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Role of digital transformation in achieving Atmanirbhar Bharat: A sectoral analysis

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Abstract
The idea of Atmanirbhar Bharat (Self-Reliant India) focuses on strengthening the nation through innovation, efficient use of resources, and sustainable growth. At the heart of this vision lies digital transformation, uses technology to improve service delivery and governance across various sectors. This study explores the role of digital technology in supporting India's self-reliance, focusing on three major sectors: Financial, Education and Healthcare sector. Adopting a qualitative research approach, this study draws on secondary data from government reports, policy documents, academic literature, and industry publications. Findings highlight that digital transformation has enhanced operational efficiency, promoted financial inclusion, enabled online education, digitized healthcare, and fostered innovation in strategic sectors. However, challenges remain, including poor internet connectivity in remote areas, low digital literacy, and cyber security risks. The study concludes that digital transformation is not just a technological change but a crucial enabler of India's journey toward self-reliance and global competitiveness. Moving forward, smart policies, stronger institutions, and public participation are essential to maximize the benefits of digital tools for inclusive and sustainable development.

Keyword: Atmanirbhar Bharat, digital transformation, sectoral analysis, self-reliant India, sustainable development, digital India

Introduction
India's journey towards becoming a self-sustaining economy gained significant momentum with the launch of the Atmanirbhar Bharat Abhiyan on May 12, 2020, led by Prime Minister Narendra Modi. With a ₹20 lakh crore financial package, the initiative aims to boost domestic production, reduce import dependence, and empower local industries in key sectors (Press Information Bureau, 2020). Central to this mission is digital transformation, which leverages technology to enhance efficiency, innovation, and public service delivery. Initiatives like Digital India, Startup India, the National Digital Health Mission, and PM Gati Shakti have been introduced to support this shift (Ministry of Electronics and Information Technology, 2022). While some sectors have rapidly adopted digital technologies, others face challenges such as inadequate infrastructure, digital illiteracy, and limited policy implementation (Press Information Bureau, 2024). This imbalance hinders inclusive digital growth and self-reliance. This study focuses on three critical sectors-healthcare, education, and finance-to explore how digital innovations are shaping these areas in the context of Atmanirbhar Bharat. The study will adopt a qualitative, sector-wise analytical approach to assess the impact, potential, and challenges of digital transformation in healthcare, education, and finance. Data will be gathered from secondary sources, including government publications, industry reports, and academic papers, to analyze digital initiatives and their effectiveness. The research will also identify barriers to digital adoption and suggest actionable strategies to overcome these obstacles. Additionally, the study will evaluate how these sectors contribute to India's self-reliance, inclusivity, and global competitiveness. Through this approach, the research aims to provide insights and recommendations for accelerating India's move toward digital empowerment and self-sufficiency (Grand View Research, 2024; Ministry of Commerce & Industry, 2024) [48].

Review of Literature
Khan and Joshi (2021) [34], the research focuses on the influence of digital education on skill development under the Atmanirbhar Bharat Mission. Researcher surveying individuals

enrolled in online training courses and evaluating the outcomes of such programs, the study analyzes how effectively digital platforms are delivering practical skills and improving job readiness. The findings offer valuable perspectives on how digital learning is helping to close the skills gap and support the goal of building a self-reliant workforce in India.

Nath (2024) [53] conducted the study on Role of ICT in transforming India towards Atmanirbhar Bharat. This study explores how Information and Communication Technology (ICT) supports India's Atmanirbhar Bharat mission by encouraging digital innovation, entrepreneurship, and e-governance, while also helping reduce the digital gap between urban and rural areas. It stresses the need for digital literacy and quality education to create a skilled workforce for the digital age. Based on secondary research from articles, government reports, and policy reviews, the study shows how ICT can improve the economy, governance, rural development, healthcare, and industry. It also discusses the challenges and suggests ways to achieve long-term growth and self-reliance.

Oz (2018) study is conducted on Academicians view on Digital Transformation in Education. In this paper researcher study the need for digital transformation in education, researcher found that academicians strongly believe education must move forward with digital changes, just like the rest of the world. They shared that Digital technologies like artificial intelligence, learning analytics, and online/virtual learning can enhance the effectiveness of education. They pointed out that it's important to update physical spaces and infrastructure to support these changes by using modern Information and Communication Technology (ICT).

Patil (2025) [67] study is conducted on india's goals of the initiatives of Atmanirbhar Bharat and Viksit Bharat point to the significant impact of research and innovation in enhancing the economy Researcher studies that To turn academic research into successful businesses, teamwork between universities, industries, and the government is essential. Projects such as Startup India, Make in India, and Atal New India challenge help by offering funding, resources, and guidance. The researcher depicted the study that to rise of small businesses (MSMEs) and patent-based industries in areas like healthcare, energy, and farming shows how research-based entrepreneurship can strengthen India's status as a global leader in innovation and self-reliance.

