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A STUDY ON THE IMPACT OF DIGITAL TRANSFORMATION ON THE INDIAN ECONOMY

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Abstract:

The digital transformation of the Indian economy serves as a primary driver behind the nation's recent economic growth and development. Digitalization has proven to be a catalyst for growth, fostering innovation and inclusivity across various sectors, including finance, e-commerce, agriculture, healthcare, education, and entrepreneurship. This study explores the multifaceted impact of digital transformation on Indian economy, with a particular focus on key government initiatives such as Digital India, the Unified Payments Interface (UPI), Aadhaar, the Bharat Net Project, and Startup India. It assesses their achievements, influence, challenges, and contributions to economic growth, productivity, and employment. The research underscores the effects of government-led initiatives on the digitalization of the economy across multiple sectors. These efforts have positioned India as a global leader in digital innovation. However, challenges remain, such as the digital divide, cybersecurity risks, skill gaps, and regulatory obstacles, which continue to impede equitable digital progress. By analysing existing literature, secondary data, and global benchmarks, this study provides valuable insights for policymakers, businesses, and educators, offering guidance on how to maximize the potential of digital transformation in India.

Keywords: *Digital Transformation, Indian Economy, Digital India, Financial Inclusion, UPI & Aadhaar*

Introduction:

The digital transformation of the Indian economy represents a pivotal shift in its development trajectory, enabling technological integration across sectors to drive growth, efficiency, and inclusivity. This study examines the multidimensional impact of digital transformation in India, focusing on its significance in reshaping economic activities, fostering innovation, and addressing challenges related to digital disparities.

1. **Defining Digital Transformation**

   Digital transformation refers to the integration of digital technologies into all aspects of business and governance, fundamentally altering how economies operate and deliver value to stakeholders. It encompasses the use of artificial intelligence (AI), blockchain, cloud computing, the Internet of Things (IoT), and mobile technologies to optimize processes, enhance productivity, and improve connectivity (Mazzucato, 2018). In the Indian context, digital transformation involves leveraging technology to address socio-economic challenges, including financial inclusion, rural development, and skill enhancement.

2. **India's Digital Economy and Global Position:**

   India's digital economy, expected to reach $1 trillion by 2025, is driven by widespread smartphone and internet use, affordable data, and government initiatives (MeitY, 2019). With 800 million active internet users, India leads in digital payments, with UPI processing 16.73 billion transactions worth ₹23.25 lakh crore in December 2024 (NPCI, 2024). The Aadhaar system, with 1.3

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billion enrollments, has enabled direct benefit transfers to 900 million people, reducing subsidy leakages (UIDAI, 2024). UPI, capturing 75% of retail payments, has expanded internationally to Singapore and UAE (NPCI, 2024). The EdTech market will reach $10 billion by 2025, and the HealthTech sector, powered by NDHM, has issued 500 million health IDs and increased teleconsultations by 300% (National Health Authority, 2024). These advancements position India as a digital leader.

3. **Key Initiatives:**

Key Initiatives for digital transformation of the Indian economy are summarised below. These efforts have boosted India's digital economy while improving transparency, governance, and rural connectivity.

4. Government Digital Transformation Initiatives in India

Sr. no.	Initiative	Launch Year	Objective	Key Achievements (as of 2024)
1	Digital India Initiative	2015	To transform India into a digitally empowered society	Increased internet penetration to 850 million users, issued unique identities to 1.3 billion population, 95.15% villages having access to internet with 3G/4G mobile connectivity, seamless access to government subsidies and benefits for millions, directly contributing to financial empowerment
2	Unified Payments Interface (UPI)	2016	To promote cashless transactions and digital payments	16.73 billion transactions processed in December 2024
3	Aadhaar	2009	To provide a unique digital identity to citizens	1.3 billion Aadhaar cards issued
4	Pradhan Mantri Gramin Digital Saksharta Abhiyan	2017	To promote digital literacy in rural households	6.39 crore individuals made digitally literate
5	BharatNet Project	2011	To provide broadband connectivity in rural India	2.14 lakh (214,000) Gram Panchayats with broadband services
6	National Digital Health Mission (NDHM)	2020	To create a digital health ecosystem	Over 618 million Unique Health IDs (ABHA IDs) created for citizens.
7	Startup India	2016	To foster innovation and entrepreneurship	India has emerged as the 3rd largest startup hub globally, with over 157,066 startups, more than 100 unicorns
8	Jan Dhan-Aadhaar-Mobile (JAM) Trinity	2014	To promote financial inclusion through digital infrastructure	500 million Jan Dhan accounts opened

