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Decadal Progress of Digital India in the Indian Economy: Growth, Inclusion and Structural Transformation during 2015–2025

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ABSTRACT

The Digital India Programme, launched in July 2015, represents one of India's most ambitious attempts to use digital technologies for economic transformation, public-service delivery and social inclusion. Over the past decade, the programme has expanded beyond its original focus on internet connectivity and e-governance to encompass digital public infrastructure, financial technology, digital payments, electronic commerce, artificial intelligence, semiconductors, digital education and technology-enabled entrepreneurship. This paper examines the role of the decadal progress of Digital India in shaping the Indian economy during 2015–2025.The study is based on secondary data collected from government reports, the Ministry of Electronics and Information Technology, the Indian Council for Research on International Economic Relations, the Reserve Bank of India, the Telecom Regulatory Authority of India, NPCI and relevant academic and policy literature. The analysis indicates that internet connections increased from 25.15 crore in 2014 to 96.96 crore in 2024, while broadband connections increased from 6.1 crore to 94.92 crore during the same period. In April 2025, UPI processed 1,867.7 crore transactions valued at ₹24.77 lakh crore. The digital economy contributed approximately 11.74 per cent of national income in 2022–23 and is projected to reach 13.42 per cent by 2024–25.Digital India has improved financial inclusion, reduced transaction costs, strengthened direct benefit transfers, supported MSMEs and encouraged innovation. However, digital inequality, inadequate rural connectivity, cyber security risks, privacy concerns, gender gaps and limited digital skills remain significant challenges. The article argues that the next phase of Digital India must focus not merely on access but on meaningful, secure, affordable and productive digital participation.

Keywords: Digital India, digital economy, digital public infrastructure, UPI, financial inclusion, e-governance, economic growth, India.

INTRODUCTION

Digital technology has become a major determinant of economic competitiveness, productivity and social development. In both developed and developing economies, the expansion of digital infrastructure has transformed the way individuals communicate, firms produce and distribute goods, governments deliver services and financial institutions conduct transactions. Digitalisation has also altered traditional relationships between consumers, producers, markets and the state. India's Digital India Programme was launched in July 2015 with the broad objective of transforming India into a digitally empowered society and knowledge economy. The programme was designed around three central goals developing digital infrastructure as a core utility for citizens, delivering government services through digital platforms and empowering citizens through digital literacy and access to information.

At the time of its launch, India faced several structural constraints. Internet penetration was relatively low, rural connectivity was inadequate, government services were fragmented, financial exclusion was widespread and many administrative procedures depended on paper-based documentation. Digital India attempted to address these problems through a combination of telecommunications expansion, digital identity, electronic payments, online public services, digital literacy and institutional innovation.

During the decade 2015–2025, the programme evolved considerably. It became associated with a broader ecosystem consisting of Aadhaar, Jan Dhan accounts, mobile connectivity, UPI, DigiLocker, UMANG, BharatNet, Common Service

Centres, the Government e-Marketplace, ONDC, CoWIN, e-Sanjeevani, BHASHINI and several other platforms. These initiatives collectively contributed to the emergence of India's digital public infrastructure.

The significance of Digital India is not limited to the information technology sector. Digital systems increasingly influence agriculture, banking, education, healthcare, manufacturing, retail trade, logistics, public administration and labour markets. According to the ICRIER study, India's digital economy accounted for 11.74 per cent of national income in 2022–23, equivalent to ₹31.64 lakh crore in GDP. It is projected to reach nearly one-fifth of national income by 2029–30.

REVIEW OF LITERATURE

Gupta and Arora (2015) studied the impact of the Digital India project on India's rural sector. The study found that many schemes have been launched in Digital India to boost the agriculture sector and entrepreneurship development in rural areas. The Digital India programme has also set the stage for the empowerment of rural Indian women.

Midha Rahul (2016) concluded that Digital India is a great plan to develop India for a knowledgeable future, but its improper implementation due to inaccessibility and inflexibility to requirements can lead to its failure. Though the Digital India programme is facing a number of challenges, if properly implemented, it can make the best future for every citizen. So we Indians should work together to shape the knowledge economy.