Patel *et al*., (2019) [66] this study is about the impact of digital education on entrepreneurship development related with the Atmanirbhar Bharat Abhiyan. The researcher conducting interviews with entrepreneurs and analyzing digital learning tools, this research shows how virtual education has empowered budding entrepreneurs with essential skills, knowledge, and support to initiate and manage their businesses. The study emphasizes the significant role of digital education in promoting self-employment, generating job opportunities, and contributing to economic advancement and self-sufficiency

Singh and Sharma (2020) [75] this study delves into the role of digital technologies, particularly digital education, in fostering inclusive growth under the Atmanirbhar Bharat initiative. By examining government schemes, scholarly research, and real-world examples, the paper evaluates how digital tools are enhancing educational access, encouraging entrepreneurship, and supporting skill development among underrepresented groups. It sheds light on both the opportunities and challenges involved in utilizing digital innovations to promote socio-economic up liftment across India

Sinku (2021) [74] Study is conducted on Digital transformation in education sector. This paper present Covid-19 pandemic caused major disruption to India's education system, with over 95% of schools and colleges closing by March 2020. Researcher found that sudden move to online learning showed how dependent the system was on traditional methods and how unprepared it was for digital education. However, it also sped up the use of technology, as teachers started using online tools to continue teaching. While some schools were already using digital methods, the pandemic showed that many more-especially in rural areas-need to catch up. Secondary data shows both problems and new chances in this shift. If used well, digital learning can improve both access and quality, making it a strong part of India's education system.

Sharma and Singh (2020) [75] the study focuses on the Digital Education in promoting Inclusive Development under the vision of Atmanirbhar Bharat. This research paper is a qualitative review of various government initiatives, programs, and case studies, the researchers highlight how digital education has enabled individuals from different socio-economic strata to access quality learning materials and skill-building platforms. The findings emphasize that digital education can play a crucial role in reducing the digital gap and fostering socio-economic empowerment across the country.

Sharma (2024) [73] study is conducted on Digital Transformation in India: Perspectives, Challenges, and Future the main goal of the Digital India initiative is to make government services easily available online to people in both cities and villages by improving internet access and digital infrastructure. It aims to support economic growth through innovation and public involvement. But there are challenges like lack of digital skills, weak infrastructure, and poor coordination. The success of this program depends on teamwork between the government and private companies. If done well, it can create many opportunities, improve financial transparency through smartphones, and show how important financial knowledge is for the country's progress. Staying focused and ready to handle challenges is crucial for its success

Yadav and Kapoor (2020) [81] study is conducted on A Case Study of Atmanirbhar Bharat Abhiyan Promoting Innovation through Digital Education. This case study looks at how digital education helps promote innovation and creativity under the Atmanirbhar Bharat Abhiyan. It highlights how digital learning supports a self-reliant and economically empowered society. This study is grounded in a comprehensive review of prior research, which guides the method and connects the work to broader academic discussions. This ensures the study is relevant, informed, and adds value to ongoing conversations about digital progress. The literature review forms a strong base for exploring the topic in depth

Objectives of the Study

- To examine how digital initiative supports the goal of a self-reliant India.
- To analyze the benefits and challenges associated with the implementation of digital learning programs in the finance, education, and healthcare sectors.

