higher education	53	12.09

Indicator	Rank	Score
C. Governance pillar	45	69.29
1st sub-pillar: Trust	35	71.64
3.1.1 Secure Internet servers	73	48.78
3.1.2 Cybersecurity	34	94.50
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	47	73.87
3.2.1 Regulatory quality	33	68.46
3.2.2 ICT regulatory environment	97	68.69
3.2.3 Regulation of emerging technologies	25	75.26
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	90	56.94
3rd sub-pillar: Inclusion	63	62.35
3.3.1 E-Participation	89	36.05
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	30	81.97
3.3.4 Gender gap in Internet use	44	69.03
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	53	57.07
1st sub-pillar: Economy	23	45.03
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	59	55.61
4.1.3 Prevalence of gig economy	14	71.22
4.1.4 ICT services exports	80	8.26
2nd sub-pillar: Quality of Life	25	79.30
4.2.1 Happiness	42	70.65
4.2.2 Freedom to make life choices	14	93.14
4.2.3 Income inequality	59	71.72
4.2.4 Healthy life expectancy at birth	39	76.50
3rd sub-pillar: SDG Contribution	123	46.88
4.3.1 SDG 3: Good Health and Well-Being	52	75.81
4.3.2 SDG 4: Quality Education	49	34.97
4.3.3 SDG 5: Women's economic opportunity	131	11.97
4.3.4 SDG 7: Affordable and Clean Energy	115	55.34
4.3.5 SDG 11: Sustainable Cities and Communities	12	94.70

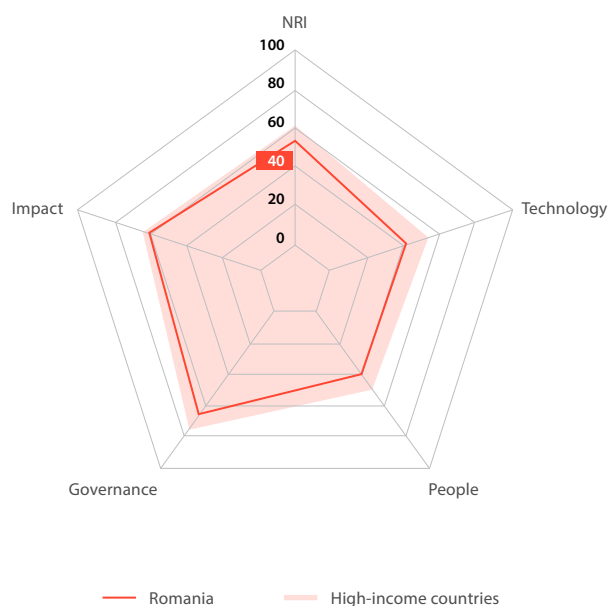
NOTE: ● Indicates a strength and ○ a weakness.

Romania

Rank Score
(Out of 133) **57 52.77**

Network Readiness Index

Pillar/sub-pillar	Rank	Score
A. Technology pillar	63	44.05
1st sub-pillar: Access	45	72.33
2nd sub-pillar: Content	58	27.54
3rd sub-pillar: Future Technologies	78	32.26
B. People pillar	79	39.25
1st sub-pillar: Individuals	62	49.66
2nd sub-pillar: Businesses	95	29.77
3rd sub-pillar: Governments	69	38.33
C. Governance pillar	51	66.19
1st sub-pillar: Trust	52	61.26
2nd sub-pillar: Regulation	43	74.91
3rd sub-pillar: Inclusion	62	62.40
D. Impact pillar	38	61.57
1st sub-pillar: Economy	35	40.48
2nd sub-pillar: Quality of Life	39	74.38
3rd sub-pillar: SDG Contribution	51	69.86



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	63	44.05
1st sub-pillar: Access	45	72.33
1.1.1 Mobile tariffs	14	86.50 ●
1.1.2 Handset prices	73	59.57
1.1.3 FTTH/building Internet subscriptions	21	47.87 ●
1.1.4 Population covered by at least a 3G mobile network	36	98.37 ●
1.1.5 International Internet bandwidth	77	69.36
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	58	27.54
1.2.1 GitHub commits	45	19.16
1.2.2 Internet domain registrations	45	8.99
1.2.3 Mobile apps development	49	69.56
1.2.4 AI scientific publications	51	12.46
3rd sub-pillar: Future Technologies	78	32.26
1.3.1 Adoption of emerging technologies	47	66.12
1.3.2 Investment in emerging technologies	90	31.25 ○
1.3.3 Robot density	38	5.38 ○
1.3.4 Computer software spending	49	26.30
B. People pillar	79	39.25
1st sub-pillar: Individuals	62	49.66
2.1.1 Mobile broadband internet traffic within the country	42	21.92
2.1.2 ICT skills in the education system	50	61.23
2.1.3 Use of virtual social networks	63	58.24
2.1.4 Adult literacy rate	19	98.76 ●
2.1.5 AI talent concentration	39	8.15 ○
2nd sub-pillar: Businesses	95	29.77
2.2.1 Firms with website	77	41.42 ○
2.2.2 Number of venture capital deals invested in AI	54	4.64 ○
2.2.3 Annual investment in telecommunication services	63	51.43
2.2.4 Public cloud computing market scale	56	21.59
3rd sub-pillar: Governments	69	38.33
2.3.1 Government online services	69	64.79
2.3.2 Data Capabilities	46	40.30
2.3.3 Government promotion of investment in emerging technologies	53	39.83
2.3.4 R&D expenditure by governments and higher education	62	8.38

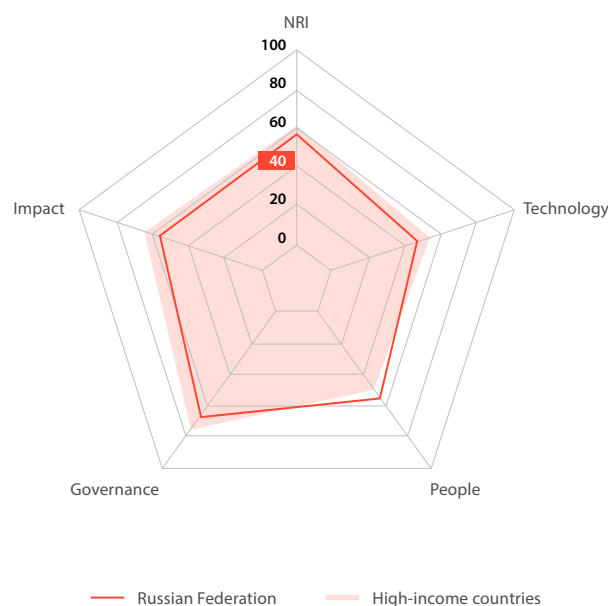
Indicator	Rank	Score
C. Governance pillar	51	66.19
1st sub-pillar: Trust	52	61.26
3.1.1 Secure Internet servers	34	79.56 ●
3.1.2 Cybersecurity	70	76.33
3.1.3 Online access to financial account	56	46.54
3.1.4 Internet shopping	50	42.63
2nd sub-pillar: Regulation	43	74.91
3.2.1 Regulatory quality	53	56.58
3.2.2 ICT regulatory environment	28	90.48 ●
3.2.3 Regulation of emerging technologies	54	52.36
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	53	75.14
3rd sub-pillar: Inclusion	62	62.40
3.3.1 E-Participation	54	61.63
3.3.2 Socioeconomic gap in use of digital payments	84	61.43 ○
3.3.3 Availability of local online content	45	71.88
3.3.4 Gender gap in Internet use	55	67.34
3.3.5 Rural gap in use of digital payments	89	49.73 ○
D. Impact pillar	38	61.57
1st sub-pillar: Economy	35	40.48
4.1.1 ICT patent applications	41	2.39
4.1.2 Domestic market scale	35	64.00 ●
4.1.3 Prevalence of gig economy	74	36.34 ○
4.1.4 ICT services exports	10	59.21 ●
2nd sub-pillar: Quality of Life	39	74.38
4.2.1 Happiness	34	73.18 ●
4.2.2 Freedom to make life choices	56	80.31
4.2.3 Income inequality	48	74.81
4.2.4 Healthy life expectancy at birth	72	64.52
3rd sub-pillar: SDG Contribution	51	69.86
4.3.1 SDG 3: Good Health and Well-Being	45	79.03
4.3.2 SDG 4: Quality Education	45	37.45
4.3.3 SDG 5: Women's economic opportunity	41	87.18
4.3.4 SDG 7: Affordable and Clean Energy	19	90.42 ●
4.3.5 SDG 11: Sustainable Cities and Communities	93	49.71 ○

NOTE: ● Indicates a strength and ○ a weakness.

Russian Federation

	Rank (Out of 133)	Score
Network Readiness Index	41	55.74

Pillar/sub-pillar	Rank	Score
A. Technology pillar	47	47.69
1st sub-pillar: Access	30	76.47
2nd sub-pillar: Content	37	42.38
3rd sub-pillar: Future Technologies	104	24.23
B. People pillar	22	54.58
1st sub-pillar: Individuals	5	75.84
2nd sub-pillar: Businesses	44	41.05
3rd sub-pillar: Governments	41	46.84
C. Governance pillar	49	66.74
1st sub-pillar: Trust	33	74.09
2nd sub-pillar: Regulation	112	52.66
3rd sub-pillar: Inclusion	40	73.47
D. Impact pillar	69	53.95
1st sub-pillar: Economy	41	39.55
2nd sub-pillar: Quality of Life	77	62.31
3rd sub-pillar: SDG Contribution	88	60.00



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	47	47.69
1st sub-pillar: Access	30	76.47
1.1.1 Mobile tariffs	31	79.35
1.1.2 Handset prices	33	86.74
1.1.3 FTTH/building Internet subscriptions	6	67.16 ●
1.1.4 Population covered by at least a 3G mobile network	91	66.68 ○
1.1.5 International Internet bandwidth	17	82.41 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	37	42.38
1.2.1 GitHub commits	47	14.83
1.2.2 Internet domain registrations	44	9.53
1.2.3 Mobile apps development	34	71.81
1.2.4 AI scientific publications	10	73.32 ●
3rd sub-pillar: Future Technologies	104	24.23
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	47	48.75
1.3.3 Robot density	48	1.02 ○
1.3.4 Computer software spending	60	22.91
B. People pillar	22	54.58
1st sub-pillar: Individuals	5	75.84
2.1.1 Mobile broadband internet traffic within the country	4	63.68 ●
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	38	63.95
2.1.4 Adult literacy rate	3	99.89 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	44	41.05
2.2.1 Firms with website	66	51.89
2.2.2 Number of venture capital deals invested in AI	79	0.00 ○
2.2.3 Annual investment in telecommunication services	11	73.89 ●
2.2.4 Public cloud computing market scale	27	38.40 ●
3rd sub-pillar: Governments	41	46.84
2.3.1 Government online services	61	70.91
2.3.2 Data Capabilities	30	50.00
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	37	19.61

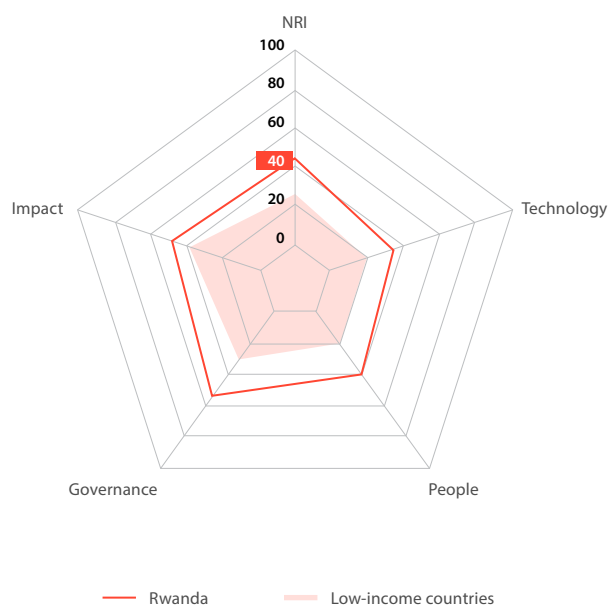
Indicator	Rank	Score
C. Governance pillar	49	66.74
1st sub-pillar: Trust	33	74.09
3.1.1 Secure Internet servers	40	75.73
3.1.2 Cybersecurity	8	98.08 ●
3.1.3 Online access to financial account	28	69.66
3.1.4 Internet shopping	42	52.91
2nd sub-pillar: Regulation	112	52.66
3.2.1 Regulatory quality	125	21.22 ○
3.2.2 ICT regulatory environment	124	55.36 ○
3.2.3 Regulation of emerging technologies	52	53.49
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	121	33.22 ○
3rd sub-pillar: Inclusion	40	73.47
3.3.1 E-Participation	57	59.31
3.3.2 Socioeconomic gap in use of digital payments	37	89.13
3.3.3 Availability of local online content	39	76.68
3.3.4 Gender gap in Internet use	40	69.53
3.3.5 Rural gap in use of digital payments	39	72.70
D. Impact pillar	69	53.95
1st sub-pillar: Economy	41	39.55
4.1.1 ICT patent applications	40	2.61
4.1.2 Domestic market scale	6	81.99 ●
4.1.3 Prevalence of gig economy	25	63.66 ●
4.1.4 ICT services exports	77	9.94
2nd sub-pillar: Quality of Life	77	62.31
4.2.1 Happiness	70	59.36
4.2.2 Freedom to make life choices	96	63.60 ○
4.2.3 Income inequality	59	71.72
4.2.4 Healthy life expectancy at birth	91	56.22 ○
3rd sub-pillar: SDG Contribution	88	60.00
4.3.1 SDG 3: Good Health and Well-Being	41	80.65
4.3.2 SDG 4: Quality Education	24	59.56
4.3.3 SDG 5: Women's economic opportunity	109	63.25 ○
4.3.4 SDG 7: Affordable and Clean Energy	122	46.13 ○
4.3.5 SDG 11: Sustainable Cities and Communities	74	61.48

NOTE: ● Indicates a strength and ○ a weakness.

Rwanda

	Rank (Out of 133)	Score
Network Readiness Index	91	43.16

Pillar/sub-pillar	Rank	Score
A. Technology pillar	93	33.10
1st sub-pillar: Access	102	46.83
2nd sub-pillar: Content	105	14.66
3rd sub-pillar: Future Technologies	55	37.80
B. People pillar	88	37.93
1st sub-pillar: Individuals	109	33.66
2nd sub-pillar: Businesses	82	32.78
3rd sub-pillar: Governments	40	47.35
C. Governance pillar	76	53.65
1st sub-pillar: Trust	83	38.44
2nd sub-pillar: Regulation	66	67.51
3rd sub-pillar: Inclusion	80	55.00
D. Impact pillar	98	47.98
1st sub-pillar: Economy	83	28.59
2nd sub-pillar: Quality of Life	113	44.91
3rd sub-pillar: SDG Contribution	49	70.45



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	93	33.10
1st sub-pillar: Access	102	46.83
1.1.1 Mobile tariffs	118	29.84 ○
1.1.2 Handset prices	103	40.83
1.1.3 FTTH/building Internet subscriptions	75	27.19
1.1.4 Population covered by at least a 3G mobile network	59	89.63
1.1.5 International Internet bandwidth	111	61.70
1.1.6 Internet access in schools	73	31.78
2nd sub-pillar: Content	105	14.66
1.2.1 GitHub commits	74	4.87
1.2.2 Internet domain registrations	119	0.17 ○
1.2.3 Mobile apps development	106	46.15 ○
1.2.4 AI scientific publications	66	7.48
3rd sub-pillar: Future Technologies	55	37.80
1.3.1 Adoption of emerging technologies	66	59.73
1.3.2 Investment in emerging technologies	42	50.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	111	3.67
B. People pillar	88	37.93
1st sub-pillar: Individuals	109	33.66
2.1.1 Mobile broadband internet traffic within the country	107	2.63
2.1.2 ICT skills in the education system	48	61.42 ●
2.1.3 Use of virtual social networks	127	1.22 ○
2.1.4 Adult literacy rate	83	69.36
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	82	32.78
2.2.1 Firms with website	92	32.66
2.2.2 Number of venture capital deals invested in AI	8	55.86 ●
2.2.3 Annual investment in telecommunication services	113	39.39 ○
2.2.4 Public cloud computing market scale	112	3.20 ○
3rd sub-pillar: Governments	40	47.35
2.3.1 Government online services	41	77.18 ●
2.3.2 Data Capabilities	56	33.04
2.3.3 Government promotion of investment in emerging technologies	23	65.69 ●
2.3.4 R&D expenditure by governments and higher education	48	13.48

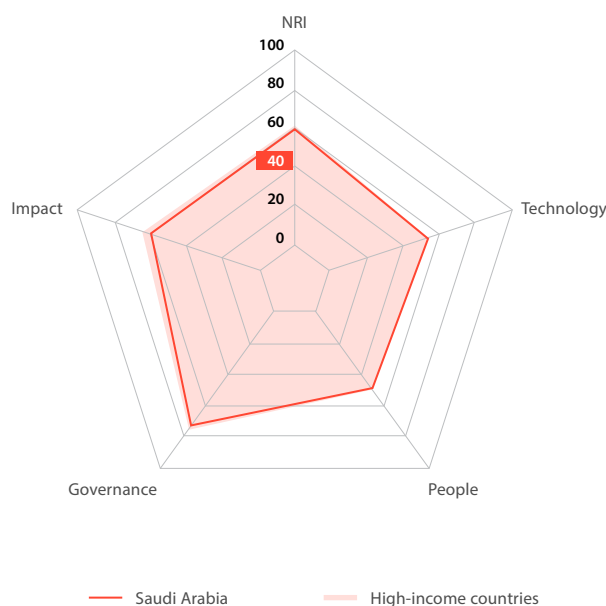
Indicator	Rank	Score
C. Governance pillar	76	53.65
1st sub-pillar: Trust	83	38.44
3.1.1 Secure Internet servers	105	35.01
3.1.2 Cybersecurity	65	79.92
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	126	0.40 ○
2nd sub-pillar: Regulation	66	67.51
3.2.1 Regulatory quality	62	51.85
3.2.2 ICT regulatory environment	46	86.90 ●
3.2.3 Regulation of emerging technologies	57	50.27
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	106	48.51
3rd sub-pillar: Inclusion	80	55.00
3.3.1 E-Participation	53	62.80 ●
3.3.2 Socioeconomic gap in use of digital payments	120	36.12 ○
3.3.3 Availability of local online content	82	51.44
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	51	69.65 ●
D. Impact pillar	98	47.98
1st sub-pillar: Economy	83	28.59
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	118	35.27 ○
4.1.3 Prevalence of gig economy	55	44.77
4.1.4 ICT services exports	92	5.73
2nd sub-pillar: Quality of Life	113	44.91
4.2.1 Happiness	130	1.82 ○
4.2.2 Freedom to make life choices	46	83.77 ●
4.2.3 Income inequality	99	49.61
4.2.4 Healthy life expectancy at birth	102	48.70
3rd sub-pillar: SDG Contribution	49	70.45
4.3.1 SDG 3: Good Health and Well-Being	110	32.26
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	35	88.89 ●
4.3.4 SDG 7: Affordable and Clean Energy	63	81.73
4.3.5 SDG 11: Sustainable Cities and Communities	94	49.19

NOTE: ● Indicates a strength and ○ a weakness.

Saudi Arabia

	Rank (Out of 133)	Score
Network Readiness Index	35	58.75

Pillar/sub-pillar	Rank	Score
A. Technology pillar	31	53.95
1st sub-pillar: Access	22	78.61
2nd sub-pillar: Content	79	21.58
3rd sub-pillar: Future Technologies	14	61.67
B. People pillar	30	51.13
1st sub-pillar: Individuals	15	66.54
2nd sub-pillar: Businesses	87	31.53
3rd sub-pillar: Governments	26	55.31
C. Governance pillar	44	70.44
1st sub-pillar: Trust	32	74.12
2nd sub-pillar: Regulation	91	61.25
3rd sub-pillar: Inclusion	30	75.95
D. Impact pillar	45	59.47
1st sub-pillar: Economy	29	42.33
2nd sub-pillar: Quality of Life	16	84.30
3rd sub-pillar: SDG Contribution	112	51.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	31	53.95
1st sub-pillar: Access	22	78.61
1.1.1 Mobile tariffs	51	71.48
1.1.2 Handset prices	64	65.46
1.1.3 FTTH/building Internet subscriptions	23	47.35
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	9	87.35 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	79	21.58
1.2.1 GitHub commits	97	2.59 ○
1.2.2 Internet domain registrations	83	1.72
1.2.3 Mobile apps development	69	64.22
1.2.4 AI scientific publications	41	17.79
3rd sub-pillar: Future Technologies	14	61.67
1.3.1 Adoption of emerging technologies	8	95.39 ●
1.3.2 Investment in emerging technologies	30	61.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	41	28.11
B. People pillar	30	51.13
1st sub-pillar: Individuals	15	66.54
2.1.1 Mobile broadband internet traffic within the country	5	60.78 ●
2.1.2 ICT skills in the education system	11	82.71 ●
2.1.3 Use of virtual social networks	5	83.43 ●
2.1.4 Adult literacy rate	37	95.94
2.1.5 AI talent concentration	35	9.87 ○
2nd sub-pillar: Businesses	87	31.53
2.2.1 Firms with website	110	16.33 ○
2.2.2 Number of venture capital deals invested in AI	64	3.47 ○
2.2.3 Annual investment in telecommunication services	17	69.61
2.2.4 Public cloud computing market scale	31	36.70
3rd sub-pillar: Governments	26	55.31
2.3.1 Government online services	32	80.33
2.3.2 Data Capabilities	38	45.84
2.3.3 Government promotion of investment in emerging technologies	6	86.91 ●
2.3.4 R&D expenditure by governments and higher education	63	8.19

Indicator	Rank	Score
C. Governance pillar	44	70.44
1st sub-pillar: Trust	32	74.12
3.1.1 Secure Internet servers	89	43.09
3.1.2 Cybersecurity	2	99.50 ●
3.1.3 Online access to financial account	12	82.31 ●
3.1.4 Internet shopping	21	71.59
2nd sub-pillar: Regulation	91	61.25
3.2.1 Regulatory quality	51	57.85
3.2.2 ICT regulatory environment	14	94.05
3.2.3 Regulation of emerging technologies	18	78.74
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	128	25.59 ○
3rd sub-pillar: Inclusion	30	75.95
3.3.1 E-Participation	43	68.61
3.3.2 Socioeconomic gap in use of digital payments	60	78.24
3.3.3 Availability of local online content	11	91.11 ●
3.3.4 Gender gap in Internet use	31	70.21
3.3.5 Rural gap in use of digital payments	42	71.56
D. Impact pillar	45	59.47
1st sub-pillar: Economy	29	42.33
4.1.1 ICT patent applications	33	4.94
4.1.2 Domestic market scale	17	74.18
4.1.3 Prevalence of gig economy	5	86.05 ●
4.1.4 ICT services exports	98	4.17 ○
2nd sub-pillar: Quality of Life	16	84.30
4.2.1 Happiness	14	83.48
4.2.2 Freedom to make life choices	25	89.44
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	40	75.65
3rd sub-pillar: SDG Contribution	112	51.79
4.3.1 SDG 3: Good Health and Well-Being	64	72.58
4.3.2 SDG 4: Quality Education	66	20.61 ○
4.3.3 SDG 5: Women's economic opportunity	111	60.68 ○
4.3.4 SDG 7: Affordable and Clean Energy	103	65.50 ○
4.3.5 SDG 11: Sustainable Cities and Communities	96	48.16

NOTE: ● Indicates a strength and ○ a weakness.

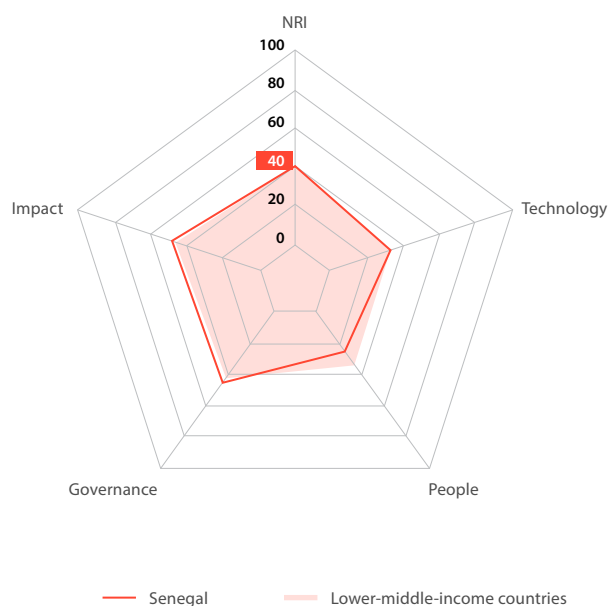
Senegal

	Rank (Out of 133)	Score
Network Readiness Index	101	39.10

Pillar/sub-pillar	Rank	Score
A. Technology pillar	92	33.17
1st sub-pillar: Access	98	50.81
2nd sub-pillar: Content	117	10.93
3rd sub-pillar: Future Technologies	57	37.78
B. People pillar	119	24.95
1st sub-pillar: Individuals	113	32.14
2nd sub-pillar: Businesses	122	21.10
3rd sub-pillar: Governments	113	21.60
C. Governance pillar	97	47.44
1st sub-pillar: Trust	104	28.00
2nd sub-pillar: Regulation	68	67.45
3rd sub-pillar: Inclusion	98	46.85
D. Impact pillar	86	50.85
1st sub-pillar: Economy	62	32.64
2nd sub-pillar: Quality of Life	95	57.70
3rd sub-pillar: SDG Contribution	80	62.22

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	92	33.17
1st sub-pillar: Access	98	50.81
1.1.1 Mobile tariffs	99	46.09
1.1.2 Handset prices	113	35.12 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	52	94.30 ●
1.1.5 International Internet bandwidth	129	51.94 ○
1.1.6 Internet access in schools	77	26.59
2nd sub-pillar: Content	117	10.93
2.1 GitHub commits	112	1.04 ○
2.2 Internet domain registrations	105	0.53
2.3 Mobile apps development	118	37.70 ○
2.4 AI scientific publications	78	4.45
3rd sub-pillar: Future Technologies	57	37.78
3.1 Adoption of emerging technologies	79	50.05
3.2 Investment in emerging technologies	59	41.25 ●
3.3 Robot density	NA	NA
3.4 Computer software spending	66	22.05 ●
B. People pillar	119	24.95
1st sub-pillar: Individuals	113	32.14
2.1.1 Mobile broadband internet traffic within the country	75	9.90
2.1.2 ICT skills in the education system	47	61.68 ●
2.1.3 Use of virtual social networks	112	14.42 ○
2.1.4 Adult literacy rate	96	42.56 ○
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	122	21.10
2.2.1 Firms with website	106	22.98 ○
2.2.2 Number of venture capital deals invested in AI	46	7.77
2.2.3 Annual investment in telecommunication services	76	47.91
2.2.4 Public cloud computing market scale	102	5.73
3rd sub-pillar: Governments	113	21.60
2.3.1 Government online services	98	44.01
2.3.2 Data Capabilities	91	6.97 ○
2.3.3 Government promotion of investment in emerging technologies	90	25.18
2.3.4 R&D expenditure by governments and higher education	57	10.22 ●



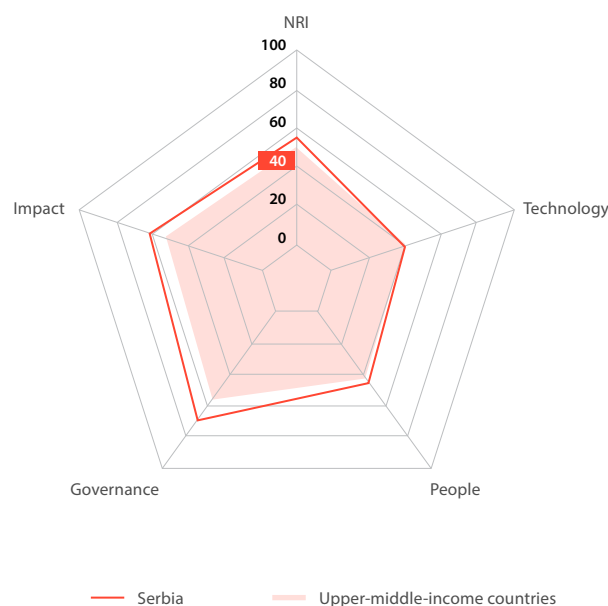
Indicator	Rank	Score
C. Governance pillar	97	47.44
1st sub-pillar: Trust	104	28.00
3.1.1 Secure Internet servers	119	26.17 ○
3.1.2 Cybersecurity	103	35.83
3.1.3 Online access to financial account	68	37.16
3.1.4 Internet shopping	85	12.85
2nd sub-pillar: Regulation	68	67.45
3.2.1 Regulatory quality	88	41.06
3.2.2 ICT regulatory environment	56	85.71 ●
3.2.3 Regulation of emerging technologies	44	59.54 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	100	50.95
3rd sub-pillar: Inclusion	98	46.85
3.3.1 E-Participation	97	32.56
3.3.2 Socioeconomic gap in use of digital payments	75	67.58
3.3.3 Availability of local online content	90	49.52
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	103	37.75
D. Impact pillar	86	50.85
1st sub-pillar: Economy	62	32.64
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	95	41.56
4.1.3 Prevalence of gig economy	54	45.06 ●
4.1.4 ICT services exports	69	11.30 ●
2nd sub-pillar: Quality of Life	95	57.70
4.2.1 Happiness	94	42.25
4.2.2 Freedom to make life choices	75	71.67
4.2.3 Income inequality	68	68.89
4.2.4 Healthy life expectancy at birth	101	49.45
3rd sub-pillar: SDG Contribution	80	62.22
4.3.1 SDG 3: Good Health and Well-Being	109	33.87 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	110	62.39
4.3.4 SDG 7: Affordable and Clean Energy	62	81.80 ●
4.3.5 SDG 11: Sustainable Cities and Communities	87	51.07

NOTE: ● Indicates a strength and ○ a weakness.

Serbia

	Rank (Out of 133)	Score
Network Readiness Index	47	53.91

Pillar/sub-pillar	Rank	Score
A. Technology pillar	78	39.86
1st sub-pillar: Access	61	66.70
2nd sub-pillar: Content	56	28.45
3rd sub-pillar: Future Technologies	103	24.43
B. People pillar	46	46.00
1st sub-pillar: Individuals	36	55.60
2nd sub-pillar: Businesses	50	38.76
3rd sub-pillar: Governments	55	43.65
C. Governance pillar	48	67.97
1st sub-pillar: Trust	56	57.12
2nd sub-pillar: Regulation	46	73.98
3rd sub-pillar: Inclusion	42	72.81
D. Impact pillar	37	61.81
1st sub-pillar: Economy	22	46.35
2nd sub-pillar: Quality of Life	48	72.02
3rd sub-pillar: SDG Contribution	61	67.07



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	78	39.86
1st sub-pillar: Access	61	66.70
1.1.1 Mobile tariffs	56	66.66
1.1.2 Handset prices	61	67.09
1.1.3 FTTH/building Internet subscriptions	66	30.34
1.1.4 Population covered by at least a 3G mobile network	51	94.63
1.1.5 International Internet bandwidth	45	74.76
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	56	28.45
1.2.1 GitHub commits	38	27.66
1.2.2 Internet domain registrations	55	5.28
1.2.3 Mobile apps development	29	72.77 ●
1.2.4 AI scientific publications	64	8.10
3rd sub-pillar: Future Technologies	103	24.43
1.3.1 Adoption of emerging technologies	63	61.18
1.3.2 Investment in emerging technologies	90	31.25 ○
1.3.3 Robot density	44	2.56 ○
1.3.4 Computer software spending	114	2.72 ○
B. People pillar	46	46.00
1st sub-pillar: Individuals	36	55.60
2.1.1 Mobile broadband internet traffic within the country	63	13.07
2.1.2 ICT skills in the education system	79	49.20 ○
2.1.3 Use of virtual social networks	50	60.96
2.1.4 Adult literacy rate	14	99.18 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	50	38.76
2.2.1 Firms with website	25	76.81 ●
2.2.2 Number of venture capital deals invested in AI	61	4.02 ○
2.2.3 Annual investment in telecommunication services	46	56.99
2.2.4 Public cloud computing market scale	61	17.22
3rd sub-pillar: Governments	55	43.65
2.3.1 Government online services	26	83.58 ●
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	78	29.70 ○
2.3.4 R&D expenditure by governments and higher education	40	17.67

Indicator	Rank	Score
C. Governance pillar	48	67.97
1st sub-pillar: Trust	56	57.12
3.1.1 Secure Internet servers	43	72.97
3.1.2 Cybersecurity	47	89.83
3.1.3 Online access to financial account	85	27.53 ○
3.1.4 Internet shopping	53	38.17
2nd sub-pillar: Regulation	46	73.98
3.2.1 Regulatory quality	66	51.24
3.2.2 ICT regulatory environment	11	94.64 ●
3.2.3 Regulation of emerging technologies	81	39.03 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	26	85.00 ●
3rd sub-pillar: Inclusion	42	72.81
3.3.1 E-Participation	15	80.23 ●
3.3.2 Socioeconomic gap in use of digital payments	39	88.33
3.3.3 Availability of local online content	53	66.59
3.3.4 Gender gap in Internet use	60	66.92
3.3.5 Rural gap in use of digital payments	69	62.00
D. Impact pillar	37	61.81
1st sub-pillar: Economy	22	46.35
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	76	49.37
4.1.3 Prevalence of gig economy	79	35.17 ○
4.1.4 ICT services exports	13	54.50 ●
2nd sub-pillar: Quality of Life	48	72.02
4.2.1 Happiness	37	72.13 ●
4.2.2 Freedom to make life choices	73	73.18
4.2.3 Income inequality	42	76.86
4.2.4 Healthy life expectancy at birth	70	64.68
3rd sub-pillar: SDG Contribution	61	67.07
4.3.1 SDG 3: Good Health and Well-Being	70	69.35
4.3.2 SDG 4: Quality Education	41	43.51
4.3.3 SDG 5: Women's economic opportunity	28	91.45 ●
4.3.4 SDG 7: Affordable and Clean Energy	94	71.64 ○
4.3.5 SDG 11: Sustainable Cities and Communities	84	54.01

NOTE: ● Indicates a strength and ○ a weakness.

Seychelles

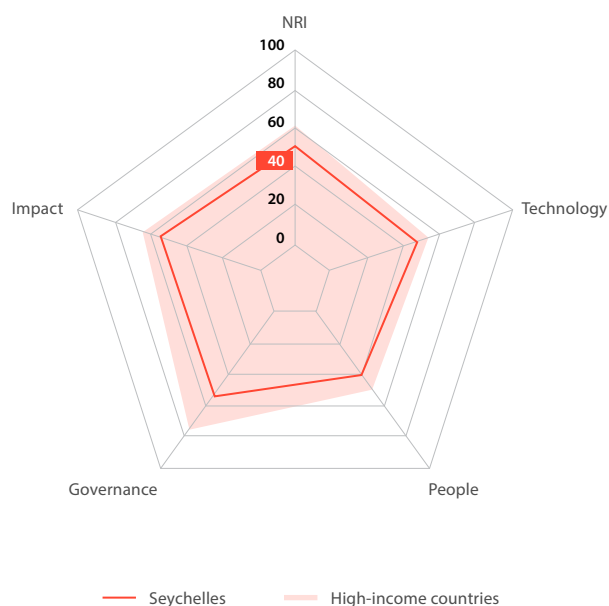
Rank
(Out of 133)

Score

Network Readiness Index

71 47.99

Pillar/sub-pillar	Rank	Score
A. Technology pillar	50	46.56
1st sub-pillar: Access	78	62.09
2nd sub-pillar: Content	17	50.20
3rd sub-pillar: Future Technologies	96	27.39
B. People pillar	77	39.44
1st sub-pillar: Individuals	61	49.71
2nd sub-pillar: Businesses	33	47.60
3rd sub-pillar: Governments	115	21.01
C. Governance pillar	82	52.08
1st sub-pillar: Trust	65	50.59
2nd sub-pillar: Regulation	80	64.05
3rd sub-pillar: Inclusion	112	41.60
D. Impact pillar	70	53.88
1st sub-pillar: Economy	132	11.62
2nd sub-pillar: Quality of Life	42	73.87
3rd sub-pillar: SDG Contribution	38	76.14



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	50	46.56
1st sub-pillar: Access	78	62.09
1.1.1 Mobile tariffs	85	56.63
1.1.2 Handset prices	59	68.45
1.1.3 FTTH/building Internet subscriptions	125	3.72 ○
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	123	54.84 ○
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	17	50.20
1.2.1 GitHub commits	54	12.66
1.2.2 Internet domain registrations	1	100.00
1.2.3 Mobile apps development	2	88.14
1.2.4 AI scientific publications	132	0.00 ○
3rd sub-pillar: Future Technologies	96	27.39
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	50	47.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	96	7.54
B. People pillar	77	39.44
1st sub-pillar: Individuals	61	49.71
2.1.1 Mobile broadband internet traffic within the country	128	0.23 ○
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	71	53.56
2.1.4 Adult literacy rate	40	95.35
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	33	47.60
2.2.1 Firms with website	62	53.83
2.2.2 Number of venture capital deals invested in AI	1	100.00
2.2.3 Annual investment in telecommunication services	117	36.56 ○
2.2.4 Public cloud computing market scale	127	0.00 ○
3rd sub-pillar: Governments	115	21.01
2.3.1 Government online services	108	38.37
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	87	3.64

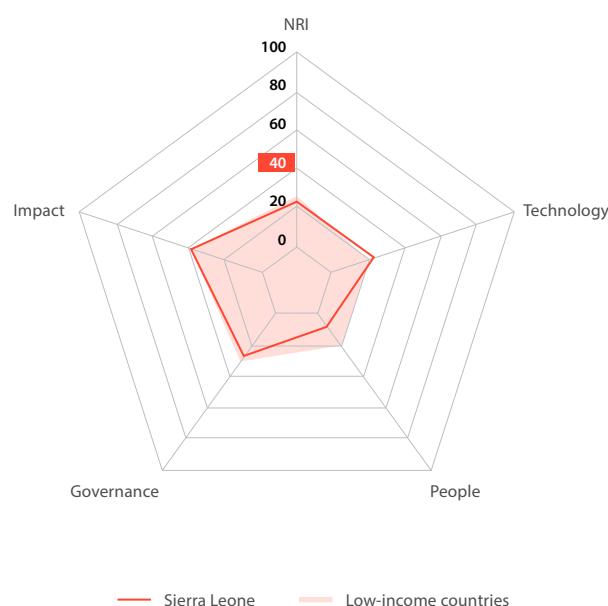
Indicator	Rank	Score
C. Governance pillar	82	52.08
1st sub-pillar: Trust	65	50.59
3.1.1 Secure Internet servers	13	87.94
3.1.2 Cybersecurity	122	13.25 ○
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	80	64.05
3.2.1 Regulatory quality	54	55.71
3.2.2 ICT regulatory environment	121	55.95 ○
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	65	69.52
3rd sub-pillar: Inclusion	112	41.60
3.3.1 E-Participation	119	20.94 ○
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	62	62.26
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	70	53.88
1st sub-pillar: Economy	132	11.62
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	133	0.00 ○
4.1.3 Prevalence of gig economy	60	42.73
4.1.4 ICT services exports	102	3.76
2nd sub-pillar: Quality of Life	42	73.87
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	34	79.43
4.2.4 Healthy life expectancy at birth	59	68.31
3rd sub-pillar: SDG Contribution	38	76.14
4.3.1 SDG 3: Good Health and Well-Being	57	74.19
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	99	67.52
4.3.4 SDG 7: Affordable and Clean Energy	31	87.13
4.3.5 SDG 11: Sustainable Cities and Communities	54	73.36

NOTE: ● Indicates a strength and ○ a weakness.

Sierra Leone

	Rank (Out of 133)	Score
Network Readiness Index	129	23.43

Pillar/sub-pillar	Rank	Score
A. Technology pillar	120	22.56
1st sub-pillar: Access	113	34.66
2nd sub-pillar: Content	112	12.26
3rd sub-pillar: Future Technologies	113	20.76
B. People pillar	133	7.04
1st sub-pillar: Individuals	132	7.27
2nd sub-pillar: Businesses	133	0.58
3rd sub-pillar: Governments	128	13.26
C. Governance pillar	128	28.33
1st sub-pillar: Trust	129	13.53
2nd sub-pillar: Regulation	120	45.48
3rd sub-pillar: Inclusion	129	25.99
D. Impact pillar	124	35.79
1st sub-pillar: Economy	131	13.11
2nd sub-pillar: Quality of Life	126	36.60
3rd sub-pillar: SDG Contribution	94	57.66



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	82	52.08
1st sub-pillar: Access	65	50.59
1.1.1 Mobile tariffs	13	87.94
1.1.2 Handset prices	122	13.25 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	NA	NA
1.1.5 International Internet bandwidth	80	64.05
1.1.6 Internet access in schools	54	55.71
2nd sub-pillar: Content	121	55.95 ○
1.2.1 GitHub commits	NA	NA
1.2.2 Internet domain registrations	87	75.00
1.2.3 Mobile apps development	65	69.52
1.2.4 AI scientific publications	112	41.60
3rd sub-pillar: Future Technologies	119	20.94 ○
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	62	62.26
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	70	53.88
1st sub-pillar: Individuals	132	11.62
2.1.1 Mobile broadband internet traffic within the country	79	0.00 ○
2.1.2 ICT skills in the education system	133	0.00 ○
2.1.3 Use of virtual social networks	60	42.73
2.1.4 Adult literacy rate	102	3.76
2.1.5 AI talent concentration	42	73.87
2nd sub-pillar: Businesses	NA	NA
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	34	79.43
2.2.3 Annual investment in telecommunication services	59	68.31
2.2.4 Public cloud computing market scale	38	76.14
3rd sub-pillar: Governments	57	74.19
2.3.1 Government online services	NA	NA
2.3.2 Data Capabilities	99	67.52
2.3.3 Government promotion of investment in emerging technologies	31	87.13
2.3.4 R&D expenditure by governments and higher education	54	73.36

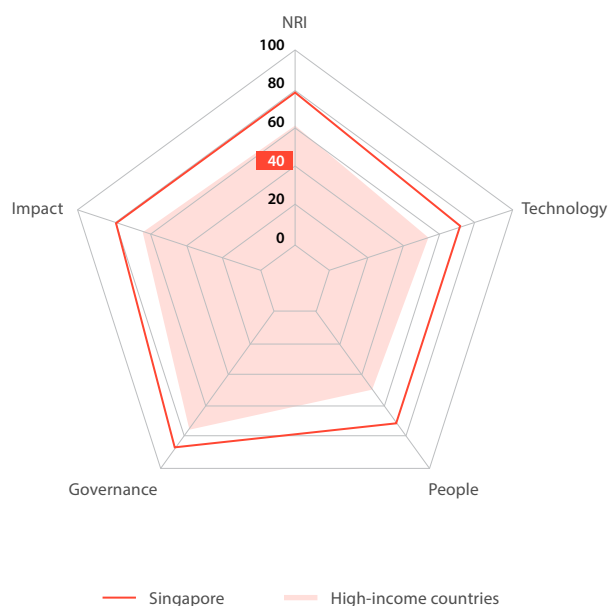
Indicator	Rank	Score
C. Governance pillar	128	28.33
1st sub-pillar: Trust	129	13.53
3.1.1 Secure Internet servers	128	14.37
3.1.2 Cybersecurity	112	25.33 ●
3.1.3 Online access to financial account	104	13.68
3.1.4 Internet shopping	125	0.73 ○
2nd sub-pillar: Regulation	120	45.48
3.2.1 Regulatory quality	122	23.24
3.2.2 ICT regulatory environment	121	55.95
3.2.3 Regulation of emerging technologies	120	0.00 ○
3.2.4 E-commerce legislation	119	50.00
3.2.5 Privacy protection by law content	2	98.19 ●
3rd sub-pillar: Inclusion	129	25.99
3.3.1 E-Participation	123	18.60
3.3.2 Socioeconomic gap in use of digital payments	113	41.44
3.3.3 Availability of local online content	129	16.35
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	111	27.56
D. Impact pillar	124	35.79
1st sub-pillar: Economy	131	13.11
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	128	25.78
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	131	0.44 ○
2nd sub-pillar: Quality of Life	126	36.60
4.2.1 Happiness	126	6.21
4.2.2 Freedom to make life choices	114	54.04
4.2.3 Income inequality	63	70.18 ●
4.2.4 Healthy life expectancy at birth	125	28.93
3rd sub-pillar: SDG Contribution	94	57.66
4.3.1 SDG 3: Good Health and Well-Being	121	19.35
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	34	89.74 ●
4.3.4 SDG 7: Affordable and Clean Energy	100	67.84 ●
4.3.5 SDG 11: Sustainable Cities and Communities	131	11.48 ○

NOTE: ● Indicates a strength and ○ a weakness.

Singapore

	Rank	Score
(Out of 133)		
Network Readiness Index	2	76.94

Pillar/sub-pillar	Rank	Score
A. Technology pillar	6	71.20
1st sub-pillar: Access	3	86.44
2nd sub-pillar: Content	15	52.37
3rd sub-pillar: Future Technologies	2	74.79
B. People pillar	3	69.98
1st sub-pillar: Individuals	10	68.62
2nd sub-pillar: Businesses	5	65.38
3rd sub-pillar: Governments	3	75.94
C. Governance pillar	8	86.95
1st sub-pillar: Trust	16	82.61
2nd sub-pillar: Regulation	12	88.22
3rd sub-pillar: Inclusion	1	90.01
D. Impact pillar	5	79.61
1st sub-pillar: Economy	5	67.55
2nd sub-pillar: Quality of Life	18	83.35
3rd sub-pillar: SDG Contribution	3	87.94



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	6	71.20
1st sub-pillar: Access	3	86.44
1.1.1 Mobile tariffs	4	97.86 ●
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	74	27.83 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	4	92.95 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	15	52.37
2.2.1 GitHub commits	1	100.00 ●
2.2.2 Internet domain registrations	35	18.23
2.2.3 Mobile apps development	5	84.69
2.2.4 AI scientific publications	70	6.57 ○
3rd sub-pillar: Future Technologies	2	74.79
3.3.1 Adoption of emerging technologies	5	97.38
3.3.2 Investment in emerging technologies	13	78.50
3.3.3 Robot density	1	100.00 ●
3.3.4 Computer software spending	58	23.26 ○
B. People pillar	3	69.98
1st sub-pillar: Individuals	10	68.62
2.1.1 Mobile broadband internet traffic within the country	67	12.08 ○
2.1.2 ICT skills in the education system	2	91.22 ●
2.1.3 Use of virtual social networks	8	74.72
2.1.4 Adult literacy rate	34	96.47
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	5	65.38
2.2.1 Firms with website	55	58.91 ○
2.2.2 Number of venture capital deals invested in AI	1	100.00 ●
2.2.3 Annual investment in telecommunication services	48	56.35 ○
2.2.4 Public cloud computing market scale	17	46.27
3rd sub-pillar: Governments	3	75.94
2.3.1 Government online services	5	95.80
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	3	92.24 ●
2.3.4 R&D expenditure by governments and higher education	16	39.78

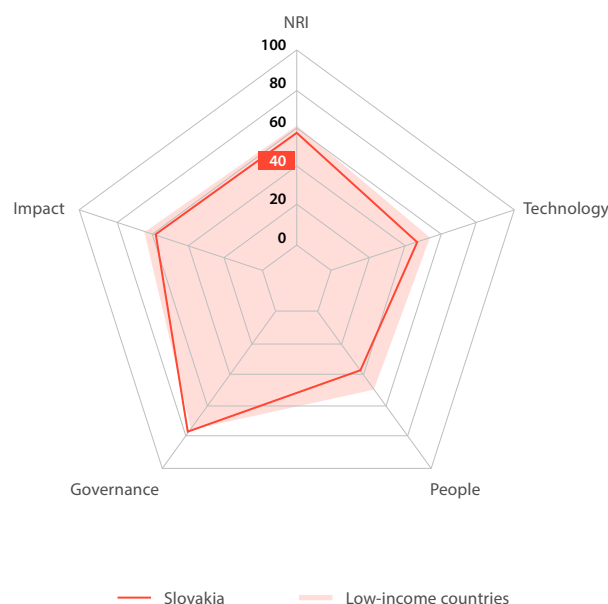
Indicator	Rank	Score
C. Governance pillar	8	86.95
1st sub-pillar: Trust	16	82.61
3.1.1 Secure Internet servers	4	93.86 ●
3.1.2 Cybersecurity	5	98.50
3.1.3 Online access to financial account	25	70.90
3.1.4 Internet shopping	25	67.20
2nd sub-pillar: Regulation	12	88.22
3.2.1 Regulatory quality	1	100.00 ●
3.2.2 ICT regulatory environment	21	93.45
3.2.3 Regulation of emerging technologies	3	94.25 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	95	53.41 ○
3rd sub-pillar: Inclusion	1	90.01
3.3.1 E-Participation	3	97.68 ●
3.3.2 Socioeconomic gap in use of digital payments	27	92.85
3.3.3 Availability of local online content	10	91.59
3.3.4 Gender gap in Internet use	43	69.07 ○
3.3.5 Rural gap in use of digital payments	2	98.86 ●
D. Impact pillar	5	79.61
1st sub-pillar: Economy	5	67.55
4.1.1 ICT patent applications	7	97.70
4.1.2 Domestic market scale	37	63.65
4.1.3 Prevalence of gig economy	10	81.40
4.1.4 ICT services exports	35	27.44
2nd sub-pillar: Quality of Life	18	83.35
4.2.1 Happiness	26	76.84
4.2.2 Freedom to make life choices	51	82.45
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	2	98.18 ●
3rd sub-pillar: SDG Contribution	3	87.94
4.3.1 SDG 3: Good Health and Well-Being	2	96.77 ●
4.3.2 SDG 4: Quality Education	2	91.94 ●
4.3.3 SDG 5: Women's economic opportunity	74	76.07 ○
4.3.4 SDG 7: Affordable and Clean Energy	24	89.62
4.3.5 SDG 11: Sustainable Cities and Communities	18	91.51

NOTE: ● Indicates a strength and ○ a weakness.