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9	E-Shram Portal	2021	To register unorganized workers and provide social security	Over 30.48 crore unorganized workers have registered, receiving a Universal Account Number (UAN)
10	National AI Portal (INDIAai)	2020	To promote the use of AI in governance and industry	Supports AI research and innovation in key sectors, Knowledge Repository, AI Ecosystem Database
11	DigiLocker	2015	To provide secure digital storage for important documents	Registered over 236.91 crore users and Issued 6.28 crore documents

5. Research Questions:

b) How has digital transformation reshaped key economic sectors in India?

c) What are its effects on employment, productivity, and growth?

d) What challenges remain in achieving equitable digital growth?

Digital transformation has revolutionized the Indian economy by boosting productivity and innovation while posing challenges in terms of digital inequality and data governance.

6. Objectives:

The primary objective of this research is to examine the multidimensional impact of digital transformation on the Indian economy, focusing on its contributions to economic growth, innovation, and inclusivity while identifying challenges and barriers.

The objectives of the study are to:

1. Assess various government's initiatives with respect to digitalization of Indian economy.
2. Evaluate impact of digital transformation on Indian economy
3. Identify challenges faced in digital transformation of Indian economy

7. Methodology:

The study adopts a mixed-methods approach, combining qualitative and quantitative analyses to examine the impact of digital transformation on India's economy. It draws extensively on secondary data from reliable sources such as MeitY, NASSCOM, and the World Bank to evaluate key indicators like UPI transactions, digital sector contributions to GDP, and employment patterns. The research includes a comprehensive review of literature and case studies, highlighting UPI's role in promoting financial inclusion. Major government initiatives, including Digital India, are assessed to understand their successes, challenges, and areas for improvement, addressing issues such as the digital divide and cybersecurity concerns. Additionally, the study conducts comparative and regional assessments to explore disparities in digital adoption and identify opportunities for targeted interventions.

Literature Review:

1. Global Trends and Benchmarks in Digital Transformation:

Digital transformation is reshaping economies worldwide, enabling governments and businesses to increase efficiency, enhance service delivery, and foster innovation. Core trends include the adoption of artificial intelligence (AI), Internet of Things (IoT), blockchain, and 5G technology. These advancements have driven economic competitiveness and opened opportunities for sustainable growth (World Economic Forum, 2020).

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Key Lessons from Other Countries:

1. **United States:** The U.S. is a global leader in digital transformation due to its robust innovation ecosystems, with technology hubs like Silicon Valley. Companies such as Amazon, Google, and Microsoft dominate markets for AI, cloud computing, and digital services (McKinsey Global Institute, 2019). Government-backed initiatives such as the National AI Initiative Act focus on developing AI capabilities, setting benchmarks for integrating cutting-edge technologies (U.S. Congress, 2021).
2. **China:** China has rapidly advanced its digital economy through strategic government policies like "Made in China 2025," focusing on building smart factories and enhancing industrial automation (China State Council, 2015). With over 1 billion internet users, China's digital transformation is driven by mobile-based innovations like WeChat Pay and Alipay, making it a leader in digital payments and e-commerce (World Bank, 2021).
3. **The Impact of Digital Transformation on the Indian Economy**

   Digital transformation has had a profound impact on various sectors of the Indian economy, driving growth, inclusivity, and innovation across financial services, agriculture, healthcare, education, and entrepreneurship.