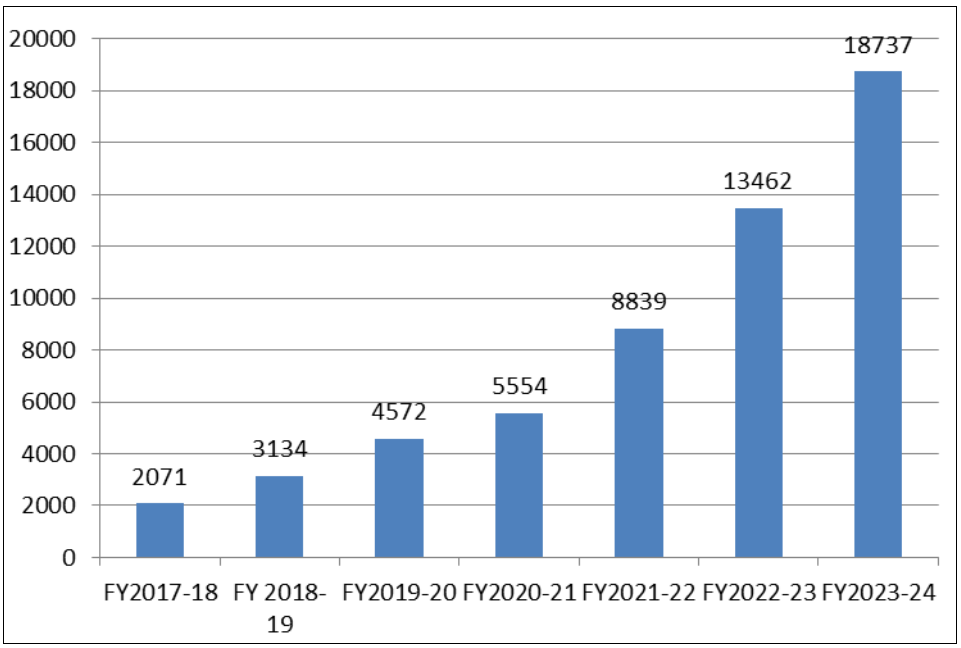
Research Methodology

This study uses a qualitative approach to examine the role of digital transformation in advancing Atmanirbhar Bharat, focusing on healthcare, education, and finance. It analyzes how digital initiatives in these sectors contribute to self-reliance, inclusivity, and sustainable development. Data is sourced from secondary materials, including government reports, PIB, Ministries, RBI, CBSE, and industry research agencies. Each sector is evaluated on parameters like accessibility, service delivery, transparency, scalability, and sustainability. The research gap lies in the lack of sector-specific analysis on how digital transformation in healthcare, education, and finance contributes to Atmanirbhar Bharat's goals. While digital initiatives are discussed broadly, their role in promoting self-reliance and inclusivity remains underexplored. Major aim is to fill gap by analyzing the impact of digital transformation in these sectors and suggesting strategies for faster adoption to support India's self-reliance and inclusive growth.

Data Analysis

1. Digital Transformation in Finance Sector

The finance sector plays a key role in India's digital transformation towards self-reliance. Key initiatives include promoting mobile wallets like PhonePe and Google Pay, expanding 3G and 4G connectivity, and the rise of online trading platforms such as Zerodha and Upstox. Additionally, innovations like robo-advisors, digital KYC, open banking, and a focus on cybersecurity and data privacy are driving this transformation (Chaddha & Jain, 2024) [9].



Source: RBI, NPCI & Banks NPCI

Chart 1: Number of Digital Payment Transactions in Crores

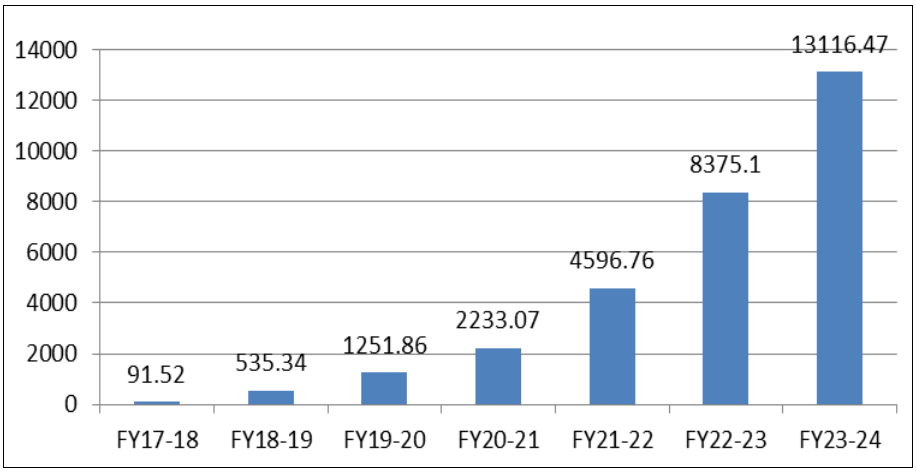
Charts represents that the total number of digital payment transactions in India grew from 2,071 crore in FY 2017-18 to 18,737 crore in FY 2023-24, reflecting a strong CAGR of 44% (Ministry of Finance). This consistent growth highlights the success of government-led digital initiatives under the Atmanirbhar Bharat mission, showcasing how improved digital infrastructure and rising public trust in digital financial services are driving the country toward greater economic self-reliance and financial inclusion.

Key digital transformation initiatives in the finance sector supporting Atmanirbhar Bharat

India's financial ecosystem is experiencing significant digital advancement, in alignment with the Atmanirbhar Bharat initiative aimed at fostering a self-sufficient, inclusive, and tech-driven economy.

- **Growth of Unified Payments Interface (UPI)**

India accounts for 46% of global real-time payment transactions, with UPI contributing to 70% of digital payments in FY 2023-24. In May 2024, UPI set a record with over 1,403 crore transactions in a single month (Ministry of Finance PIB). UPI's transaction value is projected to reach ₹379.72 million by FY 2026-27 (Reserve Bank of India). To enhance accessibility, RBI and NPCI launched UPI 123PAY and UPI LITE for basic phones and offline payments (Ministry of Electronics and IT, 2023) [37]. Additionally, foreign nationals can now use UPI via PPI wallets (The Economic Times). The growth of smartphones, internet usage, and e-commerce, expected to hit $200 billion by 2026, is driving digital payment adoption (The Economic Times).