Kaul and Mathur (2017) analysed the importance of financial literacy. The finding of the study identified the obstacles in the implementation of various programmes to make India financially literate and strategies to implement these policies effectively and efficiently. The impact of digitalisation on a country can be accessed on the basis of its impact on the government, on the economy and on the society. Digitalisation has created new job opportunities, led to innovation in every sector and also led to the growth of the economy. The government emphasised digitalisation as it brings transparency, better control and better job opportunities.

Maiti and Kayal (2017) studied the impact of digitisation on India's services' and MSME sectors' development and growth. The performance of the services sector improved extensively from 2000 onwards. The study concluded that India's service sector and MSME segment have high potential for future growth with digitisation. The inclusive growth of both India's services sector and MSME segment gives a boost to the volume of trade and India's share with the help of digitisation.

Digitalisation and economic growth

The relationship between digitalisation and economic growth has been widely discussed in economic literature. Digital technologies can contribute to growth through several channels. First, they increase productivity by improving access to information and reducing transaction costs. Second, they create new markets and business models. Third, they support innovation and entrepreneurship. Fourth, they improve the efficiency of public administration and service delivery.Digital infrastructure may be considered a form of economic infrastructure because it enables communication, market exchange, financial transactions and knowledge creation. Broadband, mobile networks, cloud computing and digital platforms reduce geographical barriers and allow firms to reach consumers beyond local markets.

However, the economic benefits of digitalisation are not automatic. They depend on affordability, skills, institutional quality, data protection, competition and the ability of individuals and enterprises to use digital tools productively. Thus, digital access is necessary but not sufficient for inclusive economic development.

Digital financial inclusion

Digital financial inclusion involves the provision of affordable and accessible financial services through digital technologies. In India, the combination of Jan Dhan bank accounts, Aadhaar-based identification and mobile connectivity has been described as the JAM trinity.The expansion of UPI has substantially changed India's payment ecosystem. It enables real-time bank-to-bank transfers, merchant payments, QR-code transactions and peer-to-peer payments. The system has particularly benefited small merchants, self-employed workers and micro-enterprises by reducing dependence on cash and expensive payment infrastructure.

Objectives of the Study

1. To examine the growth of digital infrastructure in India during 2015–2025.
2. To analyse the contribution of Digital India to the expansion of the digital economy.
3. To assess the impact of digital payments on financial inclusion and economic activity.
4. To examine the role of digitalisation in promoting entrepreneurship, MSMEs and employment.

5. To identify the major challenges associated with India's digital transformation.
6. To suggest policy measures for making Digital India more inclusive and sustainable.

HYPOTHESES

Hypothesis 1
H_0: The expansion of digital infrastructure has no significant relationship with India's economic growth.
H_1: The expansion of digital infrastructure has a significant positive relationship with India's economic growth.

Hypothesis 2
H_0: Digital payment expansion has no significant impact on financial inclusion.
H_1: Digital payment expansion has a significant positive impact on financial inclusion.

Hypothesis 3
H_0: Digitalisation has not significantly improved the participation of MSMEs in formal markets.
H_1: Digitalisation has significantly improved the participation of MSMEs in formal markets.

RESEARCH METHODOLOGY

Research design
The study adopts a descriptive and analytical research design. It combines qualitative assessment of policy initiatives with quantitative analysis of selected indicators of digitalisation and economic development.

Nature of data
The study is based primarily on secondary data. Data and information have been collected from:

- Ministry of Electronics and Information Technology.
- Press Information Bureau.
- ICRIER.
- Reserve Bank of India.
- NPCI.
- TRAI.
- UIDAI.
- Ministry of Statistics and Programme Implementation.
- Government budget documents.
- Academic studies and policy reports.
- Relevant institutional and research publications.