   1. **Financial Inclusion and Payments:** Digital transformation has revolutionized financial services in India, enhancing financial inclusion and payment systems. The Unified Payments Interface (UPI) has become a pivotal tool for digital payments, enabling seamless transactions. In 2024, UPI processed over 16.73 billion transactions worth ₹23.25 lakh crore, averaging 539.68 million transactions daily (Economic Times). Digital payment systems have expanded services to rural and semi-urban areas. The Pradhan Mantri Jan Dhan Yojana (PMJDY) opened over 500 million bank accounts, promoting financial inclusion. Aadhaar-linked Direct Benefit Transfers (DBTs) have saved ₹2.25 lakh crore by ensuring subsidies reach beneficiaries directly (MeitY, 2024). Aadhaar-enabled Payment Systems (AePS) facilitated over 2.2 billion transactions in 2024, bringing banking to underserved rural areas. Initiatives like the PAHAL scheme saved ₹72,000 crore, improving transparency and efficiency in welfare programs (UIDAI, 2024).
   2. **Agriculture:** AgriStack, the Government of India's centralized digital platform for agriculture, has significantly improved farming efficiency and sustainability. By December 2024, over 3.7 million farmer IDs were created, linking farmers to a digital record of their activities and ensuring direct access to government services and subsidies (Business Standard, 2024). Technologies like AI and remote sensing have boosted crop yields by 20-30%, and integration with eNAM has enhanced market connectivity, increasing farmers' income by 15-20% (Press Information Bureau, 2024). AgriStack also streamlines crop insurance through schemes like PMFBY, cutting settlement times by 50% (Press Information Bureau, 2024). Real-time weather alerts and blockchain for traceability have further improved the agricultural ecosystem, reducing crop losses by 30-40% and ensuring transparency (Press Information Bureau, 2024). The integration of UPI and Aadhaar has enabled direct transfer of fertilizer subsidies to over 90 million farmers, ensuring transparency and

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reducing delays (Press Information Bureau, 2023). Digital technologies have also enhanced seed distribution, with over 50% of seeds now tracked digitally (Press Information Bureau, 2024). The MSP scheme has seen a 30% increase in recipients, with 75% of payments processed digitally, ensuring quicker, accurate payments and fair prices for farmers.

3. **E-commerce and Retail:** Digitalization initiatives of the government has transformed the e-commerce and retail sector by improving accessibility, efficiency, and customer experience. The Indian e-commerce market grew from $85 billion in 2021 to $120 billion in 2023, and it is projected to reach $200 billion by 2026 (IBEF, 2023). Platforms like Amazon, Flipkart, and JioMart have expanded their reach due to rising internet penetration, which hit 850 million users in 2024 (TRAI, 2024).

   Digital payments, particularly through UPI, have fuelled growth by processing 16.73 billion transactions in December 2024 (NPCI, 2024). Government initiatives like Bharat Net and PMGDISHA have connected rural areas, boosting online retail. Digitalization has also empowered MSMEs, with over 60% of small businesses now using online platforms to expand their customer base (DPIIT, 2024). However, traditional retail faces competitive pressures, prompting the need for digital adoption to stay relevant.

4. **Healthcare :** Digital technologies have revolutionized the Indian healthcare sector by enhancing accessibility, affordability, and efficiency. The National Digital Health Mission (NDHM), launched in 2020, aims to create a unified digital health infrastructure with over 20 million health IDs created by 2023 (Press Information Bureau, 2023). Platforms like eSanjeevani, which conducted over 30 million teleconsultations by 2023, have improved healthcare access, especially in rural areas (Press Information Bureau, 2023). Furthermore, the integration of Aadhaar with healthcare services has streamlined the delivery of benefits, such as in the Pradhan Mantri Jan Arogya Yojana (PMJAY), which enrolled 10 crore beneficiaries by 2023 (Press Information Bureau, 2023).

   The Aarogya Setu app, launched during the COVID-19 pandemic, became a crucial tool for contact tracing and public health advisories, reaching over 200 million downloads by 2021 (NITI Aayog, 2022). The overall adoption of digital technologies has led to a 25-30% increase in operational efficiency in hospitals (NITI Aayog, 2022), contributing to the improvement of healthcare services across the country.