Source: NPCI

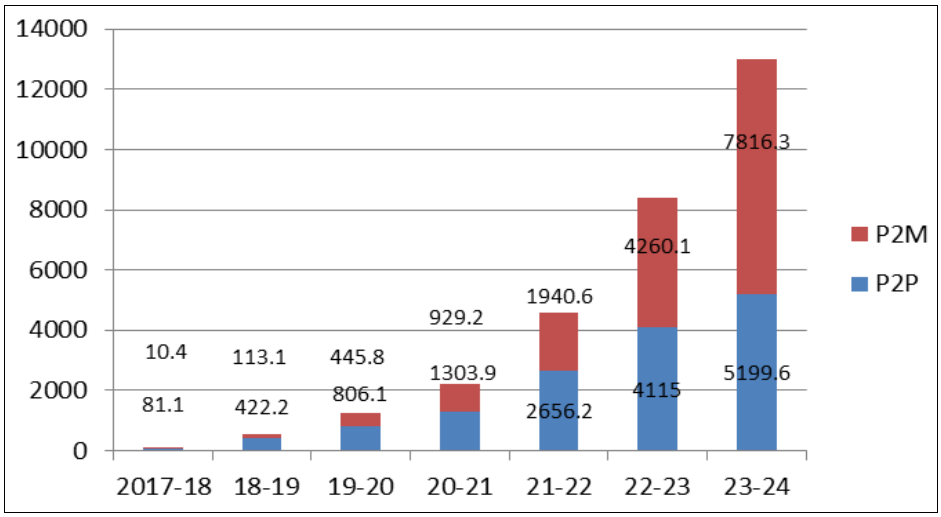
Chart 2: Number of UPI Transaction in Crore

The above chart shows that the growth of UPI is expected to continue strongly. The sharp rise in UPI transactions from 92 crore in FY 2017-18 to 13,116 crore in FY 2023-24, with a remarkable CAGR of 129%, reflects the growing success of India's homegrown digital payment system. This transformation has played a significant role in advancing the goals of Atmanirbhar Bharat by promoting self-reliance in financial technology, reducing dependence on cash-based transactions, and encouraging digital inclusion across all sections of society.

Classification of UPI in two ways

P2P (Person-to-Person) Transactions

P2M (Person-to-Merchant) Transactions



Source: NPCI

Chart 3: Number of UPI transaction in crore

Between FY 2017-18 and FY 2023-24, UPI experienced significant growth in both P2P and P2M transactions, reflecting the success of digital payments in India's self-reliance journey. P2P transactions grew from ₹81.1 crore to ₹5,199.6 crore, while P2M surged from ₹10.4 crore to ₹7,816.3 crore. This strong adoption in both personal and merchant payments highlights the role of UPI in empowering individuals and businesses, supporting the Atmanirbhar Bharat initiative by promoting a cashless economy and fostering financial inclusion, particularly in retail and commercial sectors.

- India's Digital Public Infrastructure (DPI) includes Aadhaar, UPI, DigiLocker, and e-KYC-an open, interoperable system enabling secure, scalable service delivery by startups and financial institutions (MeitY, 2023).
- The Digital Rupee (CBDC), piloted by RBI in 2022, aims to reduce cash dependency, lower transaction costs, and promote monetary efficiency, supporting digital sovereignty (RBI, 2023).
- The Account Aggregator (AA) system enables users to securely share financial data with consent, enhancing credit access for MSMEs and underserved communities (RBI, 2022).
- The Jan Dhan-Aadhaar-Mobile (JAM) trinity has streamlined government subsidy delivery to over 48 crore accounts, reducing intermediaries and ensuring welfare efficiency (Ministry of Finance, 2023).
- The development of GIFT City and IFSCA in Gujarat establishes a global financial hub that fosters fintech innovation and attracts international investments through a regulatory sandbox (IFSCA, 2023) [29].

Emerging Opportunities for the Financial Sector in Driving Atmanirbhar Bharat

- India's booming e-commerce sector, expected to hit $200 billion by 2026, is rapidly boosting digital payments, especially in the P2M segment, supporting the vision of a self-reliant, fintech-driven economy.
- RBI's approval for foreign nationals to use UPI via PPI wallets enhances global accessibility and reinforces India's fintech leadership.
- Accounting for 46% of global real-time payments, India is a global leader in instant digital finance, aligning with Atmanirbhar Bharat's goal of inclusive and tech-driven financial ecosystems.

Key Challenges Hindering the Financial Sector's ROLE in Realizing Atmanirbhar Bharat