Slovakia

	Rank (Out of 133)	Score
Network Readiness Index	46	54.88

Pillar/sub-pillar	Rank	Score
A. Technology pillar	49	46.87
1st sub-pillar: Access	27	77.90
2nd sub-pillar: Content	53	29.45
3rd sub-pillar: Future Technologies	74	33.25
B. People pillar	92	37.29
1st sub-pillar: Individuals	112	32.56
2nd sub-pillar: Businesses	64	35.71
3rd sub-pillar: Governments	56	43.61
C. Governance pillar	27	78.13
1st sub-pillar: Trust	18	82.03
2nd sub-pillar: Regulation	30	80.52
3rd sub-pillar: Inclusion	43	71.85
D. Impact pillar	52	57.22
1st sub-pillar: Economy	92	26.09
2nd sub-pillar: Quality of Life	47	72.39
3rd sub-pillar: SDG Contribution	45	73.16



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	49	46.87
1st sub-pillar: Access	27	77.90
1.1.1 Mobile tariffs	9	91.28 ●
1.1.2 Handset prices	28	88.00 ●
1.1.3 FTTH/building Internet subscriptions	69	29.75
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	73	69.49
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	53	29.45
1.2.1 GitHub commits	43	22.77
1.2.2 Internet domain registrations	33	19.80
1.2.3 Mobile apps development	42	70.64
1.2.4 AI scientific publications	77	4.59 ○
3rd sub-pillar: Future Technologies	74	33.25
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	44	49.25
1.3.3 Robot density	18	26.02
1.3.4 Computer software spending	53	24.49
B. People pillar	92	37.29
1st sub-pillar: Individuals	112	32.56
2.1.1 Mobile broadband internet traffic within the country	77	9.43 ○
2.1.2 ICT skills in the education system	80	48.88 ○
2.1.3 Use of virtual social networks	45	62.92
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	36	9.01 ○
2nd sub-pillar: Businesses	64	35.71
2.2.1 Firms with website	39	67.02
2.2.2 Number of venture capital deals invested in AI	52	5.28 ○
2.2.3 Annual investment in telecommunication services	59	52.18
2.2.4 Public cloud computing market scale	60	18.35
3rd sub-pillar: Governments	56	43.61
2.3.1 Government online services	62	69.72
2.3.2 Data Capabilities	22	57.13 ●
2.3.3 Government promotion of investment in emerging technologies	76	30.99 ○
2.3.4 R&D expenditure by governments and higher education	44	16.62

Indicator	Rank	Score
C. Governance pillar	27	78.13
1st sub-pillar: Trust	18	82.03
3.1.1 Secure Internet servers	26	81.09 ●
3.1.2 Cybersecurity	42	92.33
3.1.3 Online access to financial account	19	76.53 ●
3.1.4 Internet shopping	17	78.15 ●
2nd sub-pillar: Regulation	30	80.52
3.2.1 Regulatory quality	34	67.98
3.2.2 ICT regulatory environment	43	87.50
3.2.3 Regulation of emerging technologies	48	57.51
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	17	89.62 ●
3rd sub-pillar: Inclusion	43	71.85
3.3.1 E-Participation	80	45.35 ○
3.3.2 Socioeconomic gap in use of digital payments	44	85.89
3.3.3 Availability of local online content	29	82.93 ●
3.3.4 Gender gap in Internet use	39	69.66
3.3.5 Rural gap in use of digital payments	24	75.42 ●
D. Impact pillar	52	57.22
1st sub-pillar: Economy	92	26.09
4.1.1 ICT patent applications	43	1.97
4.1.2 Domestic market scale	66	52.13
4.1.3 Prevalence of gig economy	75	36.05 ○
4.1.4 ICT services exports	62	14.20
2nd sub-pillar: Quality of Life	47	72.39
4.2.1 Happiness	49	68.13
4.2.2 Freedom to make life choices	94	64.14 ○
4.2.3 Income inequality	1	100.00 ●
4.2.4 Healthy life expectancy at birth	54	69.83
3rd sub-pillar: SDG Contribution	45	73.16
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	39	49.78
4.3.3 SDG 5: Women's economic opportunity	57	82.91
4.3.4 SDG 7: Affordable and Clean Energy	75	77.70
4.3.5 SDG 11: Sustainable Cities and Communities	40	79.04

NOTE: ● Indicates a strength and ○ a weakness.

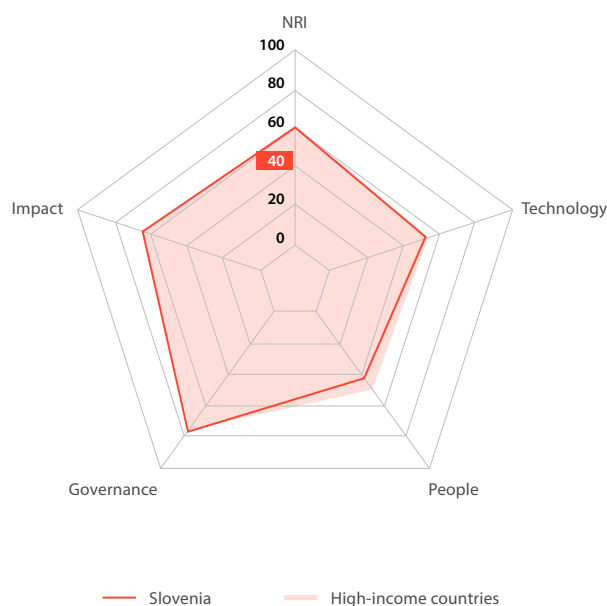
Slovenia

Rank
(Out of 133)

Score
40

Network Readiness Index

Pillar/sub-pillar	Rank	Score
A. Technology pillar	33	52.62
1st sub-pillar: Access	24	78.09
2nd sub-pillar: Content	44	36.29
3rd sub-pillar: Future Technologies	41	43.47
B. People pillar	59	43.36
1st sub-pillar: Individuals	95	41.49
2nd sub-pillar: Businesses	59	37.23
3rd sub-pillar: Governments	31	51.36
C. Governance pillar	31	76.47
1st sub-pillar: Trust	39	70.76
2nd sub-pillar: Regulation	23	83.49
3rd sub-pillar: Inclusion	35	75.16
D. Impact pillar	28	65.07
1st sub-pillar: Economy	101	24.86
2nd sub-pillar: Quality of Life	6	88.94
3rd sub-pillar: SDG Contribution	26	81.40



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	33	52.62
1st sub-pillar: Access	24	78.09
1.1.1 Mobile tariffs	6	97.57 ●
1.1.2 Handset prices	46	81.01 ○
1.1.3 FTTH/building Internet subscriptions	89	20.75 ○
1.1.4 Population covered by at least a 3G mobile network	38	97.68
1.1.5 International Internet bandwidth	64	71.53
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	44	36.29
1.2.1 GitHub commits	27	39.59
1.2.2 Internet domain registrations	27	25.71
1.2.3 Mobile apps development	15	76.82 ●
1.2.4 AI scientific publications	84	3.03 ○
3rd sub-pillar: Future Technologies	41	43.47
1.3.1 Adoption of emerging technologies	31	76.74
1.3.2 Investment in emerging technologies	41	51.50
1.3.3 Robot density	9	39.70 ●
1.3.4 Computer software spending	99	5.95 ○
B. People pillar	59	43.36
1st sub-pillar: Individuals	95	41.49
2.1.1 Mobile broadband internet traffic within the country	85	6.45 ○
2.1.2 ICT skills in the education system	27	74.58
2.1.3 Use of virtual social networks	32	67.13
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	24	17.81
2nd sub-pillar: Businesses	59	37.23
2.2.1 Firms with website	33	74.36
2.2.2 Number of venture capital deals invested in AI	40	11.29
2.2.3 Annual investment in telecommunication services	67	49.84
2.2.4 Public cloud computing market scale	74	13.41 ○
3rd sub-pillar: Governments	31	51.36
2.3.1 Government online services	22	85.26
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	77	30.44 ○
2.3.4 R&D expenditure by governments and higher education	18	38.39 ●

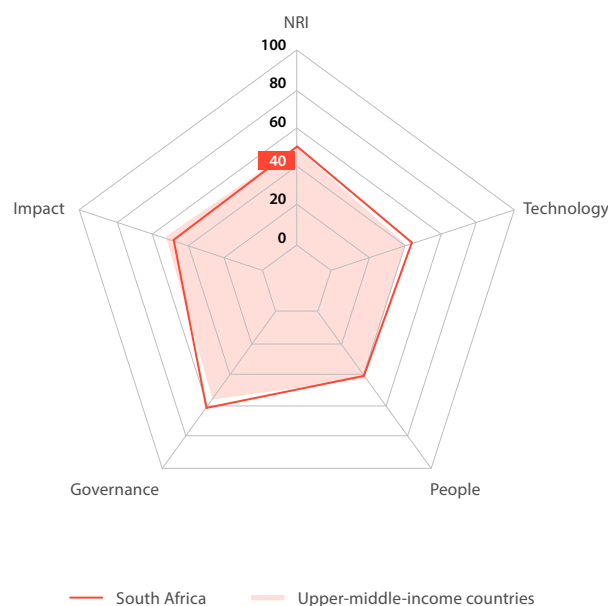
Indicator	Rank	Score
C. Governance pillar	31	76.47
1st sub-pillar: Trust	39	70.76
3.1.1 Secure Internet servers	14	86.19 ●
3.1.2 Cybersecurity	75	74.92 ○
3.1.3 Online access to financial account	42	58.65
3.1.4 Internet shopping	30	63.26
2nd sub-pillar: Regulation	23	83.49
3.2.1 Regulatory quality	40	64.33
3.2.2 ICT regulatory environment	3	97.62 ●
3.2.3 Regulation of emerging technologies	33	67.00
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	18	88.50 ●
3rd sub-pillar: Inclusion	35	75.16
3.3.1 E-Participation	25	74.42
3.3.2 Socioeconomic gap in use of digital payments	33	90.40
3.3.3 Availability of local online content	49	68.27
3.3.4 Gender gap in Internet use	51	68.17
3.3.5 Rural gap in use of digital payments	30	74.54
D. Impact pillar	28	65.07
1st sub-pillar: Economy	101	24.86
4.1.1 ICT patent applications	42	2.35
4.1.2 Domestic market scale	88	44.79 ○
4.1.3 Prevalence of gig economy	70	37.50 ○
4.1.4 ICT services exports	60	14.81
2nd sub-pillar: Quality of Life	6	88.94
4.2.1 Happiness	21	78.88 ●
4.2.2 Freedom to make life choices	10	94.35 ●
4.2.3 Income inequality	2	99.49 ●
4.2.4 Healthy life expectancy at birth	26	87.72
3rd sub-pillar: SDG Contribution	26	81.40
4.3.1 SDG 3: Good Health and Well-Being	21	88.71
4.3.2 SDG 4: Quality Education	21	60.81
4.3.3 SDG 5: Women's economic opportunity	20	95.73
4.3.4 SDG 7: Affordable and Clean Energy	47	84.14
4.3.5 SDG 11: Sustainable Cities and Communities	34	81.18

NOTE: ● Indicates a strength and ○ a weakness.

South Africa

	Rank (Out of 133)	Score
Network Readiness Index	72	47.80

Pillar/sub-pillar	Rank	Score
A. Technology pillar	59	44.61
1st sub-pillar: Access	66	66.15
2nd sub-pillar: Content	57	27.88
3rd sub-pillar: Future Technologies	51	39.80
B. People pillar	73	39.80
1st sub-pillar: Individuals	105	36.71
2nd sub-pillar: Businesses	34	47.48
3rd sub-pillar: Governments	78	35.21
C. Governance pillar	60	61.58
1st sub-pillar: Trust	58	53.45
2nd sub-pillar: Regulation	55	69.18
3rd sub-pillar: Inclusion	65	62.10
D. Impact pillar	105	45.23
1st sub-pillar: Economy	89	26.79
2nd sub-pillar: Quality of Life	118	40.09
3rd sub-pillar: SDG Contribution	55	68.80



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	59	44.61
1st sub-pillar: Access	66	66.15
1.1.1 Mobile tariffs	90	53.16
1.1.2 Handset prices	75	59.24
1.1.3 FTTH/building Internet subscriptions	31	43.40
1.1.4 Population covered by at least a 3G mobile network	43	97.45
1.1.5 International Internet bandwidth	31	77.48
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	57	27.88
1.2.1 GitHub commits	71	5.05
1.2.2 Internet domain registrations	52	5.98
1.2.3 Mobile apps development	76	61.94
1.2.4 AI scientific publications	26	38.57
3rd sub-pillar: Future Technologies	51	39.80
1.3.1 Adoption of emerging technologies	46	66.24
1.3.2 Investment in emerging technologies	40	51.75
1.3.3 Robot density	39	4.90
1.3.4 Computer software spending	28	36.33
B. People pillar	73	39.80
1st sub-pillar: Individuals	105	36.71
2.1.1 Mobile broadband internet traffic within the country	39	26.54
2.1.2 ICT skills in the education system	100	35.46
2.1.3 Use of virtual social networks	98	35.21
2.1.4 Adult literacy rate	63	86.35
2.1.5 AI talent concentration	47	0.00
2nd sub-pillar: Businesses	34	47.48
2.2.1 Firms with website	23	77.41
2.2.2 Number of venture capital deals invested in AI	63	3.61
2.2.3 Annual investment in telecommunication services	24	65.95
2.2.4 Public cloud computing market scale	23	42.94
3rd sub-pillar: Governments	78	35.21
2.3.1 Government online services	55	72.23
2.3.2 Data Capabilities	61	30.63
2.3.3 Government promotion of investment in emerging technologies	87	25.92
2.3.4 R&D expenditure by governments and higher education	54	12.06

Indicator	Rank	Score
C. Governance pillar	60	61.58
1st sub-pillar: Trust	58	53.45
3.1.1 Secure Internet servers	38	76.48
3.1.2 Cybersecurity	67	78.50
3.1.3 Online access to financial account	60	43.42
3.1.4 Internet shopping	80	15.39
2nd sub-pillar: Regulation	55	69.18
3.2.1 Regulatory quality	83	43.68
3.2.2 ICT regulatory environment	70	83.69
3.2.3 Regulation of emerging technologies	61	49.05
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	66	69.47
3rd sub-pillar: Inclusion	65	62.10
3.3.1 E-Participation	61	58.14
3.3.2 Socioeconomic gap in use of digital payments	68	72.97
3.3.3 Availability of local online content	89	49.76
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	53	67.52
D. Impact pillar	105	45.23
1st sub-pillar: Economy	89	26.79
4.1.1 ICT patent applications	49	1.07
4.1.2 Domestic market scale	32	66.36
4.1.3 Prevalence of gig economy	84	33.72
4.1.4 ICT services exports	90	6.03
2nd sub-pillar: Quality of Life	118	40.09
4.2.1 Happiness	95	41.87
4.2.2 Freedom to make life choices	97	63.21
4.2.3 Income inequality	118	0.00
4.2.4 Healthy life expectancy at birth	123	30.38
3rd sub-pillar: SDG Contribution	55	68.80
4.3.1 SDG 3: Good Health and Well-Being	73	67.74
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	52	83.76
4.3.4 SDG 7: Affordable and Clean Energy	110	59.94
4.3.5 SDG 11: Sustainable Cities and Communities	80	57.67

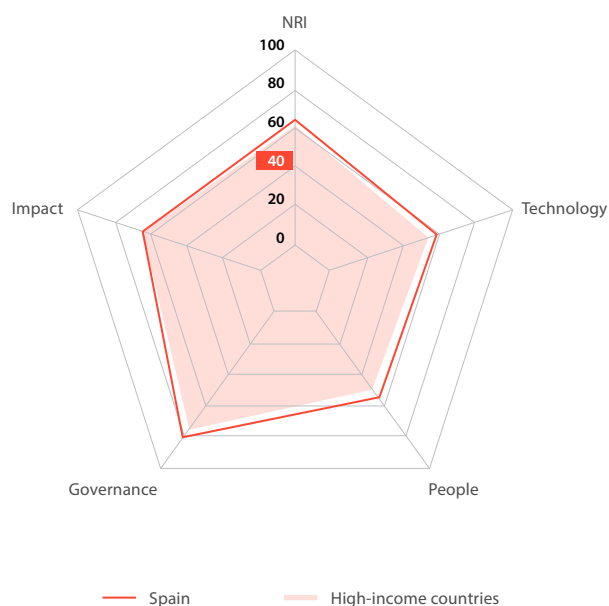
NOTE: ● Indicates a strength and ○ a weakness.

Spain

Rank Score
(Out of 133)

Network Readiness Index 24 65.15

Pillar/sub-pillar	Rank	Score
A. Technology pillar	23	58.39
1st sub-pillar: Access	11	80.75
2nd sub-pillar: Content	29	45.29
3rd sub-pillar: Future Technologies	29	49.12
B. People pillar	19	55.33
1st sub-pillar: Individuals	28	57.61
2nd sub-pillar: Businesses	21	54.86
3rd sub-pillar: Governments	27	53.53
C. Governance pillar	24	80.25
1st sub-pillar: Trust	26	77.67
2nd sub-pillar: Regulation	26	81.53
3rd sub-pillar: Inclusion	15	81.54
D. Impact pillar	24	66.64
1st sub-pillar: Economy	38	40.12
2nd sub-pillar: Quality of Life	38	75.20
3rd sub-pillar: SDG Contribution	11	84.61



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	23	58.39
1st sub-pillar: Access	11	80.75
1.1.1 Mobile tariffs	45	73.85
1.1.2 Handset prices	34	85.99
1.1.3 FTTH/building Internet subscriptions	16	55.98
1.1.4 Population covered by at least a 3G mobile network	45	96.54
1.1.5 International Internet bandwidth	60	72.14 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	29	45.29
1.2.1 GitHub commits	30	38.43
1.2.2 Internet domain registrations	31	22.13
1.2.3 Mobile apps development	35	71.74
1.2.4 AI scientific publications	22	48.84
3rd sub-pillar: Future Technologies	29	49.12
1.3.1 Adoption of emerging technologies	37	71.91
1.3.2 Investment in emerging technologies	56	43.00 ○
1.3.3 Robot density	20	22.52
1.3.4 Computer software spending	12	59.05 ●
B. People pillar	19	55.33
1st sub-pillar: Individuals	28	57.61
2.1.1 Mobile broadband internet traffic within the country	24	38.62
2.1.2 ICT skills in the education system	63	55.93 ○
2.1.3 Use of virtual social networks	11	73.41 ●
2.1.4 Adult literacy rate	24	97.97
2.1.5 AI talent concentration	22	22.10 ○
2nd sub-pillar: Businesses	21	54.86
2.2.1 Firms with website	30	74.69
2.2.2 Number of venture capital deals invested in AI	21	22.50
2.2.3 Annual investment in telecommunication services	13	73.08 ●
2.2.4 Public cloud computing market scale	15	49.17
3rd sub-pillar: Governments	27	53.53
2.3.1 Government online services	25	84.07
2.3.2 Data Capabilities	3	78.40 ●
2.3.3 Government promotion of investment in emerging technologies	86	26.06 ○
2.3.4 R&D expenditure by governments and higher education	30	25.59

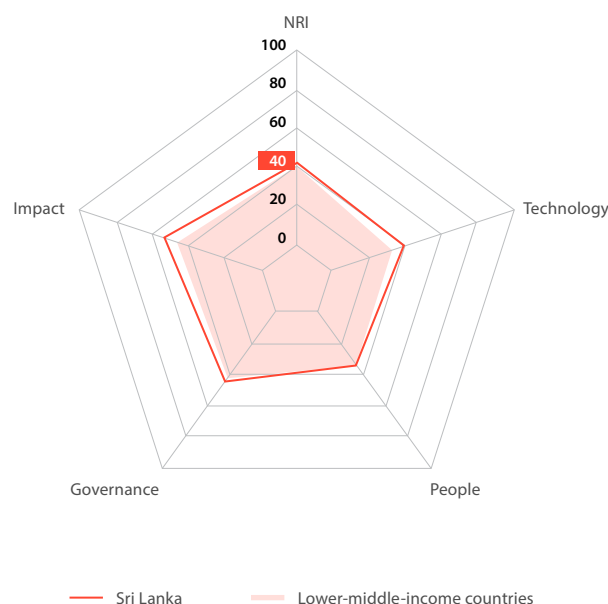
Indicator	Rank	Score
C. Governance pillar	24	80.25
1st sub-pillar: Trust	26	77.67
3.1.1 Secure Internet servers	33	79.63
3.1.2 Cybersecurity	5	98.50 ●
3.1.3 Online access to financial account	31	66.09
3.1.4 Internet shopping	26	66.48
2nd sub-pillar: Regulation	26	81.53
3.2.1 Regulatory quality	35	66.73
3.2.2 ICT regulatory environment	71	83.33 ○
3.2.3 Regulation of emerging technologies	30	67.87
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	15	89.72
3rd sub-pillar: Inclusion	15	81.54
3.3.1 E-Participation	25	74.42
3.3.2 Socioeconomic gap in use of digital payments	3	99.47 ●
3.3.3 Availability of local online content	22	85.58
3.3.4 Gender gap in Internet use	27	70.86
3.3.5 Rural gap in use of digital payments	11	77.36 ●
D. Impact pillar	24	66.64
1st sub-pillar: Economy	38	40.12
4.1.1 ICT patent applications	28	10.66
4.1.2 Domestic market scale	15	74.87
4.1.3 Prevalence of gig economy	47	51.16 ○
4.1.4 ICT services exports	44	23.78
2nd sub-pillar: Quality of Life	38	75.20
4.2.1 Happiness	36	72.46
4.2.2 Freedom to make life choices	80	68.46 ○
4.2.3 Income inequality	48	74.81 ○
4.2.4 Healthy life expectancy at birth	8	94.54 ●
3rd sub-pillar: SDG Contribution	11	84.61
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	28	57.90
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	26	88.52
4.3.5 SDG 11: Sustainable Cities and Communities	13	93.74 ●

NOTE: ● Indicates a strength and ○ a weakness.

Sri Lanka

	Rank (Out of 133)	Score
Network Readiness Index	95	42.12

Pillar/sub-pillar	Rank	Score
A. Technology pillar	82	38.21
1st sub-pillar: Access	99	50.71
2nd sub-pillar: Content	82	20.74
3rd sub-pillar: Future Technologies	44	43.18
B. People pillar	105	31.50
1st sub-pillar: Individuals	79	46.36
2nd sub-pillar: Businesses	118	23.34
3rd sub-pillar: Governments	105	24.81
C. Governance pillar	101	46.46
1st sub-pillar: Trust	100	31.54
2nd sub-pillar: Regulation	109	53.61
3rd sub-pillar: Inclusion	82	54.23
D. Impact pillar	78	52.30
1st sub-pillar: Economy	36	40.36
2nd sub-pillar: Quality of Life	107	48.35
3rd sub-pillar: SDG Contribution	57	68.18



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	82	38.21
1st sub-pillar: Access	99	50.71
1.1.1 Mobile tariffs	82	58.57
1.1.2 Handset prices	118	29.84 ○
1.1.3 FTTH/building Internet subscriptions	57	33.57 ●
1.1.4 Population covered by at least a 3G mobile network	90	69.99
1.1.5 International Internet bandwidth	61	71.87
1.1.6 Internet access in schools	68	40.46
2nd sub-pillar: Content	82	20.74
1.2.1 GitHub commits	50	13.47 ●
1.2.2 Internet domain registrations	101	0.80
1.2.3 Mobile apps development	91	56.37
1.2.4 AI scientific publications	52	12.32 ●
3rd sub-pillar: Future Technologies	44	43.18
1.3.1 Adoption of emerging technologies	92	41.11
1.3.2 Investment in emerging technologies	69	38.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	21	50.18 ●
B. People pillar	105	31.50
1st sub-pillar: Individuals	79	46.36
2.1.1 Mobile broadband internet traffic within the country	56	14.90 ●
2.1.2 ICT skills in the education system	66	53.76
2.1.3 Use of virtual social networks	101	27.15
2.1.4 Adult literacy rate	60	89.61
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	118	23.34
2.2.1 Firms with website	122	3.63 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	57	52.57
2.2.4 Public cloud computing market scale	71	13.81
3rd sub-pillar: Governments	105	24.81
2.3.1 Government online services	88	51.86
2.3.2 Data Capabilities	62	27.71
2.3.3 Government promotion of investment in emerging technologies	99	17.72 ○
2.3.4 R&D expenditure by governments and higher education	102	1.97 ○

Indicator	Rank	Score
C. Governance pillar	101	46.46
1st sub-pillar: Trust	100	31.54
3.1.1 Secure Internet servers	80	47.48
3.1.2 Cybersecurity	89	58.67
3.1.3 Online access to financial account	115	7.83 ○
3.1.4 Internet shopping	87	12.17
2nd sub-pillar: Regulation	109	53.61
3.2.1 Regulatory quality	108	32.68
3.2.2 ICT regulatory environment	125	55.12 ○
3.2.3 Regulation of emerging technologies	71	46.38
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	86	58.86
3rd sub-pillar: Inclusion	82	54.23
3.3.1 E-Participation	94	33.73
3.3.2 Socioeconomic gap in use of digital payments	61	77.51
3.3.3 Availability of local online content	93	47.12
3.3.4 Gender gap in Internet use	92	46.72 ○
3.3.5 Rural gap in use of digital payments	59	66.10
D. Impact pillar	78	52.30
1st sub-pillar: Economy	36	40.36
4.1.1 ICT patent applications	58	0.35
4.1.2 Domestic market scale	60	55.35 ●
4.1.3 Prevalence of gig economy	44	53.49 ●
4.1.4 ICT services exports	15	52.23 ●
2nd sub-pillar: Quality of Life	107	48.35
4.2.1 Happiness	123	9.22 ○
4.2.2 Freedom to make life choices	93	64.27
4.2.3 Income inequality	76	65.04
4.2.4 Healthy life expectancy at birth	35	78.08 ●
3rd sub-pillar: SDG Contribution	57	68.18
4.3.1 SDG 3: Good Health and Well-Being	85	61.29
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	117	52.99 ○
4.3.4 SDG 7: Affordable and Clean Energy	6	95.76 ●
4.3.5 SDG 11: Sustainable Cities and Communities	90	50.30

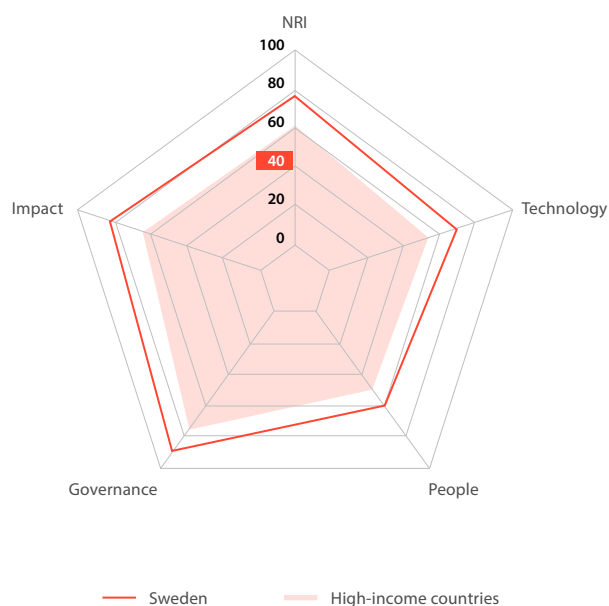
NOTE: ● Indicates a strength and ○ a weakness.

Sweden

Rank
(Out of 133)

Score
4 74.99

Pillar/sub-pillar	Rank	Score
A. Technology pillar	7	69.28
1st sub-pillar: Access	16	79.49
2nd sub-pillar: Content	9	57.62
3rd sub-pillar: Future Technologies	4	70.73
B. People pillar	15	60.21
1st sub-pillar: Individuals	51	51.65
2nd sub-pillar: Businesses	19	57.24
3rd sub-pillar: Governments	6	71.73
C. Governance pillar	6	87.89
1st sub-pillar: Trust	3	90.77
2nd sub-pillar: Regulation	6	89.98
3rd sub-pillar: Inclusion	10	82.92
D. Impact pillar	2	82.58
1st sub-pillar: Economy	4	72.56
2nd sub-pillar: Quality of Life	5	90.50
3rd sub-pillar: SDG Contribution	10	84.67



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	7	69.28
1st sub-pillar: Access	16	79.49
1.1.1 Mobile tariffs	20	84.07
1.1.2 Handset prices	37	84.33
1.1.3 FTTH/building Internet subscriptions	40	39.05 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	74	69.48 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	9	57.62
1.2.1 GitHub commits	6	85.70 ●
1.2.2 Internet domain registrations	15	51.55
1.2.3 Mobile apps development	10	78.35
1.2.4 AI scientific publications	46	14.86 ○
3rd sub-pillar: Future Technologies	4	70.73
1.3.1 Adoption of emerging technologies	13	88.50
1.3.2 Investment in emerging technologies	3	92.00 ●
1.3.3 Robot density	6	45.02
1.3.4 Computer software spending	16	57.40
B. People pillar	15	60.21
1st sub-pillar: Individuals	51	51.65
2.1.1 Mobile broadband internet traffic within the country	38	27.01
2.1.2 ICT skills in the education system	6	86.50 ●
2.1.3 Use of virtual social networks	20	70.13
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	21	22.96 ○
2nd sub-pillar: Businesses	19	57.24
2.2.1 Firms with website	8	89.19
2.2.2 Number of venture capital deals invested in AI	18	27.60
2.2.3 Annual investment in telecommunication services	32	62.00
2.2.4 Public cloud computing market scale	14	50.16
3rd sub-pillar: Governments	6	71.73
2.3.1 Government online services	13	88.97
2.3.2 Data Capabilities	19	58.11
2.3.3 Government promotion of investment in emerging technologies	11	79.65
2.3.4 R&D expenditure by governments and higher education	4	60.21 ●

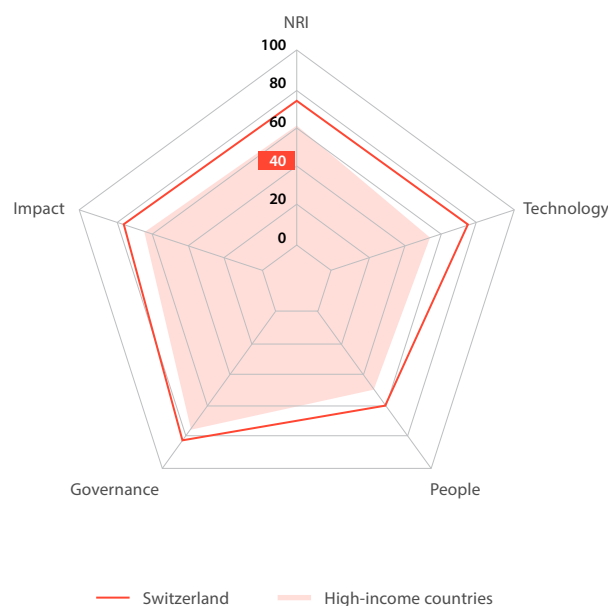
Indicator	Rank	Score
C. Governance pillar	6	87.89
1st sub-pillar: Trust	3	90.77
3.1.1 Secure Internet servers	25	82.96
3.1.2 Cybersecurity	32	94.58
3.1.3 Online access to financial account	4	94.97 ●
3.1.4 Internet shopping	4	90.56 ●
2nd sub-pillar: Regulation	6	89.98
3.2.1 Regulatory quality	8	87.49
3.2.2 ICT regulatory environment	46	86.90 ○
3.2.3 Regulation of emerging technologies	15	80.99
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	9	94.51
3rd sub-pillar: Inclusion	10	82.92
3.3.1 E-Participation	32	72.10
3.3.2 Socioeconomic gap in use of digital payments	16	96.66
3.3.3 Availability of local online content	1	100.00 ●
3.3.4 Gender gap in Internet use	38	69.85 ○
3.3.5 Rural gap in use of digital payments	20	75.98
D. Impact pillar	2	82.58
1st sub-pillar: Economy	4	72.56
4.1.1 ICT patent applications	1	100.00 ●
4.1.2 Domestic market scale	39	63.16 ○
4.1.3 Prevalence of gig economy	18	68.90
4.1.4 ICT services exports	12	58.20
2nd sub-pillar: Quality of Life	5	90.50
4.2.1 Happiness	7	88.07 ●
4.2.2 Freedom to make life choices	12	93.49
4.2.3 Income inequality	21	85.35
4.2.4 Healthy life expectancy at birth	8	94.54
3rd sub-pillar: SDG Contribution	10	84.67
4.3.1 SDG 3: Good Health and Well-Being	14	90.32
4.3.2 SDG 4: Quality Education	18	62.08
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	59	82.46 ○
4.3.5 SDG 11: Sustainable Cities and Communities	3	97.98 ●

NOTE: ● Indicates a strength and ○ a weakness.

Switzerland

	Rank (Out of 133)	Score
Network Readiness Index	7	73.71

Pillar/sub-pillar	Rank	Score
A. Technology pillar	2	74.85
1st sub-pillar: Access	8	82.60
2nd sub-pillar: Content	5	69.42
3rd sub-pillar: Future Technologies	3	72.54
B. People pillar	10	61.38
1st sub-pillar: Individuals	37	55.04
2nd sub-pillar: Businesses	10	62.64
3rd sub-pillar: Governments	14	66.45
C. Governance pillar	13	83.27
1st sub-pillar: Trust	31	74.75
2nd sub-pillar: Regulation	3	93.48
3rd sub-pillar: Inclusion	14	81.58
D. Impact pillar	10	75.35
1st sub-pillar: Economy	15	54.99
2nd sub-pillar: Quality of Life	13	85.75
3rd sub-pillar: SDG Contribution	7	85.32



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	2	74.85
1st sub-pillar: Access	8	82.60
1.1.1 Mobile tariffs	1	100.00 ●
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	82	26.10 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	74	69.48 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	5	69.42
1.2.1 GitHub commits	1	100.00 ●
1.2.2 Internet domain registrations	5	90.69 ●
1.2.3 Mobile apps development	21	74.47
1.2.4 AI scientific publications	50	12.53 ○
3rd sub-pillar: Future Technologies	3	72.54
1.3.1 Adoption of emerging technologies	2	99.62 ●
1.3.2 Investment in emerging technologies	4	89.25 ●
1.3.3 Robot density	10	39.22
1.3.4 Computer software spending	7	62.07
B. People pillar	10	61.38
1st sub-pillar: Individuals	37	55.04
2.1.1 Mobile broadband internet traffic within the country	43	20.32
2.1.2 ICT skills in the education system	5	87.30
2.1.3 Use of virtual social networks	25	68.54
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	6	43.99
2nd sub-pillar: Businesses	10	62.64
2.2.1 Firms with website	4	92.10 ●
2.2.2 Number of venture capital deals invested in AI	12	39.22
2.2.3 Annual investment in telecommunication services	18	67.72
2.2.4 Public cloud computing market scale	13	51.50
3rd sub-pillar: Governments	14	66.45
2.3.1 Government online services	49	74.33 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	20	67.67
2.3.4 R&D expenditure by governments and higher education	7	57.37

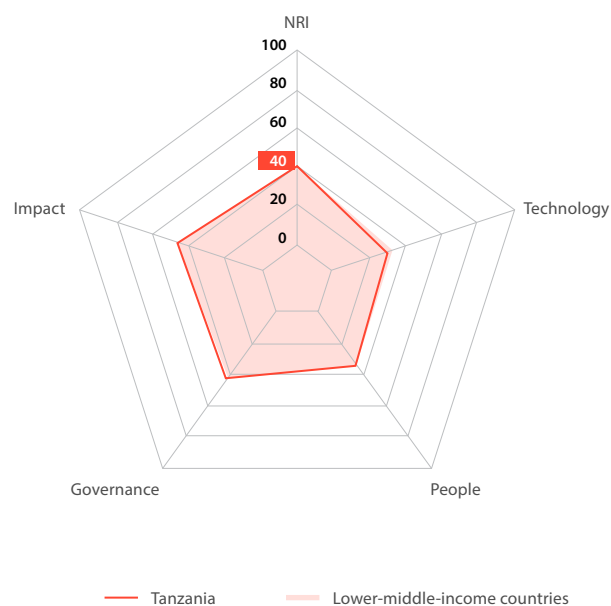
Indicator	Rank	Score
C. Governance pillar	13	83.27
1st sub-pillar: Trust	31	74.75
3.1.1 Secure Internet servers	5	93.32 ●
3.1.2 Cybersecurity	50	87.00 ○
3.1.3 Online access to financial account	41	60.55
3.1.4 Internet shopping	38	58.12
2nd sub-pillar: Regulation	3	93.48
3.2.1 Regulatory quality	11	86.05
3.2.2 ICT regulatory environment	21	93.45
3.2.3 Regulation of emerging technologies	5	90.38
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	4	97.53 ●
3rd sub-pillar: Inclusion	14	81.58
3.3.1 E-Participation	41	69.76
3.3.2 Socioeconomic gap in use of digital payments	1	100.00 ●
3.3.3 Availability of local online content	6	95.43
3.3.4 Gender gap in Internet use	56	67.15 ○
3.3.5 Rural gap in use of digital payments	23	75.53
D. Impact pillar	10	75.35
1st sub-pillar: Economy	15	54.99
4.1.1 ICT patent applications	9	70.14
4.1.2 Domestic market scale	34	64.09
4.1.3 Prevalence of gig economy	28	62.79
4.1.4 ICT services exports	47	22.93 ○
2nd sub-pillar: Quality of Life	13	85.75
4.2.1 Happiness	13	83.82
4.2.2 Freedom to make life choices	31	87.49
4.2.3 Income inequality	46	75.32 ○
4.2.4 Healthy life expectancy at birth	4	96.57 ●
3rd sub-pillar: SDG Contribution	7	85.32
4.3.1 SDG 3: Good Health and Well-Being	10	91.94
4.3.2 SDG 4: Quality Education	9	66.44
4.3.3 SDG 5: Women's economic opportunity	52	83.76 ○
4.3.4 SDG 7: Affordable and Clean Energy	5	96.78 ●
4.3.5 SDG 11: Sustainable Cities and Communities	6	96.62

NOTE: ● Indicates a strength and ○ a weakness.

Tanzania

	Rank (Out of 133)	Score
Network Readiness Index	103	37.93

Pillar/sub-pillar	Rank	Score
A. Technology pillar	104	28.97
1st sub-pillar: Access	109	40.20
2nd sub-pillar: Content	103	15.09
3rd sub-pillar: Future Technologies	82	31.61
B. People pillar	102	31.98
1st sub-pillar: Individuals	108	34.89
2nd sub-pillar: Businesses	106	26.36
3rd sub-pillar: Governments	80	34.69
C. Governance pillar	103	44.80
1st sub-pillar: Trust	90	35.85
2nd sub-pillar: Regulation	107	54.44
3rd sub-pillar: Inclusion	104	44.10
D. Impact pillar	103	45.97
1st sub-pillar: Economy	72	30.86
2nd sub-pillar: Quality of Life	100	51.22
3rd sub-pillar: SDG Contribution	102	55.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	104	28.97
1st sub-pillar: Access	109	40.20
1.1.1 Mobile tariffs	120	27.36 ○
1.1.2 Handset prices	105	39.06
1.1.3 FTTH/building Internet subscriptions	19	48.55 ●
1.1.4 Population covered by at least a 3G mobile network	118	17.10 ○
1.1.5 International Internet bandwidth	79	68.94
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	103	15.09
2.2.1 GitHub commits	124	0.38 ○
2.2.2 Internet domain registrations	118	0.17 ○
2.2.3 Mobile apps development	112	42.80 ○
2.2.4 AI scientific publications	42	17.02 ●
3rd sub-pillar: Future Technologies	82	31.61
3.3.1 Adoption of emerging technologies	75	52.84
3.3.2 Investment in emerging technologies	58	41.50 ●
3.3.3 Robot density	NA	NA
3.3.4 Computer software spending	128	0.50 ○
B. People pillar	102	31.98
1st sub-pillar: Individuals	108	34.89
2.1.1 Mobile broadband internet traffic within the country	65	12.34 ●
2.1.2 ICT skills in the education system	77	50.24
2.1.3 Use of virtual social networks	125	2.90 ○
2.1.4 Adult literacy rate	76	74.08
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	106	26.36
2.2.1 Firms with website	107	22.62
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	85	45.77
2.2.4 Public cloud computing market scale	79	10.68
3rd sub-pillar: Governments	80	34.69
2.3.1 Government online services	105	41.42
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	31	53.56 ●
2.3.4 R&D expenditure by governments and higher education	61	9.09 ●

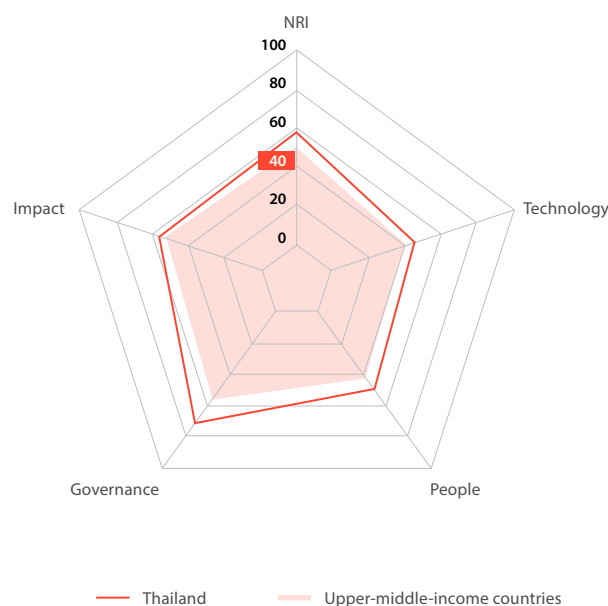
Indicator	Rank	Score
C. Governance pillar	103	44.80
1st sub-pillar: Trust	90	35.85
3.1.1 Secure Internet servers	116	28.75
3.1.2 Cybersecurity	45	90.58 ●
3.1.3 Online access to financial account	99	17.92
3.1.4 Internet shopping	104	6.16
2nd sub-pillar: Regulation	107	54.44
3.2.1 Regulatory quality	102	34.79
3.2.2 ICT regulatory environment	75	79.76
3.2.3 Regulation of emerging technologies	78	39.85
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	113	42.81
3rd sub-pillar: Inclusion	104	44.10
3.3.1 E-Participation	109	25.58
3.3.2 Socioeconomic gap in use of digital payments	101	52.28
3.3.3 Availability of local online content	95	44.71
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	83	53.84
D. Impact pillar	103	45.97
1st sub-pillar: Economy	72	30.86
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	67	52.05 ●
4.1.3 Prevalence of gig economy	69	38.08 ●
4.1.4 ICT services exports	113	2.44
2nd sub-pillar: Quality of Life	100	51.22
4.2.1 Happiness	118	18.97 ○
4.2.2 Freedom to make life choices	50	82.53 ●
4.2.3 Income inequality	86	57.84
4.2.4 Healthy life expectancy at birth	104	46.48
3rd sub-pillar: SDG Contribution	102	55.84
4.3.1 SDG 3: Good Health and Well-Being	117	22.58 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	80	74.36
4.3.4 SDG 7: Affordable and Clean Energy	107	61.33
4.3.5 SDG 11: Sustainable Cities and Communities	110	41.06

NOTE: ● Indicates a strength and ○ a weakness.