Period of study
The principal period of study is 2015–2025, covering the first decade of the Digital India Programme. Where comparable data are unavailable, the study uses 2014 as the pre-Digital India base year.

Analytical framework : The study evaluates Digital India through six dimensions:

1. Digital connectivity and infrastructure.
2. Digital financial inclusion.
3. E-governance and public-service delivery.
4. Digital entrepreneurship and MSMEs.
5. Employment and human capital.
6. Innovation and strategic technological capacity.

Limitations
The digital economy is difficult to measure because digitalisation cuts across traditional sectors. The ICRIER study notes that conventional national accounts do not directly capture all digital activities, including platform businesses, digitally enabled traditional firms and informal digital work. Therefore, digital economy estimates vary according to the methodology used.

Evolution of Digital India: 2015–2025
Digital India was initially organised around nine pillars:

1. Broadband highways.

2. Universal access to mobile connectivity.
3. Public internet access.
4. E-governance.
5. E-Kranti and electronic delivery of services.
6. Information for all.
7. Electronics manufacturing.
8. IT for jobs.
9. Early harvest programmes.

During the first phase, the focus was on building basic infrastructure and providing online access to public services. In the second phase, the programme expanded toward digital payments, digital identity, platform-based service delivery, artificial intelligence, cybersecurity, digital education and semiconductor manufacturing.

The programme's evolution can be divided into three stages:

Stage I: Foundation building, 2015–2017
The first stage focused on Aadhaar integration, mobile connectivity, Common Service Centres, digital literacy, online government services and the expansion of bank accounts. DigiLocker and BHIM-UPI were introduced during this period.

Stage II: Mass adoption, 2017–2020
This phase witnessed rapid growth in mobile internet, smartphones, digital payments and e-commerce. The affordability of mobile data accelerated digital adoption. Government services increasingly moved online, while digital transactions expanded among households and businesses.

Stage III: Platform expansion and strategic technology, 2020–2025
The COVID-19 pandemic increased reliance on digital education, telemedicine, online commerce and digital payments. Platforms such as CoWIN demonstrated the capacity of India's digital infrastructure to support large-scale public programmes. The focus subsequently expanded to AI, semiconductor manufacturing, digital skilling, cybersecurity and open digital networks.

Growth of Digital Infrastructure
Internet and broadband expansion : One of the clearest achievements of Digital India has been the expansion of internet connectivity. Internet connections increased from 25.15 crore in 2014 to 96.96 crore in 2024, representing growth of approximately 285.53 per cent. Broadband connections increased from 6.1 crore in March 2014 to 94.92 crore in August 2024.

Indicator	2014	2024–25	Change
Internet connections	25.15 crore	96.96 crore	About 285.53% increase
Broadband connections	6.1 crore	94.92 crore	About 1,452% increase
Telephone connections	93.3 crore	More than 120 crore	Significant expansion
5G towers	Not applicable	4.74 lakh	Rapid deployment
Gram Panchayats connected through BharatNet	Limited coverage	2.18 lakh	Major rural expansion

The increase in connectivity has reduced the cost of communication and enabled access to education, banking, e-commerce, digital entertainment and government services. Data prices declined substantially during the period, making mobile internet accessible to lower-income households.

4G and 5G expansion : The development of 4G networks and the rapid deployment of 5G have strengthened India's digital infrastructure. By 2025, 4G connectivity had reached 6,15,836 villages. Further, 4.74 lakh 5G towers had been installed, covering 99.6 per cent of India's districts.

5G is expected to support:
- Industrial automation.
- Smart logistics.
- Telemedicine.
- Precision agriculture.
- Connected transport systems.
- Remote education.

- Cloud-based enterprise services.
- Internet of Things applications.

The economic value of 5G, however, will depend on its use in productive activities rather than merely in high-speed consumer applications.

Bharat Net and rural connectivity : Bharat Net is a major rural broadband initiative designed to connect Gram Panchayats through optical fibre. By January 2025, more than 2.18 lakh Gram Panchayats had been connected and approximately 6.92 lakh kilometres of optical fibre had been laid.