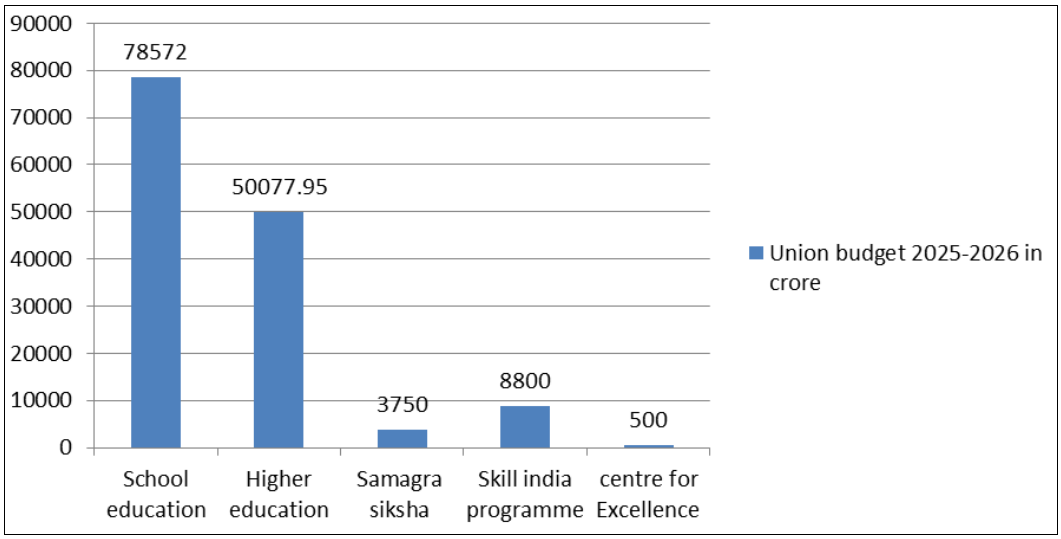
- UPI managing 70% of digital payments highlights India's digital finance dominance, but system resilience and self-reliant innovation are essential to avoid disruption.
- Rising cyber threats demand stronger security and public awareness to build trust in India's indigenous digital payment systems under Atmanirbhar Bharat.
- Limited access to smartphones, internet, and digital literacy in rural areas must be addressed through infrastructure and education to ensure inclusive participation in a self-reliant digital economy.

2. Digital Transformation in Educational Sector

Educational Sector also play a major role to become the self-reliant Bharat. With the adoption of cutting-edge technologies like Artificial Intelligence (AI), Machine Learning (ML), the Internet of Things (IoT), and blockchain, India's education sector is poised for a significant transformation in the coming years. **(**IBEF - Education & Training Report (2024)

Atmanirbhar Bharat through Education and Skill Development

The Union Budget 2025-26 underscores India's unwavering commitment to building a self-reliant nation (Atmanirbhar Bharat) by significantly enhancing investments in education, skill development, and emerging technologies.



Source (Union Budget, 2025-26).

Chart 4: Union Budget 2025-26 in Educational sector (crore)

Chart represents The Union Budget 2025-26 allocates ₹78,572 crore for School Education (16.28% increase) and ₹50,078 crore for Higher Education (5.16% increase), reflecting the government's commitment to building a skilled workforce aligned with Atmanirbhar Bharat. ₹3,750 crore has been dedicated to Samagra Shiksha for equitable learning, while ₹8,800 crore will extend the Skill India Programme until 2026, empowering youth for a self-reliant economy. ₹500 crore has been earmarked for an AI Centre of Excellence, driving innovation and supporting India's technological sovereignty

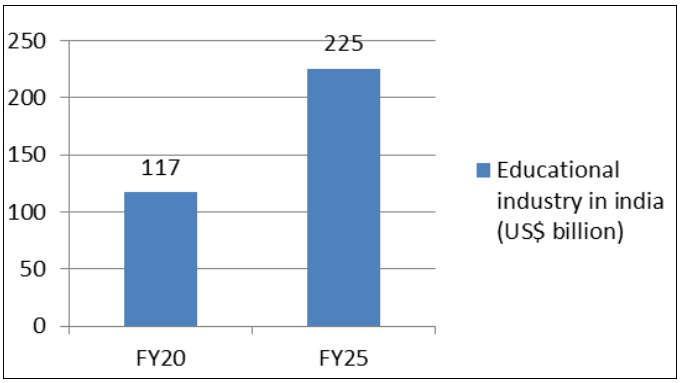
- The NEP 2020 promotes Atmanirbhar Bharat by focusing on skill development, digital inclusion, and innovation, introducing vocational training from middle school to boost employability (PIB, 2021). PM e-VIDYA unifies digital learning platforms, while NIPUN Bharat targets early literacy and numeracy (PIB, 2023). Programs like IIT Hyderabad's BUILD and platforms like NDEAR and NETF integrate technology into education for enhanced access and quality (PIB, 2024).
- SWAYAM supports self-reliance by offering free online courses, with over 4.8 crore enrollments and 37 lakh certificates issued by 2024, significantly increasing digital learning access across India, especially in rural areas (Careers360, 2024; TOI, 2023).
- Three AI Centres of Excellence have been established in Delhi to address challenges in healthcare, agriculture, and urban development, promoting indigenous innovation (Union Budget, 2025-26).
- The government is prioritizing tech-driven, industry-focused training to prepare youth for Industry 4.0 and enhance global competitiveness (Union Budget, 2025-26).

- The PM Vidyalaxmi Scheme supports economically disadvantaged students, aligning with NEP 2020's vision of inclusive, equitable, and self-reliant education (Union Budget, 2025-26).