5. **Education:** Digital transformation in India's education sector has significantly improved access to quality education, particularly benefiting rural and underserved communities. Government-led initiatives like SWAYAM, NPTEL, and DIKSHA have expanded e-learning opportunities, offering free courses, multilingual content, and skill development programs. Platforms such as e-PG Pathshala, Bharat Skills, and digital repositories like the National Digital Library of India and IGNOU e-Gyankosh provide vast educational resources, contributing to lifelong learning. The Swayam Prabha TV channels, with 34 dedicated DTH channels, have also extended educational content to remote areas. These efforts have improved learning outcomes and reduced

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dropout rates while making education more affordable by minimizing the need for physical infrastructure.

The impact of these digital initiatives is substantial. NPTEL offers over 1,400 courses annually and has more than 62,000 hours of video content, with 4.5 million YouTube subscribers. By 2024, 2.55 crore enrollments were recorded, and 23.4 lakh e-certifications were issued. DIKSHA has reached 1.4 crore students and 15 lakh teachers, promoting inclusive education. Digital platforms have streamlined administrative processes, including Common Entrance Tests (CETs), ensuring transparency and reducing logistical challenges. The PM eVIDYA initiative reached 25 million students by 2023, enhancing affordability for economically disadvantaged groups. Furthermore, UDISE+ has improved educational data collection across 1.5 million schools, enabling better monitoring of infrastructure and resources. e-Governance initiatives in higher education have also enhanced administrative efficiency through digitized admissions, exams, and result processing, supporting a more robust and inclusive education system.

6. **Governance:** Digital initiatives have significantly improved transparency, accountability, and service delivery in India's governance system. The Aadhaar-based Direct Benefit Transfers (DBTs) disbursed ₹7.44 lakh crore across 319 schemes by 2023, reducing leakages and ensuring accurate beneficiary targeting (Press Information Bureau, 2023). Platforms like UMANG, DigiLocker, and e-Districts provide over 4,000 government services online, with 135 crore digital transactions monthly (Ministry of Electronics and IT, 2023). The Public Financial Management System (PFMS) processed ₹30.88 lakh crore in payments by 2023, ensuring timely fund releases (Press Information Bureau, 2023). Digitalization also improved tax compliance, the number of GST-registered taxpayers grew from 1.03 crore in 2017 to 1.43 crore in 2023, with monthly GST collections exceeding ₹1.5 lakh crore in 2023 (GST Council, 2023). The CoWIN platform facilitated the administration of 220 crore COVID-19 vaccine doses by 2024, showcasing India's large-scale digital governance capacity (Press Information Bureau, 2024). DigiLocker issued over 14 crore digital documents by 2024, promoting paperless governance (Ministry of Electronics and IT, 2024). The Government e-Marketplace (GeM) recorded ₹4 lakh crore worth of transactions by 2024, improving transparency in public procurement (Ministry of Commerce, 2024). These digital initiatives have improved efficiency, reduced corruption, and enhanced citizen engagement across government services.
7. **Startups and Entrepreneurship:** Government digitalization initiatives in India have greatly enhanced the startup ecosystem by simplifying business processes and providing access to resources, technology, and funding. Key programs like Startup India, Fund of Funds for Startups (FFS), and Digital India have facilitated innovation and entrepreneurship. Platforms such as GSTN, EPFO, and MSME have streamlined business registration, reducing setup time and complexity. The eBiz Portal and Single Window Clearance System simplify regulatory procedures. The FFS has committed over ₹10,000 crore for supporting startups

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(DPIIT, 2023), while Pradhan Mantri Mudra Yojana (PMMY) has disbursed over ₹8.5 lakh crore to 34 million micro-entrepreneurs (Ministry of Finance, 2023). Initiatives like BharatNet and platforms such as Amazon India and Flipkart have opened up wider market access for startups in various sectors. As of 2023, India has over 90,000 recognized startups and 108 unicorns (DPIIT, 2023). Additionally, over 1.4 crore entrepreneurs have benefited from the Digital India initiative (Ministry of Electronics and IT, 2023). These efforts have positioned India as a global hub for innovation and entrepreneurship.