Bharat Net has the potential to reduce rural-urban disparities by facilitating:

- Digital banking.
- Online education.
- Telemedicine.
- Digital agricultural extension.
- E-commerce.
- Online employment services.
- Access to government schemes.

Nevertheless, connectivity must be measured not only by infrastructure laid but also by actual service quality, reliability, affordability and usage.

Digital India and Economic Growth

Expansion of the digital economy : The most important macroeconomic contribution of Digital India is the expansion of the digital economy. The ICRIER–MeitY study estimates that India's digital economy contributed 11.74 per cent of national income in 2022–23. In absolute terms, this represented approximately ₹31.64 lakh crore in GDP and ₹28.94 lakh crore in GVA. The share is projected to increase to 13.42 per cent by 2024–25 .

The digital economy includes more than information technology and telecommunications. It also includes:

- Digital platforms.
- E-commerce.
- Fintech.
- Digital financial services.
- Digitally enabled banking.
- Online education.
- Digital media.
- Platform-dependent MSMEs.
- Digitally ordered trade.
- Online logistics.
- Software and IT-enabled services.

The ICRIER study estimates that digitally enabling industries accounted for 7.83 per cent of GVA, while new digital industries contributed nearly 2 per cent. The digital component of traditional sectors such as trade, banking, financial services, insurance and education contributed an additional 2 per cent of national GVA .

Productivity effects : Digital technology raises productivity through the following mechanisms:

1. **Lower transaction costs:** Digital platforms reduce search, payment and verification costs.
2. **Improved information access:** Firms and consumers can compare prices and identify markets more efficiently.
3. **Greater formalisation:** Digital transactions create records that can help firms obtain credit and enter formal markets.
4. **Time savings:** Online public services reduce travel, waiting time and administrative costs.
5. **Improved supply chains:** Digital tracking increases coordination between producers, suppliers and customers.
6. **Better targeting:** Data-enabled welfare systems can improve the targeting of subsidies and benefits.

The ICRIER report estimates that the digital economy employed approximately 14.67 million workers in 2022–23, representing 2.55 per cent of India's workforce. It also estimates that labour productivity in the digital economy was approximately five times higher than in the rest of the economy.

This comparison should be interpreted carefully because digital-sector employment estimates may exclude some informal and platform-based work. Nevertheless, it highlights the high value-added potential of digital industries.

Digitalisation of traditional sectors
Digitalisation is increasingly transforming sectors that were traditionally considered non-digital.

Agriculture
Digital technologies support agriculture through:

- Online market information.
- Weather and crop advisory services.
- Digital payments.
- Remote sensing.
- E-commerce for agricultural products.
- Digital land records.
- Direct transfers to farmers.
- Mobile-based extension services.

Digital platforms can reduce information asymmetry between farmers, traders and consumers. However, their impact depends on digital literacy, language accessibility and rural connectivity.

Banking and finance : Banks use digital platforms for account opening, e-KYC, loan processing, payment services, insurance and investment products. Fintech firms have expanded access to credit and financial services, particularly for small businesses and individuals with limited access to traditional banking.

Education : Online learning platforms have expanded access to educational content and professional training. Digital classrooms, online examinations and open educational resources have become more important. However, unequal device ownership and internet access continue to affect learning outcomes.

Healthcare : Telemedicine and digital health records have improved access to healthcare in remote regions. During the pandemic, digital platforms enabled online consultations, vaccination registration and health information dissemination.

Retail and logistics :E-commerce and digital payments have transformed retail trade. Small sellers can access wider markets through online platforms. Digital logistics systems support inventory management, delivery tracking and supply-chain integration.

Digital Payments and Financial Inclusion
Growth of UPI : UPI has become one of the most important achievements associated with India's digital transformation. In April 2025, UPI processed 1,867.7 crore transactions valued at ₹24.77 lakh crore. Approximately 460 million people and 65 million merchants were using UPI. India accounted for approximately 49 per cent of global real-time payment transactions in 2023.