These strategic investments not only enhance the accessibility and quality of education in India but also position the country as a global knowledge hub, rooted in the principles of self-reliance, innovation, and inclusivity the very essence of Atmanirbhar Bharat.

Growth in Education sector

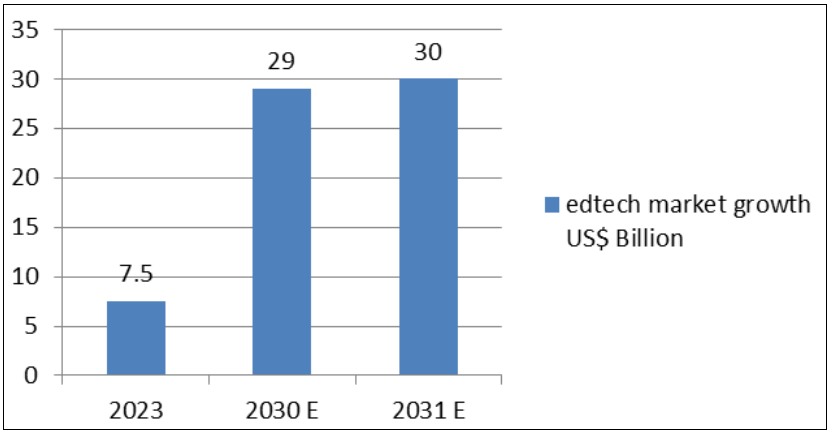
- India's education industry was valued at US$ 117 billion in FY20 and is expected to nearly double to US$ 225 billion by FY25 (IBEF - Education & Training Report (2024)



Source: IBEF - Education & Training Report (2024)

Chart 5: Educational Industry in India (Us$ Billion)

- India's online education market is expected to grow by US$ 2.28 billion between 2021-2025, at a CAGR of nearly 20% (Technavio Market Research Report on Online Education in India)
- The edtech market, currently worth Rs. 64,875 crore (US$ 7.5 billion), is projected to reach Rs. 2,50,850 crore (US$ 29 billion) by 2030 and US$ 30 billion by 2031, making India the second-largest E-learning market globally after the US (IAMAI & Grant Thornton Bharat Report (2023), KPMG Report (2021)



Source: (IAMAI & Grant Thornton Bharat Report (2023), KPMG Report (2021)

Chart 6: Edtech Market Growt h US$ Billion

- India has over 250 million school students, the largest in the world. (UNICEF India, Government of India - MHRD Reports)
- As of February 2025, India had 52,538 colleges and 1,362 universities (IBEF, UGC Annual Reports (2025)

Transforming Education through Technology and Innovation: A Step toward Atmanirbhar Bharat

India's education sector is undergoing a major shift towards self-reliance. With the support of technology, innovation, and public-private partnerships, the Atmanirbhar Bharat mission is modernizing learning and equipping youth with skills for the global economy.

- Conve Genius raised US$ 7 million to expand its AI-based learning platforms, helping underserved communities access personalized education.
- 62% of students in India now enroll through digital platforms, showing how education is becoming more tech-driven and self-sustaining.
- The Skill India Digital platform offers tech-based training to help create a skilled workforce ready for future industries.
- The "Education to Entrepreneurship" program encourages students and educators to think like entrepreneurs and contribute to innovation.
- IGNOU introduced an online MA in Sustainability

Science, making education more affordable and flexible, aligned with sustainability goals.
- Byju's raised US$ 250 million to strengthen India's home-grown education platforms.
- Sunstone raised US$ 35 million to expand education programs focused on career growth.
- AICTE partnered with AWS Academy to provide an AI internship to 5,000 students, improving their skills for digital jobs.

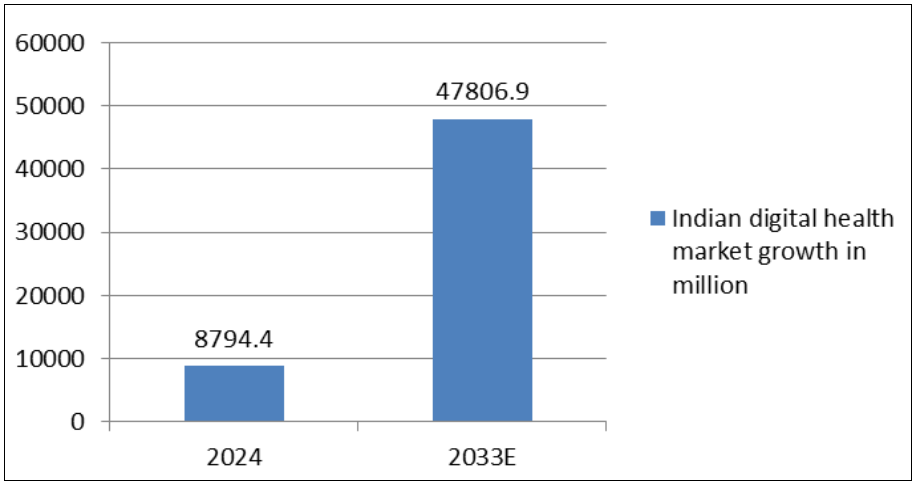
These dynamic advancements in digital education and skills development reflect India's firm steps toward building a resilient, inclusive, and Atmanirbhar educational framework that is globally competitive and locally rooted.