Thailand

	Rank (Out of 133)	Score
Network Readiness Index	40	56.07

Pillar/sub-pillar	Rank	Score
A. Technology pillar	48	47.05
1st sub-pillar: Access	36	75.03
2nd sub-pillar: Content	69	24.56
3rd sub-pillar: Future Technologies	47	41.57
B. People pillar	32	50.49
1st sub-pillar: Individuals	13	67.31
2nd sub-pillar: Businesses	76	33.67
3rd sub-pillar: Governments	32	50.50
C. Governance pillar	42	71.32
1st sub-pillar: Trust	44	69.09
2nd sub-pillar: Regulation	54	69.96
3rd sub-pillar: Inclusion	36	74.90
D. Impact pillar	60	55.41
1st sub-pillar: Economy	74	30.72
2nd sub-pillar: Quality of Life	30	78.07
3rd sub-pillar: SDG Contribution	95	57.44



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	48	47.05
1st sub-pillar: Access	36	75.03
1.1.1 Mobile tariffs	62	64.63
1.1.2 Handset prices	88	49.31 ○
1.1.3 FTTH/building Internet subscriptions	10	62.00 ●
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	11	85.43 ●
1.1.6 Internet access in schools	35	99.90
2nd sub-pillar: Content	69	24.56
1.2.1 GitHub commits	80	4.55
1.2.2 Internet domain registrations	72	2.68
1.2.3 Mobile apps development	64	65.79
1.2.4 AI scientific publications	31	25.22 ●
3rd sub-pillar: Future Technologies	47	41.57
1.3.1 Adoption of emerging technologies	28	77.07
1.3.2 Investment in emerging technologies	37	54.50
1.3.3 Robot density	32	8.10
1.3.4 Computer software spending	45	26.60
B. People pillar	32	50.49
1st sub-pillar: Individuals	13	67.31
2.1.1 Mobile broadband internet traffic within the country	8	58.25 ●
2.1.2 ICT skills in the education system	53	60.50
2.1.3 Use of virtual social networks	60	59.08
2.1.4 Adult literacy rate	56	91.41
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	76	33.67
2.2.1 Firms with website	86	36.17 ○
2.2.2 Number of venture capital deals invested in AI	72	1.45 ○
2.2.3 Annual investment in telecommunication services	25	64.80 ●
2.2.4 Public cloud computing market scale	38	32.24
3rd sub-pillar: Governments	32	50.50
2.3.1 Government online services	47	75.28
2.3.2 Data Capabilities	27	53.44
2.3.3 Government promotion of investment in emerging technologies	37	49.49
2.3.4 R&D expenditure by governments and higher education	32	23.80

Indicator	Rank	Score
C. Governance pillar	42	71.32
1st sub-pillar: Trust	44	69.09
3.1.1 Secure Internet servers	59	60.09
3.1.2 Cybersecurity	52	86.50
3.1.3 Online access to financial account	24	71.24 ●
3.1.4 Internet shopping	36	58.54
2nd sub-pillar: Regulation	54	69.96
3.2.1 Regulatory quality	61	51.90
3.2.2 ICT regulatory environment	65	83.93
3.2.3 Regulation of emerging technologies	66	47.57
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	77	66.38
3rd sub-pillar: Inclusion	36	74.90
3.3.1 E-Participation	18	77.91 ●
3.3.2 Socioeconomic gap in use of digital payments	8	98.84 ●
3.3.3 Availability of local online content	60	63.94
3.3.4 Gender gap in Internet use	65	66.51
3.3.5 Rural gap in use of digital payments	54	67.30
D. Impact pillar	60	55.41
1st sub-pillar: Economy	74	30.72
4.1.1 ICT patent applications	64	0.22 ○
4.1.2 Domestic market scale	22	70.78 ●
4.1.3 Prevalence of gig economy	48	50.87
4.1.4 ICT services exports	128	0.99 ○
2nd sub-pillar: Quality of Life	30	78.07
4.2.1 Happiness	48	68.61
4.2.2 Freedom to make life choices	13	93.39 ●
4.2.3 Income inequality	57	72.24
4.2.4 Healthy life expectancy at birth	46	72.20
3rd sub-pillar: SDG Contribution	95	57.44
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	65	23.39 ○
4.3.3 SDG 5: Women's economic opportunity	96	70.09 ○
4.3.4 SDG 7: Affordable and Clean Energy	86	75.51 ○
4.3.5 SDG 11: Sustainable Cities and Communities	117	36.09 ○

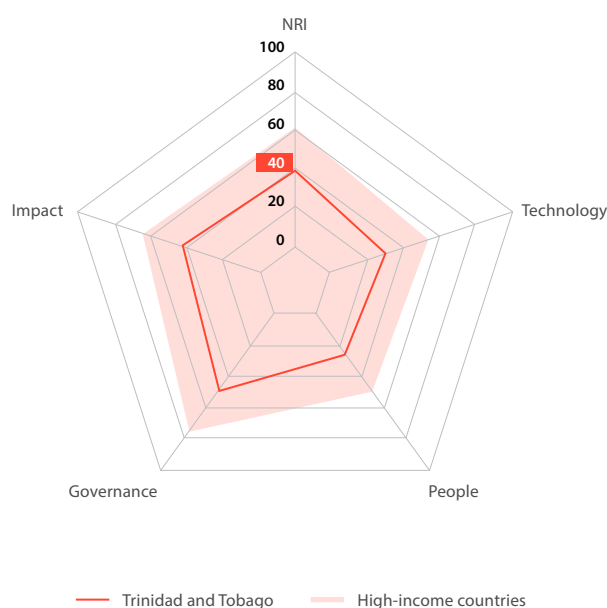
NOTE: ● Indicates a strength and ○ a weakness.

Trinidad and Tobago

Rank Score
(Out of 133)

Network Readiness Index **106** **36.48**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	103	29.31
1st sub-pillar: Access	83	59.07
2nd sub-pillar: Content	121	7.54
3rd sub-pillar: Future Technologies	111	21.32
B. People pillar	120	24.58
1st sub-pillar: Individuals	123	23.80
2nd sub-pillar: Businesses	98	28.76
3rd sub-pillar: Governments	114	21.17
C. Governance pillar	93	48.44
1st sub-pillar: Trust	103	28.81
2nd sub-pillar: Regulation	81	64.01
3rd sub-pillar: Inclusion	87	52.49
D. Impact pillar	110	43.59
1st sub-pillar: Economy	130	14.41
2nd sub-pillar: Quality of Life	50	71.75
3rd sub-pillar: SDG Contribution	125	44.61



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	103	29.31
1st sub-pillar: Access	83	59.07
1.1.1 Mobile tariffs	103	44.40
1.1.2 Handset prices	63	65.74 ●
1.1.3 FTTH/building Internet subscriptions	94	18.44
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	93	66.78
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	121	7.54
1.2.1 GitHub commits	85	4.24
1.2.2 Internet domain registrations	78	2.21
1.2.3 Mobile apps development	120	23.29 ○
1.2.4 AI scientific publications	123	0.40 ○
3rd sub-pillar: Future Technologies	111	21.32
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	114	22.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	72	20.40 ●
B. People pillar	120	24.58
1st sub-pillar: Individuals	123	23.80
2.1.1 Mobile broadband internet traffic within the country	118	1.72 ○
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	82	45.88
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	98	28.76
2.2.1 Firms with website	109	18.39
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	114	39.14 ○
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	114	21.17
2.3.1 Government online services	101	43.55
2.3.2 Data Capabilities	76	18.98
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	108	0.98 ○

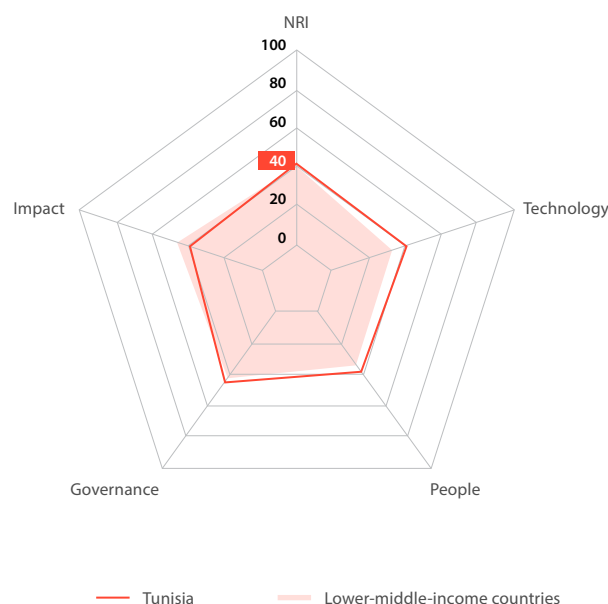
Indicator	Rank	Score
C. Governance pillar	93	48.44
1st sub-pillar: Trust	103	28.81
3.1.1 Secure Internet servers	84	45.86
3.1.2 Cybersecurity	115	22.17
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	72	18.41
2nd sub-pillar: Regulation	81	64.01
3.2.1 Regulatory quality	75	46.28
3.2.2 ICT regulatory environment	41	88.10 ●
3.2.3 Regulation of emerging technologies	107	18.44 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	72	67.24 ●
3rd sub-pillar: Inclusion	87	52.49
3.3.1 E-Participation	117	22.09 ○
3.3.2 Socioeconomic gap in use of digital payments	46	84.90 ●
3.3.3 Availability of local online content	86	50.48
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	110	43.59
1st sub-pillar: Economy	130	14.41
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	117	35.58 ○
4.1.3 Prevalence of gig economy	108	19.19 ○
4.1.4 ICT services exports	111	2.86
2nd sub-pillar: Quality of Life	50	71.75
4.2.1 Happiness	53	66.60 ●
4.2.2 Freedom to make life choices	52	82.09 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	78	61.34
3rd sub-pillar: SDG Contribution	125	44.61
4.3.1 SDG 3: Good Health and Well-Being	57	74.19 ●
4.3.2 SDG 4: Quality Education	48	35.43
4.3.3 SDG 5: Women's economic opportunity	103	65.81
4.3.4 SDG 7: Affordable and Clean Energy	131	0.00 ○
4.3.5 SDG 11: Sustainable Cities and Communities	36	80.24 ●

NOTE: ● Indicates a strength and ○ a weakness.

Tunisia

	Rank (Out of 133)	Score
Network Readiness Index	96	41.57

Pillar/sub-pillar	Rank	Score
A. Technology pillar	71	42.34
1st sub-pillar: Access	71	64.05
2nd sub-pillar: Content	77	22.03
3rd sub-pillar: Future Technologies	49	40.92
B. People pillar	94	36.75
1st sub-pillar: Individuals	56	50.83
2nd sub-pillar: Businesses	94	29.94
3rd sub-pillar: Governments	97	29.48
C. Governance pillar	91	49.41
1st sub-pillar: Trust	81	40.11
2nd sub-pillar: Regulation	95	59.84
3rd sub-pillar: Inclusion	94	48.27
D. Impact pillar	122	37.79
1st sub-pillar: Economy	111	21.27
2nd sub-pillar: Quality of Life	119	39.79
3rd sub-pillar: SDG Contribution	109	52.32



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	71	42.34
1st sub-pillar: Access	71	64.05
1.1.1 Mobile tariffs	69	62.47
1.1.2 Handset prices	81	53.79
1.1.3 FTTH/building Internet subscriptions	80	26.32
1.1.4 Population covered by at least a 3G mobile network	60	88.89
1.1.5 International Internet bandwidth	57	72.43 ●
1.1.6 Internet access in schools	49	80.42
2nd sub-pillar: Content	77	22.03
1.2.1 GitHub commits	60	8.77 ●
1.2.2 Internet domain registrations	76	2.32
1.2.3 Mobile apps development	96	53.53
1.2.4 AI scientific publications	34	23.52 ●
3rd sub-pillar: Future Technologies	49	40.92
1.3.1 Adoption of emerging technologies	64	60.45
1.3.2 Investment in emerging technologies	78	35.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	44	26.82 ●
B. People pillar	94	36.75
1st sub-pillar: Individuals	56	50.83
2.1.1 Mobile broadband internet traffic within the country	66	12.26
2.1.2 ICT skills in the education system	33	71.37 ●
2.1.3 Use of virtual social networks	77	48.41
2.1.4 Adult literacy rate	82	71.27
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	94	29.94
2.2.1 Firms with website	70	49.47
2.2.2 Number of venture capital deals invested in AI	38	11.36 ●
2.2.3 Annual investment in telecommunication services	80	46.82
2.2.4 Public cloud computing market scale	76	12.12
3rd sub-pillar: Governments	97	29.48
2.3.1 Government online services	85	56.13
2.3.2 Data Capabilities	59	30.93
2.3.3 Government promotion of investment in emerging technologies	100	17.58 ○
2.3.4 R&D expenditure by governments and higher education	49	13.28 ●

Indicator	Rank	Score
C. Governance pillar	91	49.41
1st sub-pillar: Trust	81	40.11
3.1.1 Secure Internet servers	83	46.00
3.1.2 Cybersecurity	53	86.25 ●
3.1.3 Online access to financial account	110	9.35 ○
3.1.4 Internet shopping	71	18.86
2nd sub-pillar: Regulation	95	59.84
3.2.1 Regulatory quality	92	38.30
3.2.2 ICT regulatory environment	92	70.00
3.2.3 Regulation of emerging technologies	63	48.19
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	71	67.71
3rd sub-pillar: Inclusion	94	48.27
3.3.1 E-Participation	67	53.49
3.3.2 Socioeconomic gap in use of digital payments	79	65.35
3.3.3 Availability of local online content	82	51.44
3.3.4 Gender gap in Internet use	95	42.99 ○
3.3.5 Rural gap in use of digital payments	110	28.07 ○
D. Impact pillar	122	37.79
1st sub-pillar: Economy	111	21.27
4.1.1 ICT patent applications	60	0.31
4.1.2 Domestic market scale	78	48.73
4.1.3 Prevalence of gig economy	104	22.09 ○
4.1.4 ICT services exports	64	13.94
2nd sub-pillar: Quality of Life	119	39.79
4.2.1 Happiness	104	29.23 ○
4.2.2 Freedom to make life choices	129	18.25 ○
4.2.3 Income inequality	46	75.32 ●
4.2.4 Healthy life expectancy at birth	58	68.50 ●
3rd sub-pillar: SDG Contribution	109	52.32
4.3.1 SDG 3: Good Health and Well-Being	85	61.29
4.3.2 SDG 4: Quality Education	71	14.06 ○
4.3.3 SDG 5: Women's economic opportunity	118	51.28 ○
4.3.4 SDG 7: Affordable and Clean Energy	66	80.12
4.3.5 SDG 11: Sustainable Cities and Communities	68	66.34

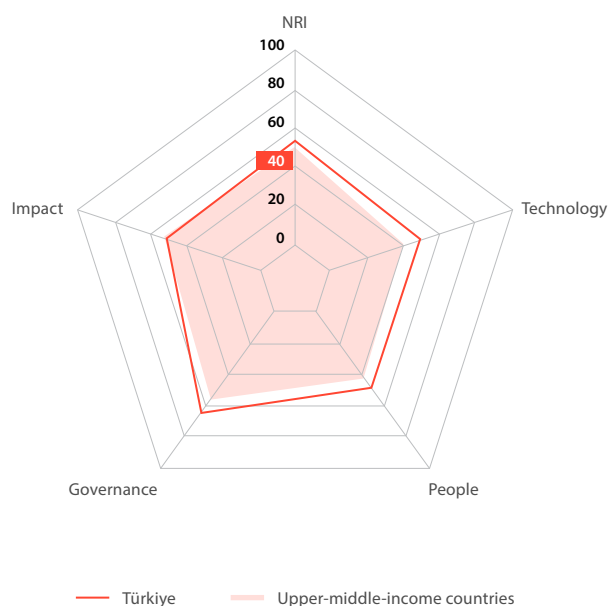
NOTE: ● Indicates a strength and ○ a weakness.

Türkiye

Rank Score
(Out of 133)

Network Readiness Index 58 52.65

Pillar/sub-pillar	Rank	Score
A. Technology pillar	39	50.26
1st sub-pillar: Access	9	81.72
2nd sub-pillar: Content	46	34.78
3rd sub-pillar: Future Technologies	72	34.27
B. People pillar	40	47.33
1st sub-pillar: Individuals	38	54.90
2nd sub-pillar: Businesses	56	37.61
3rd sub-pillar: Governments	34	49.47
C. Governance pillar	54	64.28
1st sub-pillar: Trust	49	62.81
2nd sub-pillar: Regulation	77	65.05
3rd sub-pillar: Inclusion	56	64.97
D. Impact pillar	96	48.75
1st sub-pillar: Economy	66	32.26
2nd sub-pillar: Quality of Life	120	39.79
3rd sub-pillar: SDG Contribution	44	74.20



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	39	50.26
1st sub-pillar: Access	9	81.72
1.1.1 Mobile tariffs	5	97.66 ●
1.1.2 Handset prices	69	61.87
1.1.3 FTTH/building Internet subscriptions	18	48.94 ●
1.1.4 Population covered by at least a 3G mobile network	44	97.11
1.1.5 International Internet bandwidth	13	84.73 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	46	34.78
1.2.1 GitHub commits	65	7.32
1.2.2 Internet domain registrations	51	7.47
1.2.3 Mobile apps development	26	73.71
1.2.4 AI scientific publications	21	50.64 ●
3rd sub-pillar: Future Technologies	72	34.27
1.3.1 Adoption of emerging technologies	50	65.59
1.3.2 Investment in emerging technologies	102	27.50 ○
1.3.3 Robot density	37	5.47 ○
1.3.4 Computer software spending	25	38.51
B. People pillar	40	47.33
1st sub-pillar: Individuals	38	54.90
2.1.1 Mobile broadband internet traffic within the country	11	47.24 ●
2.1.2 ICT skills in the education system	93	41.55 ○
2.1.3 Use of virtual social networks	64	57.68
2.1.4 Adult literacy rate	39	95.43
2.1.5 AI talent concentration	10	32.62
2nd sub-pillar: Businesses	56	37.61
2.2.1 Firms with website	71	48.70
2.2.2 Number of venture capital deals invested in AI	66	2.45 ○
2.2.3 Annual investment in telecommunication services	20	66.27 ●
2.2.4 Public cloud computing market scale	37	33.03
3rd sub-pillar: Governments	34	49.47
2.3.1 Government online services	24	84.53
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	46	43.69
2.3.4 R&D expenditure by governments and higher education	35	20.19

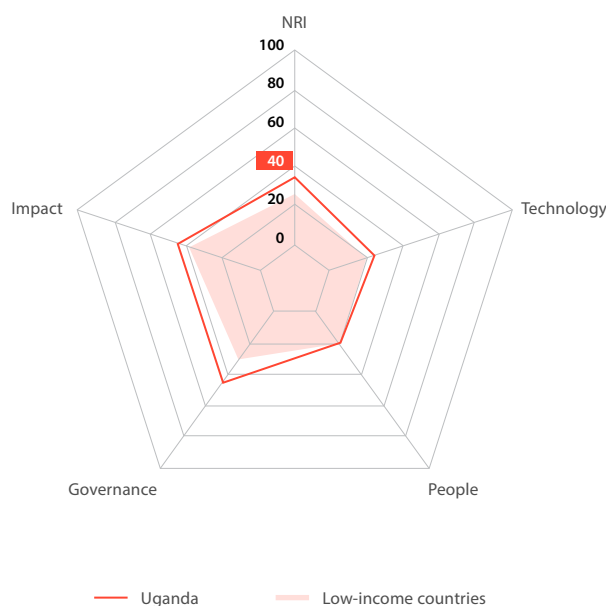
Indicator	Rank	Score
C. Governance pillar	54	64.28
1st sub-pillar: Trust	49	62.81
3.1.1 Secure Internet servers	47	70.46
3.1.2 Cybersecurity	15	97.50 ●
3.1.3 Online access to financial account	54	48.73
3.1.4 Internet shopping	59	34.54
2nd sub-pillar: Regulation	77	65.05
3.2.1 Regulatory quality	85	42.28
3.2.2 ICT regulatory environment	21	93.45
3.2.3 Regulation of emerging technologies	68	47.52
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	114	42.01 ○
3rd sub-pillar: Inclusion	56	64.97
3.3.1 E-Participation	18	77.91 ●
3.3.2 Socioeconomic gap in use of digital payments	83	61.83
3.3.3 Availability of local online content	47	69.95
3.3.4 Gender gap in Internet use	89	55.38 ○
3.3.5 Rural gap in use of digital payments	72	59.78
D. Impact pillar	96	48.75
1st sub-pillar: Economy	66	32.26
4.1.1 ICT patent applications	35	4.44
4.1.2 Domestic market scale	11	78.76 ●
4.1.3 Prevalence of gig economy	66	39.83
4.1.4 ICT services exports	91	6.01 ○
2nd sub-pillar: Quality of Life	120	39.79
4.2.1 Happiness	86	50.45 ○
4.2.2 Freedom to make life choices	127	25.12 ○
4.2.3 Income inequality	100	47.81 ○
4.2.4 Healthy life expectancy at birth	NA	NA
3rd sub-pillar: SDG Contribution	44	74.20
4.3.1 SDG 3: Good Health and Well-Being	52	75.81
4.3.2 SDG 4: Quality Education	37	51.44
4.3.3 SDG 5: Women's economic opportunity	74	76.07
4.3.4 SDG 7: Affordable and Clean Energy	23	89.84 ●
4.3.5 SDG 11: Sustainable Cities and Communities	32	83.07

NOTE: ● Indicates a strength and ○ a weakness.

Uganda

	Rank (Out of 133)	Score
Network Readiness Index	118	32.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	119	22.63
1st sub-pillar: Access	119	32.32
2nd sub-pillar: Content	99	17.15
3rd sub-pillar: Future Technologies	118	18.41
B. People pillar	124	20.00
1st sub-pillar: Individuals	120	26.81
2nd sub-pillar: Businesses	132	6.42
3rd sub-pillar: Governments	101	26.77
C. Governance pillar	100	46.47
1st sub-pillar: Trust	86	36.62
2nd sub-pillar: Regulation	97	58.67
3rd sub-pillar: Inclusion	103	44.11
D. Impact pillar	113	42.52
1st sub-pillar: Economy	96	25.64
2nd sub-pillar: Quality of Life	99	52.20
3rd sub-pillar: SDG Contribution	115	49.72



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	119	22.63
1st sub-pillar: Access	119	32.32
1.1.1 Mobile tariffs	113	35.55
1.1.2 Handset prices	125	24.95 ○
1.1.3 FTTH/building Internet subscriptions	119	6.70 ○
1.1.4 Population covered by at least a 3G mobile network	118	17.10 ○
1.1.5 International Internet bandwidth	34	77.30 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	99	17.15
1.2.1 GitHub commits	107	1.62
1.2.2 Internet domain registrations	121	0.13 ○
1.2.3 Mobile apps development	97	52.84
1.2.4 AI scientific publications	48	14.00 ●
3rd sub-pillar: Future Technologies	118	18.41
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	75	36.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	126	0.82 ○
B. People pillar	124	20.00
1st sub-pillar: Individuals	120	26.81
2.1.1 Mobile broadband internet traffic within the country	82	7.91
2.1.2 ICT skills in the education system	NA	NA
2.1.3 Use of virtual social networks	131	0.09 ○
2.1.4 Adult literacy rate	80	72.44
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	132	6.42
2.2.1 Firms with website	120	4.35 ○
2.2.2 Number of venture capital deals invested in AI	45	8.42 ●
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	96	6.47
3rd sub-pillar: Governments	101	26.77
2.3.1 Government online services	96	46.61
2.3.2 Data Capabilities	57	31.33
2.3.3 Government promotion of investment in emerging technologies	NA	NA
2.3.4 R&D expenditure by governments and higher education	98	2.39

Indicator	Rank	Score
C. Governance pillar	100	46.47
1st sub-pillar: Trust	86	36.62
3.1.1 Secure Internet servers	117	28.41 ○
3.1.2 Cybersecurity	79	70.00 ●
3.1.3 Online access to financial account	67	38.40 ●
3.1.4 Internet shopping	92	9.67
2nd sub-pillar: Regulation	97	58.67
3.2.1 Regulatory quality	99	36.51
3.2.2 ICT regulatory environment	59	84.52 ●
3.2.3 Regulation of emerging technologies	98	28.82
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	112	43.51
3rd sub-pillar: Inclusion	103	44.11
3.3.1 E-Participation	87	39.54
3.3.2 Socioeconomic gap in use of digital payments	102	51.47
3.3.3 Availability of local online content	123	23.56 ○
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	70	61.87 ●
D. Impact pillar	113	42.52
1st sub-pillar: Economy	96	25.64
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	81	47.65
4.1.3 Prevalence of gig economy	100	25.29
4.1.4 ICT services exports	99	3.97
2nd sub-pillar: Quality of Life	99	52.20
4.2.1 Happiness	107	28.37
4.2.2 Freedom to make life choices	57	80.15 ●
4.2.3 Income inequality	95	52.19
4.2.4 Healthy life expectancy at birth	108	44.00
3rd sub-pillar: SDG Contribution	115	49.72
4.3.1 SDG 3: Good Health and Well-Being	110	32.26
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	71	77.78 ●
4.3.4 SDG 7: Affordable and Clean Energy	126	33.41 ○
4.3.5 SDG 11: Sustainable Cities and Communities	106	43.67

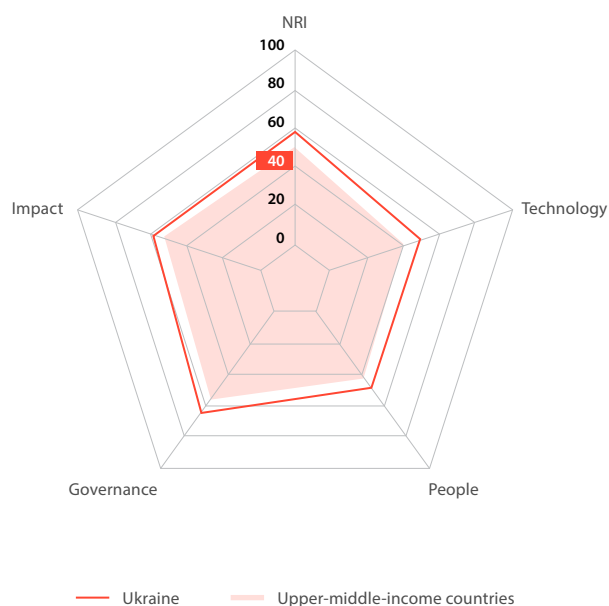
NOTE: ● Indicates a strength and ○ a weakness.

Ukraine

Rank Score
(Out of 133)

Network Readiness Index 43 55.32

Pillar/sub-pillar	Rank	Score
A. Technology pillar	44	48.96
1st sub-pillar: Access	69	65.49
2nd sub-pillar: Content	41	37.69
3rd sub-pillar: Future Technologies	40	43.71
B. People pillar	28	51.83
1st sub-pillar: Individuals	4	77.28
2nd sub-pillar: Businesses	69	34.67
3rd sub-pillar: Governments	57	43.53
C. Governance pillar	56	63.14
1st sub-pillar: Trust	51	62.15
2nd sub-pillar: Regulation	78	64.48
3rd sub-pillar: Inclusion	61	62.78
D. Impact pillar	51	57.34
1st sub-pillar: Economy	16	52.82
2nd sub-pillar: Quality of Life	90	59.28
3rd sub-pillar: SDG Contribution	89	59.93



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	44	48.96
1st sub-pillar: Access	69	65.49
1.1.1 Mobile tariffs	54	69.66
1.1.2 Handset prices	77	55.29
1.1.3 FTTH/building Internet subscriptions	12	59.84 ●
1.1.4 Population covered by at least a 3G mobile network	109	33.13 ○
1.1.5 International Internet bandwidth	43	75.02
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	41	37.69
1.2.1 GitHub commits	39	26.18
1.2.2 Internet domain registrations	56	5.24
1.2.3 Mobile apps development	12	77.28 ●
1.2.4 AI scientific publications	24	42.04 ●
3rd sub-pillar: Future Technologies	40	43.71
1.3.1 Adoption of emerging technologies	52	65.04
1.3.2 Investment in emerging technologies	62	40.50
1.3.3 Robot density	55	0.09 ○
1.3.4 Computer software spending	4	69.19 ●
B. People pillar	28	51.83
1st sub-pillar: Individuals	4	77.28
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	25	75.99 ●
2.1.3 Use of virtual social networks	68	55.90
2.1.4 Adult literacy rate	2	99.96 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	69	34.67
2.2.1 Firms with website	58	58.42
2.2.2 Number of venture capital deals invested in AI	62	3.80 ○
2.2.3 Annual investment in telecommunication services	56	52.73
2.2.4 Public cloud computing market scale	52	23.74
3rd sub-pillar: Governments	57	43.53
2.3.1 Government online services	34	79.53 ●
2.3.2 Data Capabilities	23	55.39 ●
2.3.3 Government promotion of investment in emerging technologies	71	34.08
2.3.4 R&D expenditure by governments and higher education	78	5.12 ○

Indicator	Rank	Score
C. Governance pillar	56	63.14
1st sub-pillar: Trust	51	62.15
3.1.1 Secure Internet servers	44	72.60
3.1.2 Cybersecurity	85	65.92
3.1.3 Online access to financial account	36	62.11
3.1.4 Internet shopping	45	47.97
2nd sub-pillar: Regulation	78	64.48
3.2.1 Regulatory quality	89	40.24 ○
3.2.2 ICT regulatory environment	86	75.00
3.2.3 Regulation of emerging technologies	80	39.06 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	70	68.11
3rd sub-pillar: Inclusion	61	62.78
3.3.1 E-Participation	57	59.31
3.3.2 Socioeconomic gap in use of digital payments	41	87.08
3.3.3 Availability of local online content	76	54.33
3.3.4 Gender gap in Internet use	81	59.21 ○
3.3.5 Rural gap in use of digital payments	81	53.97
D. Impact pillar	51	57.34
1st sub-pillar: Economy	16	52.82
4.1.1 ICT patent applications	45	1.45
4.1.2 Domestic market scale	48	59.19
4.1.3 Prevalence of gig economy	35	57.85
4.1.4 ICT services exports	5	92.77 ●
2nd sub-pillar: Quality of Life	90	59.28
4.2.1 Happiness	101	32.94 ○
4.2.2 Freedom to make life choices	85	67.38
4.2.3 Income inequality	3	96.14 ●
4.2.4 Healthy life expectancy at birth	84	58.91
3rd sub-pillar: SDG Contribution	89	59.93
4.3.1 SDG 3: Good Health and Well-Being	52	75.81
4.3.2 SDG 4: Quality Education	42	42.25
4.3.3 SDG 5: Women's economic opportunity	63	79.49
4.3.4 SDG 7: Affordable and Clean Energy	113	57.60 ○
4.3.5 SDG 11: Sustainable Cities and Communities	104	44.97 ○

NOTE: ● Indicates a strength and ○ a weakness.

United Arab Emirates

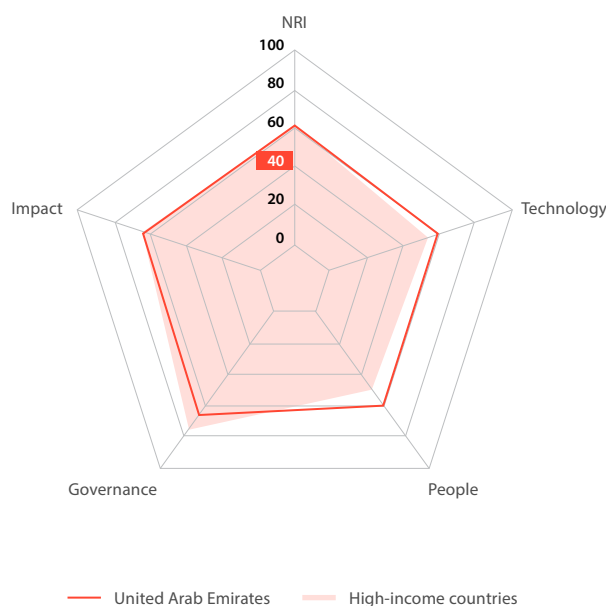
Rank
(Out of 133)

Score
28 62.79

Pillar/sub-pillar	Rank	Score
A. Technology pillar	21	59.51
1st sub-pillar: Access	4	84.96
2nd sub-pillar: Content	63	26.11
3rd sub-pillar: Future Technologies	8	67.46
B. People pillar	12	60.74
1st sub-pillar: Individuals	2	77.80
2nd sub-pillar: Businesses	61	36.63
3rd sub-pillar: Governments	11	67.79
C. Governance pillar	50	66.58
1st sub-pillar: Trust	54	58.03
2nd sub-pillar: Regulation	74	66.17
3rd sub-pillar: Inclusion	33	75.55
D. Impact pillar	33	64.31
1st sub-pillar: Economy	33	41.28
2nd sub-pillar: Quality of Life	17	84.28
3rd sub-pillar: SDG Contribution	60	67.37

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	21	59.51
1st sub-pillar: Access	4	84.96
1.1.1 Mobile tariffs	10	88.54 ●
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	45	37.43
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	15	83.77
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	63	26.11
1.2.1 GitHub commits	51	13.25
1.2.2 Internet domain registrations	46	8.82
1.2.3 Mobile apps development	13	76.94
1.2.4 AI scientific publications	73	5.42 ○
3rd sub-pillar: Future Technologies	8	67.46
1.3.1 Adoption of emerging technologies	3	99.14 ●
1.3.2 Investment in emerging technologies	10	79.50 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	57	23.74
B. People pillar	12	60.74
1st sub-pillar: Individuals	2	77.80
2.1.1 Mobile broadband internet traffic within the country	37	27.15
2.1.2 ICT skills in the education system	7	86.13 ●
2.1.3 Use of virtual social networks	1	100.00 ●
2.1.4 Adult literacy rate	25	97.94
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	61	36.63
2.2.1 Firms with website	NA	NA
2.2.2 Number of venture capital deals invested in AI	42	10.96 ○
2.2.3 Annual investment in telecommunication services	33	61.30
2.2.4 Public cloud computing market scale	29	37.64
3rd sub-pillar: Governments	11	67.79
2.3.1 Government online services	12	89.10
2.3.2 Data Capabilities	20	57.54
2.3.3 Government promotion of investment in emerging technologies	2	97.73 ●
2.3.4 R&D expenditure by governments and higher education	26	26.77



Indicator	Rank	Score
C. Governance pillar	50	66.58
1st sub-pillar: Trust	54	58.03
3.1.1 Secure Internet servers	61	58.34
3.1.2 Cybersecurity	8	98.08 ●
3.1.3 Online access to financial account	55	46.91
3.1.4 Internet shopping	60	28.78
2nd sub-pillar: Regulation	74	66.17
3.2.1 Regulatory quality	29	72.31
3.2.2 ICT regulatory environment	75	79.76 ○
3.2.3 Regulation of emerging technologies	9	83.27 ●
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	130	20.50 ○
3rd sub-pillar: Inclusion	33	75.55
3.3.1 E-Participation	18	77.91
3.3.2 Socioeconomic gap in use of digital payments	31	91.47
3.3.3 Availability of local online content	21	85.82
3.3.4 Gender gap in Internet use	31	70.21
3.3.5 Rural gap in use of digital payments	87	52.36 ○
D. Impact pillar	33	64.31
1st sub-pillar: Economy	33	41.28
4.1.1 ICT patent applications	31	5.70
4.1.2 Domestic market scale	33	65.32
4.1.3 Prevalence of gig economy	11	79.94
4.1.4 ICT services exports	63	14.15 ○
2nd sub-pillar: Quality of Life	17	84.28
4.2.1 Happiness	22	78.49
4.2.2 Freedom to make life choices	32	86.63
4.2.3 Income inequality	8	94.09 ●
4.2.4 Healthy life expectancy at birth	32	81.35
3rd sub-pillar: SDG Contribution	60	67.37
4.3.1 SDG 3: Good Health and Well-Being	27	85.48
4.3.2 SDG 4: Quality Education	46	36.99 ○
4.3.3 SDG 5: Women's economic opportunity	74	76.07 ○
4.3.4 SDG 7: Affordable and Clean Energy	99	67.91 ○
4.3.5 SDG 11: Sustainable Cities and Communities	19	91.50

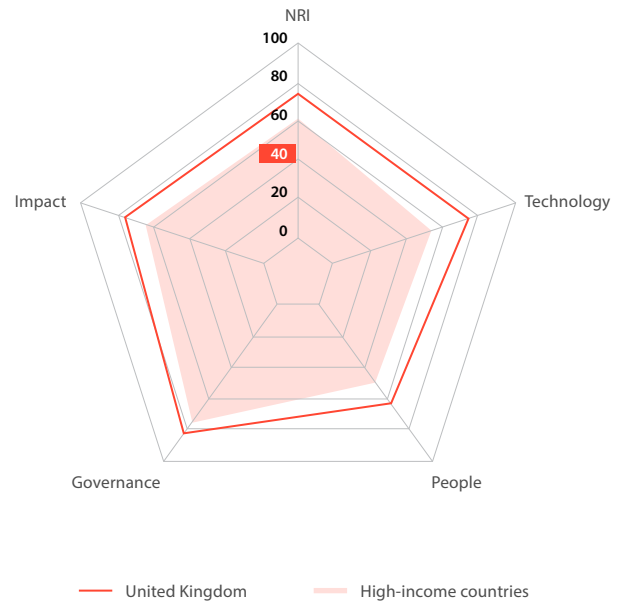
NOTE: ● Indicates a strength and ○ a weakness.

United Kingdom

Rank Score
(Out of 133)

Network Readiness Index 8 73.57

Pillar/sub-pillar	Rank	Score
A. Technology pillar	5	71.38
1st sub-pillar: Access	10	81.48
2nd sub-pillar: Content	3	72.55
3rd sub-pillar: Future Technologies	16	60.11
B. People pillar	7	64.01
1st sub-pillar: Individuals	49	51.81
2nd sub-pillar: Businesses	4	66.17
3rd sub-pillar: Governments	4	74.05
C. Governance pillar	14	82.88
1st sub-pillar: Trust	21	80.52
2nd sub-pillar: Regulation	25	82.05
3rd sub-pillar: Inclusion	5	86.08
D. Impact pillar	8	76.02
1st sub-pillar: Economy	12	59.75
2nd sub-pillar: Quality of Life	22	81.45
3rd sub-pillar: SDG Contribution	4	86.85



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	5	71.38
1st sub-pillar: Access	10	81.48
1.1.1 Mobile tariffs	25	82.08
1.1.2 Handset prices	12	96.12
1.1.3 FTTH/building Internet subscriptions	34	41.44 ○
1.1.4 Population covered by at least a 3G mobile network	29	98.83 ○
1.1.5 International Internet bandwidth	8	88.91 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	3	72.55
1.2.1 GitHub commits	18	58.86
1.2.2 Internet domain registrations	10	63.00
1.2.3 Mobile apps development	25	73.95
1.2.4 AI scientific publications	7	94.38 ●
3rd sub-pillar: Future Technologies	16	60.11
1.3.1 Adoption of emerging technologies	16	84.70
1.3.2 Investment in emerging technologies	8	82.25 ●
1.3.3 Robot density	23	15.34 ○
1.3.4 Computer software spending	15	58.16
B. People pillar	7	64.01
1st sub-pillar: Individuals	49	51.81
2.1.1 Mobile broadband internet traffic within the country	17	43.80
2.1.2 ICT skills in the education system	28	74.46
2.1.3 Use of virtual social networks	13	72.66
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	26	16.31 ○
2nd sub-pillar: Businesses	4	66.17
2.2.1 Firms with website	15	82.00
2.2.2 Number of venture capital deals invested in AI	9	47.30
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	3	69.22 ●
3rd sub-pillar: Governments	4	74.05
2.3.1 Government online services	17	87.39
2.3.2 Data Capabilities	6	71.31 ●
2.3.3 Government promotion of investment in emerging technologies	7	84.88 ●
2.3.4 R&D expenditure by governments and higher education	11	52.61

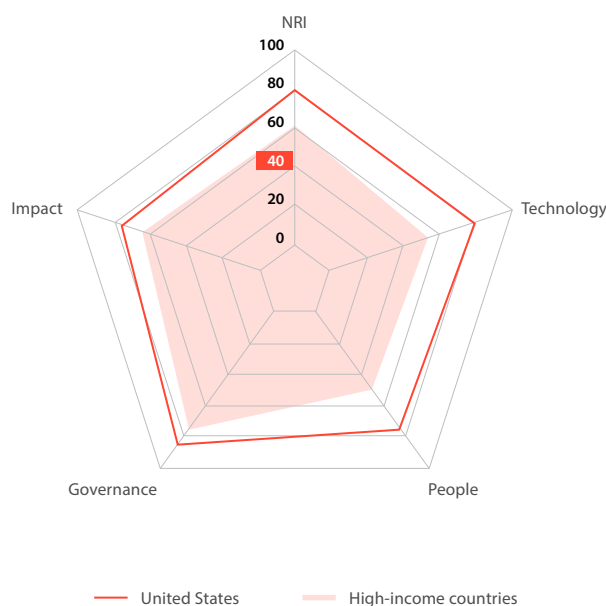
Indicator	Rank	Score
C. Governance pillar	14	82.88
1st sub-pillar: Trust	21	80.52
3.1.1 Secure Internet servers	21	83.82
3.1.2 Cybersecurity	2	99.50 ●
3.1.3 Online access to financial account	33	64.59 ○
3.1.4 Internet shopping	19	74.18
2nd sub-pillar: Regulation	25	82.05
3.2.1 Regulatory quality	13	84.79
3.2.2 ICT regulatory environment	7	95.83 ●
3.2.3 Regulation of emerging technologies	29	69.11
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	85	60.53 ○
3rd sub-pillar: Inclusion	5	86.08
3.3.1 E-Participation	6	95.34 ●
3.3.2 Socioeconomic gap in use of digital payments	5	99.42 ●
3.3.3 Availability of local online content	12	90.87
3.3.4 Gender gap in Internet use	46	68.70 ○
3.3.5 Rural gap in use of digital payments	19	76.06
D. Impact pillar	8	76.02
1st sub-pillar: Economy	12	59.75
4.1.1 ICT patent applications	18	35.38
4.1.2 Domestic market scale	9	79.42
4.1.3 Prevalence of gig economy	4	89.24 ●
4.1.4 ICT services exports	27	34.97
2nd sub-pillar: Quality of Life	22	81.45
4.2.1 Happiness	25	76.93
4.2.2 Freedom to make life choices	38	84.69 ○
4.2.3 Income inequality	35	78.66 ○
4.2.4 Healthy life expectancy at birth	27	86.78
3rd sub-pillar: SDG Contribution	4	86.85
4.3.1 SDG 3: Good Health and Well-Being	5	95.16 ●
4.3.2 SDG 4: Quality Education	13	64.95
4.3.3 SDG 5: Women's economic opportunity	15	96.58
4.3.4 SDG 7: Affordable and Clean Energy	14	91.89
4.3.5 SDG 11: Sustainable Cities and Communities	16	92.78

NOTE: ● Indicates a strength and ○ a weakness.

United States

	Rank (Out of 133)	Score
Network Readiness Index	1	78.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	1	82.24
1st sub-pillar: Access	2	86.46
2nd sub-pillar: Content	1	76.03
3rd sub-pillar: Future Technologies	1	84.24
B. People pillar	2	72.97
1st sub-pillar: Individuals	18	62.05
2nd sub-pillar: Businesses	1	76.87
3rd sub-pillar: Governments	2	79.98
C. Governance pillar	9	86.53
1st sub-pillar: Trust	6	90.27
2nd sub-pillar: Regulation	19	85.34
3rd sub-pillar: Inclusion	9	83.96
D. Impact pillar	11	74.12
1st sub-pillar: Economy	2	77.34
2nd sub-pillar: Quality of Life	73	66.10
3rd sub-pillar: SDG Contribution	29	78.92



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	1	82.24
1st sub-pillar: Access	2	86.46
1.1.1 Mobile tariffs	24	82.70
1.1.2 Handset prices	18	93.55
1.1.3 FTTH/building Internet subscriptions	14	57.42
1.1.4 Population covered by at least a 3G mobile network	48	95.41 ○
1.1.5 International Internet bandwidth	7	89.68
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	1	76.03
1.2.1 GitHub commits	14	64.55
1.2.2 Internet domain registrations	9	65.42
1.2.3 Mobile apps development	23	74.16
1.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	1	84.24
1.3.1 Adoption of emerging technologies	4	98.65
1.3.2 Investment in emerging technologies	1	100.00 ●
1.3.3 Robot density	11	38.30
1.3.4 Computer software spending	1	100.00 ●
B. People pillar	2	72.97
1st sub-pillar: Individuals	18	62.05
2.1.1 Mobile broadband internet traffic within the country	3	81.82 ●
2.1.2 ICT skills in the education system	12	82.22
2.1.3 Use of virtual social networks	52	60.77 ○
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	17	23.39 ○
2nd sub-pillar: Businesses	1	76.87
2.2.1 Firms with website	36	69.25
2.2.2 Number of venture capital deals invested in AI	13	38.25
2.2.3 Annual investment in telecommunication services	1	100.00 ●
2.2.4 Public cloud computing market scale	1	100.00 ●
3rd sub-pillar: Governments	2	79.98
2.3.1 Government online services	9	92.31
2.3.2 Data Capabilities	16	65.46
2.3.3 Government promotion of investment in emerging technologies	1	100.00 ●
2.3.4 R&D expenditure by governments and higher education	3	62.14 ●

Indicator	Rank	Score
C. Governance pillar	9	86.53
1st sub-pillar: Trust	6	90.27
3.1.1 Secure Internet servers	2	94.60 ●
3.1.2 Cybersecurity	1	100.00 ●
3.1.3 Online access to financial account	15	80.30
3.1.4 Internet shopping	9	86.19
2nd sub-pillar: Regulation	19	85.34
3.2.1 Regulatory quality	18	81.46
3.2.2 ICT regulatory environment	31	89.88
3.2.3 Regulation of emerging technologies	6	89.11
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	78	66.26 ○
3rd sub-pillar: Inclusion	9	83.96
3.3.1 E-Participation	10	90.70
3.3.2 Socioeconomic gap in use of digital payments	35	89.92
3.3.3 Availability of local online content	7	93.51
3.3.4 Gender gap in Internet use	18	71.79
3.3.5 Rural gap in use of digital payments	34	73.90
D. Impact pillar	11	74.12
1st sub-pillar: Economy	2	77.34
4.1.1 ICT patent applications	1	100.00 ●
4.1.2 Domestic market scale	2	98.08 ●
4.1.3 Prevalence of gig economy	2	95.35 ●
4.1.4 ICT services exports	58	15.93 ○
2nd sub-pillar: Quality of Life	73	66.10
4.2.1 Happiness	33	73.90
4.2.2 Freedom to make life choices	107	58.77 ○
4.2.3 Income inequality	92	55.78 ○
4.2.4 Healthy life expectancy at birth	42	75.47
3rd sub-pillar: SDG Contribution	29	78.92
4.3.1 SDG 3: Good Health and Well-Being	10	91.94
4.3.2 SDG 4: Quality Education	17	62.90
4.3.3 SDG 5: Women's economic opportunity	38	88.03
4.3.4 SDG 7: Affordable and Clean Energy	81	76.97 ○
4.3.5 SDG 11: Sustainable Cities and Communities	31	83.60

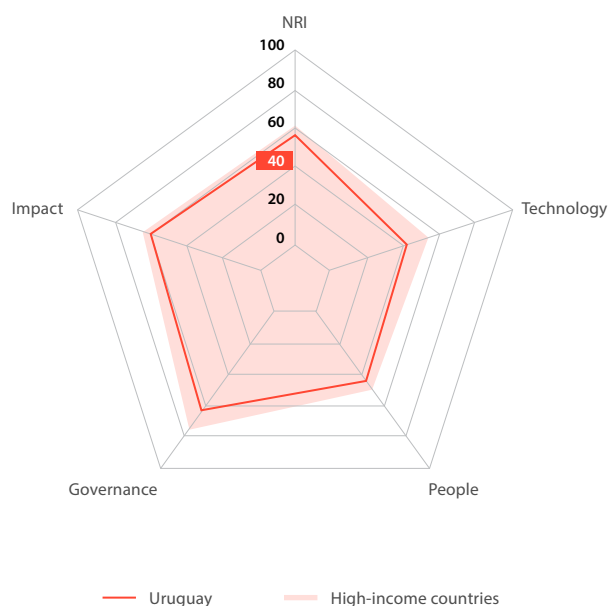
NOTE: ● Indicates a strength and ○ a weakness.