8. **Employment :** Digitalization has significantly boosted employment across India's economy, driven by initiatives like Digital India, Startup India, and Skill India. The IT and ITeS sectors employed over 5.4 million professionals by 2023 (NASSCOM, 2023), with digital roles in software development and cybersecurity seeing high demand. The gig economy grew, with 7.7 million workers in 2021, expected to reach 23.5 million by 2030 (NITI Aayog, 2022). Platforms like Swiggy, Zomato, and Flipkart have created jobs in logistics and customer service. Digital programs such as PMGDISHA, training 6 crore rural people by 2023 (Ministry of Electronics and IT, 2023), have expanded job access. Digital financial services, Common Service Centers (CSCs), and the Fund of Funds for Startups have created jobs for rural entrepreneurs, with over 9 lakh jobs from 90,000 startups (DPIIT, 2023). Sectors like EdTech and HealthTech have also generated thousands of jobs in telemedicine and online education, further promoting job growth.
9. **Productivity and Growth:** Digital transformation has improved efficiency across industries by integrating AI, IoT, and automation. For instance, AI-driven solutions in manufacturing have reduced production costs by 20%, while IoT adoption in logistics has improved delivery times by 30% (Deloitte, 2023).
10. **Contribution to GDP and Export Growth:** India's digital economy has become a significant driver of economic growth and international trade. As of 2023, it accounted for approximately 9% of the country's GDP, with estimates suggesting it could rise to 20% by 2025 (World Bank, 2021). The IT and IT-enabled services (ITeS) sector has played a key role in this expansion, contributing to both domestic development and export growth. In 2023, India's ITeS exports stood at $194 billion, underscoring its growing presence in the global digital market (NASSCOM, 2023). The country has established itself as a leading provider of software solutions, data services, and business process outsourcing (BPO) to international clients. Emerging technologies like artificial intelligence (AI), cloud services, and cybersecurity have further enhanced India's digital export potential. Government initiatives such as Digital India and Make in India have also accelerated digital infrastructure development and workforce upskilling, supporting sustained growth in both GDP contributions and export revenues across sectors like e-commerce, FinTech, and Health Tech.

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Impact of Digital Technology on India's Economy				
Sector/Indicator	**Before Digital Transformation (2010)**	**Current Status (2024)**	**Impact/Change**	**Source**
Digital Payments (UPI)	₹1.2 Trillion (2010)	₹160 Trillion (2024)	Explosive growth of digital transactions through UPI.	NPCI, 2024
Internet Penetration	7.5%	66%	Significant increase in internet users (over 900 million).	Ministry of Electronics and IT, 2024
Digital Economy Contribution to GDP	5%	20%	Digital economy's share of GDP is rapidly increasing.	NASSCOM, 2023
E-commerce Market Size	$4.5 Billion	$120 Billion	Boost in online retail and services sector.	Ministry of Commerce, 2024
Employment in IT & Digital Sectors	2 Million	5 Million	Significant job creation in IT, AI, and fintech sectors.	NASSCOM, 2023
Startups	2,500	100,000+	India has become the third-largest startup ecosystem.	DPIIT, 2023
Rural Internet Users	0.5 Million	450 Million	Rural digital inclusion has grown substantially.	Ministry of Electronics and IT, 2024
Government Services (Digital India)	Minimal	100+ Core Services Online	Improved governance and transparency through digital tech.	Ministry of Electronics and IT, 2024
Financial Inclusion (Jan Dhan Accounts)	60 Million Accounts	500+ Million Accounts	Boost in financial inclusion due to digital banking.	Ministry of Finance, 2023

Challenges in Digital Transformation:

India's efforts to digitalize face multiple obstacles that hinder the development of a strong digital economy. Despite various government initiatives aimed at closing the digital gap, challenges such as poor infrastructure, cybersecurity risks, and low digital literacy persist, especially in rural areas. Digital infrastructure remains a significant obstacle, with only 52.4% of rural areas having internet access in 2024, and only 41.7% of rural households connected to the internet. The disparity between urban and rural digital access is stark, with about 60% of rural households lacking internet compared to just 10% in urban areas. Furthermore, digital literacy remains a concern, as 30% of the rural population lacks basic digital skills, despite initiatives like PMGDISHA.