Emerging Opportunities for the Educational Sector in Driving Atmanirbhar Bharat
- The EdTech market, growing from $7.5 billion to $30 billion by 2031, is driven by homegrown platforms like Byju's and AI-driven startups, advancing self-reliant education in India.
- With 62% of students enrolling digitally, India's large student base and 52,000 colleges create vast potential for self-sustained digital education, boosted by initiatives like Meta's "Education to Entrepreneurship."
- The integration of AI, ML, IoT, and Block chain in curricula and initiatives like IGNOU's online MA highlight India's readiness to leverage indigenous technologies for a self-reliant education system.

Key Challenges Hindering the Financial Education Sector's Role in Realizing Atmanirbhar Bharat
- Faculty skill gaps hinder digital education; continuous upskilling is key to empowering educators for a self-reliant, innovation-driven Bharat.
- Growing digital adoption raises student data privacy concerns; robust, indigenous cyber security is vital for safeguarding India's digital education ecosystem.
- Overreliance on technology can affect mental health and soft skills; balanced tech integration is essential for holistic, self-reliant educational growth.

3. Digital Transformation in Health Sector

India's healthcare system is changing fast with the help of digital technology, government support, and new policies. As the population grows and the need for good healthcare rises, digital tools are helping make healthcare more affordable, accessible, and efficient. Telemedicine, online health records, and AI-based diagnosis are helping improve healthcare, especially in rural areas, by connecting them better with urban health services. (Press information bureau) India's digital health market, valued at USD 8,794.4 million in 2024 and projected to reach USD 47,806.9 million by 2033 with a CAGR of 17.67%, reflects the nation's rapid strides toward a Self-Reliant Bharat by leveraging indigenous digital healthcare solutions to ensure accessible, affordable, and tech-driven medical services. Which are represent in the chart.



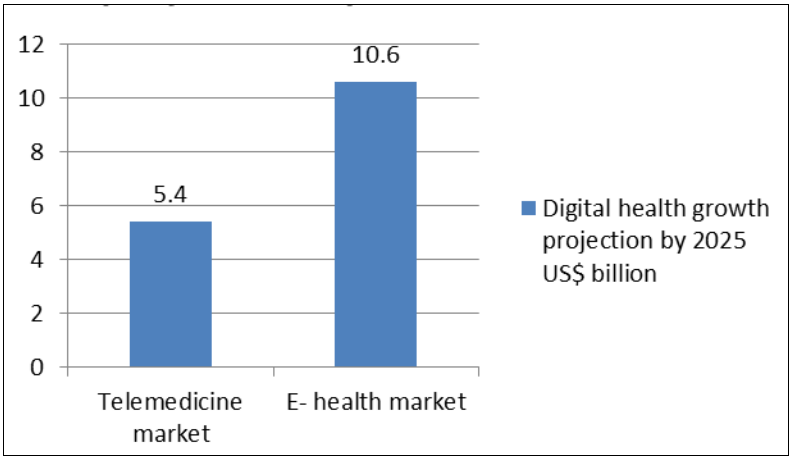
Source: (Custom Market Insights)

Chart 7: Indian Digital Health Market Growth in Millions

According to a report by Grand View Research, Inc., the global artificial intelligence (AI) in healthcare market is projected to reach USD 187.7 billion by 2030, growing at a compound annual growth rate (CAGR) of 38.5% from 2024 to 2030 (Grand View Research)

Major Growth Health Care Industry
- India's healthcare sector is rapidly advancing, fueled by government initiatives, rising investments, and digital innovation. The Union Budget FY26 allocated Rs. 9,406 crore (US$ 1.08 billion) to PMJAY, a 28.8% rise from FY25 (Ministry of Finance, n.d.). By January 2025, over 73 crore Ayushman Bharat Health Accounts (ABHA) were created, with 5 lakh+ health professionals on boarded (PMJAY, 2025).
- Pharmaceutical exports are projected to reach Rs. 30, 76,500 crore (US$ 350 billion) by FY47 (India Brand Equity Foundation, n.d.), supported by FDI inflows of Rs. 2,00,148 crore (US$ 23.04 billion) from April 2000-Sept 2024 (Ministry of Commerce & Industry, n.d.).
- Digital health is growing rapidly, with the telemedicine