Uruguay

Rank Score
(Out of 133)

Network Readiness Index **53** **53.40**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	66	43.49
1st sub-pillar: Access	58	67.11
2nd sub-pillar: Content	62	26.36
3rd sub-pillar: Future Technologies	61	37.01
B. People pillar	45	46.02
1st sub-pillar: Individuals	23	58.34
2nd sub-pillar: Businesses	75	33.67
3rd sub-pillar: Governments	45	46.05
C. Governance pillar	55	64.12
1st sub-pillar: Trust	57	54.06
2nd sub-pillar: Regulation	34	78.53
3rd sub-pillar: Inclusion	71	59.78
D. Impact pillar	43	59.96
1st sub-pillar: Economy	76	30.59
2nd sub-pillar: Quality of Life	31	77.05
3rd sub-pillar: SDG Contribution	48	72.23



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	66	43.49
1st sub-pillar: Access	58	67.11
1.1.1 Mobile tariffs	48	72.74
1.1.2 Handset prices	43	82.12
1.1.3 FTTH/building Internet subscriptions	52	35.29
1.1.4 Population covered by at least a 3G mobile network	101	47.84 ○
1.1.5 International Internet bandwidth	103	64.65 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	62	26.36
1.2.1 GitHub commits	42	22.82
1.2.2 Internet domain registrations	43	9.59
1.2.3 Mobile apps development	33	72.05 ●
1.2.4 AI scientific publications	107	0.97 ○
3rd sub-pillar: Future Technologies	61	37.01
1.3.1 Adoption of emerging technologies	48	65.74
1.3.2 Investment in emerging technologies	104	27.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	75	18.28
B. People pillar	45	46.02
1st sub-pillar: Individuals	23	58.34
2.1.1 Mobile broadband internet traffic within the country	81	8.81
2.1.2 ICT skills in the education system	44	62.74
2.1.3 Use of virtual social networks	42	63.48
2.1.4 Adult literacy rate	22	98.31 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	75	33.67
2.2.1 Firms with website	44	64.71
2.2.2 Number of venture capital deals invested in AI	50	5.88
2.2.3 Annual investment in telecommunication services	78	47.80
2.2.4 Public cloud computing market scale	65	16.29
3rd sub-pillar: Governments	45	46.05
2.3.1 Government online services	52	73.93
2.3.2 Data Capabilities	15	67.89 ●
2.3.3 Government promotion of investment in emerging technologies	69	34.49
2.3.4 R&D expenditure by governments and higher education	64	7.88

Indicator	Rank	Score
C. Governance pillar	55	64.12
1st sub-pillar: Trust	57	54.06
3.1.1 Secure Internet servers	57	60.44
3.1.2 Cybersecurity	72	75.17
3.1.3 Online access to financial account	57	44.55
3.1.4 Internet shopping	55	36.09
2nd sub-pillar: Regulation	34	78.53
3.2.1 Regulatory quality	39	64.77
3.2.2 ICT regulatory environment	93	69.64 ○
3.2.3 Regulation of emerging technologies	31	67.86 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	14	90.37 ●
3rd sub-pillar: Inclusion	71	59.78
3.3.1 E-Participation	61	58.14
3.3.2 Socioeconomic gap in use of digital payments	74	69.00
3.3.3 Availability of local online content	63	61.78
3.3.4 Gender gap in Internet use	14	74.24 ●
3.3.5 Rural gap in use of digital payments	104	35.76 ○
D. Impact pillar	43	59.96
1st sub-pillar: Economy	76	30.59
4.1.1 ICT patent applications	52	0.79
4.1.2 Domestic market scale	89	44.30 ○
4.1.3 Prevalence of gig economy	95	27.62 ○
4.1.4 ICT services exports	16	49.65 ●
2nd sub-pillar: Quality of Life	31	77.05
4.2.1 Happiness	24	77.02 ●
4.2.2 Freedom to make life choices	23	89.72 ●
4.2.3 Income inequality	87	57.58 ○
4.2.4 Healthy life expectancy at birth	48	71.26
3rd sub-pillar: SDG Contribution	48	72.23
4.3.1 SDG 3: Good Health and Well-Being	27	85.48 ●
4.3.2 SDG 4: Quality Education	47	36.17
4.3.3 SDG 5: Women's economic opportunity	48	84.62
4.3.4 SDG 7: Affordable and Clean Energy	35	86.48
4.3.5 SDG 11: Sustainable Cities and Communities	41	77.85

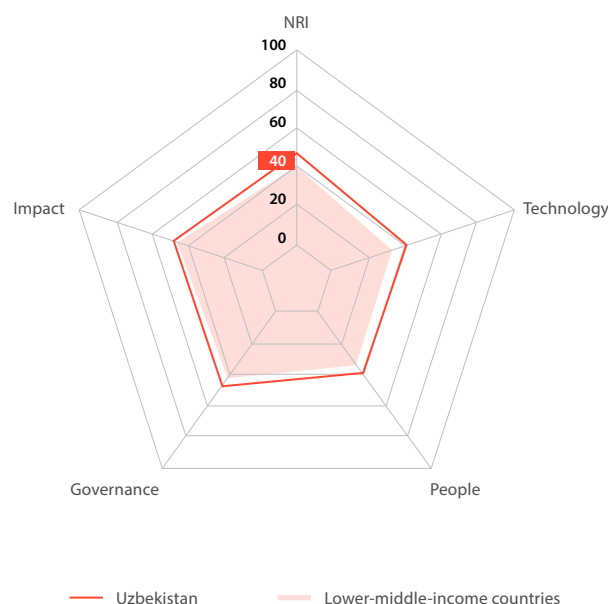
NOTE: ● Indicates a strength and ○ a weakness.

Uzbekistan

Rank
(Out of 133)

Network Readiness Index **81 44.87**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	72	41.57
1st sub-pillar: Access	63	66.49
2nd sub-pillar: Content	78	21.78
3rd sub-pillar: Future Technologies	63	36.43
B. People pillar	91	37.51
1st sub-pillar: Individuals	72	48.02
2nd sub-pillar: Businesses	101	27.72
3rd sub-pillar: Governments	74	36.80
C. Governance pillar	90	49.53
1st sub-pillar: Trust	75	42.12
2nd sub-pillar: Regulation	127	36.67
3rd sub-pillar: Inclusion	49	69.80
D. Impact pillar	85	50.87
1st sub-pillar: Economy	110	21.57
2nd sub-pillar: Quality of Life	26	78.91
3rd sub-pillar: SDG Contribution	111	52.15



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	72	41.57
1st sub-pillar: Access	63	66.49
1.1.1 Mobile tariffs	55	68.14
1.1.2 Handset prices	123	27.75 ○
1.1.3 FTTH/building Internet subscriptions	9	64.07 ●
1.1.4 Population covered by at least a 3G mobile network	92	61.99
1.1.5 International Internet bandwidth	18	82.06 ●
1.1.6 Internet access in schools	43	94.92
2nd sub-pillar: Content	78	21.78
1.2.1 GitHub commits	92	3.23
1.2.2 Internet domain registrations	100	0.82
1.2.3 Mobile apps development	61	66.31
1.2.4 AI scientific publications	43	16.76 ●
3rd sub-pillar: Future Technologies	63	36.43
1.3.1 Adoption of emerging technologies	70	57.94
1.3.2 Investment in emerging technologies	NA	NA
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	80	14.91
B. People pillar	91	37.51
1st sub-pillar: Individuals	72	48.02
2.1.1 Mobile broadband internet traffic within the country	40	24.12 ●
2.1.2 ICT skills in the education system	78	49.78
2.1.3 Use of virtual social networks	108	18.16
2.1.4 Adult literacy rate	1	100.00 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	101	27.72
2.2.1 Firms with website	112	12.82 ○
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	62	51.45
2.2.4 Public cloud computing market scale	59	18.88
3rd sub-pillar: Governments	74	36.80
2.3.1 Government online services	57	71.71
2.3.2 Data Capabilities	50	36.18
2.3.3 Government promotion of investment in emerging technologies	63	37.11
2.3.4 R&D expenditure by governments and higher education	100	2.20 ○

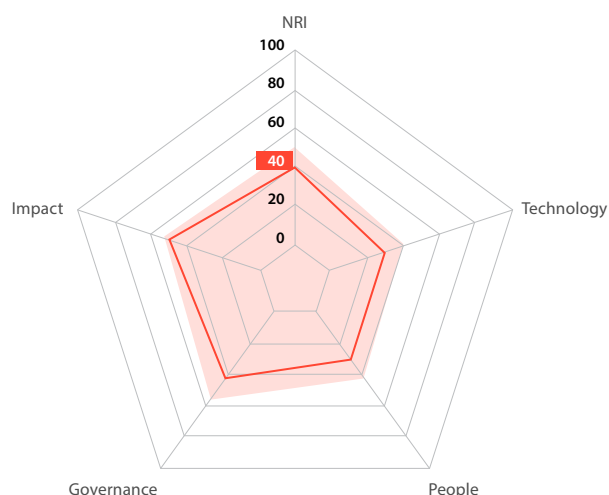
Indicator	Rank	Score
C. Governance pillar	90	49.53
1st sub-pillar: Trust	75	42.12
3.1.1 Secure Internet servers	72	49.07
3.1.2 Cybersecurity	77	71.08
3.1.3 Online access to financial account	62	42.25
3.1.4 Internet shopping	105	6.09 ○
2nd sub-pillar: Regulation	127	36.67
3.2.1 Regulatory quality	101	35.10
3.2.2 ICT regulatory environment	132	2.14 ○
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	75.00 ○
3.2.5 Privacy protection by law content	120	34.42 ○
3rd sub-pillar: Inclusion	49	69.80
3.3.1 E-Participation	55	60.46
3.3.2 Socioeconomic gap in use of digital payments	45	84.97 ●
3.3.3 Availability of local online content	NA	NA
3.3.4 Gender gap in Internet use	77	62.99
3.3.5 Rural gap in use of digital payments	45	70.79 ●
D. Impact pillar	85	50.87
1st sub-pillar: Economy	110	21.57
4.1.1 ICT patent applications	79	0.00 ○
4.1.2 Domestic market scale	56	56.82
4.1.3 Prevalence of gig economy	NA	NA
4.1.4 ICT services exports	83	7.90
2nd sub-pillar: Quality of Life	26	78.91
4.2.1 Happiness	41	70.89 ●
4.2.2 Freedom to make life choices	11	93.55 ●
4.2.3 Income inequality	25	81.75 ●
4.2.4 Healthy life expectancy at birth	76	62.80
3rd sub-pillar: SDG Contribution	111	52.15
4.3.1 SDG 3: Good Health and Well-Being	57	74.19
4.3.2 SDG 4: Quality Education	81	5.79 ○
4.3.3 SDG 5: Women's economic opportunity	74	76.07
4.3.4 SDG 7: Affordable and Clean Energy	118	52.78 ○
4.3.5 SDG 11: Sustainable Cities and Communities	52	73.71

NOTE: ● Indicates a strength and ○ a weakness.

Venezuela (Bolivarian Republic of)

	Rank (Out of 133)	Score
Network Readiness Index	104	36.84

Pillar/sub-pillar	Rank	Score
A. Technology pillar	106	28.47
1st sub-pillar: Access	103	44.13
2nd sub-pillar: Content	107	14.26
3rd sub-pillar: Future Technologies	98	27.02
B. People pillar	110	29.01
1st sub-pillar: Individuals	71	48.23
2nd sub-pillar: Businesses	116	24.25
3rd sub-pillar: Governments	126	14.56
C. Governance pillar	105	43.19
1st sub-pillar: Trust	78	40.29
2nd sub-pillar: Regulation	123	40.79
3rd sub-pillar: Inclusion	93	48.49
D. Impact pillar	101	46.67
1st sub-pillar: Economy	126	16.71
2nd sub-pillar: Quality of Life	84	60.72
3rd sub-pillar: SDG Contribution	76	62.59



— Venezuela (Bolivarian Republic of) Upper-middle-income countries

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	106	28.47
1st sub-pillar: Access	103	44.13
1.1.1 Mobile tariffs	102	44.86
1.1.2 Handset prices	86	50.29
1.1.3 FTTH/building Internet subscriptions	37	40.90 ●
1.1.4 Population covered by at least a 3G mobile network	122	9.79 ○
1.1.5 International Internet bandwidth	44	74.80 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	107	14.26
1.2.1 GitHub commits	94	3.09
1.2.2 Internet domain registrations	93	1.24
1.2.3 Mobile apps development	100	51.38
1.2.4 AI scientific publications	99	1.31
3rd sub-pillar: Future Technologies	98	27.02
1.3.1 Adoption of emerging technologies	100	33.15
1.3.2 Investment in emerging technologies	129	10.75 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	26	37.16 ●
B. People pillar	110	29.01
1st sub-pillar: Individuals	71	48.23
2.1.1 Mobile broadband internet traffic within the country	91	5.56
2.1.2 ICT skills in the education system	76	50.53
2.1.3 Use of virtual social networks	90	40.26
2.1.4 Adult literacy rate	33	96.57 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	116	24.25
2.2.1 Firms with website	74	43.42
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	122	5.08 ○
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	126	14.56
2.3.1 Government online services	125	23.25 ○
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	111	8.20 ○
2.3.4 R&D expenditure by governments and higher education	52	12.22 ●

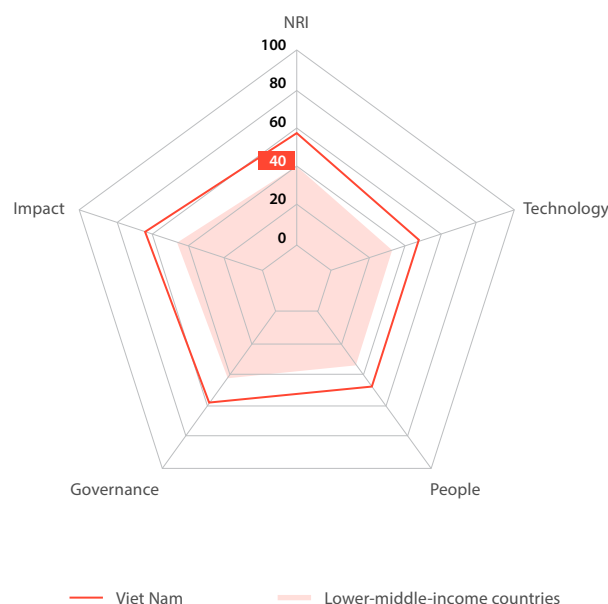
Indicator	Rank	Score
C. Governance pillar	105	43.19
1st sub-pillar: Trust	78	40.29
3.1.1 Secure Internet servers	93	42.03
3.1.2 Cybersecurity	109	27.08
3.1.3 Online access to financial account	26	70.06 ●
3.1.4 Internet shopping	66	21.98 ●
2nd sub-pillar: Regulation	123	40.79
3.2.1 Regulatory quality	133	0.00 ○
3.2.2 ICT regulatory environment	84	75.95
3.2.3 Regulation of emerging technologies	118	6.64 ○
3.2.4 E-commerce legislation	87	75.00
3.2.5 Privacy protection by law content	108	46.35
3rd sub-pillar: Inclusion	93	48.49
3.3.1 E-Participation	130	10.47 ○
3.3.2 Socioeconomic gap in use of digital payments	56	81.21 ●
3.3.3 Availability of local online content	110	31.73
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	46	70.54 ●
D. Impact pillar	101	46.67
1st sub-pillar: Economy	126	16.71
4.1.1 ICT patent applications	75	0.02
4.1.2 Domestic market scale	70	51.35
4.1.3 Prevalence of gig economy	115	13.66 ○
4.1.4 ICT services exports	118	1.79
2nd sub-pillar: Quality of Life	84	60.72
4.2.1 Happiness	77	57.15
4.2.2 Freedom to make life choices	89	64.71
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	83	59.85
3rd sub-pillar: SDG Contribution	76	62.59
4.3.1 SDG 3: Good Health and Well-Being	57	74.19 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	63	79.49 ●
4.3.4 SDG 7: Affordable and Clean Energy	121	47.15 ○
4.3.5 SDG 11: Sustainable Cities and Communities	97	48.09

NOTE: ● Indicates a strength and ○ a weakness.

Viet Nam

	Rank (Out of 133)	Score
Network Readiness Index	45	54.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	41	49.27
1st sub-pillar: Access	32	76.21
2nd sub-pillar: Content	42	36.59
3rd sub-pillar: Future Technologies	68	35.02
B. People pillar	38	47.97
1st sub-pillar: Individuals	12	67.99
2nd sub-pillar: Businesses	93	30.12
3rd sub-pillar: Governments	49	45.80
C. Governance pillar	67	58.03
1st sub-pillar: Trust	48	65.54
2nd sub-pillar: Regulation	101	57.56
3rd sub-pillar: Inclusion	90	50.99
D. Impact pillar	31	64.58
1st sub-pillar: Economy	20	47.02
2nd sub-pillar: Quality of Life	27	78.80
3rd sub-pillar: SDG Contribution	58	67.93



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	41	49.27
1st sub-pillar: Access	32	76.21
1.1.1 Mobile tariffs	60	65.68
1.1.2 Handset prices	93	45.51
1.1.3 FTTH/building Internet subscriptions	4	72.06 ●
1.1.4 Population covered by at least a 3G mobile network	37	98.26
1.1.5 International Internet bandwidth	12	84.90 ●
1.1.6 Internet access in schools	46	90.84
2nd sub-pillar: Content	42	36.59
1.2.1 GitHub commits	56	9.91
1.2.2 Internet domain registrations	73	2.45
1.2.3 Mobile apps development	7	83.13 ●
1.2.4 AI scientific publications	20	50.88 ●
3rd sub-pillar: Future Technologies	68	35.02
1.3.1 Adoption of emerging technologies	33	76.56
1.3.2 Investment in emerging technologies	67	38.50
1.3.3 Robot density	43	2.60 ○
1.3.4 Computer software spending	63	22.42
B. People pillar	38	47.97
1st sub-pillar: Individuals	12	67.99
2.1.1 Mobile broadband internet traffic within the country	14	46.09 ●
2.1.2 ICT skills in the education system	38	67.74
2.1.3 Use of virtual social networks	40	63.76
2.1.4 Adult literacy rate	44	94.34
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	93	30.12
2.2.1 Firms with website	89	34.47 ○
2.2.2 Number of venture capital deals invested in AI	58	4.20 ○
2.2.3 Annual investment in telecommunication services	39	58.55
2.2.4 Public cloud computing market scale	53	23.23
3rd sub-pillar: Governments	49	45.80
2.3.1 Government online services	75	61.14
2.3.2 Data Capabilities	49	36.46
2.3.3 Government promotion of investment in emerging technologies	13	78.29 ●
2.3.4 R&D expenditure by governments and higher education	66	7.33

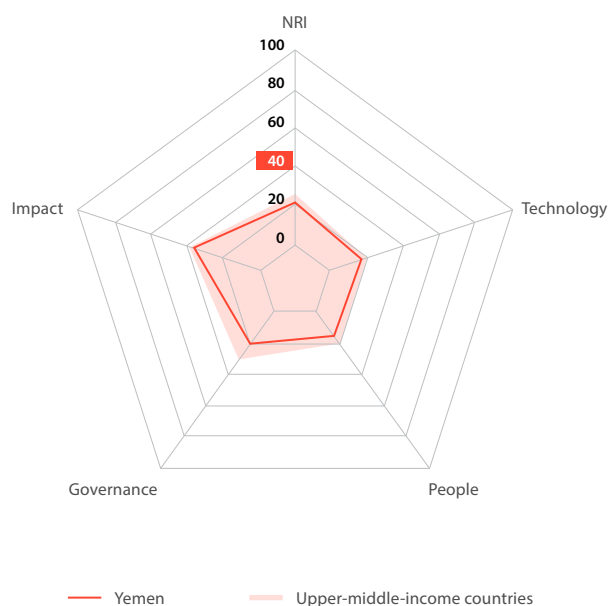
Indicator	Rank	Score
C. Governance pillar	67	58.03
1st sub-pillar: Trust	48	65.54
3.1.1 Secure Internet servers	54	64.22
3.1.2 Cybersecurity	32	94.58 ●
3.1.3 Online access to financial account	43	57.18
3.1.4 Internet shopping	47	46.19
2nd sub-pillar: Regulation	101	57.56
3.2.1 Regulatory quality	94	37.93 ○
3.2.2 ICT regulatory environment	102	66.43 ○
3.2.3 Regulation of emerging technologies	49	56.34
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	127	27.09 ○
3rd sub-pillar: Inclusion	90	50.99
3.3.1 E-Participation	71	52.33
3.3.2 Socioeconomic gap in use of digital payments	117	38.65 ○
3.3.3 Availability of local online content	65	61.06
3.3.4 Gender gap in Internet use	79	60.63 ○
3.3.5 Rural gap in use of digital payments	98	42.27 ○
D. Impact pillar	31	64.58
1st sub-pillar: Economy	20	47.02
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	25	69.86 ●
4.1.3 Prevalence of gig economy	22	65.99 ●
4.1.4 ICT services exports	93	5.22
2nd sub-pillar: Quality of Life	27	78.80
4.2.1 Happiness	44	69.56
4.2.2 Freedom to make life choices	3	98.43 ●
4.2.3 Income inequality	66	69.15
4.2.4 Healthy life expectancy at birth	61	67.68
3rd sub-pillar: SDG Contribution	58	67.93
4.3.1 SDG 3: Good Health and Well-Being	82	62.90
4.3.2 SDG 4: Quality Education	35	54.00
4.3.3 SDG 5: Women's economic opportunity	52	83.76
4.3.4 SDG 7: Affordable and Clean Energy	67	79.82
4.3.5 SDG 11: Sustainable Cities and Communities	102	45.39 ○

NOTE: ● Indicates a strength and ○ a weakness.

Yemen

	Rank (Out of 133)	Score
Network Readiness Index	133	20.24

Pillar/sub-pillar	Rank	Score
A. Technology pillar	127	14.96
1st sub-pillar: Access	130	13.74
2nd sub-pillar: Content	80	21.40
3rd sub-pillar: Future Technologies	132	9.74
B. People pillar	131	13.96
1st sub-pillar: Individuals	131	11.47
2nd sub-pillar: Businesses	130	8.15
3rd sub-pillar: Governments	111	22.27
C. Governance pillar	132	18.86
1st sub-pillar: Trust	132	6.29
2nd sub-pillar: Regulation	133	26.94
3rd sub-pillar: Inclusion	131	23.37
D. Impact pillar	128	33.17
1st sub-pillar: Economy	94	25.99
2nd sub-pillar: Quality of Life	127	32.79
3rd sub-pillar: SDG Contribution	130	40.73



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	127	14.96
1st sub-pillar: Access	130	13.74
1.1.1 Mobile tariffs	132	1.24 ○
1.1.2 Handset prices	132	2.50 ○
1.1.3 FTTH/building Internet subscriptions	115	8.37
1.1.4 Population covered by at least a 3G mobile network	124	3.24
1.1.5 International Internet bandwidth	128	53.38
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	80	21.40
1.2.1 GitHub commits	120	0.40
1.2.2 Internet domain registrations	123	0.12
1.2.3 Mobile apps development	82	60.78 ●
1.2.4 AI scientific publications	32	24.28 ●
3rd sub-pillar: Future Technologies	132	9.74
1.3.1 Adoption of emerging technologies	107	16.23
1.3.2 Investment in emerging technologies	130	7.75 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	104	5.24 ●
B. People pillar	131	13.96
1st sub-pillar: Individuals	131	11.47
2.1.1 Mobile broadband internet traffic within the country	113	2.32
2.1.2 ICT skills in the education system	113	27.32
2.1.3 Use of virtual social networks	122	4.78
2.1.4 Adult literacy rate	NA	NA
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	130	8.15
2.2.1 Firms with website	118	6.53
2.2.2 Number of venture capital deals invested in AI	44	9.78 ●
2.2.3 Annual investment in telecommunication services	NA	NA
2.2.4 Public cloud computing market scale	NA	NA
3rd sub-pillar: Governments	111	22.27
2.3.1 Government online services	123	26.98
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	101	17.55
2.3.4 R&D expenditure by governments and higher education	NA	NA

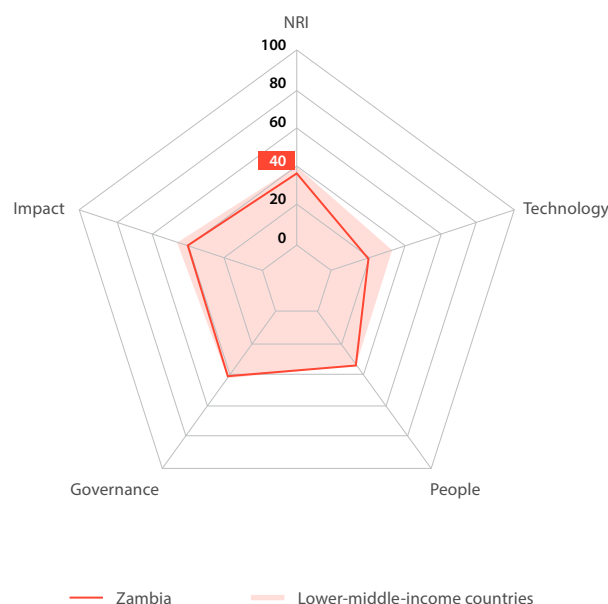
Indicator	Rank	Score
C. Governance pillar	132	18.86
1st sub-pillar: Trust	132	6.29
3.1.1 Secure Internet servers	131	12.80 ○
3.1.2 Cybersecurity	132	0.00 ○
3.1.3 Online access to financial account	107	11.12
3.1.4 Internet shopping	123	1.22
2nd sub-pillar: Regulation	133	26.94
3.2.1 Regulatory quality	132	3.01 ○
3.2.2 ICT regulatory environment	133	0.00 ○
3.2.3 Regulation of emerging technologies	119	1.89 ○
3.2.4 E-commerce legislation	119	50.00
3.2.5 Privacy protection by law content	41	79.78 ●
3rd sub-pillar: Inclusion	131	23.37
3.3.1 E-Participation	124	17.45
3.3.2 Socioeconomic gap in use of digital payments	126	23.59 ○
3.3.3 Availability of local online content	114	29.09
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	128	33.17
1st sub-pillar: Economy	94	25.99
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	100	40.40 ●
4.1.3 Prevalence of gig economy	112	16.57
4.1.4 ICT services exports	48	21.02 ●
2nd sub-pillar: Quality of Life	127	32.79
4.2.1 Happiness	125	7.65
4.2.2 Freedom to make life choices	124	35.27
4.2.3 Income inequality	69	67.61 ●
4.2.4 Healthy life expectancy at birth	110	43.30 ●
3rd sub-pillar: SDG Contribution	130	40.73
4.3.1 SDG 3: Good Health and Well-Being	119	20.97
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	133	0.00 ○
4.3.4 SDG 7: Affordable and Clean Energy	11	92.84 ●
4.3.5 SDG 11: Sustainable Cities and Communities	114	37.77

NOTE: ● Indicates a strength and ○ a weakness.

Zambia

	Rank (Out of 133)	Score
Network Readiness Index	115	33.97

Pillar/sub-pillar	Rank	Score
A. Technology pillar	122	17.70
1st sub-pillar: Access	114	34.60
2nd sub-pillar: Content	127	1.79
3rd sub-pillar: Future Technologies	122	16.69
B. People pillar	97	35.61
1st sub-pillar: Individuals	104	36.74
2nd sub-pillar: Businesses	73	33.94
3rd sub-pillar: Governments	76	36.14
C. Governance pillar	106	42.48
1st sub-pillar: Trust	92	34.81
2nd sub-pillar: Regulation	94	60.32
3rd sub-pillar: Inclusion	120	32.31
D. Impact pillar	117	40.10
1st sub-pillar: Economy	113	21.00
2nd sub-pillar: Quality of Life	116	40.49
3rd sub-pillar: SDG Contribution	92	58.81



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	122	17.70
1st sub-pillar: Access	114	34.60
1.1.1 Mobile tariffs	108	40.44
1.1.2 Handset prices	122	28.42 ○
1.1.3 FTTH/building Internet subscriptions	111	9.91
1.1.4 Population covered by at least a 3G mobile network	95	58.31
1.1.5 International Internet bandwidth	101	64.74
1.1.6 Internet access in schools	84	5.81
2nd sub-pillar: Content	127	1.79
1.2.1 GitHub commits	117	0.61
1.2.2 Internet domain registrations	124	0.10 ○
1.2.3 Mobile apps development	NA	NA
1.2.4 AI scientific publications	76	4.64 ●
3rd sub-pillar: Future Technologies	122	16.69
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	90	31.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	117	2.14
B. People pillar	97	35.61
1st sub-pillar: Individuals	104	36.74
2.1.1 Mobile broadband internet traffic within the country	86	6.33
2.1.2 ICT skills in the education system	81	47.18
2.1.3 Use of virtual social networks	114	11.05
2.1.4 Adult literacy rate	69	82.42
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	73	33.94
2.2.1 Firms with website	65	52.50 ●
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	91	44.38
2.2.4 Public cloud computing market scale	106	4.95
3rd sub-pillar: Governments	76	36.14
2.3.1 Government online services	109	38.26
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	72	34.02 ●
2.3.4 R&D expenditure by governments and higher education	NA	NA

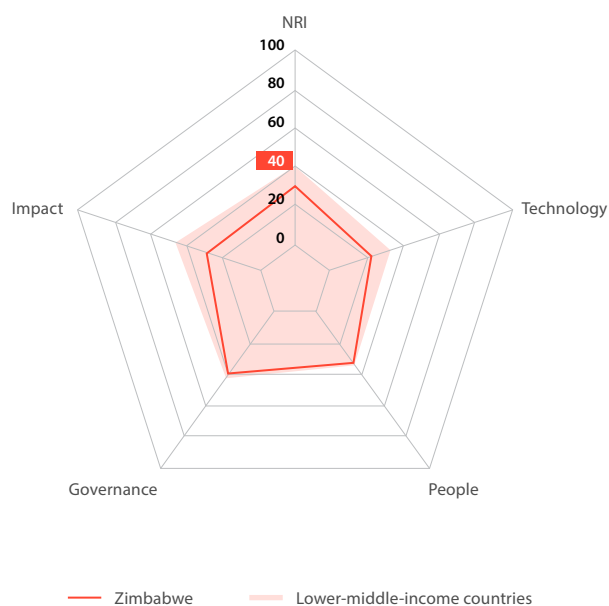
Indicator	Rank	Score
C. Governance pillar	106	42.48
1st sub-pillar: Trust	92	34.81
3.1.1 Secure Internet servers	115	29.25
3.1.2 Cybersecurity	80	68.92 ●
3.1.3 Online access to financial account	65	39.10 ●
3.1.4 Internet shopping	121	1.97 ○
2nd sub-pillar: Regulation	94	60.32
3.2.1 Regulatory quality	100	35.60
3.2.2 ICT regulatory environment	97	68.69
3.2.3 Regulation of emerging technologies	110	14.01 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	31	83.30 ●
3rd sub-pillar: Inclusion	120	32.31
3.3.1 E-Participation	89	36.05
3.3.2 Socioeconomic gap in use of digital payments	119	36.39 ○
3.3.3 Availability of local online content	126	21.39 ○
3.3.4 Gender gap in Internet use	94	43.91
3.3.5 Rural gap in use of digital payments	115	23.83 ○
D. Impact pillar	117	40.10
1st sub-pillar: Economy	113	21.00
4.1.1 ICT patent applications	NA	NA
4.1.2 Domestic market scale	93	42.19
4.1.3 Prevalence of gig economy	110	18.90
4.1.4 ICT services exports	116	1.91
2nd sub-pillar: Quality of Life	116	40.49
4.2.1 Happiness	122	11.07 ○
4.2.2 Freedom to make life choices	53	81.22 ●
4.2.3 Income inequality	113	29.56 ○
4.2.4 Healthy life expectancy at birth	126	28.78 ○
3rd sub-pillar: SDG Contribution	92	58.81
4.3.1 SDG 3: Good Health and Well-Being	100	43.55
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	80	74.36 ●
4.3.4 SDG 7: Affordable and Clean Energy	120	50.80
4.3.5 SDG 11: Sustainable Cities and Communities	78	58.98 ●

NOTE: ● Indicates a strength and ○ a weakness.

Zimbabwe

	Rank (Out of 133)	Score
Network Readiness Index	121	30.33

Pillar/sub-pillar	Rank	Score
A. Technology pillar	116	23.60
1st sub-pillar: Access	120	30.94
2nd sub-pillar: Content	104	14.92
3rd sub-pillar: Future Technologies	102	24.93
B. People pillar	104	31.82
1st sub-pillar: Individuals	103	37.90
2nd sub-pillar: Businesses	103	26.96
3rd sub-pillar: Governments	94	30.59
C. Governance pillar	115	38.65
1st sub-pillar: Trust	106	27.78
2nd sub-pillar: Regulation	125	40.11
3rd sub-pillar: Inclusion	96	48.06
D. Impact pillar	133	27.26
1st sub-pillar: Economy	133	10.08
2nd sub-pillar: Quality of Life	128	32.16
3rd sub-pillar: SDG Contribution	131	39.55



The Network Readiness Index in detail

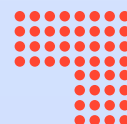
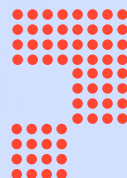
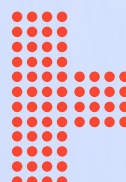
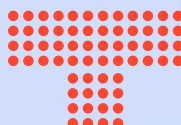
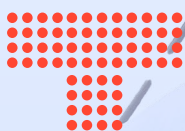
Indicator	Rank	Score
A. Technology pillar	116	23.60
1st sub-pillar: Access	120	30.94
1.1.1 Mobile tariffs	127	15.57 ○
1.1.2 Handset prices	120	29.54
1.1.3 FTTH/building Internet subscriptions	59	32.40 ●
1.1.4 Population covered by at least a 3G mobile network	116	19.06
1.1.5 International Internet bandwidth	95	66.54
1.1.6 Internet access in schools	80	22.55
2nd sub-pillar: Content	104	14.92
1.2.1 GitHub commits	113	0.98
1.2.2 Internet domain registrations	97	0.95
1.2.3 Mobile apps development	103	47.94
1.2.4 AI scientific publications	57	9.80 ●
3rd sub-pillar: Future Technologies	102	24.93
1.3.1 Adoption of emerging technologies	90	42.08
1.3.2 Investment in emerging technologies	127	12.25 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	71	20.45 ●
B. People pillar	104	31.82
1st sub-pillar: Individuals	103	37.90
2.1.1 Mobile broadband internet traffic within the country	106	2.79
2.1.2 ICT skills in the education system	61	57.36 ●
2.1.3 Use of virtual social networks	119	6.55
2.1.4 Adult literacy rate	66	84.89 ●
2.1.5 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	103	26.96
2.2.1 Firms with website	101	27.94
2.2.2 Number of venture capital deals invested in AI	NA	NA
2.2.3 Annual investment in telecommunication services	84	45.78
2.2.4 Public cloud computing market scale	93	7.17
3rd sub-pillar: Governments	94	30.59
2.3.1 Government online services	114	31.97
2.3.2 Data Capabilities	NA	NA
2.3.3 Government promotion of investment in emerging technologies	79	29.20
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	115	38.65
1st sub-pillar: Trust	106	27.78
3.1.1 Secure Internet servers	108	33.94
3.1.2 Cybersecurity	102	36.50
3.1.3 Online access to financial account	66	38.56 ●
3.1.4 Internet shopping	120	2.11 ○
2nd sub-pillar: Regulation	125	40.11
3.2.1 Regulatory quality	129	14.55 ○
3.2.2 ICT regulatory environment	106	65.48
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	119	50.00 ○
3.2.5 Privacy protection by law content	122	30.41
3rd sub-pillar: Inclusion	96	48.06
3.3.1 E-Participation	119	20.94
3.3.2 Socioeconomic gap in use of digital payments	85	60.15 ●
3.3.3 Availability of local online content	116	27.64
3.3.4 Gender gap in Internet use	12	75.11 ●
3.3.5 Rural gap in use of digital payments	76	56.47 ●
D. Impact pillar	133	27.26
1st sub-pillar: Economy	133	10.08
4.1.1 ICT patent applications	74	0.06
4.1.2 Domestic market scale	115	35.77
4.1.3 Prevalence of gig economy	124	0.00 ○
4.1.4 ICT services exports	96	4.49
2nd sub-pillar: Quality of Life	128	32.16
4.2.1 Happiness	124	8.56 ○
4.2.2 Freedom to make life choices	103	61.00
4.2.3 Income inequality	110	32.65 ○
4.2.4 Healthy life expectancy at birth	129	21.22 ○
3rd sub-pillar: SDG Contribution	131	39.55
4.3.1 SDG 3: Good Health and Well-Being	101	41.94
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	58	82.05 ●
4.3.4 SDG 7: Affordable and Clean Energy	131	0.00 ○
4.3.5 SDG 11: Sustainable Cities and Communities	121	31.24

NOTE: ● Indicates a strength and ○ a weakness.

Since network readiness is a multi-dimensional concept, the Network Readiness Index (NRI) is a composite index constructed with three levels. The primary level consists of four pillars that make up the fundamental dimensions of network readiness. Each of the fundamental pillars divides into additional sub-pillars that constitute the second level.

Appendix I: Technical Notes



Structure of the Network Readiness Index

Since network readiness is a multi-dimensional concept, the Network Readiness Index (NRI) is a composite index constructed with three levels. The primary level consists of four pillars that make up the fundamental dimensions of network readiness. Each of the fundamental pillars divides into additional sub-pillars that constitute the second level. Table A-I.1 shows both levels.

The third level consists of individual indicators distributed across the different sub-pillars and pillars of the primary and secondary levels. All indicators used within the NRI belong to a pillar and a sub-pillar.

For record-keeping, a three-digit code identifies each indicator. The first digit refers to the primary pillar, the second digit concerns the secondary sub-pillar, and the third denotes the indicator itself. For instance, the digital code 1.2.3 refers to an individual indicator (Mobile apps development) located within the first primary pillar (Technology) and the secondary sub-pillar (Content).

The third level of the NR1 2024 consists of 54 indicators. 31 indicators are hard/quantitative data, 12 are index/composite indicator data, and 11 are survey/qualitative data.

Table A-I.2 outlines the complete structure of the NRI with its respective pillars, sub-pillars, and indicators.

Adjustments to the Network Readiness Index model in 2024

Table A-I.3 provides a summary of adjustments to the NRI 2024 framework. A total of four indicators were replaced, four indicators were removed. The methodology of three indicators was revised, methodology changed at source for two indicators, indicator name changed for one indicator, and the indicator code changed for five indicators. Overall, a total of nineteen indicators underwent adjustments this year. Additionally, the definition was adjusted for one indicator.

Table A-I.1 Network Readiness Index 2024 two top levels and composition

Primary Level	Technology	People	Governance	Impact
Secondary Level	Access Content Future technologies	Individuals Businesses Governments	Trust Regulation Inclusion	Economy Quality of life Sustainable development goal (SDG) contributions

Table A-I.2 Network Readiness Index 2024 pillars, sub-pillars, and indicators

A. Technology pillar	B. People pillar
1.1 Access	2.1 Individuals
1.1.1 Mobile tariffs	2.1.1 Mobile broadband internet traffic within the country
1.1.2 Handset prices	2.1.2 ICT skills in the education system
1.1.3 FTTH/Building internet subscriptions	2.1.3 Use of virtual social networks
1.1.4 Population covered by at least a 3G mobile network	2.1.4 Adult literacy rate
1.1.5 International Internet bandwidth	2.1.5 AI talent concentration
1.1.6 Internet access in schools	2.2 Businesses
1.2 Content	2.2.1 Firms with a website
1.2.1 GitHub commits	2.2.2 Number of venture capital deals invested in AI
1.2.2 Internet domain registrations	2.2.3 Annual investment in telecommunication services
1.2.3 Mobile applications development	2.2.4 Public cloud computing market scale
1.2.4 AI scientific publications	2.3 Governments
1.3 Future Technologies	2.3.1 Government online services
1.3.1 Adoption of emerging technologies	2.3.2 Data Capabilities
1.3.2 Investment in emerging technologies	2.3.3 Government promotion of investment in emerging technologies
1.3.3 Robot density	2.3.4 R&D expenditure by governments and higher education
1.3.4 Computer software spending	

C. Governance pillar	D. Impact pillar
3.1 Trust	4.1 Economy
3.1.1 Secure internet servers	4.1.1 ICT patent applications
3.1.2 Cybersecurity	4.1.2 Domestic market scale
3.1.3 Online access to a financial account	4.1.3 Prevalence of gig economy
3.1.4 Internet shopping	4.1.4 ICT services exports
3.2 Regulation	4.2 Quality of Life
3.2.1 Regulatory quality	4.2.1 Happiness
3.2.2 ICT regulatory environment	4.2.2 Freedom to make life choices
3.2.3 Regulation of emerging technologies	4.2.3 Income inequality
3.2.4 E-commerce legislation	4.2.4 Healthy life expectancy at birth
3.2.5 Privacy protection by law content	4.3 SDG Contribution
3.3 Inclusion	4.3.1 SDG 3: Good Health and Well-Being
3.3.1 E-participation	4.3.2 SDG 4: Quality Education
3.3.2 Socioeconomic gap in use of digital payments	4.3.3 SDG 5: Women's economic opportunity
3.3.3 Availability of local online content	4.3.4 SDG 7: Affordable and Clean Energy
3.3.4 Gender gap in Internet use	4.3.5 SDG 11: Sustainable cities and communities
3.3.5 Rural gap in use of digital payments	

Table A-I.3 Adjustments to the Network Readiness Index 2024

Variable code	NRI 2023	Adjustment	New code	NRI 2024
1.2.1.	GitHub commits	Methodology changed at source	1.2.1.	GitHub commits.
1.3.1.	Adoption of emerging technologies	Changed methodology	1.3.1.	Adoption of emerging technologies.
2.1.4.	Tertiary enrollment	Indicator Removed		
2.1.5.	Adult literacy rate	Code Changed	2.1.4.	Adult literacy rate
2.1.6.	AI talent concentration	Code Changed	2.1.5.	AI talent concentration
2.2.2.	GERD financed by business enterprise	Indicator Replaced	2.2.2.	Number of venture capital deals invested in AI
2.2.3.	Knowledge intensive employment	Indicator Removed		
2.2.4.	Annual investment in telecommunication services	Code Changed	2.2.3.	Annual investment in telecommunication services
2.2.5.	GERD performed by business enterprise	Indicator Replaced	2.2.4.	Public cloud computing market scale
2.3.2	Publication and use of open data	Indicator Replaced	2.3.2	Data Capabilities
2.3.3.	Government promotion of investment in emerging technologies	Changed methodology	2.3.3.	Government promotion of investment in emerging technologies
3.1.3.	Online access to financial account	Methodology changed at source	3.1.3.	Online access to financial account
3.2.3.	Regulation of emerging technologies	Changed methodology	3.2.3.	Regulation of emerging technologies
4.1.1.	High-tech and medium-high-tech manufacturing	Indicator Removed		
4.1.2.	High-tech exports	Indicator Removed		
4.1.3.	PCT patent applications	Indicator Replaced	4.1.1.	ICT patent applications
4.1.4.	Domestic market size	Code and Name Changed	4.1.2.	Domestic market scale
4.1.5.	Prevalence of gig economy	Code Changed	4.1.3.	Prevalence of gig economy
4.1.6.	ICT services exports	Code Changed	4.1.4.	ICT services exports



• Designed by Freepik

Country and data coverage

The inclusion of countries and indicators relies on the double threshold approach. Only countries that could provide data for at least 70% of all indicators earned inclusion to the NRI. In addition, countries needed to pass a sub-pillar level data availability of at least 40% for coverage. With the exception of 1.3.3 Robot density and 2.1.5 AI talent concentration, indicators with data available for at least 50% of all countries gained inclusion to the NRI.

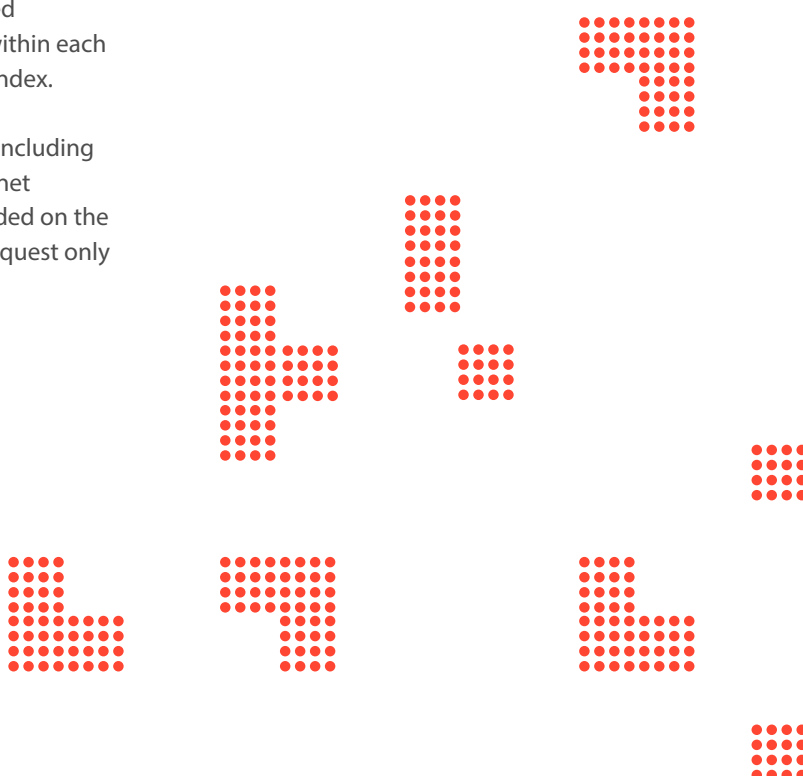
This year, initiatives were undertaken to augment the coverage percentage to 69.92% for 1.1.6, 42.11% for 1.3.3. and to 35.34% for 2.1.5, acting as a forward-leaning response to the recommendations posited by the JRC in preceding audits of the NRI. The drive behind these enhancements is twofold: to integrate both indicators more comprehensively, and to preserve them due to their contextual and theoretical significance within the NRI framework. The latter is pivotal as it aligns perfectly with the inherent objectives and principles of the NRI framework, adding layers of depth and relevance to the evolving model. This augmentation is not merely numerical but is instrumental in refining the essence and effectiveness of the framework in capturing the nuanced dimensions of networked readiness. The incorporation of these indicators substantiates the framework's adaptability and resilience, fortifying its position as a robust tool for nuanced analysis in an ever-evolving landscape. Missing values received a "N/A" label and did not count within the computation of scores.

Computation of the NRI

The computation of the NRI utilizes successive aggregations of scores from both the indicator level (i.e., the most disaggregated level) and the overall NRI score. Due to correlation, weights for four indicators were adjusted from 1 to 0.5. These include 4.2.3 Income inequality, 4.2.4 Healthy life expectancy at birth, 4.3.1 SDG 3: Good Health and Well-Being, and 4.3.5 SDG 11: Sustainable Cities and Communities. All other 50 indicators have a weight of 1 each.

The weighted arithmetic mean aggregates (i) the individual indicators within each sub-pillar; and unweighted arithmetic mean aggregates (ii) the sub-pillars within each pillar, and (iii) the pillars comprising the overall index.

Computation is based on data for all indicators, including confidential data related to indicator 1.2.2 (Internet domain registrations) that ZookNIC kindly provided on the condition of confidentiality. Keeping with this request only scores are provided for this indicator this year.



Treatment of series with outliers

Outliers in an indicator can affect ranking results with bias. It is prudent to detect and remove all outliers before the normalization of scores. An applied rule-of-thumb where an absolute value of skewness greater than 2 or a kurtosis greater than 3.5 indicates the presence of outliers.[i]

The treatment of outliers occurs mainly in two ways. First, indicators with no more than five outliers are winsorized, whereby the value affecting the distribution assigns to the next highest/lowest value method. The winsorization process continues until the reported skewness and/or kurtosis fall within the ranges specified above.

Second, indicators with at least six outliers are transformed by natural logarithms according to the following formula:

$$\ln \left[(max \times factor - 1) \times \frac{(value - min)}{(max - min)} + 1 \right]$$

Initially, a natural logarithmic transformation with base 1 is applied. If this does not correct the skewness and kurtosis, a base 10 logarithmic transformation is attempted. If necessary, a base 100 logarithmic transformation is applied as a final step.

Third, if the logarithmic transformation is ineffective for certain indicators, the Yeo-Johnson transformation is applied using the following formula:

$$\psi(y, \lambda) = \begin{cases} \frac{(y+1)^\lambda - 1}{\lambda} & y \geq 0 \text{ and } \lambda \neq 0, \\ \log(y+1) & y \geq 0 \text{ and } \lambda = 0, \\ -\frac{(-y+1)^{2-\lambda} - 1}{2-\lambda} & y < 0 \text{ and } \lambda \neq 2, \\ -\log(-y+1) & y < 0, \lambda = 2. \end{cases}$$

For the NRI 2024, outliers were detected in nineteen indicators. Ten indicators[ii] had fewer than six outliers; and seven indicators [iii] had six outliers or more and were treated through logarithmic transformation and two indicators [iv] had six outliers or more and were treated through Yeo-Johnson transformation.

Normalisation

To make the indicators comparable for data aggregation, they must go through a process of normalization. The NRI applies the Min-max normalization method to ensure all values fall into the [0, 100] range/. For indicators where higher values indicate higher outcomes the following normalization formula is applied:

$$100 \times \frac{(value - min)}{(max - min)}$$

For indicators where higher values imply worse outcomes the following reverse normalization formula is applied:[v]

$$100 \times \frac{(max - value)}{(max - min)}$$



Caveats on the year-to-year comparison of rankings

The NRI compares the performance of national digital readiness across countries/economies and presents the changes in country/economy rankings over time.

It is important to note that scores and rankings are not directly comparable between one year and another. Each ranking reflects the relative position of a particular economy based on the conceptual framework, the data coverage and the sample of countries/economies of that specific NRI edition, and also reflects changes in the underlying indicators at source and in data availability.