UPI has changed the structure of retail payments by making digital transfers:

- Instant.
- Interoperable.
- Low-cost.
- Available twenty-four hours a day.
- Accessible through mobile phones.
- Suitable for small-value transactions.

The growth of QR-code payments has been particularly important for small retailers, street vendors, transport providers and informal businesses.

Impact on households
Digital payments provide households with easier access to:

- Banking services.
- Government transfers.
- Utility payments.
- Insurance.
- Pension products.

- Remittances.
- Online purchases.

They also reduce dependence on physical bank branches. For migrant workers, digital payments can reduce remittance costs and improve the speed of transfers.

Impact on businesses
For businesses, digital payment systems provide:

- Faster settlement.
- Lower cash-handling costs.
- Improved transaction records.
- Greater customer convenience.
- Opportunities to sell online.
- Potential access to formal credit.

Digital records may help small businesses establish a financial history. This can support access to loans and working capital, although data-based lending also raises concerns regarding consent, algorithmic bias and over-indebtedness.

Aadhaar and direct benefit transfers : Aadhaar-based authentication and Direct Benefit Transfer have improved the targeting of several welfare programmes. Government estimates indicate that DBT generated savings of more than ₹3.48 lakh crore between 2015 and March 2023. By May 2025, approximately ₹44 lakh crore had been transferred through DBT.
The economic significance of DBT includes:

- Reduction of duplicate beneficiaries.
- Lower leakage.
- Faster transfer of welfare payments.
- Greater transparency.
- Improved administrative efficiency.

However, biometric authentication failures, exclusion risks, weak grievance systems and limited connectivity can affect beneficiaries. Digital welfare delivery must therefore be accompanied by offline alternatives and effective complaint-resolution mechanisms.

Digital Entrepreneurship, MSMEs and Employment
Digital entrepreneurship : Digital India has created opportunities for new forms of entrepreneurship. Entrepreneurs can use digital platforms to sell goods, offer services, advertise products, receive payments and communicate with customers.
Important areas of digital entrepreneurship include:

- Fin tech.
- E-commerce.
- Online education.
- Digital marketing.
- Software services.
- App development.
- Content creation.
- Logistics technology.
- Online professional services.
- Health technology.

The development of digital platforms has reduced entry barriers in some markets. A small firm can reach customers across India without establishing a physical retail network.

Open Network for Digital Commerce : The Open Network for Digital Commerce seeks to create an interoperable digital commerce network rather than a closed platform model. By January 2025, ONDC covered more than 616 cities and had registered over 7.64 lakh sellers and service providers.
ONDC may benefit small businesses by:

- Reducing dependence on a single platform.
- Improving discoverability.
- Encouraging competition.
- Increasing market access.
- Supporting local sellers.

Its long-term impact will depend on consumer adoption, logistics, dispute resolution, platform governance and seller awareness.

MSME formalization : Digital payments, online registration, e-invoicing and digital marketplaces can help MSMEs enter the formal economy. Formalisation may improve access to:

- Institutional credit.
- Government procurement.
- Insurance.
- Tax benefits.
- Skill programmes.
- Export opportunities.

At the same time, formalisation can impose compliance costs on small enterprises. Policymakers must ensure that digital systems simplify compliance rather than merely increasing the burden.

Employment generation : The digital economy creates employment in:

- Software development.
- IT-enabled services.
- Telecommunications.
- Digital marketing.
- Data analysis.
- Cyber security.
- Platform-based delivery.
- Online education.
- E-commerce.
- Digital financial services.

However, digitalisation also changes traditional employment. Automation may reduce demand for routine tasks while increasing demand for advanced technical and analytical skills. Platform work may create flexibility but may also involve income instability, limited social security and weak bargaining power.The ICRIER study estimates that the digital economy employed 14.67 million workers in 2022–23, or approximately 2.55 per cent of the total workforce. Future employment policy must therefore combine digital skilling with social protection for platform and informal workers.