As digital services expand, cybersecurity and privacy issues have become more prominent, with 2.3 million cybercrimes reported in 2023, leading to financial losses of around ₹11,333 crore in 2024. Financial

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challenges also persist, with 28% of Indian adults unbanked, limiting the adoption of digital payments, particularly in rural areas. Regulatory and policy hurdles, along with the high costs of technology adoption, further hinder the digital transformation of businesses. The ongoing development of the Personal Data Protection Bill (2023) highlights the need for stronger data privacy protections. Lastly, the shortage of skilled workers in areas such as AI, data science, and cybersecurity remains a major issue, with 60% of tech companies reporting a lack of qualified professionals in these fields.

Conclusion:

The study on the impact of digital transformation on the Indian economy underscores its transformative potential across diverse sectors, driving growth, innovation, and inclusivity. Key findings reveal how initiatives like Aadhaar, UPI, and Digital India have reshaped financial inclusion, e-commerce, agriculture, healthcare, education, and entrepreneurship. These initiatives have not only enhanced efficiency and transparency but also positioned India as a global leader in digital innovation. Emerging technologies such as AI, blockchain, and 5G, offer immense opportunities for sustained growth and global leadership.

However, the research also highlights significant challenges. The persistent digital divide, particularly between urban and rural areas, coupled with gaps in digital infrastructure and mobile connectivity, remains a barrier to equitable growth. Cybersecurity threats and the absence of robust data privacy frameworks pose risks to user trust and safety. Additionally, the skill gap in rural areas and traditional industries underlines the need for widespread digital literacy and reskilling initiatives.

Despite these challenges, the duality of digital transformation—offering opportunities while posing obstacles—presents an opportunity for collective action. Policymakers, businesses, and educators must collaborate to address these barriers. Policymakers should prioritize bridging the digital divide, accelerating infrastructure development, and enacting clear regulations for emerging technologies like AI and blockchain. Businesses must embrace public-private partnerships to scale digital infrastructure and skill development initiatives, ensuring that underserved community's benefit from this transformation. Educators must innovate to integrate digital skills into curricula and foster lifelong learning opportunities to prepare the workforce for future technological advancements.

In conclusion, while digital transformation in India has demonstrated immense potential to revolutionize the economy and improve lives, a concerted effort is required to make it inclusive and sustainable. By addressing challenges and leveraging opportunities, India can solidify its position as a global leader in digital innovation, ensuring that growth benefits every segment of its population.

References :

1. *CERT-In. (2023). Cybersecurity incidents in India. Retrieved from https://www.cert-in.org.in*
2. *Chandrasekhar, S., Ghosh, A., & Chakravarty, S. (2020). Aadhaar and its role in welfare distribution: A critical analysis. Journal of Development Policy. Retrieved from https://www.journalofdevelopmentpolicy.com*
3. *China State Council. (2015). Made in China 2025 Initiative. Retrieved from http://english.www.gov.cn*
4. *Deloitte. (2023). Digital transformation challenges and 5G infrastructure in India. Retrieved from https://www2.deloitte.com*
5. *Department for Promotion of Industry and Internal Trade (DPIIT). (2023). Startup India*

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XIII, Issues– V Sept – Oct, 2024