- A number of factors influence the year-on-year rankings of an economy:
- the actual performance of the economy in question;
- adjustments made to the NRI framework (changes in indicator composition and measurement revisions);
- data updates, the treatment of outliers and missing values; and
- the inclusion or exclusion of economies in the sample.

Additionally, the following characteristics complicate the time-series analysis based on simple NRI rankings or scores:

Missing values: The NRI produces relative index scores, which means that a missing value for one economy affects the index score of other economies. Because the number of missing values decreases every year, this problem reduces over time.

Reference year: The data underlying the NRI do not refer to a single year but to several years, depending on the latest available year for any given variable. In addition, the reference years for different variables are not the same for each economy, due to measures to limit the number of missing data points.

Normalization factor: Most NRI variables are normalized using GDP, population, or other factor with the intention of enabling cross-economy comparability. However, this implies that year-on-year changes in individual indicators may be driven either by the variable (numerator) or by its normalization factor (denominator).

Consistent data collection: Measuring the change in year-on-year performance relies on the consistent collection of

data over time. Changes in the definition of variables or in the data collection process could create movements in the rankings that are unrelated to performance.

A detailed economy study based on the NRI database and the economy profile over time, along with analytical groundwork that includes that of actors and decision-makers in the realm of digital transformation, yields the best results in terms of monitoring a country/economy's network readiness as well as for identifying possible improvement channels.

References

Groeneveld, R. A. & Meeden, G. (1984). Measuring skewness and kurtosis. *Journal of the Royal Statistical Society, Series D (The Statistician)*, 33, 391–399.

OECD & EC JRC (2008). *Handbook on constructing composite indicators: Methodology and user guide*. Paris: OECD, available at <http://www.oecd.org/std/42495745.pdf>

[i] Adopted from Groeneveld & Meeden (1984)

[ii] 1.2.1 GitHub commits (1 data point winsorized, top), 1.2.2 Internet domain registrations (3, top), 1.2.4 AI scientific publications (5, top), 1.3.3 Robot density (1, top), 2.1.5 AI talent concentration (3, top), 2.2.2 Number of venture capital deals invested in AI (5, top), 3.3.4 Gender gap in Internet use (3, bottom), 4.1.1 ICT patent applications (4, top), 4.1.4 ICT services exports (3, top), 4.3.4 SDG 7: Affordable and Clean Energy (1, top).

[iii] 1.1.3 FTTH/building Internet subscriptions (log 1), 1.1.5 International Internet bandwidth (log 1), 1.2.3 Mobile apps development (log 1), 2.1.1 Mobile broadband internet traffic within the country (log 1), 2.2.4 Public cloud computing market scale (log 10), 3.1.1 Secure Internet servers (log 1), 4.1.2 Domestic market Scale (log 1).

[iv] 1.1.4 Population covered by at least a 3G mobile network (λ 11.83), 2.2.3 Annual investment in telecommunication services (λ 0.07).

[v] For the NRI 2024 reverse normalisation was needed for three indicators: 4.2.3 Income inequality, 4.3.4 SDG 7: Affordable and clean energy and 4.3.5 SDG 11: Sustainable Cities and Communities.

Appendix II: Sources and Definitions





1st pillar: Technology

1.1 Access

1.1.1 Mobile tariffs

Mobile tariffs sub-index | 2023

The Mobile Tariffs indicator refers to the Mobile tariffs sub-index included in the Affordability pillar of the *Mobile Connectivity Index* published by the GSM Association. The sub-index relates to the cost of three separate basket profiles that are distinguished in part by usage allowance (100 MB, 500 MB, and 1 GB per month, respectively). Tariffs are given as a percentage of monthly GDP per capita. The primary source for the data is Tarifica (<https://tarifica.com/>).

Source: GSM Association, *The GSMA Mobile Connectivity Index 2024* (<http://www.mobileconnectivityindex.com>). Data Year: 2023.

1.1.2 Handset prices

Cost of cheapest Internet-enabled device (% of monthly GDP per capita) | 2023

As one of the indicators included in the Affordability pillar of the Mobile Connectivity Index published by the GSM Association, the Handset prices indicator relates to the cheapest smartphone or feature phone that allows user access to the Internet. The primary source for the data is Tarifica (<https://tarifica.com/>).

Source: GSM Association, *The GSMA Mobile Connectivity Index 2024* (<http://www.mobileconnectivityindex.com>). Data year: 2023.

1.1.3 FTTH/building Internet subscriptions

Fibre-to-the-home/building Internet subscriptions (% of GDP) | 2022

Fibre-to-the-home/building Internet subscriptions refers to the number of Internet subscriptions using fibre-to-the-home or fibre-to-the-building; at downstream speeds equal to; or greater than; 256 kbit/s. This should include subscriptions where fibre goes directly to the subscriber's premises or fibre-to-the-building subscriptions that terminate no more than 2 metres from an external wall of the building. Fibre-to-the-cabinet and fibre-to-the-node are excluded. Reporting occurs as a percentage of an GDP per capita, PPP.

Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2013–2022.

1.1.4 Population covered by at least a 3G mobile network

Percentage of the population covered by at least a 3G mobile network | 2023

The following indicator refers to the percentage of inhabitants within range of at least a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. Values are calculated by dividing the number of inhabitants covered by at least a 3G mobile-cellular signal by the total population and multiplied by 100.

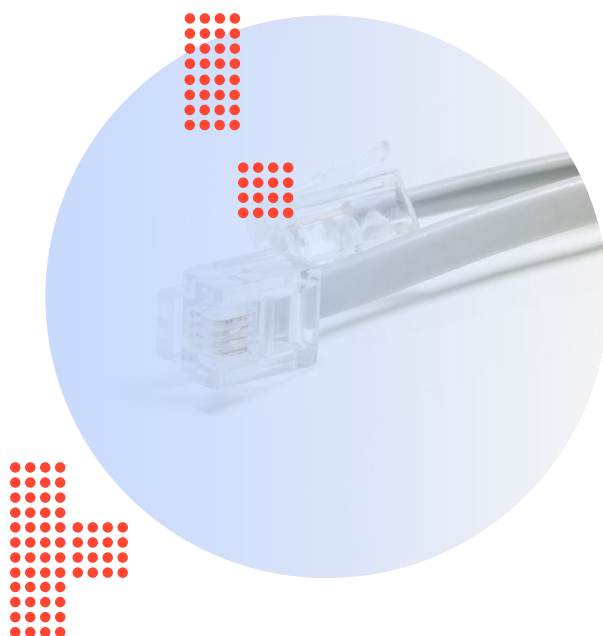
Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2022–2023.

1.1.5 International Internet bandwidth

International Internet bandwidth (Mbit/s) | 2023

International Internet bandwidth refers to the total used capacity of international Internet bandwidth in megabits per second (Mbit/s). Calculations only include the total usage capacity of all Internet exchanges (locations that exchange Internet traffic) that offer international bandwidth. If capacity is asymmetric and there is more incoming (downlink) than outgoing (uplink) capacity, then the incoming (downlink) capacity is provided.

Note: Significant revisions to data from African economies observed this year in ITU's database. Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2017–2023.



● Photo by Srattha Nualsate

1.1.6 Internet access in schools

Proportion of primary schools with access to Internet for pedagogical purposes (%) | 2022

The Internet access in schools indicator refers to the share of primary schools with access to the Internet via fixed narrowband, fixed broadband, or mobile networks. Internet for pedagogical purposes refers to web access and communications services through various devices that enhance the teaching and learning of pupils.

Source: UNESCO Institute for Statistics, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2012–2023.

1.2 Content

1.2.1 GitHub commits

GitHub commits pushes received and sent (per million population, 15–69 years old) | 2023

GitHub is the world's largest host of source code, and a commit is the term used for a saved change on this platform. One or more commits can be saved (or pushed) to projects (or repositories). Thus, "GitHub commit pushes received and sent" refers to the sum of the number of batched changes received and sent by projects on GitHub that are publicly available within a specific economy. Automated activity resulting in non-productive commits is excluded.

Source: Global Innovation Index Database, WIPO 2024. GitHub (<https://github.com/>); and United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects 2024 (April 2024 update) (<https://population.un.org/wpp>). Data Year: 2023

1.2.2 Internet domain registrations

Generic Top-Level Domains (gTLDs) and Country Code Top-Level Domains (ccTLDs) (per thousand population, 15–69 years old) | 2023

The sum of Generic top-level domains (TLDs) and country-code TLDs as a proportion of thousand population, 15–69 years old. A top-level domain (TLD) encompasses various categories maintained by the Internet Assigned Numbers Authority (IANA) for internet use. Generic TLDs cover five generic domains (.biz, .info, .org, .net, and .com), excluding sponsored domains such as .name or .pro, and all new generic TLDs. Country-code TLDs are assigned to specific economies, countries, or territories and represent total domain registrations within each country-code TLD, with exceptions for ccTLDs licensed for global commercial use. For confidentiality reasons, only normalized values are reported; while relative positions are preserved, magnitudes are not.

Source: Global Innovation Index Database, WIPO 2024. ZookNIC Inc (www.zooknic.com); and United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects 2024 (April 2024 update) (<https://population.un.org/wpp>). Data years: 2021–2023.

1.2.3 Mobile apps development

Global downloads of mobile apps (per billion PPP\$ GDP, two-year average) | 2022

Global downloads of mobile apps, by origin of the headquarters of the developer/firm, scaled by PPP\$ GDP (billions). Global downloads are compiled by data.ia, public data sources and the company's proprietary forecast model based on data from Google Play Store and iOS App Store in each country. Since data for China are not available for Google Play Store and only for iOS App Store, data from China are treated as missing and classified as "n/a".

Source: Global Innovation Index Database, WIPO 2024. data.ia (a Sensor Tower company) (www.data.ai/en); and International Monetary Fund, World Economic Outlook Database, October 2023 (www.imf.org/en/Publications/WEO/weo-database/2023/October). Data Year: 2021–2023

1.2.4 AI scientific publications

Total number of AI scientific publications, fractional counts (as % of GDP per Capita PPP) | 2023

The AI scientific publications indicator measures the total number of AI publications in Elsevier per economy. Any paper with a field of study categorized as "artificial intelligence" and "machine learning" according to the Microsoft Academic Graph (MAG) taxonomy is measured. Results from other fields of study, such as "natural language processing", "speech recognition", and "computer vision" are included if they also belong to the "artificial intelligence" or the "machine learning" fields of study. As such, the results

are likely to be conservative. Tagging occurs through a concept detection operation. The Microsoft Academic Graph (MAG) is a heterogeneous graph containing scientific publication records and citation relationships between each publication from authors, institutions, journals, conferences, and fields of study (Sinha et al., 2015; Wang et al., 2019). Reporting occurs as a percentage of GDP per capita, PPP.

Source: OECD.AI Policy Observatory (<https://oecd.ai>). Data year: 2022-2023.

1.3 Future technologies

1.3.1 Adoption of emerging technologies

Average answer to survey questions concerning the level adoption of key technologies: Information processing (AI, big data, VR and AR) and Robots and autonomous systems | 2023

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Adoption of emerging technologies indicator refers to a simple average of the average answer of two similarly-worded question posited by the EOS regarding level of adoption of key emerging technologies (Artificial intelligence, big data, VR, AR, Robots and autonomous systems): "In your country, how common is the adoption of the following key technologies [1 = Not adopted at all; 7 = Greatly adopted]: Information processing (AI, big data, VR and AR)" "In your country, how common is the adoption of the following key technologies [1 = Not adopted at all; 7 = Greatly adopted]: Robots and autonomous systems"

Source: World Economic Forum, Executive Opinion Survey 2023. (<http://reports.weforum.org>). Data year: 2023.

1.3.2 Investment in emerging technologies

Average answer to a survey question concerning the extent that companies invest in emerging technologies. | 2018

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Investment in emerging technologies indicator refers to the average answer of a similarly-worded question posited by the EOS regarding five different emerging technologies (Artificial intelligence, Robotics, App- and web-enabled markets, Big data analytics, and Cloud computing):

"In your country, to what extent do companies invest in emerging technologies (e.g., Internet of Things, advanced analytics and artificial intelligence, augmented virtual reality and wearables, advanced robotics, 3D printing)?" [1 = not at all; 7 = to a great extent].

Source: World Economic Forum, Executive Opinion Survey 2017-2018 (<http://reports.weforum.org>). Data years: 2017-2018.

1.3.3 Robot density

Number of robots in operation per 10,000 employees in the manufacturing industry | 2023

Robot density refers to the estimated number of multipurpose industrial robots per 10,000 persons employed in the manufacturing industry (ISIC rev.4: C). The International Federation of Robotics (IFR) collects country-level data on the operational stock of industrial robots and for certain countries computes robot densities. The annual *World Robotics* report publishes computed robot densities. Data for Hong Kong is sourced from IFR database 2023.

Source: Data on robot density and operational stock of industrial robots for 2023 kindly provided by the International Federation of Robotics, IFR (<https://ifr.org>). Data on employment in manufacturing in the countries for which IFR has not computed robot densities are sourced from the International Labour Organization, ILOSTAT (<https://ilostat.ilo.org/>). Data year: 2023; Data for HKG pertains to 2022.

1.3.4 Computer software spending

Total computer software spending (% of GDP) | 2023

Computer software spending refers to the total value of purchased or leased packaged software, including operating systems, database systems, programming tools, utilities, and applications. The indicator excludes expenditures for internal software development and outsourced custom software development. The data combines actual figures and estimates. Reporting occurs as a percentage of an economy's GDP.

Source: Global Innovation Index Database, WIPO 2024. S&P Global, Market Intelligence (www.marketplace.spglobal.com/en/datasets). Data Year: 2023.



2nd pillar: People

2.1 Individuals

2.1.1 Mobile broadband internet traffic within the country

Mobile-broadband internet traffic (within the country); in exabytes | 2023

Mobile-broadband Internet traffic (within the country) refers to broadband traffic volumes originated within the country from 3G networks or other more advanced mobile-networks; including 3G upgrades; evolutions or equivalent standards in terms of data transmission speeds. Traffic should be collected and aggregated at the country level for all 3G or more advanced mobile networks within the country. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point. Wholesale and walled-garden traffic should be excluded. The traffic should be reported in exabytes.

Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2017–2023.

2.1.2 ICT skills in the education system

Average answer to the question: In your country, to what extent is the workforce proficient in the following skills? Technology skills [1 = Not at all; 7 = To a great extent] | 2024

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

The ICT skills indicator refers to the average answer of a similarly-worded question posited by the EOS regarding the digital skills of a country: "In your country, to what extent is the workforce proficient in the following skills?" "Technology skills" [1 = not at all; 7 = to a great extent].

Source: World Economic Forum, Executive Opinion Survey 2024 (<http://reports.weforum.org>). Data years: 2023 - 2024.



● Photo by Michelangelo Buonarroti

2.1.3 Use of virtual social networks

Number of active social media users (% of population) | 2024

The Use of virtual social networks indicator refers to the penetration of active social media users expressed as a percentage of the total population. Original data comes from a variety of sources, including company statements and reports in reputable media.

Source: We Are Social and Hootsuite Global Digital Report 2024 (<https://wearesocial.com/uk/blog/2024/01/digital-2024/>). Data Year: 2024

2.1.4 Adult literacy rate

Adult literacy rate (%) | 2022

The Adult literacy rate indicator defines the percentage of the population aged 15 years and over who can read, write, and understand short, simple statements about their everyday life.

Source: UNESCO Institute for Statistics, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2012-2023.



2.1.5 AI talent concentration

AI talent concentration | 2022

A LinkedIn member is considered AI talent if they have explicitly added AI skills to their profile and/or they are occupied in an AI job. The counts of AI talent are used to calculate talent concentration metrics. For example, AI talent concentration at the country level is calculated using the counts of AI talent vis-a-vis the counts of LinkedIn members in that country. As such, AI talent concentration metrics may be influenced by a country's LinkedIn coverage and should be used with caution. For example, as of 2021 1 in every 10 LinkedIn members in India is classified as AI talent, which is a result of LinkedIn's biased coverage in that country.

Since it also encompasses LinkedIn members with AI job titles – as opposed to only LinkedIn members with AI skills on their profiles – AI talent is considered to be a more comprehensive measure than AI skills.

To enhance data coverage, the NRI 2023 values for China (2021) and Colombia (2021) were reintroduced due to the absence of these values in this year's OECD.AI platform.

Source: OECD.AI Policy Observatory (<https://oecd.ai>). Data year: 2021–2022.

2.2 Businesses

2.2.1 Firms with website

Firms with website (% of total) | 2023

The data for the Firms with website indicator consists of enterprise surveys conducted by the Organisation for Economic Co-operation and Development (OECD) and the World Bank. Data supplied by the OECD informs OECD countries, accession countries, or key partners, while all other country data sources the World Bank.

Source: OECD, *ICT Access and Use by Businesses*, OECD Telecommunications and Internet Statistics database (<https://doi.org/10.1787/9d2cb97b-en>); World Bank, *Enterprise Surveys* (www.enterprisesurveys.org). Data years: 2009–2023. Burkina Faso, Cabo Verde, and Mauritius use data from 2009.

2.2.2 Number of venture capital deals invested in AI

Number of venture capital deals invested in AI (per billion PPP\$ GDP) | 2023

This indicator refers to the number of Deal with respect to Venture Capital Investments in AI. The data is reported per billion PPP\$ GDP.

An AI start-up is considered to be a private company that researches and delivers all or part of an AI system or researches and delivers products and services that rely significantly on AI systems. The definition of an AI system follows that of the OECD principles: “An AI system is a machine-based system that is capable of influencing the environment by making recommendations, predictions, or decisions for a given set of objectives. It does so by utilising machine and/or human-based inputs/data to i) perceive real and/or virtual environments; ii) abstract such perceptions into models manually or automatically, and iii) use Model Interpretations to formulate options for outcomes.” A data start-up is considered to be a private company that provides solutions for large volumes of data, through data gathering, storing, or analysis.

Start-ups are identified as AI or data start-ups based on Preqin's cross-industry and vertical categorisation, as well as on OECD's automated analysis of the keywords contained in the description of the company's activities.

Deals reported as being “Secondary Stock Purchase”, “Mergers” or “Add-ons” were excluded from the analysis because those deals do not correspond to the financing of start-ups, i.e. where the money goes to those start-ups to develop themselves, but to a secondary market transaction where the money goes directly from one investor to another investor.

Source: OECD.AI Policy Observatory (<https://oecd.ai>). Data Year: 2017–2023.



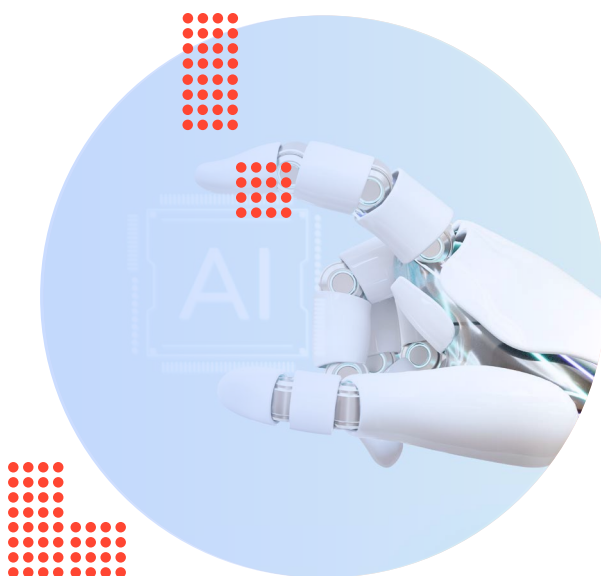
2.2.3 Annual investment in telecommunication services

Annual investment in telecommunication services (US\$) | 2022

The Annual investment in telecommunication services indicator refers to the investments made within the financial year by entities that provide telecommunication networks and/or services (including fixed mobile and Internet services and the transmission of TV signals). Investments are considered any spent funds on the acquisition and upgrading of assets (usually referred to as CAPEX) less disinvestment owing to disposals. Fixed assets include tangible assets such as buildings and networks and intangible assets such as computer software and intellectual property.

The indicator corresponds to the gross fixed capital formation concept defined in the System of National Accounts 2008. The indicator also includes expenditures on initial installations and additions to existing installations where the usage is expected over an extended period of time. It excludes expenditures on fees for operating licenses and the use of radio spectrum. All values are notated in US\$.

Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2013–2022.



● Photo by Srattha Nualsate

2.2.4 Public cloud computing market scale

Public cloud computing market scale (in billion US\$) | 2023

A public cloud is defined as the digital infrastructure and computing resources that are managed by a service provider. Examples of public cloud computing resources include virtual machines, storage, and services, all of which are available for purchase with flexible (e.g., pay as you go and subscription) business models. The Public Cloud market refers to the companies that provide these cloud computing resources and services to individuals, businesses, and organizations. Structure: The Public Cloud market is structured into five markets based on the type of service models provided by the companies. The Infrastructure as a Service (IaaS) market covers the resources and services related to the data center infrastructure. The Platform as a Service (PaaS) market covers the resources and services related to the virtual environments used for software development. The Software as a Service market (SaaS) market covers the resources and services related to software applications that can be accessed via a web browser. The Business Process as a Service (BPaaS) market covers the resources and services related to the various business processes such as finance and accounting, human resources, customer service, and supply chain management, all delivered through the cloud. The Desktop as a Service (DaaS) market covers the resources and services related to virtual desktop environments, which are accessible from any device with an internet connection. Additional Information: The public cloud market comprises revenue, revenue change, average spend per employee, and key player market shares as key performance indicators. Only revenues that are generated by primary vendors at the manufacturer price level either directly or through distribution channels (excluding value-added tax) are included, and revenues generated by resellers are excluded. Revenues are generated through both online and offline sales channels and include spending by consumers (B2C), enterprises (B2B) as well as governments (B2G). Key players of the public cloud market include companies such as Amazon (Amazon web services), Microsoft (Azure), Google (Cloud), and IBM (Cloud).

Source: AWS/Telecom Advisory Services, 2024, IDC, Statista Market Insights, Financial Statements of Key Players, National statistical offices. Data Year: 2023–2024.

2.3 Governments

2.3.1 Government online services

Government Online Service Index | 2022

The Online Service Index (OSI) is a component of the E-Government Development Index. The OSI is a composite indicator that assesses how well governments use technology to deliver public services at the national level. It is based on a survey of national websites and e-government policies, with scores normalized to a range of 0 to 1. In the 2022 edition, the OSI is now calculated based on five weighted sub-indices: services provision (45%), technology (5%), institutional framework (10%), content provision (5%), and e-participation (35%), with the overall score calculated from the normalized values of each sub-index.

Source: *Global Innovation Index Database, WIPO 2024. Division for Public Institutions and Digital Government (DPIDG) of the United Nations Department of Economic and Social Affairs (UNDESA), E-Government Survey 2022* (<https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2022>). Data Year: 2022

2.3.2 Data Capabilities

Global Data Barometer | 2021

Capabilities is one of the four pillars, or areas of assessment, of the Global Data Barometer. This indicator assesses a country's ability to effectively create, manage, and utilize data, focusing on the presence of access, skills, infrastructure, institutions, and intermediaries. It measures the extent to which a country's civil service is trained in data practices, the existence of open data initiatives, support for data reuse, and the robustness of data activities at the sub-national level. The indicator draws upon both secondary data and targeted primary indicators to evaluate these dimensions.

Source: *Global Data Barometer Research Handbook (2021)*, (<https://globaldatabarometer.org/research/>). Data Year: 2021

2.3.3 Government promotion of investment in emerging technologies

Average answer to survey questions "In your country, to what extent is the public sector promoting adoption of AI among local businesses?" [1 = Not at all; 7 = To a great extent] | 2024

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The following indicator refers to the simple mean of the average answer of a similarly-worded question posited by the EOS regarding a Government's support to AI adoption:

"In your country, to what extent is the public sector promoting adoption of AI among local businesses? [1 = Not at all; 7 = To a great extent]"

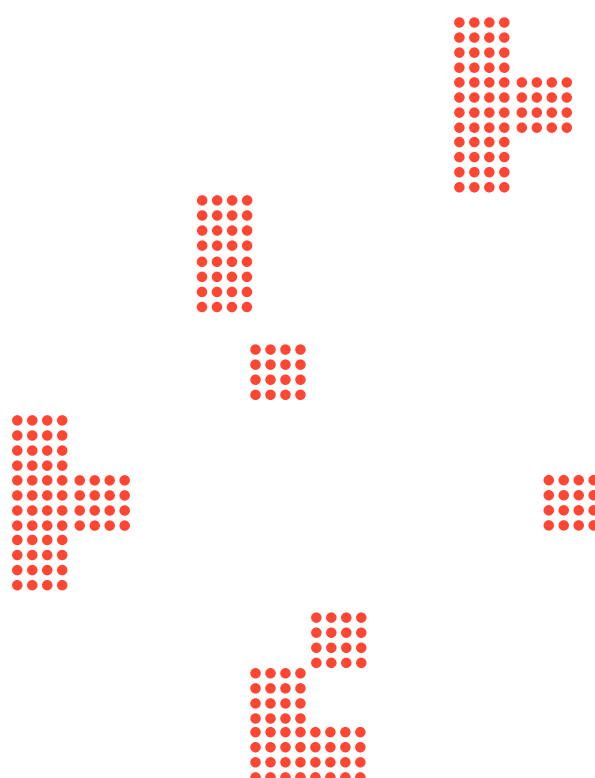
Source: *World Economic Forum, Executive Opinion Survey 2024* (<http://reports.weforum.org>). Data Year: 2024

2.3.4 R&D expenditure by governments and higher education

Gross domestic expenditure on R&D performed by government and higher education institutions (% of GDP) | 2021

The following indicator refers to the combined expenditure by governments and higher education institutions on research and development (R&D) as a percentage of GDP. The government sector comprises all central, regional, and municipal government units. It excludes all public enterprises (public enterprises fall under the business enterprise category). Higher education institutions include an organization whose primary focus is on providing formal tertiary education (i.e. levels 5–8 of the International Standard Classification of Education, ISCED). The definition of R&D expenditure involves all current expenditure plus gross fixed capital expenditure for R&D performed by government and higher education institutions, no matter the source of funds.

Source: *UNESCO Institute for Statistics, UIS.Stat* (<http://data.uis.unesco.org/>). Data years: 2013–2022.





3rd pillar: Governance

3.1 Trust

3.1.1 Secure Internet servers

Secure Internet servers (per million population) | 2020

Secure Internet servers are servers that use encryption technology in Internet transactions.

Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data years: 2020.

3.1.2 Cybersecurity

Global Cybersecurity Index | 2022

The *Global Cybersecurity Index* (GCI) measures the level of cybersecurity commitments made by individual countries. It is a composite index consisting of 25 indicators distributed across five main pillars: (1) Legal Measures, (2) Technical Measures, (3) Organizational Measures, (4) Capacity Building Measures, and (5) Cooperation Measures. Scores are standardized to a scale of 0–1.

Source: ITU (2021) *Global Cybersecurity Index (GCI) 2024* (https://www.itu.int/dms_pub/itu-d/opb/hdb/d-hdb-gci.01-2024-pdf-e.pdf). Data Year: 2022.

3.1.3 Online access to financial account

People who use a mobile phone or the internet to make payments, buy things, or to send or receive money using a financial institution account (% with a financial institution account, age 15+)| 2021

Among respondents with a financial institution account, the percentage of respondents who report using a mobile phone or the Internet to make payments, buy things, or to send or receive money using a financial institution account within the past 12 months.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data Year: 2021–2022



• Photo by Michelangelo Buonarroti

3.1.4 Internet shopping

People who used the Internet to buy something online in the past year (%) | 2021

The Internet shopping indicator refers to the percentage of respondents aged 15 years and older who have used the Internet in the past year to purchase goods and services online. The data sources a triennial survey carried out in more than 140 economies.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data years: 2017–2022.

3.2 Regulation

3.2.1 Regulatory quality

Regulatory quality indicator | 2022

The regulatory quality indicator captures the perception of a government's ability to formulate and implement sound policies and regulations that permit and promote private sector development. Scores are standardized to a scale from -2.5 (worst) to 2.5 (best).

Source: Global Innovation Index Database, WIPO 2024. World Bank, Worldwide Governance Indicators (www.govindicators.org). Data Year: 2022

3.2.2 ICT regulatory environment

ICT Regulatory Tracker | 2022

The ICT regulatory environment indicator is based on the *ICT Regulatory Tracker* composite index that provides a measure of the existence and features of ICT legal and regulatory frameworks. The index covers 50 indicators distributed across four pillars: (1) Regulatory Authority, (2) Regulatory Mandate, (3) Regulatory Regime, and (4) Competition Framework. Scores are standardized to a scale of 0–2.

Source: International Telecommunication Union (ITU), *ICT Regulatory Tracker* (<https://www.itu.int/net4/itu-d/irt/>). Data year: 2022.

3.2.3 Regulation of emerging technologies

Average answer to survey questions concerning how adequately regulated are the emerging technologies and their applications | 2020

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Legal framework's adaptability to emerging technologies indicator refers to the simple mean of the average answer of a similarly-worded question posited by the EOS regarding emerging technologies: "In your country, how adequately regulated are the emerging technologies and their applications (e.g., artificial intelligence, robotics, digital platforms)? [1=Not adequately at all—there are many regulatory grey area and loopholes; 7= Adequately—regulation is adequate for all emerging technologies and their applications]"

Source: World Economic Forum, *Executive Opinion Survey 2020* (<http://reports.weforum.org>). Data Year: 2020.

3.2.4 E-commerce legislation

Global Cyberlaw Tracker | 2021

The E-commerce legislation indicator refers to a country's adoption of e-commerce legislation. The *Global Cyberlaw Tracker* provides information on whether a country has adopted legislation or has a draft law pending adoption within four areas: electronic transactions, consumer protection, privacy and data protection, and cybercrime. Scores range from 0 (no legislation) to 4 (adopted legislation in all four areas).

Source: United Nations Conference on Trade and Development (UNCTAD), *Global Cyberlaw Tracker* (https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx). Data year: 2021.

3.2.5 Privacy protection by law content

Average answer to the question: What does the legal framework to protect Internet users' privacy and their data stipulate? | 2023

The Privacy protection by law content indicator refers to responses on privacy protection given by multiple country experts on a 0–4 scale. With disagreement and measurement error taken into account, aggregated responses compute a probability distribution over country-year scores on a standardized interval scale. Point estimates are the median values of each distribution for every country-year. The scale of a measurement model variable is similar to a normal ("Z") score (e.g. typically between -5 and 5, with 0 approximately representing the mean for all country-years in the sample), though it does not necessarily follow a normal distribution. Data only includes estimates based on at least four ratings.

Source: Mechkova, Valeriya, Daniel Pemstein, Brigitte Seim, and Steven Wilson, (2024) *Digital Society Project Dataset v2* (<http://digitalsocietyproject.org>). Data years: 2019–2023.



● Designed by Freepik

3.3 Inclusion

3.3.1 E-Participation

E-Participation Index | 2022

The E-Participation Index (EPI) is a measure of citizen engagement in public policy making through e-government programs. It's a supplement to the United Nations E-Government Survey that assesses how well governments use online services to provide information, interact with stakeholders, and engage in decision-making. Scores range from 0 to 1, with higher values indicating greater e-participation. The index questions are periodically updated to reflect changes in e-government trends and technologies. In the 2022 Survey, the e-participation questions were further expanded to reflect current trends and modalities on how governments engage their people in public policy-making, implementation and evaluation

Source: Global Innovation Index Database, WIPO 2024. Division for Public Institutions and Digital Government (DPIDG) of the United Nations 287 Department of Economic and Social Affairs (UNDESA), E-Government Survey 2022 (<https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2022>). Data Year: 2022

3.3.2 Socioeconomic gap in use of digital payments

Difference between rich and poor income groups that made or received digital payments in the past year (% age 15+) | 2021

The following indicator refers to the share of the poorest 40% and the richest 60% income groups in a country that made or received digital payment within the past 12 months. Made digital payments include the use of "mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online." Received digital payments include receiving money "directly from or into a financial institution account or through a mobile money account." Final scores express the ratio of the share related to the poorest 40% over the share related to the richest 60%.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data years: 2014-2022.

3.3.3 Availability of local online content

Average answer to the question: In your country, to what extent are Internet content and services tailored to the local population (e.g. in the local language, meeting local demand)? (1 = Not at all; 7 = To a great extent) | 2019

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey (<http://reports.weforum.org>). Data years: 2018-2019.

3.3.4 Gender gap in Internet use

Difference between female and male population in using the Internet | 2023

The Gender gap in Internet use indicator refers to the share of women and men in a country that use the Internet. Scores are calculated as the ratio of the share related to the female population over the share related to the male population.

Source: International Telecommunication Union, ITU DataHub, (<https://datahub.itu.int/>). Data Year: 2014-2023.

3.3.5 Rural gap in use of digital payments

Difference between the rural population and the total population that made or received digital payments in the past year (% age 15+) | 2017

The following indicator refers to the share of the rural population against a country's total population that made or received digital payments within the past 12 months. Made digital payments include the use of "mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online." Received digital payments include receiving money "directly from or into a financial institution account or through a mobile money account." Final scores express as a ratio the share related to the rural population over the share related to the total population.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data year: 2017-2021.





4th pillar: Impact

4.1 Economy

4.1.1 ICT patent applications

Number of ICT applications filed under the Patent Cooperation Treaty (PCT) (per million population) | 2020

This indicator refers to the count of applications filed under the Patent Cooperation Treaty (PCT) in the technology domain of information and communication technologies (ICT) by priority date and inventor nationality. The count is given per million people in the country's population. The classification of ICT-related patents is based on the International Patent Classification (IPC), as described in Inaba and Squicciarini (2017).

Source: OECD, Patent Database (<http://www.oecd.org/sti/inno/intellectual-property-statistics-and-analysis.htm>). Population data sourced from World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). The IPC classification is discussed in Inaba, T. and M. Squicciarini (2017), ICT: A new taxonomy based on the international patent classification. OECD Science, Technology and Industry Working Papers No. 2017/01. Paris: OECD Publishing (<https://doi.org/10.1787/ab16c396-en>). Data Year: 2019–2020

4.1.2 Domestic market scale

Domestic market scale as measured by GDP, bn PPP\$ | 2023

The domestic market size is measured by GDP based on the PPP valuation of country GDP, in current international dollars (billions).

Source: Global Innovation Index Database, WIPO 2024. International Monetary Fund, World Economic Outlook Database, October 2023 (www.imf.org/en/Publications/WEO/weo-database/2023/October). Data Year: 2022–2023.

4.1.3 Prevalence of gig economy

Average answer to the question: In your country, to what extent is the online gig economy prevalent? [1 = Not at all; 7 = To a great extent] | 2019

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness. The gig economy refers to a labor market specific to digital platforms and work arrangements focused on short-term contracts and task-based work.

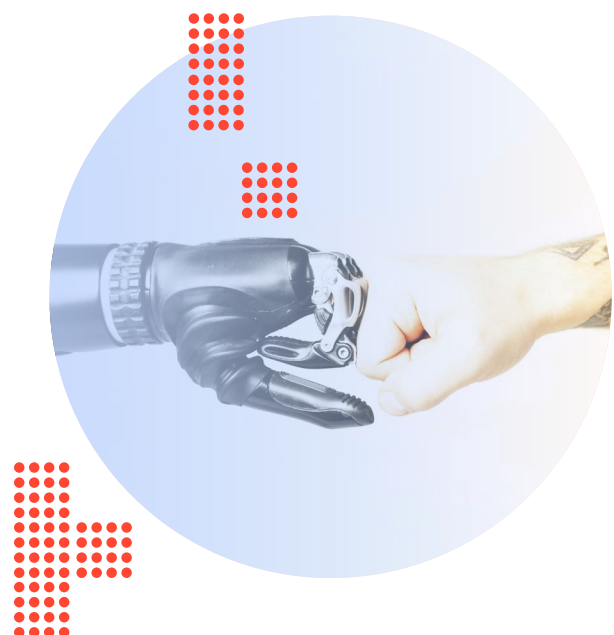
Source: World Economic Forum, Executive Opinion Survey 2017–2020 (<http://reports.weforum.org>). Data year: 2019.

4.1.4 ICT services exports

Telecommunications, computers, and information services exports (% of total trade) | 2022

Telecommunications, computer and information services exports as a percentage of total trade according to the Extended Balance of Payments Services Classification EBOPS 2010, coded SI: Telecommunications, computer, and information services. Values are based on the classification of the sixth (2009) edition of the International Monetary Fund's Balance of Payments and International Investment Position Manual and Balance of Payments database.

Source: Global Innovation Index Database, WIPO 2024. WTO | Statistics – Global Services Trade Data Hub. Trade in Services by Mode of Supply dataset (www.wto.org/english/res_e/statistics_e/services_trade_data_hub_e.htm). Data Year: 2022



• Photo by cottonbro studio:

4.2 Quality of Life

4.2.1 Happiness

Happiness score (life ladder) | 2023

Happiness refers to the national average response to the following survey question included in the Gallup World Poll: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" The indicator is also known as the Cantril life ladder, life ladder, or subjective well-being.

Note: The data for Oman is an average of value from 2011, as reported by the Gallup World Poll, and the updated 2024 value provided by Gallup Inc.

Source: The Gallup World Poll, sourced from Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Akinin, L. B., & Wang, S. (Eds.). (2024). World Happiness Report 2024. University of Oxford: Wellbeing Research Centre. (<https://worldhappiness.report/>). Data for Oman for 2024 kindly provided by Gallup Inc. Data Year: 2014–2024.

4.2.2 Freedom to make life choices

Freedom to make life choices score | 2023

Freedom to make life choices refers to the national average response to the following survey question included in the Gallup World Poll: "Are you satisfied or dissatisfied with your freedom to choose what you do with your life?"

Note: The data for Oman is an average of value from 2011, as reported by the Gallup World Poll, and the updated 2024 value provided by Gallup Inc.

Source: The Gallup World Poll, sourced from Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Akinin, L. B., & Wang, S. (Eds.). (2024). World Happiness Report 2024. University of Oxford: Wellbeing Research Centre. (<https://worldhappiness.report/>). Data for Oman for 2024 kindly provided by Gallup Inc. Data Year: 2012–2024.

4.2.3 Income inequality

Gini index | 2021

The Gini index is a measure of income inequality within an individual economy. At a technical level, it is based on a Lorenz curve that "plots the cumulative percentages of total income received against the cumulative number of recipients." The Gini index also refers to the area between the Lorenz curve and the (hypothetical) line of perfect equality. The scale of the Gini index ranges from 0 (perfect equality) to 100 (perfect inequality).

Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data Year: 2013–2023

4.2.4 Healthy life expectancy at birth

Healthy life expectancy at birth (years) | 2021

The Healthy life expectancy at birth indicator expresses the "average number of years that a person can expect to live in 'full health' by taking into account years lived in less than full health due to disease and/or injury." The number of years lost due to ill health in a country is estimated by the disability rate per capita (adjusted for independent comorbidity) broken down by age and sex.

Source: World Health Organization, Global Health Observatory (GHO) Database (<https://www.who.int/gho>). Data year: 2021.

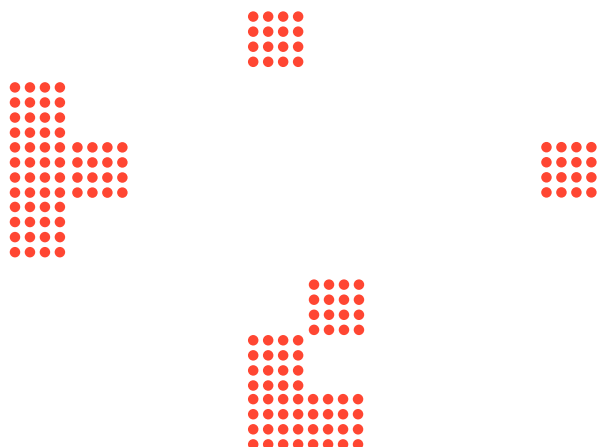
4.3 SDG Contribution

4.3.1 SDG 3: Good Health and Well-Being

Universal health coverage | 2021

The following indicator refers to the Universal health coverage (UHC) service coverage index and is one of the official indicators related to SDG 3: Ensure healthy lives and promote well-being for all at all ages (indicator 3.8.1). The UHC service coverage index encompasses essential health services that include reproductive, maternal, newborn and child health, infectious diseases, service capacity and access, and non-communicable diseases among the general and the most disadvantaged population. Scores report on a scale of 0–100 and compute the geometric mean of 14 tracer indicators related to health service coverage. The tracer indicators on service coverage compile into four components: (1) Reproductive, maternal, newborn and child health, (2) Infectious diseases, (3) Noncommunicable diseases (4) Service capacity and access.

Source: World Health Organization. Tracking universal health coverage: 2021 Global Monitoring Report. Geneva, WHO 2021. (<https://iris.who.int/bitstream/handle/10665/374059/9789240080379-eng.pdf?sequence=1>) Sourced from United Nations, Open SDG Data Hub (<http://www.sdg.org>). Data Year: 2021



4.3.2 SDG 4: Quality Education

PISA scales in reading, mathematics and science | 2022

PISA is the OECD's (Organisation for Economic Co-operation and Development) Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge skills. Results from PISA indicate the quality and equity of learning outcomes attained around the world. The 2022 PISA survey is the eighth round of the triennial assessment. The indicator is built using the average of the reading, mathematics and science scores for each country. PISA scores are set in relation to the variation in results observed across all test participants in a country. There is, theoretically, no minimum or maximum score in PISA; rather, the results are scaled to fit approximately normal distributions, with means around 500 score points and standard deviations around 100 score points. China did not participate in the 2022 PISA Survey. As a result, China's scores correspond to their 2018 PISA results and are only based on the provinces/municipalities of Beijing, Shanghai, Jiangsu and Zhejiang. The 2022 scores for Azerbaijan correspond only to the capital Baku.

Source: *Global Innovation Index Database, WIPO 2024. OECD Programme for International Student Assessment (PISA) (www.oecd.org/pisa). Data Year: 2015–2022.*

4.3.3 SDG 5: Women's economic opportunity

Women Business and the Law Index Score (scale 1-100) | 2024

Women, Business and the Law tracks progress toward legal equality between men and women in 190 economies. Data are collected with standardized questionnaires to ensure comparability across economies. Questionnaires are administered to over 2,000 respondents with expertise in family, labor, and criminal law, including lawyers, judges, academics, and members of civil society organizations working on gender issues. Respondents provide responses to the questionnaires and references to relevant laws and regulations. The Women, Business and the Law team collects the texts of these codified sources of national law - constitutions, codes, laws, statutes, rules, regulations, and procedures - and checks questionnaire responses for accuracy. Thirty-five data points are scored across eight indicators of four or five binary questions, with each indicator representing a different phase of a woman's career. Indicator-level scores are obtained by calculating the unweighted average of the questions within that indicator and scaling the result to 100. Overall scores are then calculated by taking the average of each indicator, with 100 representing the highest possible score.

Source: *World Bank: Women, Business and the Law 2024. (<https://wbl.worldbank.org/>). Data Year: 2024.*

4.3.4 SDG 7: Affordable and Clean Energy

Energy intensity | 2021

The Affordable and Clean Energy indicator refers to the energy intensity level of primary energy (defined in megajoules per constant 2011 purchasing power parity GDP) and is an official indicator related to SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all (indicator 7.3.1).

Source: *Energy Balances, UN Statistics Division (2021) and IEA (2021), World Energy Balances. Sourced from United Nations, Open SDG Data Hub (<http://www.sdg.org>). Data year: 2021.*

4.3.5 SDG 11: Sustainable Cities and Communities

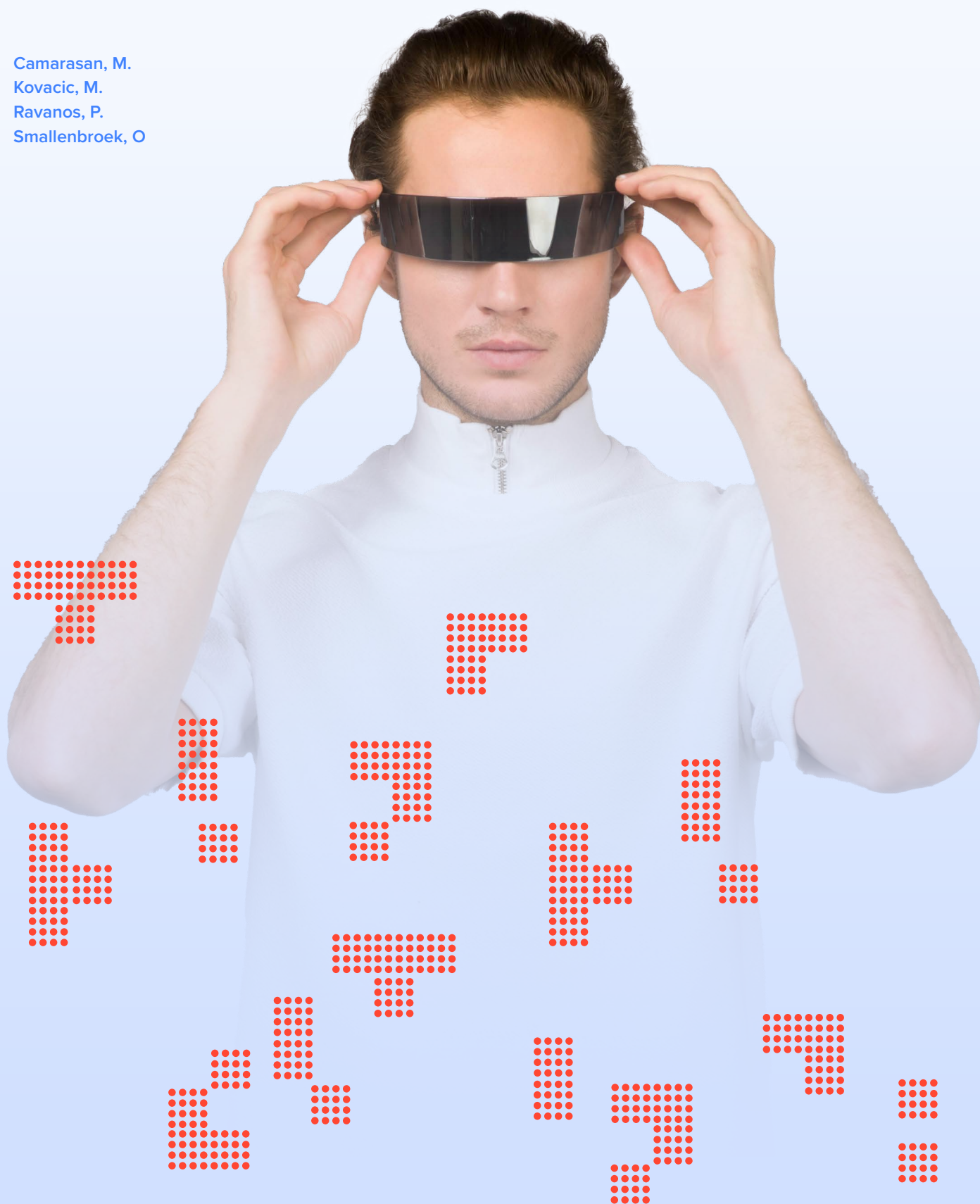
Urban safety and sustainability | 2019

Two indicators capture the safety and sustainability of cities: urban pollution and household. Urban pollution officially relates to SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable (indicator 11.6.2) and is measured by the annual mean concentration of fine particulate matter in urban areas less than 2.5 microns in diameter. Mortality rate attributed to household and ambient air pollution is indicator 3.9.1 in the SDG and it further measures mortality attributable to the joint effects of household and ambient air pollution can be expressed as : Number of deaths Death rate Death rates are calculated by dividing the number of deaths by the total population (or indicated if a different population group is used, e.g. children under 5 years). Evidence from epidemiological studies have shown that exposure to air pollution is linked, among others, to the important diseases taken into account in this estimate: Acute respiratory infections (estimated for all ages); Cerebrovascular diseases in adults (estimated above 25 years); Ischaemic heart diseases in adults (estimated above 25 years); Chronic obstructive pulmonary disease in adults (estimated above 25 years); and Lung cancer in adults (estimated above 25 years).