Digital India and Human Capital Development : Digital transformation depends on human capabilities. The Digital India Programme has supported digital literacy and technology training through initiatives such as PMGDISHA, FutureSkills Prime and iGOT Karmayogi.
Digital literacy enables citizens to:

- Use smartphones and computers.
- Access government services.
- Make digital payments.
- Search for information.
- Protect personal data.
- Identify online fraud.
- Participate in digital markets.

Future Skills Prime aims to provide training in emerging technologies, including artificial intelligence, cloud computing, cyber security, block chain and data science. Such programmes are important because India’s future competitiveness will depend not only on the number of internet users but also on the quality of digital skills.
Nevertheless, training programmes must address:

- Regional disparities.
- Language barriers.
- Gender gaps.
- Accessibility for persons with disabilities.
- The needs of rural workers.
- Practical employability.
- Continuous reskilling.

The economic return from digital infrastructure will remain limited if citizens lack the skills required to use it productively.

Innovation, AI and Semiconductor Development : The next phase of Digital India focuses increasingly on technological self-reliance and strategic capability.

India AI Mission : The India AI Mission was approved in 2024 with a budget of ₹10,371.92 crore over five years. It focuses on computing capacity, datasets, innovation, startups, skills and responsible artificial intelligence. By May 2025, national compute capacity had crossed 34,000 GPUs.

AI can support:

- Agricultural forecasting.
- Healthcare diagnostics.
- Language translation.
- Fraud detection.
- Education personalisation.
- Public-service delivery.
- Industrial productivity.
- Financial risk assessment.

However, AI development must address bias, explain ability, privacy, employment displacement and accountability.

Semiconductor manufacturing: The India Semiconductor Mission has an outlay of ₹76,000 crore and aims to build domestic capabilities in chip manufacturing and design. By May 2025, six semiconductor projects valued at approximately ₹1.55 lakh crore had been approved.

Semiconductors are important for:

- Electronics manufacturing.
- Telecommunications.
- Automobiles.
- Defence.
- Renewable energy.
- Artificial intelligence.
- Consumer devices.

Domestic semiconductor capacity can reduce import dependence and improve India's position in global value chains. However, the sector requires large capital investment, advanced skills, reliable infrastructure and long-term technological collaboration.

Major Challenges

Rural-urban digital divide : Despite significant progress, rural regions continue to lag behind urban areas in connectivity, device ownership, service quality and digital skills. National averages can conceal substantial regional inequalities.

The rural digital divide is influenced by:

- Lower household incomes.
- Limited electricity reliability.
- Poor network quality.
- Shared device ownership.
- Lower digital literacy.
- Language barriers.
- Limited local digital-service support.

Gender digital divide : Women often face lower access to mobile phones, smart phones, bank accounts and internet services. Social norms, safety concerns, affordability and limited control over household resources contribute to the gender gap.The ORF assessment reports that rural female mobile ownership and internet usage remain substantially below male levels. Gender-sensitive policies should provide affordable devices, digital training, safety awareness and women-focused entrepreneurship support.

Cyber security : The expansion of digital transactions increases exposure to:

- Phishing.
- Identity theft.
- Ransomware.

- Malware.
- Financial fraud.
- Data breaches.
- Online harassment.

Cyber security is therefore an economic issue as well as a technological issue. A major cyber incident can reduce consumer confidence, interrupt business operations and impose significant financial costs.

Data privacy : Digital public infrastructure depends on the collection and processing of large quantities of personal data. Data protection requires:

- Informed consent.
- Purpose limitation.
- Data minimisation.
- Strong security standards.
- Independent oversight.
- Effective grievance redress.
- Accountability for data breaches.

The Digital Personal Data Protection Act, 2023, and related rules represent important steps toward a formal data-governance framework. However, effective implementation and institutional independence are essential for public trust.

Platform concentration : Large digital platforms may exercise considerable control over markets, data and consumer access. Excessive concentration can create:

- High entry barriers.
- Unfair contractual terms.
- Dependence of small sellers.
- Algorithmic discrimination.
- Reduced competition.

