

India Shines in Network Readiness Index 2024

A Digital Transformation Led by Government Initiatives

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India has made significant strides in the global digital landscape, evidenced by its improved ranking in the Network Readiness Index (NRI) 2024, where the country now stands at 49th position, up from 60th in the 2023 report. This remarkable leap of eleven positions reflects India's growing role as a leader in digital transformation, driven largely by robust government initiatives. The NRI 2024 evaluates the network readiness of 133 economies based on four key pillars: Technology, People, Governance, and Impact, and uses a wide range of 54 variables to determine rankings.

India's improved score of 53.63 (up from 49.93 in 2023) underlines the country's enhanced technological, governance, and infrastructural capabilities. The country's rise in the rankings is a direct result of government policies and strategic initiatives aimed at boosting connectivity, innovation, and digital services across all sectors of the economy.

Key Highlights of India's Performance in NRI 2024

India's improved position in the NRI 2024 is not just a numerical shift but an indication of the country's progress in several key areas. Notable achievements include:

- ❖ 1st Rank: AI Scientific Publications, AI Talent Concentration and ICT Services Exports
- 2nd Rank: FTTH (Fiber to the Home) / Building Internet Subscriptions, Mobile Broadband Internet Traffic within the Country, International Internet Bandwidth
- ❖ 3rd Rank: Domestic Market Scale
- **4th Rank:** Annual Investment in Telecommunication Services

India has also ranked 2nd among lower-middle-income countries, showcasing its leadership in digital advancement within its income group. These achievements reflect India's growing dominance in technological innovation, artificial intelligence, and the telecommunications sector.

Government Initiatives Driving India's Digital Transformation

India's rise in the NRI 2024 is deeply intertwined with the government's ongoing efforts to create a favorable environment for technological progress. Through a combination of policies, infrastructure development

programs, and public-private partnerships, the Indian government has been fostering growth in several key areas. Below are some of the most impactful initiatives that have contributed to India's improved network readiness.



Digital India Program

Launched on July 1, 2015, Digital India is one of the flagship programs of the Indian government, designed to transform India into a digitally empowered society and knowledge economy. This initiative has been at the core of India's digital revolution and has had a profound impact on internet penetration and digital infrastructure.

Broadband Access Expansion: Digital India has significantly improved access to broadband services, especially in rural and underserved areas, by promoting public-private partnerships. It has driven a massive increase in internet subscribers, growing from 25.1 crore to 94.4 crore over the past decade.

Digital Literacy: The program has also focused on improving digital literacy, with millions of people in rural and remote areas trained to use digital tools and services.

Government Services Online: It has digitized many government services, making them available online, enhancing accessibility and transparency.

❖ BharatNet Initiative

The BharatNet Project is a cornerstone of India's digital infrastructure. The program aims to connect all of India's 2.5 lakh gram panchayats (village councils) with high-speed broadband, making broadband accessible even in the most remote parts of the country. The initiative has led to:

Expansion of Internet Access: BharatNet has enabled internet connectivity in rural areas, bridging the digital divide between urban and rural India.

Enhancement of Government-to-Citizen Services: The availability of broadband has enhanced the delivery of e-governance services, such as online education, healthcare, and agriculture services, to rural populations.

❖ 5G and Future Telecom Technologies

India's launch of 5G services in 2022 marks a significant milestone in the country's telecom sector. With this leap into the next generation of mobile broadband, India has improved its global ranking in mobile broadband speed from 118th to 15th.

Infrastructure Upgrades: The Indian government has been working with telecom operators to expand 5G infrastructure across the country, offering faster data speeds and better connectivity.¹

An example of the government's commitment to expansion of 5G infrastructure, is the **5G Intelligent Village Initiative**, which aims to bridge connectivity gaps and empower rural communities by leveraging the transformative power of 5G technology. The initiative invites proposals under the theme, "From Connectivity Gaps to Smart Solutions: Designing 5G Networks for Rural Innovation," to foster technological advancement in rural areas.

Bharat 6G Vision: The Bharat 6G Vision, introduced by the government, aims to make India a global leader in 6G technology. The vision includes the development of indigenous technology, setting up research hubs, and accelerating innovation in future technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), and blockchain.²

❖ National Digital Communications Policy (NDCP) 2018

The National Digital Communications Policy (NDCP) 2018 is another significant initiative aimed at promoting a vibrant digital economy in India. This policy seeks to improve connectivity, create job opportunities, and attract investment in the telecommunications sector.

Broadband for All: The policy emphasizes providing high-speed internet to all rural and urban areas, ensuring equal access to information and services across India.

❖ PM Gati Shakti National Master Plan

¹ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2025988

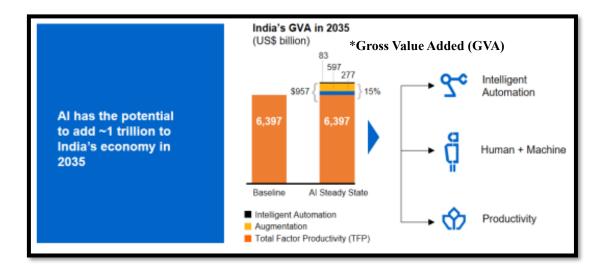
² https://do<u>t.gov.in/sites/default/files/Bharat%206G%20Vision%20Statement%20-%20full.pdf</u>

The PM Gati Shakti National Master Plan, launched in 2021, is aimed at creating integrated infrastructure for seamless connectivity across the country. This includes the creation of multimodal connectivity for better transport and logistics, which also supports digital infrastructure development.³

Transport and Digital Infrastructure: The plan focuses on improving the country's transport, logistics, and telecommunication networks, ensuring that digital and physical infrastructure complement each other.

❖ National Artificial Intelligence (AI) Strategy

In recognition of the growing importance of AI, the Indian government has laid the foundation for AI as a key driver of economic growth. The National Strategy for Artificial Intelligence, launched by NITI Aayog, aims to position India as a global leader in AI research and development. Accenture, in its recent AI research reports, provides a framework for evaluating the economic impact of AI for select G20 countries and estimates AI to boost India's annual growth rate by 1.3 percentage points by 2035⁴.



AI Research & Development: India has been fostering AI innovation through a series of research institutions and partnerships with private industry players. This has led to India's top ranking in AI Scientific Publications and AI Talent Concentration in the NRI 2024 report.

AI for Social Good: The strategy also focuses on using AI to address societal challenges such as healthcare, education, and agriculture, driving inclusive growth.

❖ Skill Development and Digital Literacy Programs

The Skill India initiative aims to equip the youth with relevant digital and technical skills, making them more competitive in the global workforce. With a focus on digital literacy, the government is preparing a new generation of talent that can drive technological advancement.

https://www.india.gov.in/spotlight/pm-gati-shakti-national-master-plan-multi-modal-connectivity

⁴ https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf

Digital Literacy for All: Programs like **Pradhan Mantri Gramin Digital Saksharta Abhiyan** (**PMGDISHA**)⁵ have significantly boosted digital literacy in rural areas, helping people to access online services and participate in the digital economy.

Conclusion

India's impressive performance in the Network Readiness Index 2024 is a direct reflection of the significant strides made in digital infrastructure, technological innovation, and governance. The government's extensive initiatives such as Digital India, BharatNet, and Startup India, along with its forward-looking 6G Vision, have played an instrumental role in positioning India as a global leader in the digital realm. With continued investment in digital technologies, regulatory reforms, and skill development, India is poised to further improve its network readiness and lead the world in future technological advancements.

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- https://usof.gov.in/en/bharatnet-project
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⁵ https://www.myscheme.gov.in/schemes/pmgdisha