Source: *World Health Organization, Global Health Observatory (GHO) Database (<https://www.who.int/data/gho/data/indicators/>). Data year: 2019.*

Appendix III: JRC Statistical Audit of the 2024 Network Readiness Index

Camarasan, M.
Kovacic, M.
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Smallenbroek, O



Introduction

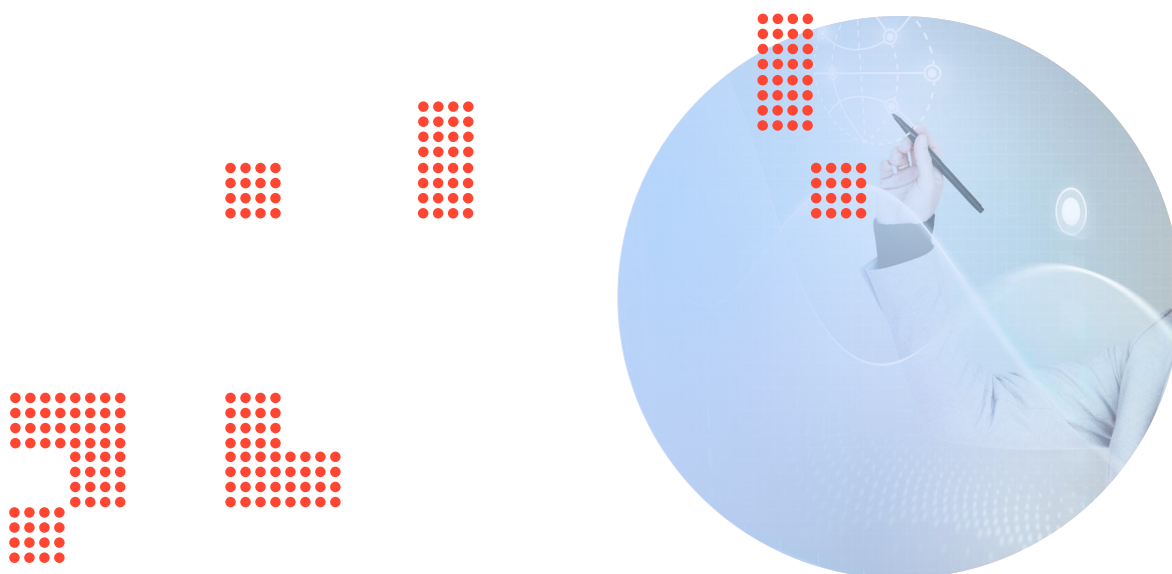
The Network Readiness Index (NRI) was first published in 2002 by the World Economic Forum as part of the Global Information Technology Report. Over the last two decades, the NRI has provided a holistic view of how economies can deploy technology to enhance development and global competitiveness.

The overall structure of the NRI exhibited some changes compared to that of the NRI 2023 but it has remained quite similar: The index consists of four pillars (Technology, People, Governance, and Impact) that make up the fundamental dimensions of network readiness. Each of the fundamental pillars is divided into additional sub-pillars, which are further subdivided into a total of 54 indicators. The current version of the index has been subject to a few adjustments. In particular, four indicators have been removed from the NRI in this edition of the index, and four others have been replaced by new indicators that fit better in the conceptual framework of digital readiness. Furthermore, the weight of four indicators has been reduced to improve the NRI correlation structure. Each pillar has the same weight in the computation of the index. All pillars are composed of three sub-pillars that are weighted equally. The number of indicators making up each sub-pillar varies from four to six. Although they are equally weighted in their respective sub-pillars, the different number of indicators within sub-pillars results into a different contribution of each individual indicator in the overall index. The inclusion of countries and indicators relies on a double threshold approach (70% coverage at the pillar level, and 40% coverage at the sub-pillar level), resulting in a total of 133 countries. Compared to the 2023 edition of the Index, four more countries were included, while five were excluded.

The European Commission's Competence Centre on Composite Indicators and Scoreboards (COIN) at the Joint Research Centre (JRC) has been invited for the fourth time to audit the index. As in the previous three editions, the present JRC-COIN audit focuses on the statistical soundness of the multi-level structure of the index as well as on the impact of key modelling assumptions on the results. The independent statistical assessment of the NRI 2024 provided by the JRC-COIN guarantees the transparency and reliability of the index for both policymakers and other stakeholders, thus facilitating more accurate priority setting and policy formulation in the respective field.

The JRC assessment of the NRI 2024 discussed in this report focuses on two main areas: the statistical coherence of the framework and the impact of key modelling assumptions. The statistical assessment examines the adequacy of aggregating indicators into pillars and pillars into the overall index.

Similar to previous NRI reports, the JRC-COIN analysis complements the reported country rankings for the NRI index 2024 with simulated intervals to better demonstrate the robustness of these rankings given the modelling decisions made by the NRI developers. Additionally, the JRC-COIN analysis includes an evaluation of the added value of the NRI 2024 and a measurement of its distance to the best-practice frontier of network readiness using data envelopment analysis.





● Photo by Anete Lusina:

Conceptual framework

Establishing a well-defined and transparent conceptual framework is a critical initial phase in the construction of a composite indicator. The NRI 2024 is a multidimensional index that encompasses four main pillars: *Technology*, *People*, *Government*, and *Impact*. Each pillar is then divided into three sub-pillars, each with varying numbers of indicators (from four to six). In total, the NRI 2024 consists of 54 indicators.

The structure of the NRI 2024 is summarized in Table 1. The choice of indicators was guided by their conceptual relevance, existing literature, expert input, and coverage across countries.

Compared to the previously analysed version of the index in 2023, the conceptual framework has been constructively revised. Out of the 58 indicators in NRI 2023, four indicators were removed. This decision was informed by a constructive discussion which reached the conclusion that these indicators align more closely with innovation than with digital readiness. These indicators were:

- 2.1.4-Tertiary enrolment
- 2.2.3-Knowledge intensive employment
- 4.1.1-High-tech and medium-high-tech manufacturing
- 4.1.2-High-tech exports

Apart from that, four indicators were replaced in order to improve the conceptual coherence of the framework:

- Former indicator 2.2.2 “GERD financed by business enterprises” has been replaced by the “Number of venture capital deals invested in AI”; former indicator 2.2.5 “GERD performed by business enterprise” has been replaced by “Public cloud computing market scale”;
- former indicator 2.3.2 “Publication and use of open data” has been replaced by “Data Capabilities”; and
- former indicator 4.1.3 “PCT patent applications” has been replaced by “ICT patent applications”.

The replacements were the result of constructive discussions, in which it was decided that the replacement indicators align better with the concept of digital readiness than the old indicators which they replaced. These changes in the framework highlight the meticulous work by the developers in continuously improving the NRI framework and keeping it up to date with novel changes in the field of digital readiness. Additional minor modifications include some methodology and name changes that took place in a reduced number of indicators. The last column of **Table 1** provides a summary of adjustments to the NRI 2024 framework.

Even though the aim of this statistical audit is not to address the conceptual relevance of the indicators underpinning the framework, it is worth noting that the developers have used a parsimonious approach by selecting a rather balanced number of indicators across pillars and sub-pillars.

Establishing a well-defined and transparent conceptual framework is a critical initial phase in the construction of a composite indicator. The NRI 2024 is a multidimensional index that encompasses four main pillars: *Technology*, *People*, *Government*, and *Impact*. Each pillar is then divided into three sub-pillars, each with varying numbers of indicators (from four to six). In total, the NRI 2024 consists of 54 indicators.

Table 1 Conceptual Framework of the NRI 2024

Pillar	Sub-pillar	Indicator	Last year available	Note
1. Technology	1.1 Access	1.1.1 Mobile tariffs	2023	
		1.1.2 Handset prices	2023	
		1.1.3 FTTH/building Internet subscriptions	2022	
		1.1.4 Population covered by at least a 3G mobile network	2023	
		1.1.5 International Internet bandwidth	2023	
		1.1.6 Internet access in schools	2023	
	1.2 Content	1.2.1 GitHub commits	2023	Changed methodology
		1.2.2 Internet domain registrations	2023	
		1.2.3 Mobile apps development	2023	
		1.2.4 AI scientific publications	2023	
	1.3 Future Technologies	1.3.1 Adoption of emerging technologies	2023	Changed methodology
		1.3.2 Investment in emerging technologies	2018	
		1.3.3 Robot density	2023	
		1.3.4 Computer software spending	2023	
2. People	2.1 Individuals	2.1.1 Active mobile broadband subscriptions	2023	
		2.1.2 ICT skills in the education system	2024	
		2.1.3 Use of virtual social networks	2024	
		2.1.4 Adult literacy rate	2023	
		2.1.5 AI talent concentration	2022	
	2.2 Businesses	2.2.1 Firms with website	2023	
		2.2.2 Number of venture capital deals invested in AI	2023	Replaces 'GERD financed by business enterprise'
		2.2.3 Annual investment in telecommunication services	2023	
		2.2.4 Public cloud computing market scale	2024	Replaces 'GERD performed by business enterprise'
	2.3 Governments	2.3.1 Government online services	2022	
		2.3.2 Data Capabilities	2021	Replaces 'Publication and use of open data'
		2.3.3 Government promotion of investments in emerging technologies	2024	Changed methodology
		2.3.4 R&D expenditure by governments and higher education	2022	
3. Governance	3.1 Trust	3.1.1 Secure Internet servers	2020	
		3.1.2 Cybersecurity	2022	
		3.1.3 Online access to financial account	2022	Changed methodology
		3.1.4 Internet shopping	2022	
	3.2 Regulation	3.2.1 Regulatory quality	2022	
		3.2.2 ICT regulatory environment	2022	
		3.2.3 Regulation of emerging technologies	2020	Changed methodology
		3.2.4 E-commerce legislation	2021	
		3.2.5 Privacy protection by law content	2023	
	3.3 Inclusion	3.3.1 E-Participation	2022	
		3.3.2 Socioeconomic gap in use of digital payments	2022	
		3.3.3 Availability of local online content	2019	
		3.3.4 Gender gap in Internet use	2023	
		3.3.5 Rural gap in use of digital payments	2021	
		4.1.1 ICT patent applications	2020	Replaces 'PCT patent applications'
		4.1.2 Domestic market scale	2023	Name Changed
		4.1.3 Prevalence of gig economy	2019	
		4.1.4 ICT services exports	2022	
	4.2 Quality of Life	4.2.1 Happiness	2024	
		4.2.2 Freedom to make life choices	2024	
		4.2.3 Income inequality	2023	
		4.2.4 Healthy life expectancy at birth	2021	
	4.3 SDG Contribution	4.3.1 SDG 3: Good Health and Well-Being	2021	
		4.3.2 SDG 4: Quality Education	2022	
		4.3.3 SDG 5: Women's economic opportunity	2024	
		4.3.4 SDG 7: Affordable and Clean Energy	2021	
		4.3.5 SDG 11: Sustainable Cities and Communities	2019	

Source: Developers of the index and the European Commission's Joint Research Centre, 2024.

Data quality and availability

Timeliness

The NRI 2024 draws on annual data, up to 2024. Whenever data are missing for a country-indicator pair, the developer followed the rule of the last available year, replacing missing values with previous year values. The main year used for each indicator is presented in the last column of Table 1. JRC-COIN suggests that data points up to five years old be used to ensure proper timeliness. The majority of the indicators in the NRI 2024 consider data from 2023 or 2022. There are four indicators with relatively older data, namely i.1.3.2 “Investment in emerging technologies”, i.3.3.3 “Availability of local online content”, i.4.1.3 “Prevalence of gig economy”, and i.4.3.5 “SDG 11: Sustainable Cities and Communities”, in which all values are relative to 2019 or 2018. In addition, 57.9% of the values in indicator i3.3.5 “Rural gap in use of digital payments” refer to 2017. As a consequence, JRC-COIN suggests having a special focus on the timeliness of these five indicators.

Treatment of missing data

Regarding data coverage, the general practice is to establish a threshold above which an indicator is excluded from the framework. For the NRI 2024 development, the inclusion of countries and indicators is based on the “double threshold” approach. In terms of country coverage, this means that only countries with data available for at least 70% of all indicators are included in the NRI 2024. In addition, countries need to pass a sub-pillar level data availability of at least 40%. Compared to the previous edition of the NRI, five countries were excluded due to not passing these thresholds (Eswatini, Guinea, Gambia, Lebanon, and Tajikistan), while four countries were included (Seychelles, Sierra Leone, Trinidad and Tobago, and Yemen), resulting in a total of 133 countries.

In terms of indicator coverage, only indicators with availability of at least 50% of countries are included in the NRI 2024 with two exceptions, namely the indicator “AI talent concentration” (i2.1.5) characterized by a very high incidence of missing values (65%) and “Robot density” (i.1.3.3) with available data for 42% of the countries.

In previous statistical assessments of the NRI conducted by JRC-COIN, a threshold of 33% missing values was suggested for including indicators in the NRI framework. However, it was suggested that a looser threshold of 40% missing countries could also be implemented to accommodate the inclusion of indicators representing a very specific and central concept. Indicators i2.1.5 and i1.3.3 are most likely

of this kind, as they are already being treated exceptionally by the developers in terms of data coverage. However, the incidence of missing values in these two indicators is well above the suggested limit of 40%.

In light of these concerns, JRC – COIN suggests the replacement or the exclusion of these indicators from future editions of the index - if data coverage cannot be improved - since their role in the composite may be unpredictable. Overall, and apart from the two aforementioned indicators, data availability has improved compared to the previous edition of the index. There is an additional indicator i2.2.2 “Number of venture capital deals invested in AI” for which missing data are slightly above the 40% limit. Therefore JRC-COIN recommends that it should be also monitored closely with the aim of improving its coverage in future editions of the index. Moreover, JRC-COIN suggests monitoring the coverage and continue efforts to improve the coverage of the following indicators (% of missing values in parenthesis):

- i4.1.1 ICT patent applications (33.8 %);
- i4.3.2 SDG4 Quality education (37.6%).

The audit also examined the presence of outliers that could potentially bias the effect of the indicators on the aggregates. JRC-COIN recommends an approach for outlier identification based on the values of skewness and kurtosis,¹ i.e., when the variables simultaneously have an absolute skewness higher than 2.0 and a kurtosis higher than 3.5.

The developers, following the approach suggested by JRC-COIN, detected outliers in 19 indicators, 10 of which had fewer than six outliers and nine had six or more outliers. Prior to normalisation, these were treated according to the following three-way rule:

indicators with no more than five outliers were winsorised (10 indicators);²

indicators with six or more outliers were transformed by natural logarithms using the following mathematical formula:

$$\tilde{x}_i = \ln \left[\left(\left(base \times \max_i x_i - 1 \right) \frac{x_i - \min_i x_i}{\max_i x_i - \min_i x_i} \right) + 1 \right]$$

where x_i refers to the raw value of indicator x for country i and \tilde{x}_i to the treated value of that indicator for the same country. In this step, a base of 1 was applied for six indicators (i1.1.3. FTTH/building Internet subscriptions, i1.1.5. International Internet bandwidth, i1.2.3. Mobile apps development, i2.1.1. Mobile broadband internet traffic within the country, i3.1.1. Secure Internet servers, i4.1.2. Domestic market scale);

For one indicator (i2.2.4. Public cloud computing market scale) in which a base of 1 did not correct skewness and kurtosis, a base of 10 was used;

Finally, for two indicators (i2.2.3. Annual investment in telecommunication services, i1.1.4. Population covered by at least a 3G mobile network) for which logarithmic transformation with a base of 1, 10 or 100 did not correct skewness and kurtosis, the Yeo-Johnson transformation was applied using the following mathematical formula:

$$\tilde{x}_i = \frac{(x_i + 1)^\lambda - 1}{\lambda}$$

as in this case the values of both indicators were positive.

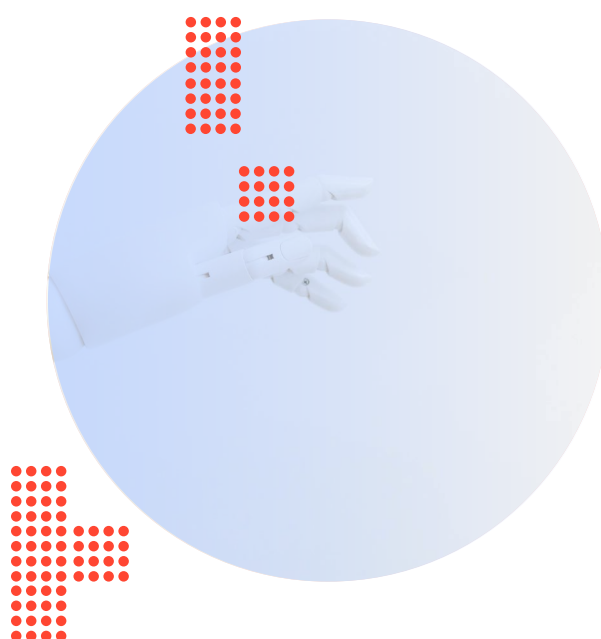
The approach followed by developers to treat the outliers is in line with the best practices suggested by JRC-COIN, and the additional steps in this edition of the Index follow up suggestions by JRC-COIN in previous Audits in 2021, 2022, and 2023 (Caperna and Kovacic, 2022; Ravanos, Kovacic and Caperna, 2023). In the previous edition of the Index, three such indicators were highlighted (i2.2.4. Public cloud computing market scale, i2.2.3. Annual investment in telecommunication services, i1.1.4. Population covered by at least a 3G mobile network) which in the current edition were treated by the developers in the additional Steps 3 and 4 described above. The updated treatment process performed by the developers ensured none of the normalised indicators in this edition of the index have an absolute skewness higher than 2.0 and a kurtosis higher than 3.5 (**Table 2**).

JRC-COIN recognises the effort put in by the developers to treat outliers. The need for special treatment for these three indicators highlights their potentially problematic structure. For example, the negative skewness and high kurtosis of indicator i1.1.4. Population covered by at least a 3G mobile network (in percentage) are caused by many values in the upper end of the distribution and very few low values. In particular, 99 out of 133 values for this indicator (74.4%) are within the range of 95%-100% (the latter meaning total coverage of the population by a 3G mobile network). This high concentration suggests a limited ability of this indicator to discriminate across the best-performing countries. The opposite holds for indicator i2.2.4. (Public cloud computing market scale), which appears to be relevant only for a few highly industrialised countries currently active in the cloud computing market (USA, UK, China, Japan, and a few EU countries). 67.7% of the countries with non-missing data for this indicator have a market scale ranging from 0 to 1 (for comparison, the highest value for the indicator is 361.94 for the USA). In effect, the indicator has a limited ability to differentiate across the worst-performing countries. Taking into account that the development of any composite indicator entails an intricate balance between conceptual and statistical

coherence, it may be beneficial for the developers to provide clear rationale for the added value of these two indicators in the NRI conceptual framework, recognising their limited ability to distinguish between the best- or the worst performing countries. On the other hand, indicator i2.2.3. (Annual investment in telecommunication services) is measured in absolute monetary units. This largely explains the very high kurtosis for this indicator, given that larger countries such as the USA, China, and India are naturally investing considerably larger amounts of money into telecommunication services. The JRC-COIN suggests denominating this indicator by a variable capturing country size such as the total amount of investments, or GDP, to mitigate these issues.

Normalisation

The indicators are rescaled to a 0-100 scale using the well-established formula of MIN-MAX, with higher values denoting better performances. This is a common and usually desired practice in the construction of composite indicators. The normalisation is conducted using all of the countries for which data are available in order to reflect more closely the global situation for each indicator. The reverse normalization formula is applied to indicators where higher values imply worse outcomes. As in the previous editions of the index, reverse normalisation was needed for three indicators: i4.2.3 ("Income inequality"), i4.3.4 ("SDG 7: Affordable and clean energy") and i4.3.5 ("SDG 11: Sustainable Cities and Communities"). Summary statistics of normalised indicators are given in **Table 2**.

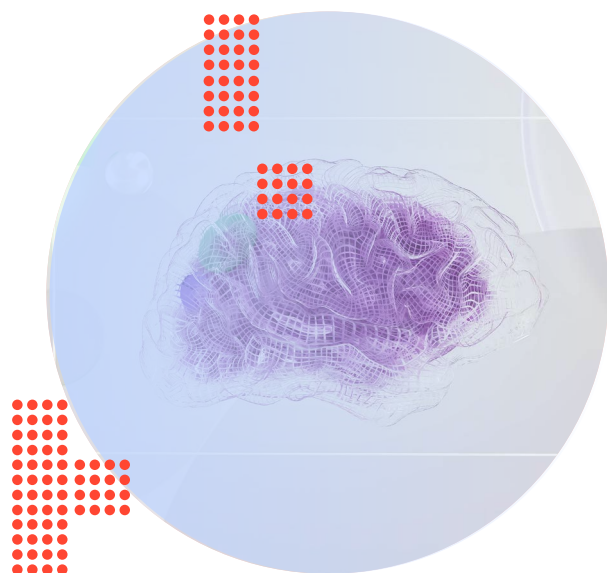


● Designed by Freepik

Table 2 Summary statistics of normalised indicators included in the NRI 2024

Indicator	N	Missing (%)	Mean	Min	Max	Std	Skew	Kurt
i1.1.1	133	0	60.5	0	100	23.1	-0.572	-0.263
i1.1.2	133	0	62.6	0	100	25.8	-0.289	-0.9
i1.1.3	128	3.8	31.8	0	100	18.8	0.644	0.573
i1.1.4	133	0	71.9	0	100	33.5	-1.01	-0.474
i1.1.5	133	0	70.5	0	100	12	-1.46	8.43
i1.1.6	93	30.1	68.1	0	100	36.3	-0.673	-1.08
i1.2.1	131	1.5	21.1	0	100	26.9	1.45	1.07
i1.2.2	133	0	15.5	0	100	24.7	2.01	3.39
i1.2.3	124	6.8	62.3	0	100	16.1	-1.36	3.12
i1.2.4	132	0.8	19.6	0	100	27.5	1.75	2.11
i1.3.1	110	17.3	62	0	100	21.6	-0.459	0.0823
i1.3.2	131	1.5	44	0	100	21.3	0.586	-0.285
i1.3.3	56	57.9	19.5	0	100	22.7	1.86	4.02
i1.3.4	130	2.3	24.3	0	100	20.5	1.03	0.652
i2.1.1	130	2.3	19.2	0	100	19.8	1.6	2.87
i2.1.2	117	12	57.4	0	100	19.2	-0.246	-0.284
i2.1.3	132	0.8	47.8	0	100	24.5	-0.589	-0.727
i2.1.4	104	21.8	82.2	0	100	22.5	-1.86	3.31
i2.1.5	47	64.7	25.9	0	100	26	1.98	3.53
i2.2.1	125	6	51.3	0	100	25.9	-0.21	-0.952
i2.2.2	79	40.6	21.2	0	100	27.3	2.04	3.4
i2.2.3	123	7.5	53.5	0	100	14.9	0.116	2.12
i2.2.4	127	4.5	23.1	0	100	19.7	1.11	1.03
i2.3.1	132	0.8	62.1	0	100	22.7	-0.425	-0.752
i2.3.2	93	30.1	39.8	0	100	21.6	0.325	-0.563
i2.3.3	114	14.3	42.9	0	100	23.2	0.562	-0.401
i2.3.4	114	14.3	17.9	0	100	19.7	1.72	3.11
i3.1.1	133	0	56.2	0	100	23.9	-0.0894	-1.03
i3.1.2	132	0.8	67.4	0	100	30.8	-0.753	-0.856
i3.1.3	120	9.8	45.1	0	100	26.4	0.228	-1.03
i3.1.4	127	4.5	35.6	0	100	29.8	0.533	-1.1
i3.2.1	133	0	52	0	100	21.9	0.123	-0.694
i3.2.2	133	0	77.7	0	100	17.5	-1.78	4.87
i3.2.3	120	9.8	50.4	0	100	23.9	-0.0751	-0.755
i3.2.4	132	0.8	87.7	0	100	19.9	-1.82	3.48
i3.2.5	133	0	65.6	0	100	21.6	-0.663	-0.0492
i3.3.1	132	0.8	53.2	0	100	24.3	-0.0111	-0.984
i3.3.2	129	3	70.5	0	100	23.2	-0.624	-0.401
i3.3.3	132	0.8	59.1	0	100	23.8	-0.247	-0.859
i3.3.4	108	18.8	61.7	0	100	18.6	-1.93	3.83
i3.3.5	124	6.8	58.4	0	100	20.4	-0.825	0.12
i4.1.1	88	33.8	17.7	0	100	30.1	1.81	2.12
i4.1.2	133	0	53.3	0	100	17.4	0.0285	0.289
i4.1.3	124	6.8	44.5	0	100	22.3	0.282	-0.482
i4.1.4	133	0	20.9	0	100	23.1	1.78	3.12
i4.2.1	131	1.5	55.3	0	100	24.6	-0.57	-0.572
i4.2.2	131	1.5	72.2	0	100	19.6	-1.18	1.48
i4.2.3	118	11.3	67.7	0	100	19.5	-0.89	0.847
i4.2.4	131	1.5	64.4	0	100	21.2	-0.374	-0.371
i4.3.1	131	1.5	64.5	0	100	25.1	-0.77	-0.521
i4.3.2	83	37.6	42.4	0	100	23	0.0611	-0.861
i4.3.3	133	0	75.7	0	100	20.5	-1.38	2.25
i4.3.4	132	0.8	74.7	0	100	19.1	-1.74	3.52
i4.3.5	132	0.8	63.8	0	100	22.8	-0.347	-0.649

Note: The cells with the percentage of missing values exceeding 35%, as well as those with the values of skewness and kurtosis simultaneously exceeding the threshold are highlighted in blue



● Photo by Google DeepMind

Statistical coherence

The assessment of statistical coherence consists of a multi-level analysis of the correlations of indicators, a comparison of NRI 2024 rankings with their constituent Pillars, as well as an assessment of the impact of changes in the structure and weights of the NRI on its statistical coherence.³

Correlation analysis

The statistical coherence of an index should be considered a prerequisite but not a sufficient condition for a sound index. Given that the statistical analysis relies heavily on correlations, the degree of correspondence of every index to a real-world phenomenon needs to be critically addressed by developers and experts, because “correlations do not necessarily represent the real influence of the individual indicators on the phenomenon being measured” (OECD and JRC, 2008).⁴ This influence relies on the interplay between both conceptual and statistical soundness. For this reason, the degree of coherence between the conceptual framework and the statistical structure of the data is an important factor for the reliability of an index. The most sound and reliable metrics combine a strong relation between the underlying phenomenon being measured and the conceptual structure of the metric developed to measure it, and a good statistical coherence within this conceptual structure, demonstrated by strong and balanced correlations between aggregated metrics, and a sufficient flow of information from indicators to their aggregates and to the overall index.

More particularly, correlation analysis is used to assess the extent to which the observed data supports the conceptual framework. Within each level of the index, there should ideally be positive and statistically significant correlations. The JRC-COIN recommends a correlation threshold of 0.3 above which the correlation is considered high enough to say that two elements share a significant amount of their variability. The framework should avoid redundancy, which can be identified by very high correlations (≥ 0.92), which may result in double counting (and thus over-weighting) of the same phenomenon.

In this section, we report the correlations between indicators in the same pillar, between indicators and their aggregates (sub-pillar, pillars, and NRI 2024), and finally between sub-pillars, pillars and the NRI 2024 index.

Correlation analysis between indicators and aggregates

Figure 1 shows the correlation coefficients between indicators within the same pillar. Boxes within each pillar identify indicators grouped into respective sub-pillars. The majority of the correlations within the “Technology pillar” (i1), as well as in the respective sub-pillars, are positive and above the threshold level (0.30). Exceptions are: (i) within the “Access” (i1.1) sub-pillar, the correlation of i.1.1.3 (“FTTH/building Internet subscriptions”) is above the suggested threshold only with the indicators i1.1.1 (“Mobile tariffs”) and i.1.1.5 (“International Internet bandwidth”); and (ii) within the “Content” (i1.2) sub-pillar, i.1.2.4 (“1.2.4 AI scientific publications”) is not sufficiently correlated with any of the other indicators, as can be gauged by the empty cells which signify correlations not significantly different from zero. This evidence may suggest that the i1.1.3 and i.1.2.4 indicators do not fully cooperate with the others in their respective sub-pillars, which could reduce their impact on the aggregates to which they belong in the following aggregation steps. As can be seen by **Figure 2**, this is indeed the case: the correlation between i.1.1.3 and its corresponding pillar and NRI 2024 is relatively low (0.42 and 0.35 respectively), and the same holds for i.1.2.4, which has a relatively low correlation coefficient of 0.43 with its corresponding pillar and a borderline correlation of 0.30 with NRI 2024. An additional low correlation exists between i1.3.3 (“Robot density”) and i1.3.4 (“Computer software spending”) of the “Future Technologies” (i1.3) sub-pillar, but since this is the only insignificant correlation among indicators of this sub-pillar, it has a lower effect on the sub-pillar’s coherence.

As for the “People pillar” (i2), analysis of the correlation structure leads to two remarks: First, the correlation structure for two indicators within the “Individuals” sub-pillar (i2.1) (i2.1.4 “Adult literacy rate” and i2.1.5 “AI talent concentration”) is weak and often not significantly different from zero (empty cells). Moreover, these two indicators are negatively correlated with each other. This suggests that the two are related to each other but in a conflicting way, which weakens the coherence within this sub-pillar since these two indicators may “cancel out” to a large extent, preventing information (variability) contained in them from reaching their aggregates. A similar relation between these indicators has been also observed in the two previous editions of the index. However, the negative association between the two indicators is weaker in this edition (-0.44 vs -0.54 in the NRI 2023, see Ravanos *et al.*, 2023). The correlation structure between the indicators in Pillar 2 and their aggregates (**Figure 2**), shows that the performance of i2.1.5 is generally good at the sub-pillar and pillar level, while its association with the overall index is relatively weaker (correlation 0.35). The improvement of the relation between i2.1.5 and NRI is slight (their correlation in NRI 2023 was 0.33), but highlights a path of continuous improvements over the last three editions of the NRI. As in the previous editions of the index, it is worth noting that the interpretation of these results should be taken with caution since the share of missing values associated to this indicator is extremely high (64.7%). However, discussed improvements may be linked to the developer’s efforts in improving the coverage of this indicator (see the discussion in **Section 3**).

Second, within the “Businesses” sub-pillar (i2.2) indicator 2.2.2 (“Number of venture capital deals invested in AI”) is not significantly correlated with any of the other indicators. Similarly to the discussion above, this suggests that this indicator may not be well represented in higher aggregates. From **Figure 2** we see that the performance of i2.2.2 is generally good at the sub-pillar and pillar level, while its association with the NRI is relatively weaker (correlation 0.44), compared to at least 0.61 for the other indicators of sub-pillar i2.2). The relationship between indicators within sub-pillar i2.3 “Governments” is quite satisfactory.

Most of the correlations between indicators within pillar 3 “Governance” fall within the [0.3, 0.92] range, and no indicator is negatively correlated with the other elements of the respective sub-pillar, which suggests that most of the sub-pillars in this pillar are statistically consistent. In general, a good correlation structure is presented within the “Impact” (i4) pillar (which underwent several modifications in this edition of the index) as well. However, JRC-COIN notes the following: within the “Economy” sub-pillar (i4.1), the association between the indicator i4.1.4 (“ICT services exports”) and the other three indicators is generally weak or not statistically different from zero. In this new structure of sub-pillar 4.1., this represents 50% (3/6) of the correlation coefficients. The association of i4.1.4 with

its aggregates is however stronger (see **Figure 2**), but that with the NRI is weaker than the remaining indicators of the “Economy” sub-pillar (0.37 vs 0.57 or more for the other three indicators). Within the sub-pillar “SDG Contribution” (i4.3), the indicator i4.3.4 (“SDG 7: Affordable and Clean Energy”) and 4.3.5 (“SDG 11: Sustainable Cities and Communities”) correlate weakly with the other indicators, but not in a critical way.

JRC-COIN suggests to keep monitoring the indicators with weak and statistically insignificant correlations for future index editions. For the newly added indicator i2.2.2, the developers should monitor whether the weak correlation with the other indicators persists and, in that case, consider the possibility of replacing it with some conceptually similar indicator. In addition, JRC-COIN would like to reiterate its previous suggestions (Caperna and Kovacic, 2022, Ravanos, Kovacic and Caperna, 2023) to pay particular attention to indicator i2.1.6 especially regarding its negative and statistically significant correlation with the indicator i2.1.5. JRC-COIN acknowledges the developer’s efforts to improve the coverage of this indicator, which, however, still results low. Therefore, we would suggest considering its substitution with another, conceptually equivalent indicator with better coverage.

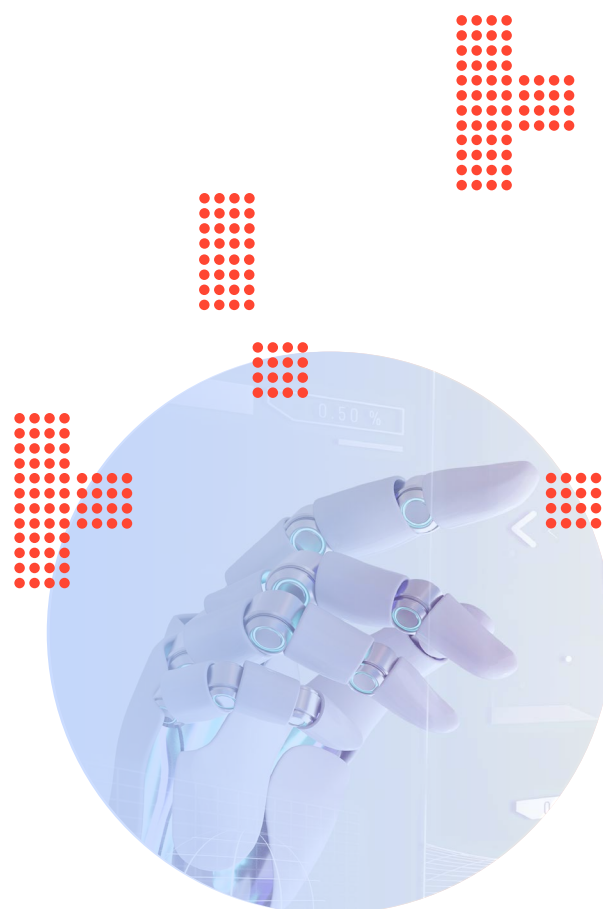
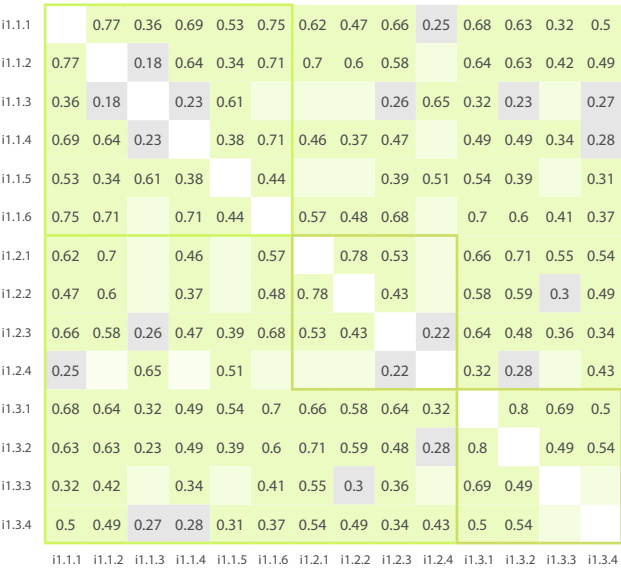


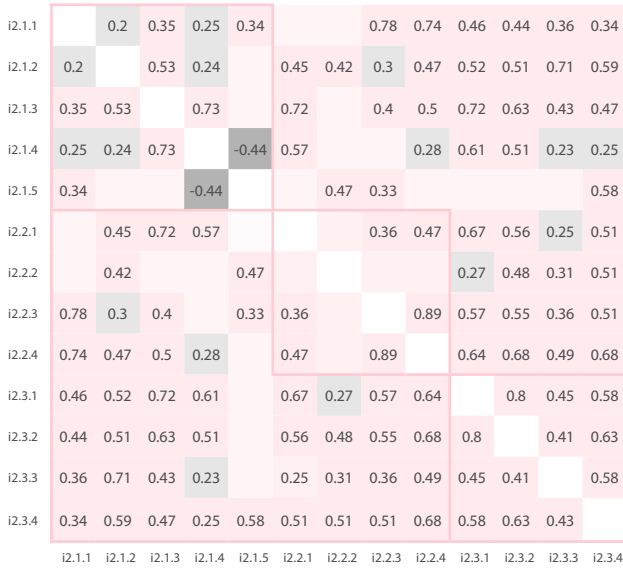
Figure 1 Correlation between indicators in the same pillar

Technology pillar (i1)



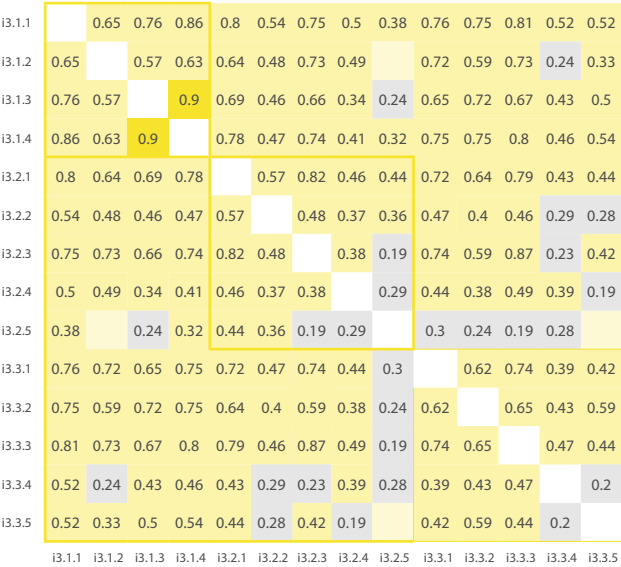
Correlation OK Weak

People pillar (i2)



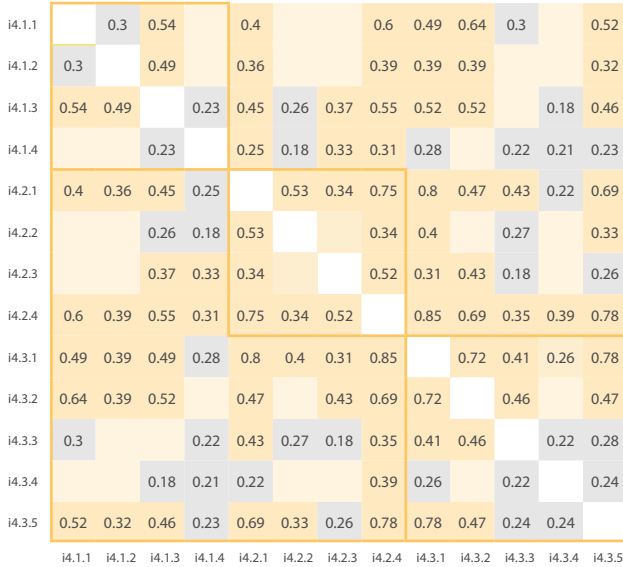
Correlation OK Weak Negative

Governance pillar (i3)



Correlation High OK Weak

Impact pillar (i4)



Correlation OK Weak

Source: European Commission's Joint Research Centre, 2024.
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green. Weak correlations (lower or equal than 0.30) are written in grey. Statistically insignificant correlations are those with the Pearson correlation coefficients lower than 0.17 and are displayed as empty cells.

Figure 2 Correlations between indicators and their aggregates (sub-pillars, pillars and index)

Technology pillar (i1)

i1.1.1	0.9	0.84	0.84
i1.1.2	0.83	0.81	0.86
i1.1.3	0.48	0.42	0.35
i1.1.4	0.85	0.69	0.7
i1.1.5	0.61	0.57	0.51
i1.1.6	0.88	0.8	0.8
i1.2.1	0.88	0.78	0.82
i1.2.2	0.78	0.66	0.64
i1.2.3	0.7	0.71	0.69
i1.2.4	0.52	0.43	0.3
i1.3.1	0.86	0.87	0.85
i1.3.2	0.86	0.82	0.8
i1.3.3	0.75	0.69	0.69
i1.3.4	0.73	0.69	0.63
	Sub pillar	Pillar	Index

Correlation High OK Weak

People pillar (i2)

i2.1.1	0.59	0.58	0.47
i2.1.2	0.51	0.7	0.72
i2.1.3	0.77	0.79	0.81
i2.1.4	0.79	0.69	0.68
i2.1.5	0.69	0.6	0.35
i2.2.1	0.8	0.71	0.75
i2.2.2	0.57	0.47	0.44
i2.2.3	0.68	0.67	0.61
i2.2.4	0.77	0.77	0.76
i2.3.1	0.85	0.84	0.88
i2.3.2	0.85	0.8	0.85
i2.3.3	0.75	0.66	0.62
i2.3.4	0.81	0.76	0.77
	Sub pillar	Pillar	Index

Correlation OK

Governance pillar (i3)

i3.1.1	0.9	0.91	0.89
i3.1.2	0.82	0.79	0.78
i3.1.3	0.9	0.84	0.77
i3.1.4	0.95	0.92	0.88
i3.2.1	0.89	0.88	0.85
i3.2.2	0.71	0.61	0.52
i3.2.3	0.8	0.84	0.89
i3.2.4	0.66	0.57	0.54
i3.2.5	0.63	0.41	0.3
i3.3.1	0.85	0.84	0.84
i3.3.2	0.85	0.79	0.74
i3.3.3	0.86	0.88	0.92
i3.3.4	0.63	0.55	0.46
i3.3.5	0.69	0.57	0.5
	Sub pillar	Pillar	Index

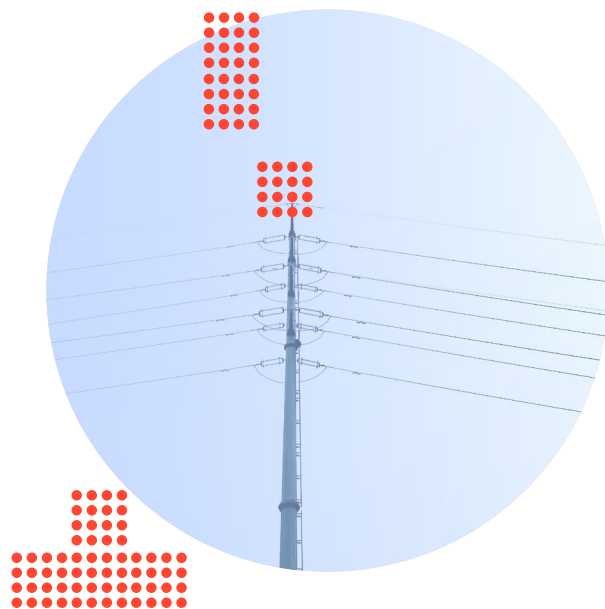
Correlation High OK Weak

Impact pillar (i4)

i4.1.1	0.81	0.75	0.76
i4.1.2	0.59	0.46	0.57
i4.1.3	0.79	0.69	0.74
i4.1.4	0.56	0.47	0.37
i4.2.1	0.91	0.8	0.76
i4.2.2	0.75	0.54	0.42
i4.2.3	0.52	0.48	0.46
i4.2.4	0.8	0.84	0.84
i4.3.1	0.68	0.79	0.85
i4.3.2	0.83	0.79	0.84
i4.3.3	0.7	0.52	0.45
i4.3.4	0.59	0.42	0.34
i4.3.5	0.65	0.72	0.74
	Sub pillar	Pillar	Index

Correlation High Ok

Source: European Commission's Joint Research Centre, 2024.
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green. Weak correlations (lower or equal than 0.30) are written in grey.



● Photo by Shuaizhi Tia

Correlations between sub-pillars, pillars and NRI 2024

The correlation between the aggregates represents the most important element of the analysis of statistical coherence as it reflects the relations between the concepts defined by the aggregates' structure. In general, the evidence from **Figure 3**, **Figure 4** and **Figure 5** suggests that all four pillars appear to be consistent, with the sub-pillars being well correlated with each other. The NRI 2024, therefore, has a generally satisfactory correlation structure, as evidenced by strong correlations between the sub-pillars, pillars, and the index. What is evident from **Figure 3** is that the correlation between sub-pillars of the "People" pillar is slightly less balanced compared to that of the other three sub-pillars, but since no correlation is too high (above the 0.92 threshold), this is evidence that no sub-pillar among those in Pillar 2 is excessively represented in Pillar 2.

Nevertheless, a note of caution is necessary. Two of the three sub-pillars within the "Governance" Pillar appear to be extremely correlated with the Pillar itself. This holds for sub-pillars "Trust" (i3.1) and "Inclusion" (i3.3), which have high correlations (exceeding 0.92) with the "Governance" Pillar, suggesting that there may be a risk of redundancy at the pillar level. This is only partly mitigated at the index level (**Figure 4**), where one of the two pillars (i3.3) shows a positive correlation that does not exceed the 0.92 set threshold.

The highest aggregation steps displayed in **Figure 3** and **Figure 4** between pillars and from pillars to NRI, also display some very high correlations. In particular, there are seven correlation coefficients between 0.89 and 0.91, which appear between sub-pillars and their aggregates in Pillars 1, 2, and 3. High statistical reliability among the main components can be the result of redundancy of information. Overall, NRI 2024 indicator, pillars, and sub-pillars seem to be measuring similar phenomena, at least for the Pillars 1, 2, and 3. The correlation analysis suggests that the exclusion of some elements from the framework is expected to have a small effect on the final result. In this edition of the index, the developers undertook modifications of the index structure by removing and replacing some indicators (see the discussion in **Section 3**) but these modifications (i) were based on conceptual grounds, and (ii) concerned the structure of sub-pillars for which correlations with aggregates shown below are not very high. In light of the issues related to statistical coherence and the risk of redundancy, JRC-COIN would suggest a further reduction of indicators for future editions of the index.

Finally, **Figure 5** shows the correlation between the pillars and between the pillars and NRI 2024. This is the most important level of aggregation because it represents the statistical coherence of the overall concept being measured. All correlations are significant and positive (> 0.30). The correlation between "Technology" (i1) and "People" (i2) pillars is very close to the 0.92 threshold, suggesting that there may be some risk of redundancy at the pillar level. This issue does not appear to be alleviated at the index level, where correlations between the two Pillars (i1 and i2) and the NRI are even higher (0.96 and 0.94 respectively), well exceeding the redundancy threshold (set at 0.92). Also, the remaining two pillars show very high correlations with the index. This is not surprising evidence given the high correlations between sub-pillars, pillars, and index reported in **Figure 4**. Although not a critical issue for the reliability of the NRI, this should be taken into account in the Index's upcoming revisions.