Competition policy must therefore adapt to the characteristics of data-driven markets.

Employment insecurity : Platform workers and gig workers may experience uncertain incomes, limited social security and weak protection against arbitrary deactivation. Digital labour policies should address minimum standards for wages, insurance, accident compensation, maternity protection and grievance redress.

Measurement problems : The digital economy is difficult to measure because it cuts across sectors. Traditional national accounts may not adequately capture:

- Free digital services.
- Informal online work.
- Digital platforms.
- Household production enabled by digital tools.
- Productivity improvements in traditional industries.
- Data as an economic asset.

Regular digital economy surveys and digital supply-use tables are necessary for reliable policy formulation.

Policy Suggestions

Universal and affordable connectivity : The government should prioritise reliable broadband in rural and remote regions. Public investment should be linked to measurable service quality, uptime, affordability and actual usage rather than only the construction of infrastructure.

Digital literacy beyond basic access

Digital literacy programmes should include:

- Online banking.
- Cyber security.
- Privacy protection.
- Digital entrepreneurship.
- Government-service access.
- Financial planning.
- Online employment.

- Critical evaluation of information.

Training should be delivered in regional languages and through local institutions.

Women-centred digital inclusion: Policy should encourage women's ownership and use of digital devices. Women's self-help groups, schools, colleges, rural enterprises and community organisations can serve as centres of digital training.

Stronger cyber security

India needs:

- Public awareness campaigns.
- Better cybercrime reporting.
- Stronger institutional coordination.
- Security standards for digital platforms.
- Protection for small businesses.
- Cyber security training in schools and colleges.
- Greater accountability for data breaches.

Privacy and trust: Digital systems must be designed around privacy and user control. Citizens should have clear information about how their data are collected, used and shared. Consent should be meaningful rather than merely a formal click-through process.

Support for MSMEs

MSMEs require assistance in:

- Digital accounting.
- E-commerce on boarding.
- Cyber security.
- Digital marketing.
- Data protection.
- Access to digital credit.
- Government procurement platforms.
- Export-oriented digital commerce.

Social protection for platform workers : Platform workers should be integrated into social-security systems. Policies should cover health insurance, accident protection, retirement savings, income security and transparent grievance mechanisms.

Improved measurement: The government should develop regular digital economy statistics using internationally comparable frameworks. Enterprise surveys, labour surveys and national accounts should capture digital activity across both formal and informal sectors.

CONCLUSION

The first decade of Digital India has produced a significant transformation in India's economic and institutional landscape. From a programme focused primarily on connectivity and e-governance, it has developed into a broad digital ecosystem supporting payments, identity, public services, entrepreneurship, education, healthcare, commerce, AI and advanced manufacturing. The expansion of internet connections, broadband, mobile networks and 5G has created the foundation for a digitally connected economy. UPI has made India a global leader in real-time digital payments, while Aadhaar and DBT have strengthened the delivery of welfare services. DigiLocker, UMANG, BharatNet, GeM and ONDC have expanded the reach of digital public infrastructure. The digital economy contributed 11.74 per cent of national income in 2022–23 and is expected to increase its share substantially in the coming years. Digital India has contributed to economic growth by reducing transaction costs, improving market access, promoting financial inclusion, supporting formalisation and creating new opportunities for entrepreneurship. It has also strengthened the state's capacity to deliver services at scale.

However, the benefits of digitalisation are uneven. Rural and gender-based inequalities, limited digital skills, cyber security risks, data privacy concerns, platform concentration and employment insecurity continue to pose serious challenges. The future success of Digital India will therefore depend on whether the country can move from digital access to meaningful digital empowerment. The next decade should focus on an inclusive, secure and productive digital economy. Digital technologies must be made affordable, accessible and understandable to all citizens. If these conditions are fulfilled, Digital

India can become not only a technology programme but also a powerful instrument for inclusive growth, employment generation, public-sector reform and India's transition toward a high-productivity knowledge economy.

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