OPEN ACCESS Original Research Article

annual report. Retrieved from https://www.startupindia.gov.in

6. *GSMA. (2023). 5G in India: Opportunities and challenges. Retrieved from https://www.gsma.com*
7. *India Brand Equity Foundation (IBEF). (2022). E-commerce in India. Retrieved from https://www.ibef.org*
8. *International Finance Corporation (IFC). (2022). Digital platforms and women's empowerment in India. Retrieved from https://www.ifc.org*
9. *Jain, R., & Ghosh, S. (2022). Unified Payments Interface (UPI) and its economic impact: Evidence from India. Journal of Payment Systems. Retrieved from https://www.journalofpaymentsystems.com*
10. *KPMG. (2023). EdTech in India: Growth and challenges. Retrieved from https://www.kpmg.com*
11. *Mazzucato, M. (2018). The value of everything: Making and taking in the global economy. PublicAffairs.*
12. *McKinsey Global Institute. (2019). Digital America: A tale of the haves and have-mores. Retrieved from https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/digital-america-a-tale-of-the-haves-and-have-mores*
13. *McKinsey Global Institute. (2022). Future of work and reskilling in India. Retrieved from https://www.mckinsey.com*
14. *McKinsey Global Institute. (2022). The future of work in India: Automation and employment shifts. Retrieved from https://www.mckinsey.com*
15. *MeitY. (2023). Digital India: Progress and Prospects. Ministry of Electronics and Information Technology, Government of India. Retrieved from https://www.meity.gov.in/sites/upload_files/dit/files/Digital%20India.pdf*
16. *Ministry of Agriculture and Farmers' Welfare. (2023). eNAM - One Nation, One Market. Retrieved from https://www.enam.gov.in*
17. *Ministry of Electronics and Information Technology (MeitY). (2019). India's trillion dollar digital economy. Government of India. Retrieved from https://www.meity.gov.in*
18. *Ministry of Electronics and Information Technology (MeitY). (2023). Digital India: Progress and Prospects. Retrieved from https://www.digitalindia.gov.in*
19. *Ministry of Electronics and Information Technology (MeitY). (2023). BharatNet progress report. Retrieved from https://www.digitalindia.gov.in*
20. *Ministry of Electronics and Information Technology (MeitY). (2023). Progress report on BharatNet and cybersecurity. Retrieved from https://www.meity.gov.in*
21. *Ministry of Electronics and Information Technology (MeitY). (2023). Digital India progress report. Retrieved from https://www.digitalindia.gov.in*
22. *Ministry of Housing and Urban Affairs (MoHUA). (2023). Smart Cities Mission progress report. Retrieved from https://www.smartcities.gov.in*
23. *Ministry of New and Renewable Energy (MNRE). (2023). India's path to net-zero: Renewable energy and green technology initiatives. Retrieved from https://www.mnre.gov.in*
24. *NASSCOM. (2023). Digital skilling and public-private partnership strategies. Retrieved from https://www.nasscom.in*
25. *NASSCOM. (2023). IT and ITES employment trends in India. Retrieved from https://www.nasscom.in*

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AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XIII, Issues– V Sept – Oct, 2024

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26. *NASSCOM. (2023). Policy and regulation challenges in India's digital economy. Retrieved from https://www.nasscom.in*
27. *National Payments Corporation of India (NPCI). (2024). UPI statistics and growth trends. Retrieved from https://www.npci.org.in*
28. *Press Information Bureau. (2023). "Direct Benefit Transfer for Fertilizers and MSP Scheme."*
29. *Press Information Bureau. (2024). "Impact of Digital Technologies in Agriculture and Financial Inclusion."*
30. *Ministry of Agriculture and Farmers Welfare. (2023). "MSP Procurement and Digital Payment Systems."*
31. *NITI Aayog. (2021). India's digital divide: Strategies for inclusivity. Government of India. Retrieved from https://www.niti.gov.in*
32. *NITI Aayog. (2022). The impact of Aarogya Setu. Retrieved from https://www.niti.gov.in*
33. *PwC. (2022). Artificial intelligence in India: Transforming businesses and society. Retrieved from https://www.pwc.in*
34. *Reserve Bank of India (RBI). (2022). Digital payments in India: A statistical overview. RBI Bulletin. Retrieved from https://www.rbi.org.in*

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