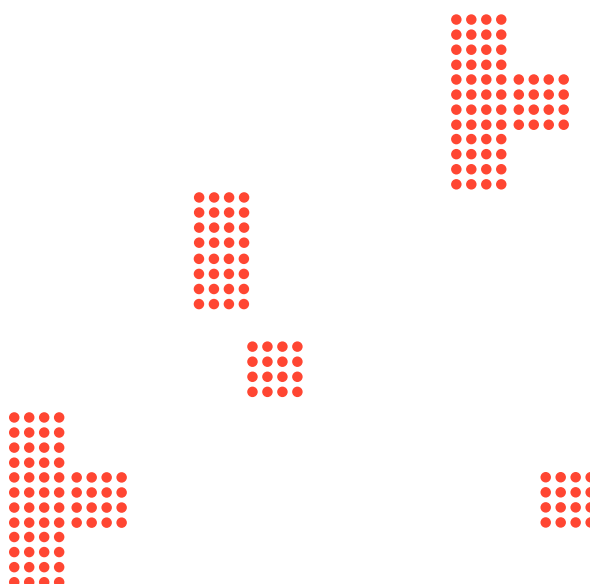
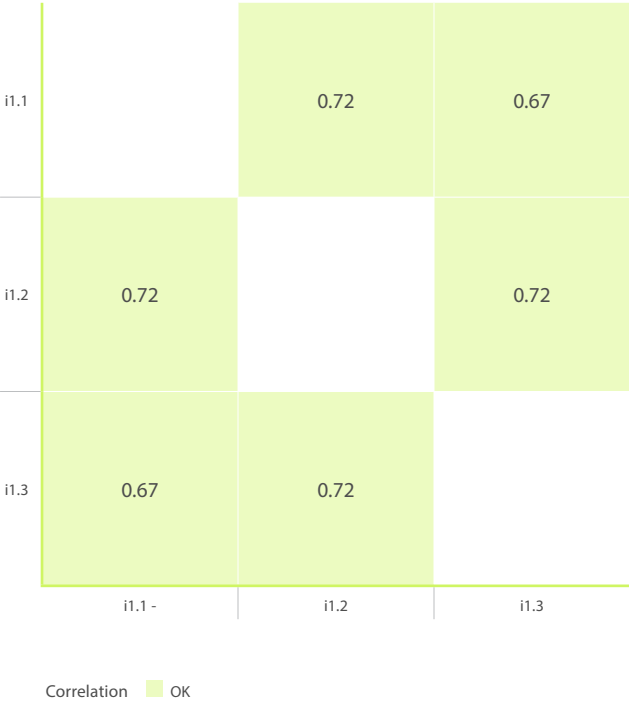
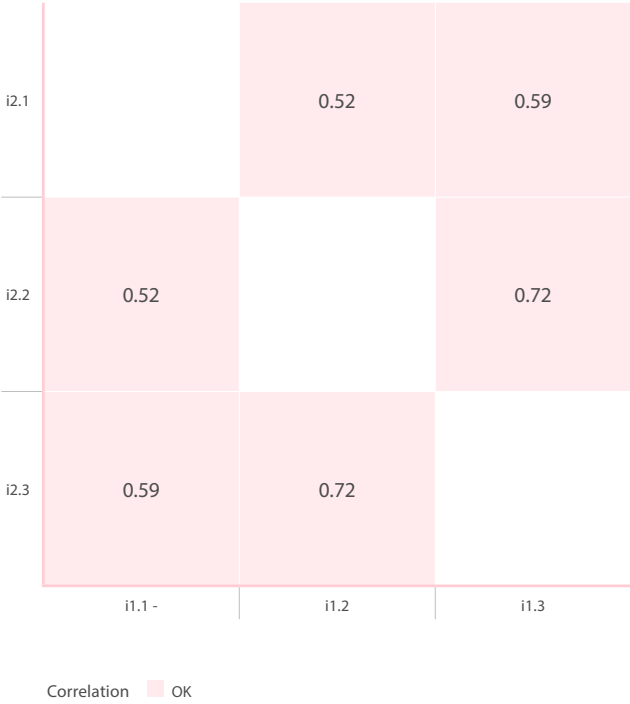


Figure 3 Correlations between sub-pillars in the same pillar

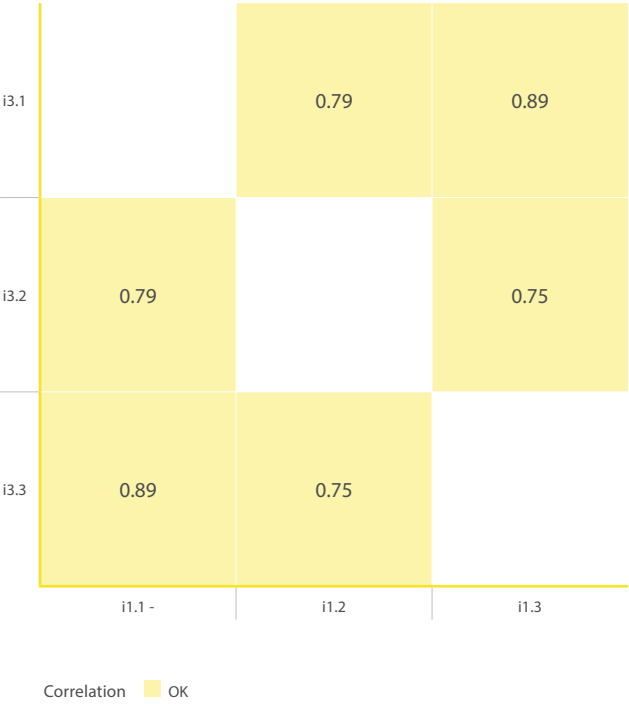
Technology pillar (i1)



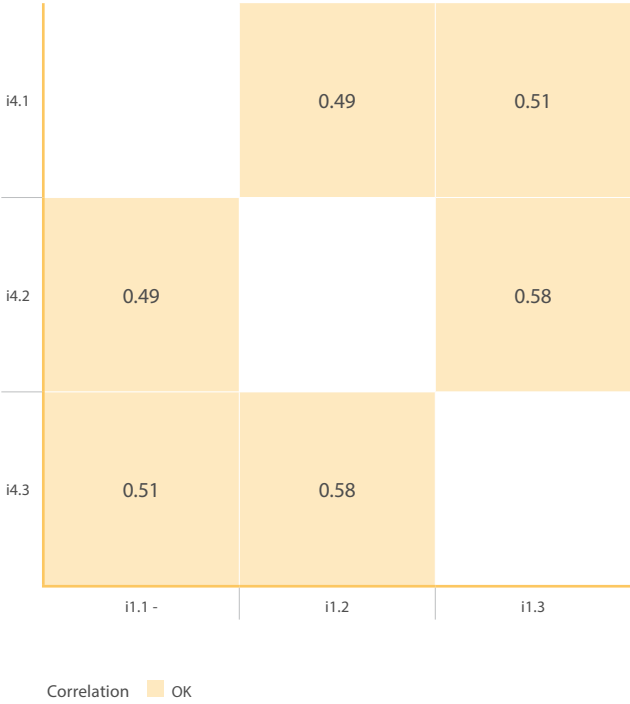
People pillar (i2)



Governance pillar (i3)



Impact pillar (i4)



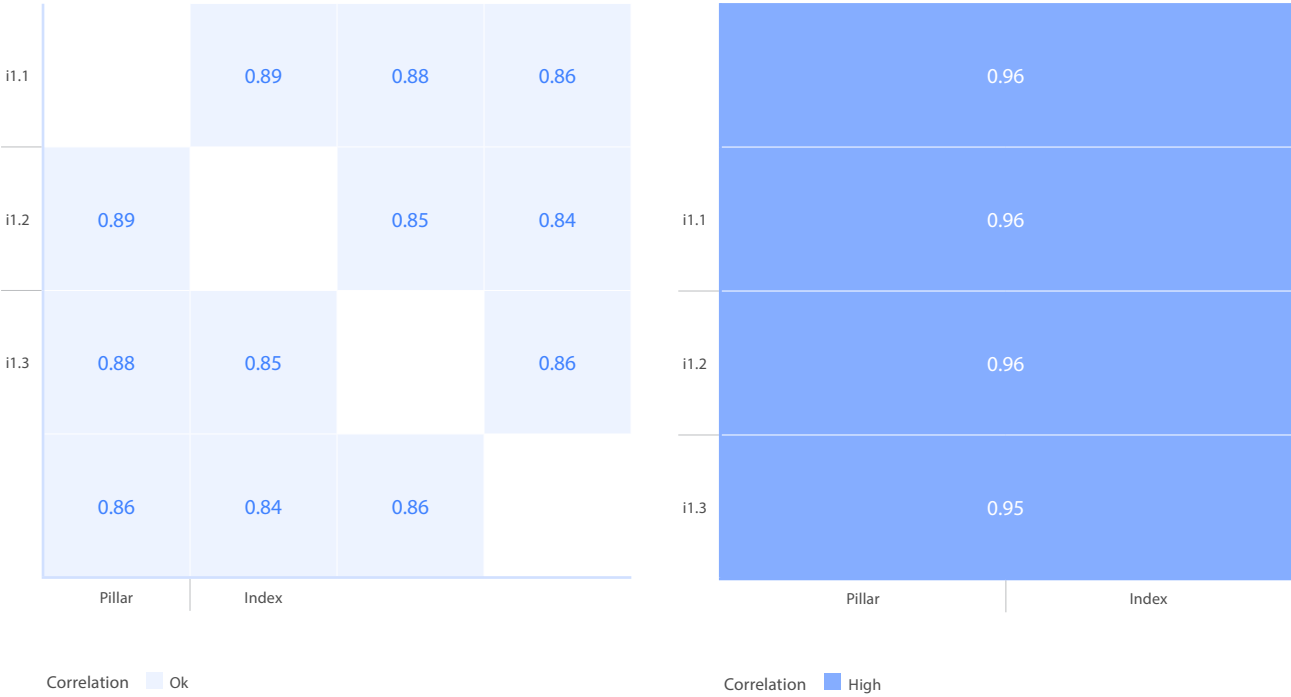
Source: European Commission's Joint Research Centre, 2024.
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green, pink, yellow and orange

Figure 4 Correlations between sub-pillars, pillars and NRI 2024



Source: European Commission's Joint Research Centre, 2023. Correlations between pillars and NRI 2024
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green, pink, yellow and orange

Figure 5 Correlations between pillars, and between pillars and NRI 2024



Source: European Commission's Joint Research Centre, 2024. Correlations between pillars and NRI 2024
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in blue

Impact of modifications in the NRI structure on correlations

The structure of the NRI 2024 underwent some modifications compared to that of the NRI 2023, with four indicators being replaced by new ones and four indicators being removed. The changes with respect to removal and replacement of indicators are concentrated in sub-pillars i2.2. “Businesses” and i4.1. “Economy”. The rationale between these changes related to discussions about the conceptual fit of the changed indicators. In addition, the weights of four indicators of the “Impact” Pillar (i4) (i4.2.3 “Income inequality”, i4.2.4 “Healthy life expectancy at birth”, i4.3.1 “SDG 3: Good Health and Well-Being”, and i4.3.5 “SDG 11: Sustainable Cities and Communities”) were reduced, departing from the equal weighting scheme within sub-pillars i4.2. and i4.3. This was conducted to improve the correlation structure within these sub-pillars and with higher aggregates. The discussion in the section aims to examine the impact of these modifications on the correlation structure of the NRI. For the first part concerning indicator removals and replacements, we compare the current structure of the NRI as presented in the previous sub-section with the previous edition structure (Ravanas, Kovacic and Caperna, 2023). For the second part concerning the change in weights, we compare the current correlation structure of the “Impact” Pillar with a counterfactual scenario in which equal weights are applied to all indicators.

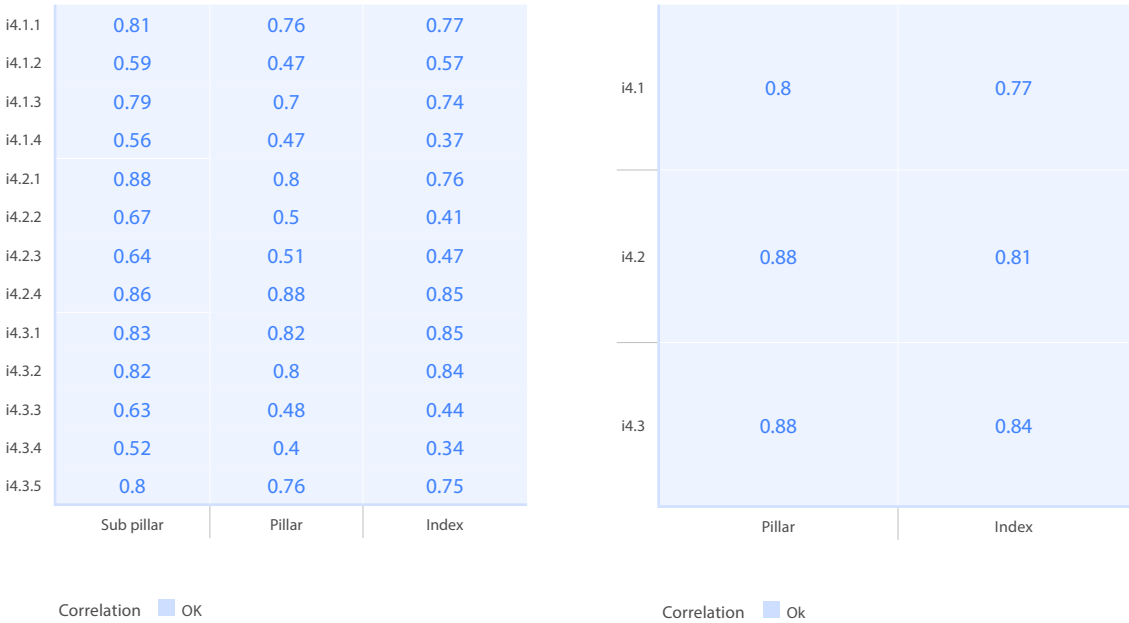
Within sub-pillar i2.2, two indicators were replaced and one indicator was removed. Comparing with the previous edition of the index, this appears to have affected the correlation structure within the sub-pillar slightly adversely but not critically. In particular, the newly added indicator i2.2.2 “Number of venture capital deals invested in AI” has low or insignificant correlations with the other indicators of the sub-pillar, while the replaced indicator (“GERD financed by business enterprise”) was adequately (i.e., above 0.3 and below 0.92) correlated with other indicators within the i2.2 pillar. The newly added indicator i2.2.4 “Public cloud computing market scale” has a less balanced correlation structure with the other indicators of the sub-pillar compared to its predecessor (“GERD performed by business enterprise”, i2.2.5 at the time), and it is highly correlated with indicator 2.2.3. “Annual investment in telecommunication services” (correlation 0.89). However, this does not result in indicators i2.2.3 and i2.2.4 being over-represented in the new sub-pillar i2.2, as we can see from the correlations in **Figure 2**. Correlations between indicators and their aggregates (sub-pillars, pillars and index). The new indicator i2.2.2 is slightly under-represented compared to other indicators in the final NRI 2024 but its correlation with NRI is 0.47, suggesting that under-representation is not critical.

Within sub-pillar “Economy” (i4.1), one indicator was replaced and two indicators were removed. Comparing with the previous edition of the index, this appears to have weakened the coherence within this sub-pillar but not critically. Particularly, the removal of former indicators i4.1.1. High-tech and medium-high-tech manufacturing and i4.1.2. High-tech exports has reduced the number of strong and positive correlations within this sub-pillar, since these two indicators were strongly and positively correlated with all other indicators in the “Economy” sub-pillar in the NRI 2023. The indicator i4.1.4. “ICT services exports” remains part of the sub-pillar in the NRI 2024 edition, resulting in a limited number of strong and positive correlations within the sub-pillar. However, the representation of all indicators in higher aggregates (see **Figure 2**. Correlations between indicators and their aggregates (sub-pillars, pillars and index) remains strong, with the exception of indicator i4.1.4.

Overall, the correlation analysis confirms that the removal and replacement of indicators on conceptual grounds in the Economy sub-pillar did not have an adverse impact on the statistical coherence of the NRI. JRC-COIN suggests to keep monitoring the performance of the indicators with weak correlations (i.e., i.2.2.2 and i.4.1.4) and, if possible, consider alternative indicators that would improve the correlation structure within the respective sub-pillars (i.e., i2.2 and i4.1).

Figure 6 shows the correlation of indicators of the “Economy” Pillar with their aggregates and the correlations across the three sub-pillars in the “Economy” Pillar under a counterfactual scenario where all the indicators within the “Economy” pillar received equal weights. Comparing these with the respective numbers in **Figure 2** and **Figure 3** we see that the reduction of weights of indicators i4.3.1 “SDG 3: Good Health and Well-Being” and i4.3.5 “SDG 11: Sustainable Cities and Communities” has resulted in a lower correlation of them with the sub-pillar i4.3 compared to the counterfactual scenario where weights were not reduced, and this has eventually resulted in a more balanced representation of all the five indicators in their aggregate i4.3. On the other hand, the change in the weights of indicators i4.2.3 “Income inequality” and i4.2.4 “Healthy life expectancy at birth” has had a slight effect of the opposite direction, as the representation of indicators within the sub-pillar i4.2 in **Figure 2** is slightly more unbalanced (and with one indicator -i.4.2.1- having a very high correlation with the sub-pillar) compared to the counterfactual scenario depicted in **Figure 6**. However, the reduction of weights also results in a more balanced representation of the three sub-pillars in the “Economy” pillar and in the resulting NRI compared to the counterfactual scenario. Thus, the statistical analysis suggests that the change in weights had in general a slight positive effect on the correlation structure within the “Economy” pillar.

Figure 6 Correlation structure within Pillar 4 with equal weights applied to the indicators of sub-pillars 4.1. and 4.3.



Source: European Commission’s Joint Research Centre, 2024.
 Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in blue.

Principal components analysis of the NRI 2024

A further step in the analysis of statistical coherence is principal component analysis (PCA). The aim of principal component analysis is to assess to what extent the conceptual framework is confirmed by statistical approaches. The desired outcome is to observe only one principal component with an eigenvalue greater than 1, and able to explain more than 70% of the total variance. The achievement of these thresholds suggests the presence of a common, unidimensional phenomenon underlying the four pillars of the NRI.

The four pillars share a single statistical dimension that summarizes a very high share (89.81%) of the total variance (Table 3). In addition, the four loadings (correlation coefficients) of these pillars are almost equal (0.96 to 0.94). This similarity suggests that the four pillars make roughly equal contributions to the variation of the NRI 2024 (ranging from 25.5% to 24.5%). The second principal component is much less influential since it accounts for only 4.23% of the total variance.

Figure 7 illustrates the projections of the pillars onto the plane spanned by the first two principal components in a “factor map”. The correlation between each pillar and the principal component is given by the projection of the NRI 2024 vector onto the component axis. The pillars trajectories are very close to each other, suggesting that there may be some risk of redundancy at the index level, which offers a significant room for simplification in accordance with the evidence obtained in the correlation analysis.

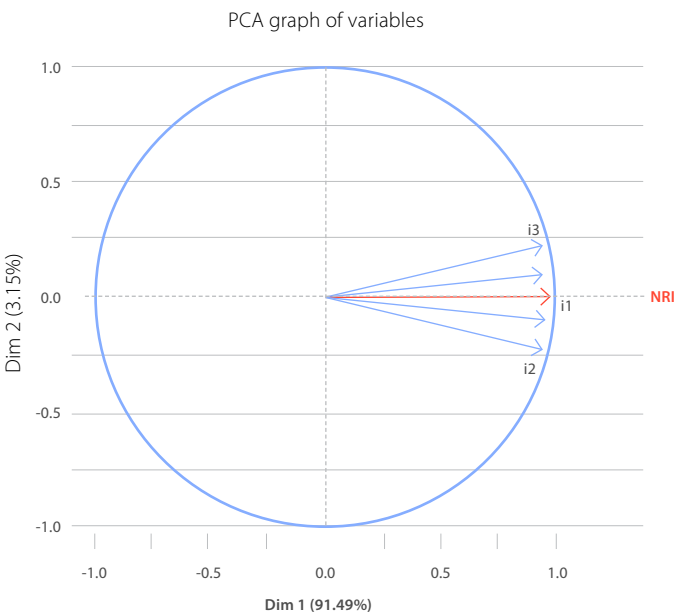
Additional PCA analysis was conducted at the pillar level. These results confirm the presence of a single latent dimension in each of the four pillars (one component with an eigenvalue greater than 1 and ranging from 2.6 to 2.1) that captures between 87.5% (“Governance” pillar) and 68.4% (“Impact” pillar) of the total variance in the three underlying sub-pillars. The respective factor maps are presented in Figure 8 and are in line with the results of the correlation analysis.

Table 3 Eigenvalues and explained variance for the first ten principal components

PC	Eigenvalue	% of variance	Cumulative % of variance
PC1	3.59	89.81	89.81
PC2	0.17	4.23	94.05
PC3	0.14	3.46	97.51
PC4	0.10	2.49	100.00

Source: European Commission’s Joint Research Centre, 2024.

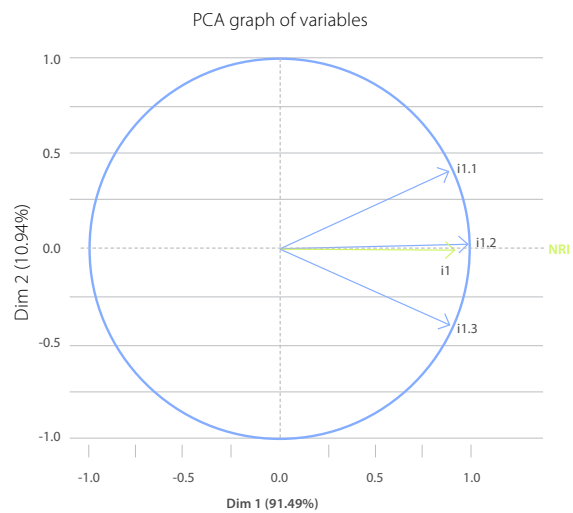
Figure 7 Factor map of the four pillars and comparison with the overall NRI 2024



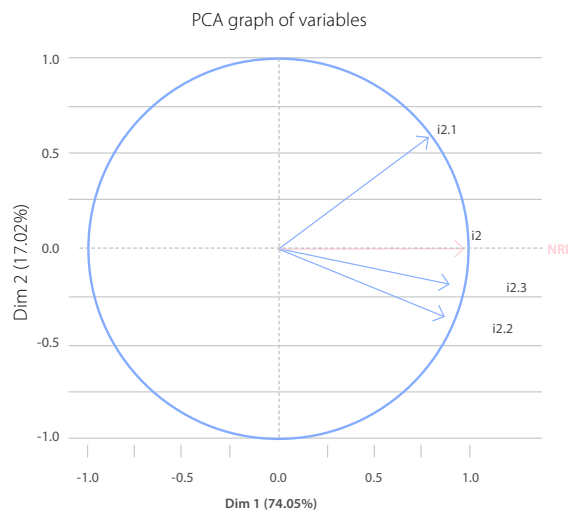
Source: European Commission’s Joint Research Centre, 2024.

Figure 8 Factor maps of the relationship between sub-pillars and their respective pillar

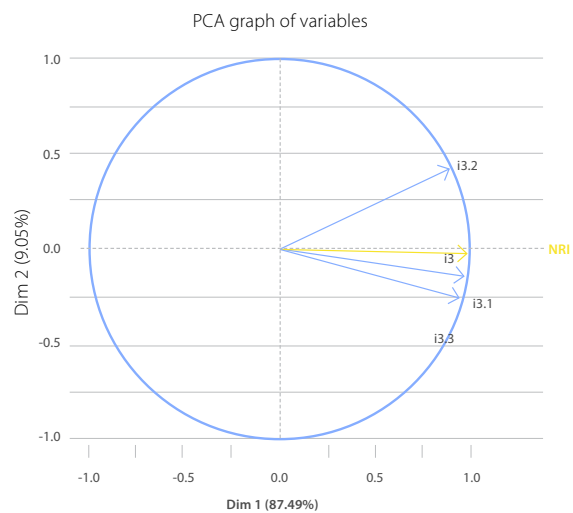
Technology pillar (i1)



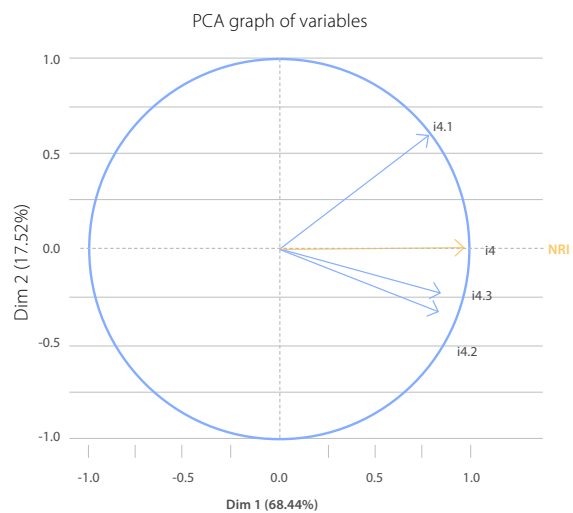
People pillar (i2)



Governance pillar (i3)



Impact pillar (i4)



Source: European Commission's Joint Research Centre, 2024

Added value of the NRI 2024

The main objective of this section is to further investigate the added value of sub-pillars by exploring whether the four pillars reveal aspects of countries’ network readiness that are not observed by the final ranking .

Table 4 presents the differences in country rankings between the NRI and each of its four sub-pillars. These results suggest that the percentage of countries where the NRI 2024 rankings differ by 15 to 30 positions with respect to the pillars ranges from 14.3% in the case of pillar i1 (“Technology”) to 18% in the case of pillar i2 (“People”). In other words, NRI 2024 rankings depict aspects of countries’ network readiness that do not emerge from each of the four single pillars for at least 14% of the countries considered. Notice also that the share of countries with shifts larger than 30 positions is in general negligible and is larger for the “Impact” pillar. This suggests that there is enough variation between the NRI and the pillar rankings to reveal aspects of countries’ network readiness that do not emerge from a single pillar, but not so much variation to suggest a lack of concordance between the NRI and any of its pillars.

Even though the presence of a strong correlation among the four aggregates of the NRI does not necessarily represent an issue calling for immediate action, it points towards opportunities for simplification in the index structure. Therefore, to improve readability, JRC-COIN would suggest considering the possibility of excluding some elements of the index in future editions without jeopardising the integrity of the pillars or the overall index.

Impact of modelling assumptions on the NRI 2022 results

Uncertainty analysis

The NRI, as with any other composite indicator, is partially the result of certain methodological decisions taken during development. A fundamental step in the statistical analysis of a composite indicator is to assess the effect of such modelling assumptions on the country rankings. Despite the efforts in the development process, there is an unavoidable subjectivity (or uncertainty) in the resulting choices. The effect of this subjectivity can be explored by comparing the results obtained under alternative modelling assumptions. The literature on this topic⁵ suggests assessing the robustness of the index by means of a Monte Carlo simulation and by applying a multi-modelling approach. This also assumes “error-free” data as possible errors have already been corrected in the preliminary stage of the index construction before the audit.

The Network Readiness Index analysed in this document is the outcome of several modelling choices including, among other things: (i) the underlying theoretical framework; (ii) the indicators selected; (iii) the treatment of potential outliers, (iv) the imputation of missing values; (v) the weights assigned; and (vi) the aggregation method. Some of these choices may be based on expert opinion or other consideration driven by statistical analysis or the need to ease communication or draw attention to specific issues.

Table 4 Distribution of differences between pillars and NRI 2024 rankings

Shift respect to NRI	Technology	People	Governance	Impact
More than 30 positions	1.50%	2.30%	0.80%	5.30%
Between 15 and 30 positions	14.30%	18.00%	15.00%	15.80%
6 to 15 positions	36.10%	39.80%	42.10%	39.10%
Up to 5 positions	42.90%	36.80%	36.10%	32.30%
0 positions	5.30%	3.00%	6.00%	7.50%

Source: European Commission’s Joint Research Centre, 2024.

This section aims to examine the impact of varying some of these assumptions within a range of plausible alternatives by means of an uncertainty analysis. The objective is therefore to try to quantify the uncertainty in the ranks of NRI 2024, which can demonstrate the extent to which countries can be differentiated by their scores and ranks. The modelling issues considered in the robustness assessment of the NRI 2024 are:

- the aggregation formula; and
- the pillars' weights.

The following paragraphs deal with each of these in turn.

Aggregation formula. The developers of the NRI 2024 opted for the arithmetic aggregation formula with an equal weight given to each of the four pillars, which implies perfect compensability across the pillars, allowing for an outstanding performance in some aspects to completely balance the weaknesses in others and vice-versa. In other words, arithmetic averaging treats countries with outstanding high and low results in the same way as it treats a more “balanced” countries showing average results.

To assess the impact of this compensability issue, the JRC-COIN relaxed the strong perfect substitutability assumption inherent in the arithmetic average and considered instead the geometric average, which is a partially compensatory approach that rewards economies with balanced profiles and motivates economies to improve in the NRI pillars in which they perform poorly, and not just in any NRI pillar. The comparison of the two aggregation approaches is thus able to highlight countries with unbalanced profiles, which are assessed more favourably by arithmetic averaging compared to geometric averaging.

Weights. The Monte Carlo simulation conducted by the JRC-COIN comprised 1 000 runs of different sets of weights for the four pillars. The weights are the result of a random extraction based on uniform continuous distributions centred in the reference values (0.25) plus or minus 20% of these values.

As summarised in Table 5, four models were tested comparing the different aggregation formulas, the different imputation methods and applying the 1,000 runs of different sets of weights resulting in a total of 2,000 runs of simulations.

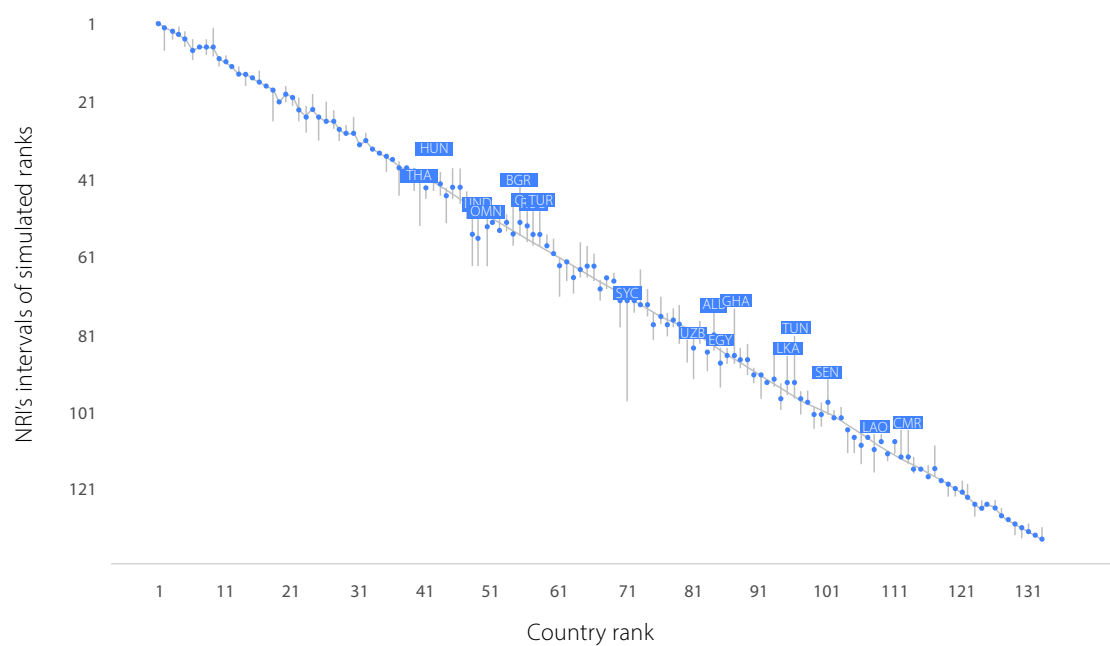
The results obtained from the robustness analysis are graphically summarised in Figure 9, which presents the countries' median ranks (blue dots) and 95% intervals computed across the 2,000 Monte Carlo simulations. Countries are ordered from best to worst according to their NRI 2024 rank and for each country, the error bars (grey lines) represent the 95% interval across all 2000 simulations, that is, from the 5th to the 95th percentile of the country's rank among all the simulations.

Table 5 Alternative assumptions considered in the analysis

	Reference	Alternative
I. Aggregation formula	Arithmetic average	Geometric average
II. Weighting system	Equal weights	Varying
Technology	0,25	U [0.2; 0.3]
People	0,25	U [0.2; 0.3]
Governance	0,25	U [0.2; 0.3]
Impact	0,25	U [0.2; 0.3]

Source: European Commission's Joint Research Centre, 2024.

Figure 9 Robustness analysis: NRI 2024 rank vs median rank and 95% intervals.



Source: European Commission's Joint Research Centre, 2024.

The NRI 2024 ranks are shown to be representative of a plurality of scenarios and satisfactorily robust to changes in modelling assumptions. Considering the median rank across the simulated scenarios as being representative of these scenarios and comparing it with the (nominal) NRI 2024 rank, we find that the two are quite close (less than four positions away) for the majority (94 out of 133 or 70.7%) of the considered countries. This suggests that NRI 2024 is a satisfactorily reliable and stable summary measure, and that a country's NRI rank sufficiently represents a wide range of alternative scenarios for the majority of the countries. Only for three countries does the NRI rank differ from the median Monte-Carlo rankings by more than 10 positions (Indonesia, Seychelles, and Tunisia).

Furthermore, the majority of the countries' ranks (113 out of 133) vary ten or less positions across simulations. There are 20 countries⁶ showing a simulated interval larger than ten positions. These countries are labelled with their acronyms in **Figure 9**. These intervals are however smaller than 20 positions for all countries but one (Seychelles). The NRI ranking of these countries should therefore be considered with some caution, particularly for Seychelles.

Table 6 reports the NRI 2024 country ranks along with the simulated intervals (the central 95 percentiles observed among the 2,000 scenarios) for full transparency and information, in order to better appreciate the robustness of these ranks to the computation methodology and to facilitate analysis of the behaviour of specific countries in response to perturbations.

The information contained in **Table 6** can also be used to provide more detailed information about the countries' NRI rankings. By comparing a country's nominal rank with the interval provided one can identify countries for which the modelling choices in NRI development are more favourable (those for which the nominal ranking coincides with the interval's upper bound) and countries which are relatively less favoured by those choices (those for which the nominal ranking coincides with the interval's lower bound). There are 25 countries for which the NRI rank coincides with the simulated interval's upper bound⁷, suggesting that their rank would most likely worsen if the NRI modelling assumptions are changed. On the other hand, there are 22 countries⁸ which would most likely see their ranking improving if some modelling assumptions of the NRI were to change, since their NRI rank coincides with the interval's lower bound. Both these groups of countries are relatively evenly spread across the NRI ranking, meaning that the NRI methodological choices do not tend to benefit countries with higher or lower NRI ranks more than others.

Table 6 NRI 2024 ranks and 95 percent confidence intervals

ISO	Index	interval	ISO	Index	interval	ISO	Index	interval
USA	1	[1-1]	SVK	46	[38-46]	BIH	90	[89-93]
SGP	2	[2-8]	SRB	47	[44-49]	RWA	91	[90-96]
FIN	3	[3-5]	IDN	48	[47-63]	CIV	92	[92-94]
SWE	4	[2-5]	IND	49	[47-62]	JAM	93	[84-94]
KOR	5	[3-7]	OMN	50	[49-63]	PRY	94	[93-100]
NLD	6	[5-10]	BHR	51	[49-53]	LKA	95	[84-95]
CHE	7	[6-8]	CRI	52	[48-55]	TUN	96	[79-97]
GBR	8	[5-9]	URY	53	[51-53]	PAK	97	[95-101]
DEU	9	[2-9]	CHL	54	[49-57]	CPV	98	[95-99]
DNK	10	[10-11]	BGR	55	[41-55]	SLV	99	[99-105]
CAN	11	[9-11]	GRC	56	[46-57]	DZA	100	[98-102]
JPN	12	[11-12]	ROU	57	[46-58]	SEN	101	[90-101]
ISR	13	[13-14]	TUR	58	[46-58]	BOL	102	[100-102]
NOR	14	[13-16]	HRV	59	[55-59]	TZA	103	[99-103]
AUS	15	[15-15]	MUS	60	[56-60]	VEN	104	[104-111]
FRA	16	[13-17]	KAZ	61	[61-70]	GTM	105	[105-110]
CHN	17	[16-18]	MEX	62	[61-67]	TTO	106	[105-114]
EST	18	[18-25]	PHL	63	[63-69]	HND	107	[106-108]
IRL	19	[19-22]	COL	64	[57-66]	LAO	108	[104-115]
AUT	20	[17-20]	MNE	65	[58-66]	NPL	109	[103-109]
BEL	21	[20-22]	ARM	66	[60-67]	KHM	110	[109-113]
NZL	22	[20-25]	KWT	67	[67-71]	BEN	111	[107-111]
LUX	23	[22-28]	GEO	68	[65-68]	NGA	112	[103-113]
ESP	24	[19-24]	ARG	69	[65-69]	CMR	113	[103-114]
ISL	25	[24-31]	MDA	70	[70-79]	BWA	114	[112-117]
ITA	26	[21-27]	SYC	71	[70-98]	ZMB	115	[113-116]
CZE	27	[23-27]	ZAF	72	[69-73]	NIC	116	[114-118]
ARE	28	[27-31]	KEN	73	[63-74]	NAM	117	[109-117]
HKG	29	[27-30]	JOR	74	[70-74]	UGA	118	[117-118]
PRT	30	[25-30]	AZE	75	[75-82]	MWI	119	[119-121]
LTU	31	[31-33]	MAR	76	[71-77]	MLI	120	[119-122]
POL	32	[29-32]	MKD	77	[75-81]	ZWE	121	[118-122]
MLT	33	[32-33]	PAN	78	[74-79]	ETH	122	[119-122]
SVN	34	[34-35]	IRN	79	[73-81]	LSO	123	[123-127]
SAU	35	[35-39]	DOM	80	[79-88]	MRT	124	[123-126]
MYS	36	[36-37]	UZB	81	[80-91]	MDG	125	[124-125]
LVA	37	[36-45]	ECU	82	[77-83]	MOZ	126	[123-126]
QAT	38	[37-39]	PER	83	[81-89]	BFA	127	[125-128]
CYP	39	[38-43]	ALB	84	[73-84]	AGO	128	[127-128]
THA	40	[40-52]	EGY	85	[82-93]	SLE	129	[129-131]
RUS	41	[41-46]	KGZ	86	[84-88]	TCO	130	[130-133]
HUN	42	[33-44]	GHA	87	[72-88]	COD	131	[129-131]
UKR	43	[39-45]	MNG	88	[83-89]	BDI	132	[131-132]
BRA	44	[43-51]	BGD	89	[83-90]	YEM	133	[130-133]
VNM	45	[38-46]						

Source: European Commission's Joint Research Centre, 2024.

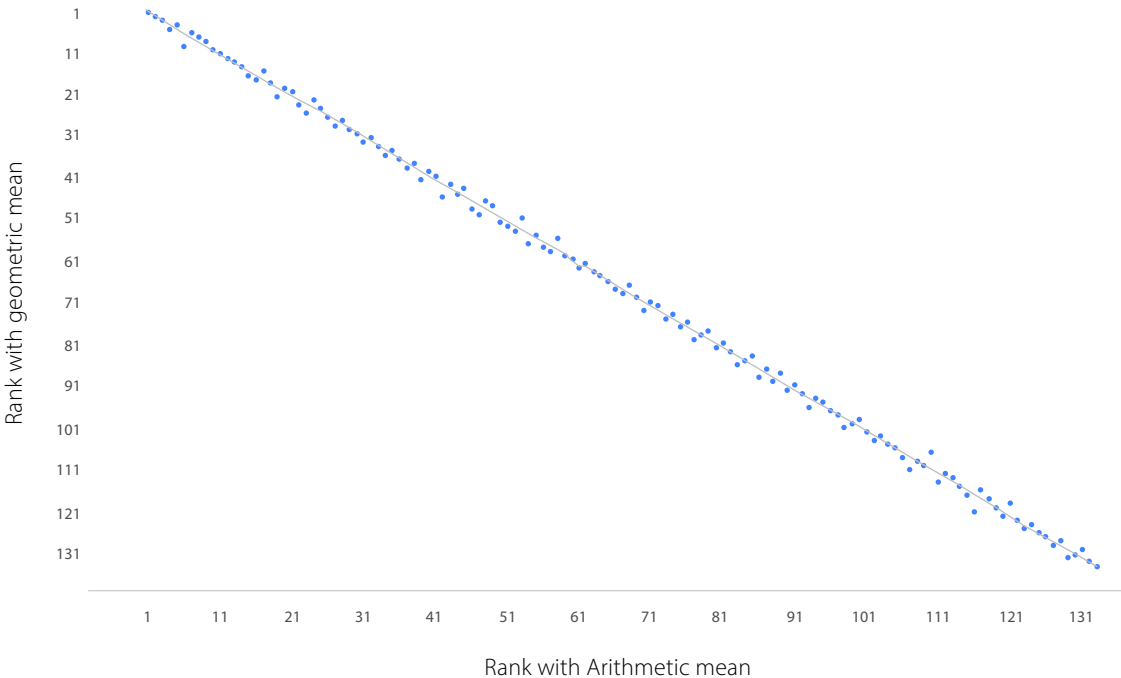
Sensitivity analysis

Complementary to the uncertainty analysis, sensitivity analysis has been used to identify which of the modelling assumptions have the highest impact on certain country ranks.

Figure 10 compares the ranks derived from NRI 2024 with those that would have been obtained by changing the aggregation procedure from arithmetic to geometric mean for the final aggregation of the four Pillars to the NRI. This comparison permits us to examine the extent to which the variability in the rank intervals is originating from the modelling assumption underlying the aggregation procedure or by the weights’ perturbation. When countries are placed under the main diagonal their values are worse in rank positions when computed with the geometric mean. This is probably the case of countries penalised by the geometric mean because of their unbalanced profiles. One such example is Nicaragua, which is ranked 116th when the arithmetic aggregation is used, and 120th when the geometric aggregation is employed.

The results suggest that the aggregation formula does not significantly affect the NRI 2024 ranks. In particular, the average change in ranks between the two scenarios is roughly equal to one rank position (1.02), suggesting that, on average, a country gains or losses on average about one rank position when the geometric aggregation is applied instead of the arithmetic one. This result is a direct consequence of the very strong correlation structure described in Section 4. In essence, when the Pillars are so strongly correlated, it is unlikely to have countries with very unbalanced values across the Pillars. Only for two countries there is a difference in ranks larger than 3 positions: Nicaragua, which loses four positions when the geometric average is used, and Cambodia, which gains four positions.

Figure 10 Sensitivity Analysis: Comparison of ranks according to arithmetic and geometric mean.



Source: European Commission’s Joint Research Centre, 2024.

Best-practice frontier in the NRI by data envelopment analysis

This section aims to examine the following question: Is there a way to benchmark economies' multidimensional performance on network readiness without imposing a fixed and common set of weights to the four pillars of the NRI - Technology, People, Governance, Impact – which may not be fair to a particular country/economy?

Several network readiness-related policy issues at the national level entail an intricate balance between global priorities and economy-specific strategies. In addition, some countries may be facing harsher “environmental” conditions than others, which may prevent their network readiness strategies from being as effective as designed, while others may benefit from some particular factor or condition that enables policies related to connectivity to be more effectively applied. Comparing the multidimensional performance on network readiness by subjecting all the 133 economies included in the NRI to a fixed and common set of weights of the four NRI pillars may hinder universal acceptance of the index on the grounds that the particular weighting scheme selected to compute the Index might not be fair to certain economies, for reasons such as those highlighted above. A useful alternative to the fixed and common weight scheme is to give to each country the “benefit-of-the-doubt” to select the aggregation weights that better reflect the underlying conditions that may be affecting connectivity policy implementation, and, to some extent, the countries' own choices to target a particular network readiness dimension over others. This is conducted through data envelopment analysis (DEA), a performance evaluation method widely applied in real decision-making settings, in which each country is assigned a set of endogenously determined weights that maximize its overall NRI score within a given dataset of countries.

In this type of analysis, the assumption of fixed pillar weights common to all 133 economies is relaxed, whereby country-specific weights that maximize a country's network readiness score are determined endogenously by a special form of DEA which is known as the Benefit-of-the-Doubt” (BoD) model.¹⁰ In theory, each country/economy is free to decide on the relative contribution of each network readiness pillar to its score, so as to achieve the best possible score in a computation that reflects its own performance across network readiness dimensions. In practice, the DEA method assigns a higher (or lower) contribution to those pillars in which a country/economy is relatively strong (or weak). This is effectively done by comparing the country with other sample countries having a similar mix of performance across the four NRI pillars. Reasonable constraints are applied to the weights to

preclude the possibility of an economy achieving a perfect score by assigning a zero weight to pillars in which it is relatively weaker: for each economy, the share of each pillar score (i.e., the pillar score multiplied by the DEA weight over the total score) has upper and lower bounds of 10 percent and 40 percent, respectively. The DEA score is then measured as the weighted average of all four network readiness pillar scores, where the weights are the economy-specific DEA weights, compared to the best performance among all other economies with those same weights. The DEA scores, ranging between 0 (lowest) and 1 (highest) can be interpreted as a measure of the “distance to the best-practice frontier.” Particularly, the inverse of these scores is interpreted as the percentage increase that a country needs to make in each of the four NRI pillars in order to reach this best-practice frontier.

Table 7 presents the pillar shares and DEA scores for the top 25 economies in the NRI 2024, next to the NRI 2024 ranks. All pillar shares are in accordance with the starting point of granting leeway to each economy when assigning shares, while not violating the upper and lower bounds (10 percent and 40 percent). The pillar shares are quite diverse, reflecting the different national strategies for network readiness. These pillar shares serve also to reflect different economies' comparative advantage in certain NRI pillars vis-à-vis all other economies and all pillars. For example, three countries – the United States of America, Singapore, and Finland- obtain a perfect DEA score of 1.00 and hence they are all on the best-practice frontier when it comes to network readiness. In the case of the United States, this is achieved by assigning the maximum possible share (40 percent) of its DEA score to the Technology and Governance pillars, while 10 percent of the USA's DEA score comes from the People and Impact pillars. Having somewhat different strengths, Finland has assigned 40 percent of its DEA score to the Governance and Impact pillars, while the remaining 10 percent of its DEA score comes from respectively the Technology and People pillars. This most favourable allocation of weights across the four Pillars enables Finland to reach the maximum possible DEA score of one and be designated as one of the best-practice countries by DEA, while it was ranked 3rd by the NRI index. The top three countries are closely followed by Sweden (0.99), Republic of Korea (0.99) and Netherlands (0.97) in terms of efficiency. **Figure 11** plots the distribution of the DEA and the NRIS scores. The two alternative methods for obtaining the NRI composite index are quite close to each other for all 133 economies (Pearson correlation of 0.998).

Table 7 Pillar shares and efficiency scores for the top 25 economies in the NRI 2024

	Pillar				Best-practice frontier score (DEA)	Best-practice frontier rank (DEA)	NRI rank	Difference NRI rank
	Technology	People	Governance	Impact				
United States of America	0,40	0,10	0,40	0,10	1,00	1	1	0
Singapore	0,10	0,22	0,34	0,34	1,00	1	2	1
Finland	0,10	0,10	0,40	0,40	1,00	1	3	2
Sweden	0,19	0,10	0,31	0,40	0,99	4	4	0
Republic of Korea	0,10	0,40	0,10	0,40	0,99	4	5	1
Netherlands	0,18	0,10	0,40	0,32	0,97	6	6	0
Switzerland	0,23	0,10	0,27	0,40	0,96	7	7	0
United Kingdom	0,22	0,10	0,28	0,40	0,95	9	8	-1
Germany	0,22	0,10	0,28	0,40	0,95	9	9	0
Denmark	0,17	0,10	0,40	0,33	0,96	7	10	3
Canada	0,18	0,10	0,40	0,32	0,94	12	11	-1
Japan	0,10	0,40	0,10	0,40	0,93	13	12	-1
Israel	0,10	0,40	0,10	0,40	0,95	9	13	4
Norway	0,17	0,10	0,40	0,33	0,92	14	14	0
Australia	0,10	0,19	0,40	0,31	0,92	14	15	1
France	0,10	0,20	0,40	0,30	0,89	19	16	-3
China	0,10	0,40	0,10	0,40	0,90	16	17	1
Estonia	0,10	0,18	0,40	0,32	0,90	16	18	2
Ireland	0,10	0,10	0,40	0,40	0,90	16	19	3
Austria	0,17	0,10	0,40	0,33	0,87	22	20	-2
Belgium	0,17	0,10	0,40	0,33	0,87	22	21	-1
New Zealand	0,10	0,10	0,40	0,40	0,88	20	22	2
Luxembourg	0,15	0,10	0,40	0,35	0,88	20	23	3
Spain	0,10	0,19	0,40	0,31	0,86	24	24	0
Iceland	0,10	0,19	0,40	0,31	0,85	25	25	0

Source: European Commission's Joint Research Centre, 2024.

Note: The results are based on the "Benefit-of-the Doubt" model, a special form of Data Envelopment Analysis. Pillar shares are expressed in percentages, bounded by 0.10 and 0.40 for all four pillars of network readiness - Technology, People, Governance, Impact. Instead, in the NRI 2024, the four pillars each have a fixed weight of 0.25. Darker colors represent a higher contribution of those pillars to the overall DEA score as a result of an economy's stronger performance in those pillars, which may help to provide evidence for economy-specific strategies. Economies are ordered by their Best-practice Frontier score.

Table 8 presents the arithmetic average of the weights chosen by the countries in the BoD model for each of the four NRI pillars and the weights used by the NRI, which are common across countries and pillars and hence equal to 0.25 for all countries. By comparing these two sets of weights we see that, if countries are given the “benefit-of-the-doubt” to choose the weights (and subject to reasonable restrictions), they place on average larger weights to the “Impact” and the “Governance” pillars compared to the equal weighting scheme of the NRI, and relatively smaller weights to the “Technology” and “People” pillars. This does not mean that one of the weight sets should be preferred over another, but rather that the two

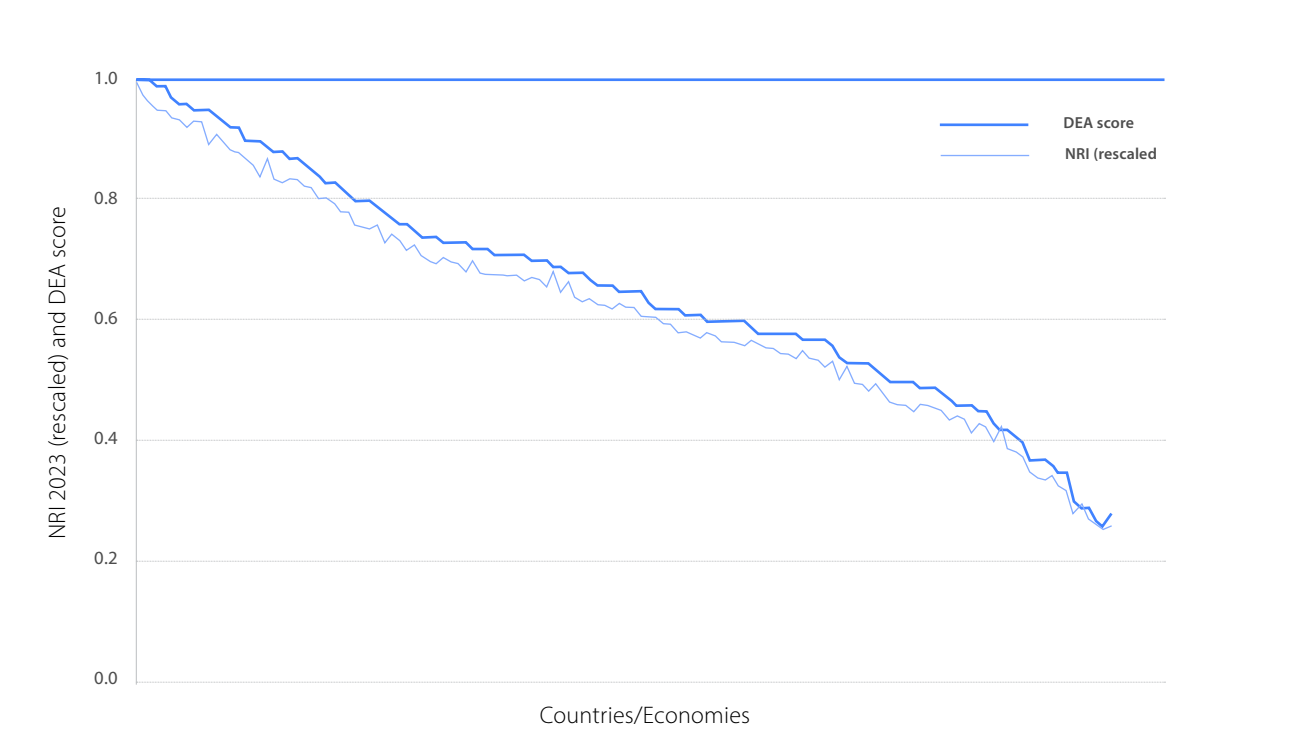
sets provide different kinds of information to the user. The BoD-derived weights are data-driven and hence represent a “positive” view of the country performance. In other words, they show “what is” or how country performance fares on average across the four pillars. The weights reflect the fact that countries tend to score, on average, better in the “Impact” and “Governance” pillars compared to the other two. On the other hand, the equal NRI weights reflect a normative view of performance. In other words, they show “what should be” according to expert views. Equal weights reflect the views that adequate network readiness is achieved with a balanced performance across the different dimensions of network readiness

Table 8 Pillar weights in the NRI and DEA

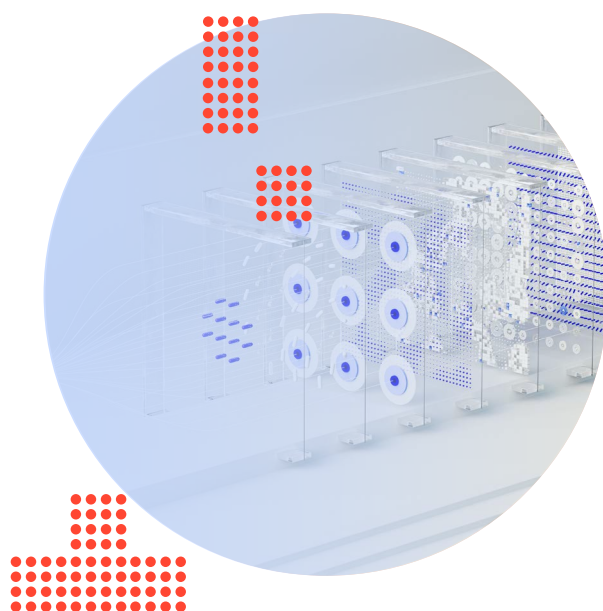
	Pillar			
	Technology	People	Governance	Impact
Nominal NRI weights	0,25	0,25	0,25	0,25
Average DEA weights	0,17	0,21	0,29	0,33

Source: European Commission’s Joint Research Centre, 2024.
 Note: The DEA results are based on the “Benefit-of-the Doubt” model, a special form of Data Envelopment Analysis. Weights are normalized by dividing with their sum for each country and then averaged.

Figure 11 NRI 2024 scores and DEA “distance to the best-practice frontier” scores



Source: European Commission’s Joint Research Centre, 2024.
 Note: For comparison purposes, the NRI scores were rescaled by dividing them by the result of the best performer in the overall NRI 2024 (the United States).



● Photo by Google DeepMind

The JRC statistical audit complements the extensive work carried out by the developers of the NRI 2024 to suggest improvements in terms of data characteristics, structure and methods used. The analysis aims to ensure the transparency of the index methodology and the reliability of the results.

Conclusions

The JRC statistical audit complements the extensive work carried out by the developers of the NRI 2024 to suggest improvements in terms of data characteristics, structure and methods used. The analysis aims to ensure the transparency of the index methodology and the reliability of the results.

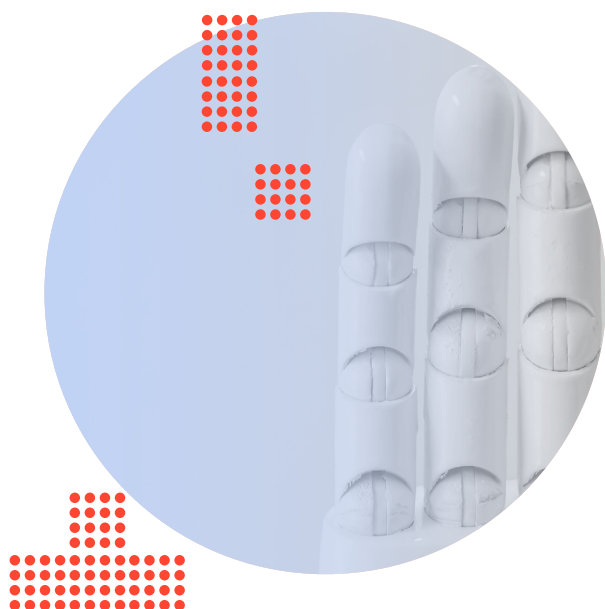
The NRI 2024 represents a sound index in terms of statistical consistency and uncertainty in ranking. It demonstrates that ICT deployment is a multifaceted phenomenon where technology, users, and several aspects of ICT regulation go hand in hand. The index framework underwent certain changes where indicators have been removed or replaced on the basis of their limited association with the concept of digital and network readiness. These changes highlight the developer's determination in revising the index to keep up with current changes in the field of ICT deployment. The data coverage of the framework is generally satisfactory. Most indicators contain an acceptable level of missing values. Nevertheless, four indicators are characterized by a high presence of missing values, two of which are well above the suggested exceptional limit of 40%. The developer's approach is not to impute missing values, which is a common practice in relevant contexts and justified on grounds of transparency and replicability. However, JRC-COIN suggests paying particular attention to the aforementioned indicators in future editions of the index and consider replacing them if improving their country coverage proves difficult.

The index is statistically well balanced with respect to its indicators, sub-pillars, and pillars. Correlations between each pillar and the respective sub-pillar are mostly significant and positive. Most of the indicators are meaningfully correlated with the index and relative pillars. JRC-COIN suggests that the developers keep monitoring the performance of problematic indicators i.2.2.2 and i.4.1.4 and, if possible, consider searching for alternative indicators in future editions of the index, which would improve the correlation structure within sub-pillars i.2.2 and i.4.1. The very strong correlations between some NRI 2024 components and between the four pillars and the index may be a sign of redundancy of information in the NRI 2023. This possibility is further confirmed by the analysis of added value of the NRI 2024 rankings. The suggestion is to use the index's very stable and correlated structure to explore and open up to the simplification of the framework or to some even more specific aspects of the network economy.

An analysis of the effect that changes in the NRI structure (indicators removal and replacement) had on the correlation structure of the NRI revealed that the statistical coherence of the index was not affected critically. However, JRC-COIN suggests closely monitoring the indicators within sub-pillar i.2.2. (and especially the newly added indicator i.2.2.2) since its correlation has relatively weakened. Similarly, an assessment of changes in the weights of four indicators in this edition of the NRI revealed that they resulted in a relatively more balanced correlation structure within sub-pillar 4.1.

Finally, JRC-COIN analysed the robustness of the index with respect to the selected weights and aggregation formula at pillar level. The results of the uncertainty analysis show that NRI 2024 is a reliable summary measure and that the majority of the country rankings are robust to changes in modelling assumptions. The rankings of a limited number of countries should however interpreted with some caution.

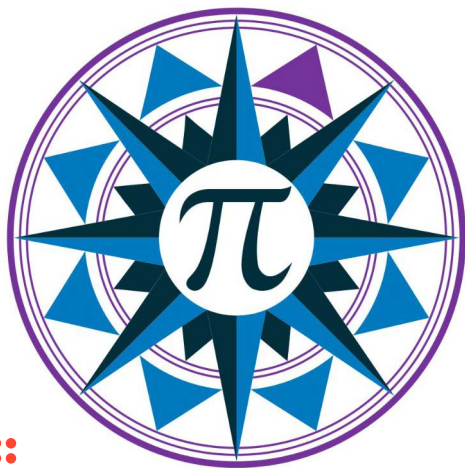
All things considered, the present JRC-COIN audit findings confirm that the NRI 2024 is a reliable tool with a statistically coherent framework and acknowledge the important efforts made by the developers' team this year to adjust and improve its conceptual structure. The suggestion is to open up the discussion for a further refinement which will also be based on the grounds of further improving statistical coherence by reducing the risk of redundancy.



● Photo by Google DeepMind

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The Portulans Institute aims to provide them with the best available data and analysis, and the directions that they need. This is why our logo combines a compass and pi, which is not only a powerful number found in geometry, algebra, physics, and arts, but also an infinite series of digits, with no pre-written rule telling us what the next one might be.



About Portulans Institute

Co-founded in 2019 by Soumitra Dutta and Bruno Lanvin, the Portulans Institute (PI) is an independent nonprofit, nonpartisan research and educational institute based in Washington DC.

Our Mission

Portulans Institute's areas of expertise include technology competitiveness, innovation readiness, and people and global talent. Our mission includes:

- To develop cross-community knowledge and dialogue on how people, technology, and innovation contribute to sustainable and inclusive growth.
- To inform policymakers by producing independent, data-based research.
- To collaborate with private sector leaders in driving a business agenda that invests in people, technology and innovation.
- To host and co-organize events and conferences on the above issues affecting human-centric sustainable economic prosperity.

Where Our Name and Logo Come From

Portulans (or portolans) are ancient nautical maps, first made in the 13th century in the Mediterranean basin and later expanded to include other regions. The word portolan comes from the Italian portolano, meaning "related to ports or harbors," and which since at least the 17th century designates "a collection of sailing directions." In these maps, only a few harbors were visible, and much of the coastlines were hypothetical.

This is how we see our mission: In an uncertain world, much is yet to be explored, and many opportunities have yet to be identified. Like the navigators of the 16th century, modern leaders have to make decisions on the basis of imperfect information and incomplete maps.

The Portulans Institute aims to provide them with the best available data and analysis, and the directions that they need. This is why our logo combines a compass and pi, which is not only a powerful number found in geometry, algebra, physics, and arts, but also an infinite series of digits, with no pre-written rule telling us what the next one might be.

Learn more at:

www.portulansinstitute.org and
www.networkreadinessindex.org



● Photo by Tiffany Jae

We educate people for successful business careers and, as a community, we seek to harness our collective expertise and knowledge to help solve pressing global issues such as demographic change, natural resource scarcity and technological challenges.

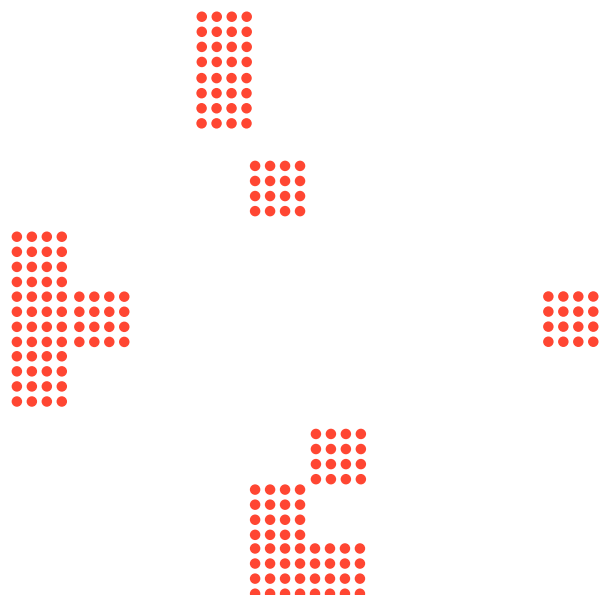
About Saïd Business School, University of Oxford

We aspire to be a world-class business school community, embedded in this world-class University, tackling world-scale problems.

The talents and efforts of our faculty, students, alumni and staff have translated into accomplishments that demonstrate that we are achieving our aim. The people at Oxford Saïd are exceptional, not only as measured conventionally but in the depth of their character. Our ideas, produced through rigorous research, are measurably changing the way leaders think and act, and in so doing, helping make businesses more effective and principled. By bringing young and experienced leaders to Oxford Saïd, whether as undergraduates or MBAs, or as CEOs or Nobel laureates, we are at the centre of the most important issues of the day.

Saïd Business School at the University of Oxford blends the best of new and old.

We educate people for successful business careers and, as a community, we seek to harness our collective expertise and knowledge to help solve pressing global issues such as demographic change, natural resource scarcity and technological challenges.





● Photo by Draga Work on Unsplash

CNI has played a leading role in society, promoting debate, and building consensus on key national issues. Especially concerning those matters that have strong influence on the development of Brazilian industry and economy, such as the digital transformation.

About Brazilian National Confederation of Industry (CNI)

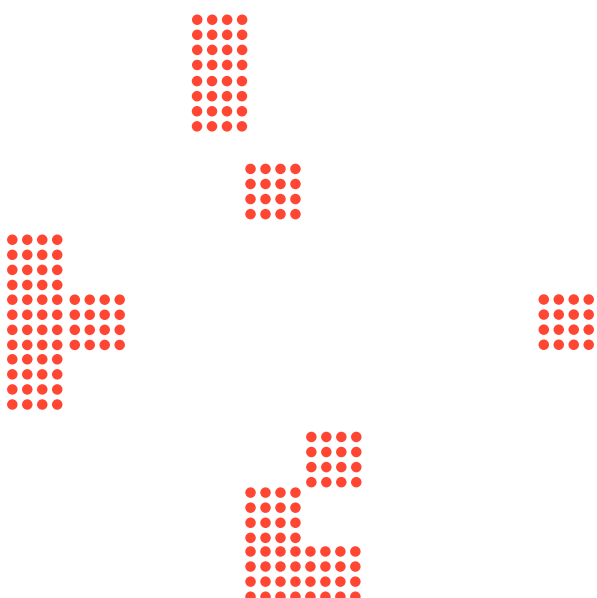
The Brazilian National Confederation of Industry (CNI) is the main representative institution of Brazilian industry. It serves as the apex body within the industrial trade union system and, since its foundation in 1938, it has defended the interests of the national industry. It also acts as the main interlocutor with the Executive, Legislative and Judiciary, besides several entities and organizations in Brazil and abroad.

It represents 27 state federations of industry and 1.306 trade unions, to which around 900 thousand industries are affiliated. It is directly in charge of the Social Service of Industry (SESI), the National Service of Industrial Training (SENAI) and Euvaldo Lodi Institute (IEL). Together, these three organizations form the Industry System, which yet assembles the state-level industry federations and trade unions.

Since its establishment, CNI has played a leading role in society, promoting debate, and building consensus on key national issues. Especially concerning those matters that have strong influence on the development of Brazilian industry and economy, such as the digital transformation.

In addition, CNI promotes national industry research, innovation, and technological development. Moreover, it supports initiatives that promote the self-recognition, social development, and professional training of the worker.

These actions are based on studies, technical researches, consultations and constant dialogues with industry federations and trade unions, national sectoral associations, forums, and business councils.



About AWS

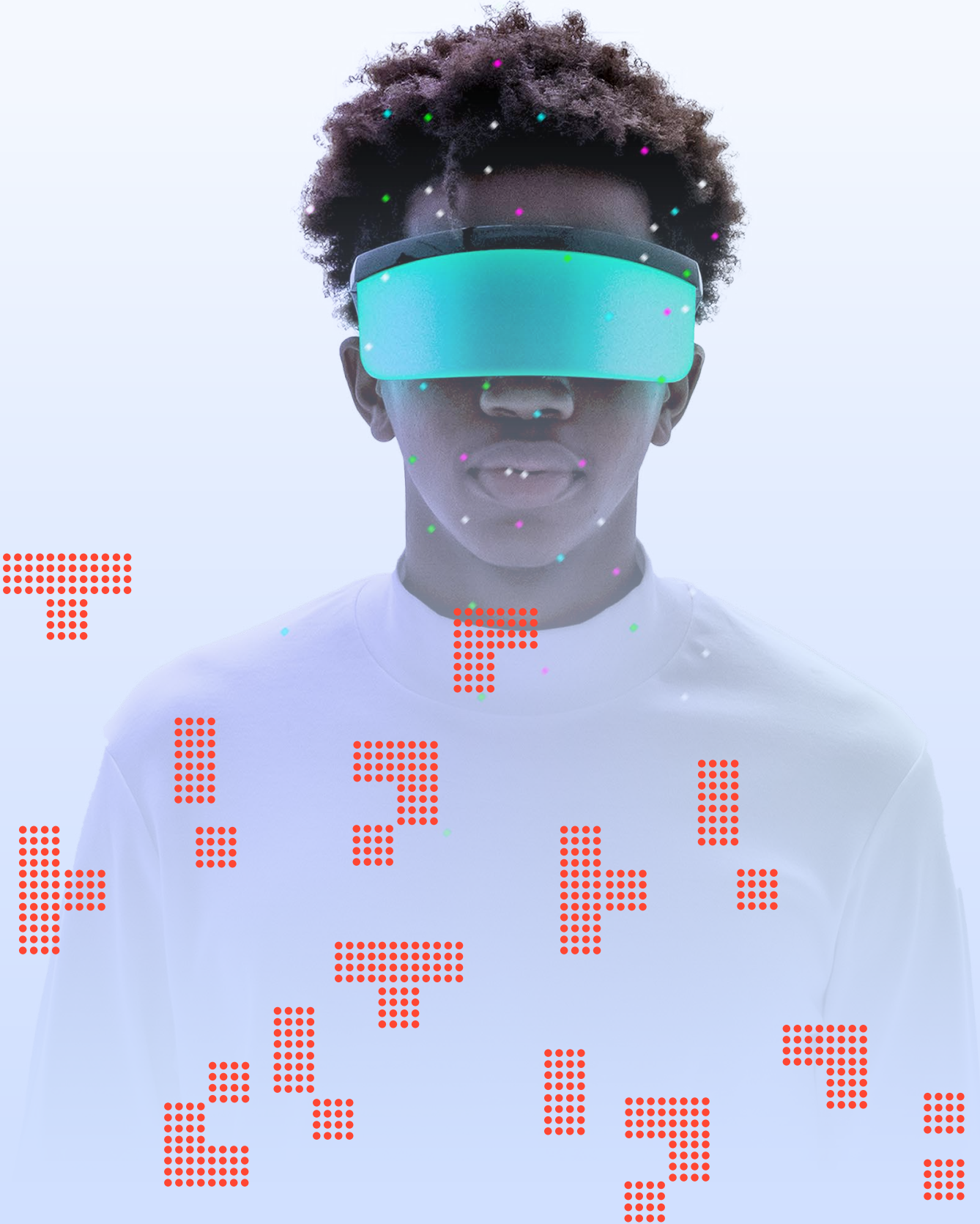
Since 2006, Amazon Web Services (AWS) has been the world's most comprehensive and broadly adopted cloud. AWS has been continually expanding its services to support virtually any workload, and it now has more than 240 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management. These services are offered in 102 Availability Zones within 32 geographic regions, with announced plans for 15 more Availability Zones and five more AWS Regions in Canada, Germany, Malaysia, New Zealand, and Thailand. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—trust AWS to power their infrastructure, become more agile, and lower costs.

Amazon Web Services (AWS) has been the world's most comprehensive and broadly adopted cloud. AWS has been continually expanding its services to support virtually any workload, and it now has more than 240 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management.



● Photo by AWS

The NRI 2024 Team



The NRI 2024 Core Team



• **Soumitra Dutta**
Co-editor and Co-author

Soumitra Dutta is co-founder and President of Portulans Institute. He is also the founder and co-editor of the Global Innovation Index (GII) published in partnership with the World Intellectual Property Organization - WIPO. Since 1 June 2022 Soumitra is the dean of Saïd Business School at the University of Oxford.

Previously, he was a Professor of Management and the former founding dean of the Cornell SC Johnson College of Business. Prior to joining Cornell in 2012, he was on the faculty and leadership team of INSEAD. Prof. Dutta is an authority on technology and innovation policy and has engaged in a number of multi-stakeholder initiatives to shape global, regional, and industry agendas.

He is the co-editor and author of The Global Information Technology Report, published by the World Economic Forum. Mr. Dutta is on the global boards of Sodexo and Dassault Systèmes and is a member of the Shareholder Council of Chicago-based ZS Associates. He serves on the advisory boards of several business schools, including HEC, Montreal; ESADE, Barcelona; and ESCP, Paris. He has co-founded two firms, including Fisheye Analytics, which WPP group acquired. He is currently Chair of the Board of Directors of the Global Business School Network.



• **Bruno Lanvin**
Co-editor and Co-author

Bruno Lanvin is a co-founder and Senior Advisor of Portulans Institute. He is also co-editor of the Global Innovation Index (GII) published in partnership with the World Intellectual Property Organization - WIPO.

Bruno is a Distinguished Fellow at INSEAD and the President of IMD's Smart City Observatory. Initially a mathematician and a specialist of international trade, his research and publications have focused on information technology, innovation and talent strategies. He has over forty years of experience in advising governments and large corporations, including twenty years at the United Nations and ten at the World Bank.

Since 2001, Bruno Lanvin has been co-authoring The Global Information Technology Report (NRI), the Global Innovation Index Report (GII), and the Global Talent Competitiveness Index (GTCI), the Smart City Index Report, and of the award-winning book 'Sixteen Shades of Smart'. His latest book 'The Future is Young' was published in July 2022.

A frequent speaker at high-level meetings, he has been a member of numerous boards for many years, including those of ICANN, IDA-Infocomm, GovTech, IP-Watch, AAID, Kazakhstan's Presidential Board on ICT Strategy, and the Bin Rashid Foundation for Government Innovation.



• **William Dutton**
Director, Portulans Institute

Bill Dutton is an Oxford Martin Fellow, supporting the Global Cyber Security Capacity Centre of the Department of Computer Science, and a Senior Fellow at the Oxford Internet Institute, at the University of Oxford. He is also a Visiting Professor in Media and Communication at the University of Leeds.

Until 2018, Bill was the Quello Professor of Media and Information Policy at Michigan State University, where he was Director of the Quello Center. Prior to that, he was the OII's Founding Director (2002-11), a Fellow of Balliol College and the first Professor of Internet Studies at Oxford University (2002-2014). Before his appointment to Oxford in 2002, he was a Professor in the Annenberg School for Communication at the University of Southern California, where he continues as an Emeritus Professor. While at USC, Bill was a Fulbright Scholar 1986-87 at Brunel, UK, and was National Director of the UK's Programme on Information and Communication Technologies (PICT) from 1993 to 1996, also at Brunel.

His recent publications on the social aspects of information and communication technologies include Society on the Line (Oxford University Press, 1999), Transforming Enterprise, co-edited (MIT Press, 2005), World Wide Research: Reshaping the Sciences and Humanities, co-edited with P. Jeffreys (MIT Press, 2011), the Oxford Handbook of Internet Studies (OUP, 2013), Society and the Internet, 2nd Edition, co-edited with Mark Graham (OUP 2019), and editor of A Research Agenda for Digital Politics (Elgar 2020 forthcoming). He is currently writing a book on the Fifth Estate.



• **Rafael Escalona Reynoso**
CEO, Portulans Institute

Rafael Escalona Reynoso has been Senior Research Associate and Data Scientist for Portulans Institute since 2020. Before joining the Portulans Team he was the Lead Researcher at The Global Innovation Index (GII) from 2013 to 2020.

His previous professional experience was as a member of the Trade and Foreign Investment Advisory Board at the office of the President of Mexico and as Economic, Science and Technology Policy Advisor to the Senate of Mexico (LVIII Legislature). As part of the congressional advisory group, he led research on the economic effects of international biosafety regulations on Mexico's basic research, industry, and trade and directed comparative analyses on international food and drug safety policies and regulations.

His research experience at Cornell University includes comparative studies between Mexico and Spain's National Systems of Innovation and regulatory aspects of modern biotechnology and the biosafety of genetically modified organisms (GMOs), and on the reach and scope of intellectual property rights (IPRs) in the information technologies era. He holds a PhD in Regional Planning with concentrations on Science and Technology Studies and Risk Analysis, Communication, and Policy and a Master of Public Administration with a concentration in Science, Technology, and Infrastructure Policy from Cornell University. He also holds a Bachelor of Arts in Economics from Universidad Panamericana in Mexico.



• **Mariam Chaduneli**
Lead Project Manager

Mariam Chaduneli is a Policy Research and Management Associate who has worked extensively on research and policy analysis in the area of technology policy, emerging threats and digital rights.

Mariam is in charge of monitoring relevant national and international policy developments and producing research relating to digital policy, innovation readiness, and digital transformation. She is also responsible for coordinating long-term research projects, communications, and administrative work across key focus areas for PI. She is the lead project manager for the Network Readiness Index (NRI) published in partnership with Saïd Business School, University of Oxford.

Mariam has a master's degree in Innovation, Technology, and the Law from the University of Edinburgh focusing on the interplay of law, technology, and human rights. Prior to obtaining the UK Government's Chevening Scholarship for her master's studies, she was a Chief Project Manager in the Ministry of Internal Affairs of Georgia where she gained hands-on experience initiating and managing international projects with public and private sector organizations operating on a national, regional and international level. She is also the co-founder of Lawformer, a legal technology platform that simplifies routine legal tasks for lawyers and law students.



• **Sylvie Antal**
Digital Strategy Manager

Sylvie is a Policy Research and Communications Associate with prior experience in digital privacy issues relating to minors and vulnerable populations, as well as in consumer education and technology for international development. She is an advocate for ethical, inclusive, and innovative solutions and policies that make digital experiences safer and more effective for all populations.

At PI, she is responsible for monitoring relevant policy developments, assisting with research, developing communication strategy and content, and coordinating the Fellowship program.

Sylvie holds a bachelor's degree in information science from the University of Michigan's School of Information, where she was a member of Tech for Social Good, and a master's degree in Human-Computer Interaction. Prior to joining Portulans, she interned at the US Federal Communications Commission, and the Family Online Safety Institute in Washington DC.



• **Shailja Bang**
Head of Research

Shailja Bang Shah is a Thematic Research Analyst and has experience in leading and managing Composite Index projects. At Portulans Institute, she is responsible for project management, research, policy analysis, and communications support for an upcoming composite index in association with VinUniversity. She is also the Co-Author and Lead Researcher for the Emerging Markets Economic Growth and ESG (EMI D-ESG) Country Ranking, a composite index published and created by the Emerging Markets Institute (EMI) at Cornell SC Johnson College of Business.

Previously, she has worked with J.P. Morgan in geopolitical and macroeconomic research, where she covered market-moving events like the implications of the COVID-19 pandemic, the consequences of unconventional monetary policy, outlook for the 2020 US elections, and the evolving U.S.-China trade tensions.

She is a qualified Chartered Accountant (India) with a bachelor's in commerce from the Narsee Monjee College of Commerce and Economics (University of Mumbai). She is a partner at Imperium Partners, a research firm which specializes in Thematic Research.



• **Abdellah Bouhamidi**
Data Scientist

Analytics consultant, founder of Science Data Value Ltd., a consulting practice focused on providing expertise in data management, aggregation and analytics, and on developing, delivering and integrating solutions to capture data and produce actionable insights in relation to growth and markets; organizational excellence and engagement; risk analysis and management; and sustainable impact.

With a background in Operations Research, an MBA from Cornell University, and more than eight years of hands-on experience in digital transformation, analytics and big data, Abdellah has helped 25 organizations across 12 industries find and activate levers for growth and sustainable ROI.



• **Rajat Kumar**
Research Assistant

Rajat Kumar is a digital transformation and innovation management specialist who has worked extensively on policy research, digital rights, and sustainable development initiatives across South Asia. Rajat specialises in developing and implementing digital transformation strategies, managing innovation programs, and conducting policy research. He is currently a Policy Research Associate at the Portulans Institute.

As an independent consultant, he leads strategic projects catalysing digital innovation ecosystems across the Global South, collaborating with international organisations, government bodies, and civil society organisations. His work involves analysing policy frameworks, assessing digital readiness, and designing intervention strategies for sustainable digital transformation.

Rajat is pursuing advanced studies in Management and Innovation, building on his previous degrees in Psychology, and Sustainable Development. Prior to his current role, he led digital transformation at the Friedrich Naumann Foundation, where he led the organisation's technology portfolio across South Asia. His experience spans over a decade, managing complex digital transformation projects, overseeing substantial program budgets, and developing strategic partnerships with key stakeholders in the technology, rights and innovation sectors.

Our Technical Advisory Board (2024)



• **Chris Ferguson**
Technical Advisor

Chris Ferguson is one of the original senior management team that built the UK's Government Digital Service (GDS) from 2011 onwards. Chris was brought in to establish the Identity Assurance Programme and was involved in the development of GDS's first wave of products and services, from GOV.UK to the Digital Service Standards and IT Spend Controls. In January 2015, Chris became the Director responsible for the formation and leadership of the GDS Digital Group comprising GOV.UK, GOV.UK Verify, the Government-as-a-Platform Programme and the Service Design Team.

In his time at GDS, Chris was the Chair of the cross-government Digital Leaders network and Head of the Digital Profession across HM Government. In March 2021, Chris was appointed to be the Chair of cross-government COVID-19 Digital Taskforce as the pandemic took hold, tasked with delivering targeted support to departments, coordinating cross-government efforts and liaising with industry.

Chris has previously worked for and alongside several other Government departments, including the Home Office, where his roles focused mainly on counter-terrorism and national security in the UK and overseas. In October 2021, Chris became the Managing Director of Scott Logic where he led the growth and

development of the professional services business, particularly in the public sector, before moving into private consulting in 2024.

Chris is married to Gagan Sansoha, a Canadian biomedical scientist and they enjoy spending their free time walking their golden retriever Lockie on the beautiful hills and coastline of Edinburgh in Scotland where they live.



• **John Garrity**
Technical Advisor

John Garrity is Chief of Party for USAID/Philippines' Better Access and Connectivity (BEACON) activity, a USD 33m USAID program to improve digital connectivity infrastructure, the ICT enabling environment, and cybersecurity capacity in the Philippines. His background is as an economist, policy advisor and project manager with twenty years of experience working on economic development issues in the public sector at the state, federal and international levels, and in the private sector. His focus is on digital inclusion programs, universal access policy and last-mile connectivity deployments to foster effective universal Internet adoption for inclusive growth and poverty alleviation.

Previously, he was an independent consultant to public sector and private sector organizations on digital infrastructure development, including the Asian Development Bank, UNDP Philippines, the UN Broadband Commission, the UN ITU, UNICEF, UNESCAP, among others. He was Senior Connectivity Advisor in the US Global Development Lab at USAID and before that spent ten years at Cisco, in emerging market strategy and global technology policy/government affairs based in Washington, D.C. He

began his career at the World Bank and also worked at the US Federal Trade Commission. He serves as a technical advisor to the Network Readiness Index, on the advisory council of the Connect Humanity Fund, has co-authored several reports on technology and development and presented around the world on efforts to close the digital divide.



• **Elena Kvochko**
Technical Advisor

Elena Kvochko is Chief Trust Officer working in the field of cybersecurity and started with SAP in 2020. She is a former COO of cybersecurity technologies at Bank of America, CISSP, CEH. She also served as a technology, cybersecurity, and business operations executive. Kvochko is a Certified Information Security Professional (CISSP) and Certified Ethical Hacker (CEH). She was named one of the Top 100 CIOs and is a member of the Wall Street Journal CIO Council. Kvochko was named one of Fortune magazine's Most Powerful Women International, one of the "Leading CIOs Who Happen to Be Female" by CIO Magazine, and Business Role Model of the Year by Women in IT. She is also a published author and an inventor with patents pending in security, privacy, and digital payments technology.



• **Irene Mia**
Technical Advisor

Dr Mia is an experienced professional (economist by training) with a successful 20 year track-record in economic and policy research and on engaging with policy-makers and senior corporate leaders. Dr Mia has expertise in managing large teams with proven strategic, financial, planning and team building skills. Dr Mia holds a PHD in International Economic and Trade Law from L. Bocconi University and MA in Latin American studies from the Institute for Latin American Studies, London University. Before her recent appointment as Senior Fellow for Latin America at the International Institute for Strategic Studies (IISS), Dr Mia was the Global Editorial Director for Thought Leadership at Economist Group, Economist Intelligence Unit.



• **Michaela Saisana**
Technical Advisor

Michaela Saisana is Head of the Unit “Science for Modelling, Monitoring and Evaluation” at the European Commission’s Joint Research Centre (JRC) in Italy. She oversees the activities of 60 scientists working on country benchmarking and performance monitoring through composite indicators and scoreboards, survey methods and questionnaire design, quality assurance of models, multi-criteria decision analysis for EU impact assessments, and on EU policy

evaluation through counterfactual methods. In her 25 years of work at the JRC, she has contributed to EU policy formulation and legislation in a wide range of areas from social rights and fairness to innovation and competitiveness, from enterprises and firms to state aid, from employment to culture and creativity, from cohesion to sustainable development. She has been working at the JRC since 1998, where she obtained a prize as ‘best young JRC scientist of the year’ in 2004, and together with her team she won the ‘JRC policy impact award’ for the Social Scoreboard of the European Pillar of Social Rights in 2018. Both prizes were awarded by EU Commissioners. She collaborates, by auditing performance indices, with over 150 international organisations and world-class universities, including the United Nations, the OECD, Transparency International, Oxfam, the World Economic Forum, INSEAD, the World Intellectual Property Organization, Yale University, Columbia University, and Harvard University.

Michaela has given hundreds of lectures around the world, including a TEDx-talk. She is a highly cited scientist with over 23,000 citations in Scholar Google, and co-author/co-editor of three books: 2021 Data science for economics and finance: Methodologies and applications (Springer Nature), 2008 OECD/JRC Handbook on Constructing Composite Indicators, 2008 Global Sensitivity Analysis-The Primer (Wiley).

Advisory Board (2024)



• **Hessa Al-Jaber**
Advisor

Dr. Hessa Al-Jaber is the chairperson of Trio Investment, a technology investment company that invests in innovative technology that addresses some of the most pressing health problems in the MENA region. As an expert in technology, media, and telecom practice, her focus is the impact of a digital economy in productivity and competitiveness. Dr. Hessa was the former and the first-ever Minister of Information and Communication Technology in Qatar. Prior to becoming a minister, Dr. Hessa held the position of Secretary General of the Supreme Council of Information and Communication Technology since its inception in 2005. Dr. Al Jaber was a member of United Nations ITU Broadband Commission for Sustainable development and a member at the Network of Global Agenda Councils of the World Economic Forum (WEF). Dr. Al Jaber is currently the Chairperson of Qatar Satellite Company, and Malomatia, in addition to being a member of several boards including Volkswagen (AG) Supervisory Board in Germany, Qatar University's Board of Regents, Qatar Museums Authority's Board. Dr. Hessa holds a Bachelor of Science in Engineering from Kuwait University, and a Master's Degree and Ph.D in Computer Science from George Washington University, Washington, DC.



• **Tawfik Jelassi**
Advisor

Dr. Tawfik Jelassi was appointed UNESCO Assistant Director-General for Communication and Information on 1st July 2021. In this position, he is responsible for the Organization's programmes on building inclusive knowledge societies, leading digital transformation, strategizing the role of ICT in education, and fostering freedom of expression.

Dr. Jelassi holds a Ph.D. doctorate in information systems from New York University (USA) and postgraduate diplomas from the University of Paris Dauphine (France). Dr. Jelassi has extensive experience in higher education, scientific research, and information & communication technologies. He held academic, corporate and government leadership positions in Europe, the USA, and Tunisia.

Among others, he was Programme Director and Professor of Strategy and Technology Management at IMD Business School in Lausanne (Switzerland, 2015 – June 2021). Prior to that, he served as Minister of Higher education, Scientific Research and Information & Communication Technologies in the democratic transition government of Tunisia (2014 – 2015). Prior appointments included being Chairman of the Board of Directors of Ooredoo Telecom in Tunisia, Dean at Ecole Nationale des Ponts et Chaussées (Paris), and Professor & Chairman of the Technology Management Department at INSEAD (Fontainebleau).



• **Diego Molano**
Advisor

Diego Molano is an international consultant on digital transformation of companies and governments. He was the minister of information and communication technologies (ICT) of Colombia from 2010 to 2015. He transformed his country with his policy plan "Vive Digital," which aims to reduce poverty and create jobs using technology. Mr. Molano has a long career in the technology industry and has had responsibilities in more than 20 countries. He has been a board member of international organizations and corporations in the telecommunications, TV, radio, and postal services sectors. He is currently senior advisor to the Inter-American Development Bank, senior advisor to McKinsey & Co. in Washington DC. Mr. Molano is an electronics engineer and economist from Xavier University in Colombia and holds an MBA from IMD in Switzerland.



• **Mona Abou Hana**
Advisor

Mona is PwC Middle East Chief People Officer and a member of the leadership team, responsible for formulating and delivering the firm's people strategy. She is also a partner in PwC's consulting practice working with governments and the public sector. She specialises in strategy and policy formulation and focuses on national planning, innovation & entrepreneurship ecosystems as well as upskilling strategies to ready the workforce for the digital world. Mona also leads PwC Middle East Digital Upskilling Program. Mona holds a BA in Economics from the American University of Beirut and MBA from INSEAD. She is fluent in English, Arabic and French. Some of her publications include:

Building the Data Economies of the Future: Tomorrow's Data Economies Shaped by the Youth of Today. Inspire and Orchestrate: Innovation-Driven Government; Innovation in the UAE: From First Foundations to 'Beyond Oil'; Middle East & North Africa Talent Competitiveness Index



• **Osman Sultan**
Advisor

Osman Sultan brings 35 years of leadership, rich with achievements in the telecom sector. His vast knowledge and expertise in the field as early as the pre-Internet period placed him as one of the pioneers in Europe, the US, Japan, and the entire MENA region. His distinguished achievements ranked him as one of the most powerful executives in the worldwide telecom industry twice on the "GTBPower100 List" in both 2010 and 2011.

Sultan has developed several strategies that helped produce the profound transformations that the telecom and information sectors have been creating in our lives. Sultan has been a board member for various institutions in the telecom industry, technology space, and academic world. incl. the advisory board of the Mohammed bin Rashid School of Communications (MBRSC), the Global Blockchain Advisory Council of the WEF, the Board of Endeavor UAE, and many others. His latest book 'The Future is Young' was published in July 2022.



• **Jacques Bughin**
Advisor

Jacques is currently teaching business strategy and an investor and board member in a variety of ventures. Dr. Jacques Bughin was a director in McKinsey's Brussels office and supported clients in their Media & Entertainment, Corporate Finance, and Strategy Practices, in addition to co-leading the Digital Economy Initiative. He also acted as director of the McKinsey Global Institute (MGI), the firm's business and economics research arm. He worked for McKinsey for 28 years. Prior to joining McKinsey, Jacques was a consultant with Arthur Andersen Consulting and received a PhD in economics, operations research, and strategy from Université Catholique de Louvain in Belgium.

Jacques has led numerous research efforts on global economic trends such as globalization, productivity, and inclusive growth, as well as on the impact, opportunities, and challenges of technology including big data, the future of work and skills, and AI. He has authored 50+ articles published in titles including Harvard Business Review, and Sloan Management Review, as well as in academic journals and is quoted regularly in leading international media.



• **Karim Michel Sabbagh**
Advisor

Karim Michel Sabbagh led global technology-centric businesses as CEO, investor and advisor covering space-based multi-orbit communication networks, terrestrial communication networks, ultra-secure communications, cyber security, digital transformation, AI and applied analytics. He is presently the Managing Director of E-Space & Lead for Europe and the Middle East.

Prior, he was the CEO of the DarkMatter Group where he led the restructuring of the company and oversaw its holistic transformation from a fluid start-up to a leading and highly influential firm with a focus on digital transformation and applied analytics, cyber security and ultra-secure communications.

This successful trajectory led to multiple private equity buyouts in 2019. Karim was also the President and CEO of SES (Société Européenne des Satellites), the world-leading satellite operator. He led the strategy-based transformation of SES, overseeing the evolution of the company's strategy and execution and its elevation to become the leading provider of satellite-enabled communications solutions in the video, fixed data, mobility, and government markets. Over the course of the transformation, SES rose to the no.1 position globally.

He also served as a Senior Partner and global practice leader for communications, media & technology at Booz&Co (previously Booz Allen Hamilton). At Board and CEO levels, he has shaped and served the strategic agenda of global players in the communications,

media and satellite sectors. He led end-to-end multinational teams in long-term, large-scale privatizations, international expansion, mergers and acquisitions, growth acceleration and strategy-based transformation programs.

He is a visiting professor in Technology and Innovation Management and member of the Academic Council for Écoles des Ponts Business School in France. He holds an MS in Technology Management from Columbia University (New York), a DBA in International Business Management from the International School of Management (Paris), and an MBA and BBA from the American University of Beirut.



• **Lynn St. Amour**
Advisor

Lynn St. Amour is President and CEO of Internet Matters, an Internet consulting company, and is active in matters of Internet development and governance. She served as the UN Internet Governance Forum – Multistakeholder Advisory Group (IGF-MAG) Chair (2016 – 2019). From 2001 to 2014, she was President and CEO of the Internet Society (ISOC), a global non-profit organization dedicated to the open development, evolution, and use of the Internet. She joined the Internet Society in 1998 as Executive Director of its Europe, Middle East, and Africa operations, after previously holding senior positions in Europe and the United States with AT&T and Digital Equipment Corporation. She is Co-Chair, World Economic Forum, Digital Economy and Society Systems Initiative.

She is a graduate of the University of Vermont and has extensive

experience in the global IT sector, international business, and corporate restructuring, with a background in strategic planning, international sales and marketing, and finance. Ms. St. Amour has served on a number of international boards.



• **Hildegunn Kyvik Nordås**
Advisor

Hildegunn Kyvik Nordås is a Senior Associate with the Council on Economic Policies. She also holds a position as visiting professor at Örebro University in Sweden. Prior to that she was leading the OECD's work on services trade policy analysis, developing the Services Trade Restrictiveness Indices and database and related analytical activities (2005-2019). She also spent two years at the research department at the WTO (2002-2004).

Before joining international organizations, Hildegunn conducted research, teaching, policy analysis, and policy advice at Norwegian and South African universities and research institutes. She spent one year as a visiting scholar at Stanford University, USA. She also led a long-term project providing technical assistance on macroeconomic modelling and policy analysis to the Tanzanian government.

Hildegunn holds a PhD in economics from the University of Bergen, Norway. Her research interest lies at the interface between digital technology, services trade, and jobs in the services sectors; areas where she has published extensively.

Endnotes

- 1 Groeneveld, R. A. and Meeden, G., 'Measuring Skewness and Kurtosis', *Journal of the Royal Statistical Society, Series D*, vol. 33, pp. 391–399, 1984.
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- 8 Angola, Argentina, Benin, Bulgaria, Burundi, Canada, Croatia, Democratic Republic of the Congo, Ethiopia, Germany, Nepal, Madagascar, Mauritius, Mozambique, Namibia, Poland, Portugal, Senegal, Spain, Tanzania, Türkiye, Yemen
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About the Network Readiness Index

Published by Portulans Institute and Saïd Business School, University of Oxford, the 2024 NRI is the sixth edition of a renewed NRI model, reflecting how technology and people need to be integrated within an effective governance structure in order to have the right impact on our economy, society and the environment. Multiple countries use the NRI to design their digital strategies, connecting Technology with People and Governance for Impact.

The 2024 edition of the NRI is dedicated to the theme of Building a Digital Tomorrow: Public-Private Investments and Global Collaboration for Digital Readiness. It draws attention to the role of PPPs in our increasingly interconnected world.

Recognizing the pervasiveness of digital technologies in today's networked world, the index is grounded in four fundamental dimensions: Technology, People, Governance, and Impact. This holistic approach means that the NRI covers issues ranging from future technologies such as AI and the Internet of Things to the role of the digital economy in reaching the Sustainable Development Goals (SDGs).

Origins: The Network Readiness Index (NRI) was first published in 2002 and provided a holistic framework for assessing the multi-faceted impact of ICT on society and the development of nations. Until 2016, the NRI was part of the Global Information Technology Report (GITR) published by the World Economic Forum (WEF), Cornell University, and INSEAD. The NRI anticipated various aspects that would become critical in the following years. Early on, it identified three essential stakeholders for ICT: individuals/society, businesses, and governments, and it included elements of ICT application that were novel for the time.

At a time when the primary concerns in ICT revolved around infrastructure issues, the NRI provided a forward-looking and holistic perspective on the application of ICT within national economies. The NRI rapidly developed into a global benchmark for the application and utilization of ICT. Many economies utilized the NRI to design their ICT strategies, and the NRI was used and frequently quoted by leaders from the public and private sectors.

In a major redesign of the NRI framework in 2019, current topical concerns of trust, governance,

inclusivity and impact on SDG goals were included into the model. The NRI framework provides a simple yet holistic view of how economies can leverage the power of digital technologies while building sustainable and inclusive futures.

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