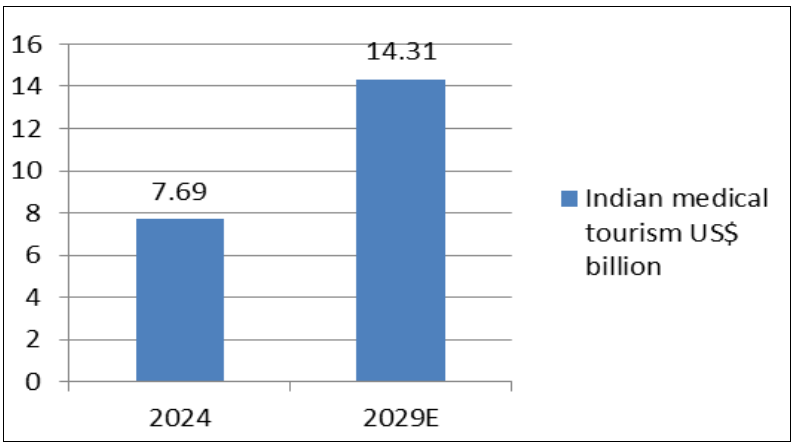
market expected to hit US$ 5.4 billion by FY25 (Press Information Bureau, 2025), and health-tech hiring projected to rise by 15-20% in 2024 (Press Information Bureau, 2024). The e-health market is also set to reach US$ 10.6 billion by FY25 (Press Information Bureau, 2024).



Source: Press Information Bureau, 2024

Chart 8: Digital Health Growth Projection by2025 US$ billion

- India's medical tourism is booming, valued at US$ 7.69 billion in 2024, and projected to reach US$ 14.31 billion by 2029, driven by high-quality, affordable care (India Tourism Statistics, 2024).



Source: (India Tourism Statistics, 2024).

Chart 9: Indian Medical Tourism US$ Billion

Government Initiatives in Health Sector to Become Self Reliant India

- India and Indonesia signed an MoU to standardize traditional medicine globally, promoting Ayurveda and India's leadership in holistic healthcare (Ministry of AYUSH, 2025).
- The Ministry of Health introduced virtual NQAS assessments and an IPHS compliance dashboard for real-time monitoring of Ayushman Arogya Mandirs, enhancing public health quality (MoHFW, 2025).
- India's COVID-19 vaccination drive, with over 2.20 billion doses administered and 30.12 crore exported, showcases self-reliance in vaccine production and global health support (MoHFW, 2023).
- FSSAI's Spot Food Licence Initiative and the MedTech Mitra platform empower small vendors and innovators, advancing India's US$ 50 billion MedTech vision (FSSAI, 2024; MoHFW, 2024).
- Under Poshan Abhiyan, Anganwadi Centres are equipped with smartphones and growth monitors, enabling real-time nutrition tracking and reinforcing grassroots healthcare (MWCD, 2024).

Government Development in Health Sector to Become Self Reliant India

- India's healthcare sector is rapidly transforming through innovation, investment, and indigenous capacity-building, reinforcing the goal of a self-reliant healthcare ecosystem (IBEF, n.d.).
- The Centre for Digital Health and Precision Medicine in Andhra Pradesh, launched by Apollo Hospitals and the University of Leicester, and AI-powered Iswarya Hospital in Chennai exemplify India's growing smart healthcare infrastructure (Apollo Hospitals, n.d.; Iswarya Hospital, n.d.).
- Metropolis Healthcare, in collaboration with Roche Diagnostics India, introduced a self-sampling HPV DNA test to promote preventive women's health, while

DNA Wellness invested ₹200 crore to set up 100+ cervical screening labs by 2027 (Metropolis Healthcare, n.d.; DNA Wellness, n.d.).
- The medical devices sector is expected to reach ₹4.34 lakh crore (US$ 50 billion) by FY31, driven by rising domestic demand and supportive policies (IBEF, n.d.).
- IIT Bombay received US$ 900,000 under the BFI-Biome initiative to develop scalable, low-cost health technologies for Indian needs (IIT Bombay, n.d.).
- The Ayushman Bharat scheme has issued over 26 crore health cards, with AI now enhancing fraud detection and efficient delivery (PMJAY, 2023).
- Abbott, in partnership with Americas India Foundation, is converting 75 PHCs into Health and Wellness Centres, improving care for 2.5 million underserved people across nine states (Abbott, n.d.).

Emerging Opportunities for the Health Care Sector in Driving Atmanirbhar Bharat
- Government initiatives like PMJAY, MedTech Mitra, and Poshan Abhiyan foster collaboration between healthcare providers, tech firms, and entrepreneurs, advancing India's self-reliant healthcare innovation.
- Health-tech employment is projected to grow by 15-20% in 2024, expanding job opportunities and strengthening India's digital health workforce.
- The adoption of AI, ML, and IoT in healthcare positions India to lead in innovations like diagnostics and personalized medicine, boosting its self-reliant healthcare technology leadership.

Key Challenges Hindering the Health Care Sector's Role in Realizing Atmanirbhar Bharat
- Infrastructure gaps in rural areas hinder digital healthcare access; bridging this gap is vital for a self-reliant Bharat with equal healthcare access across regions.
- Digital literacy is a barrier for many, especially in remote areas; empowering citizens with digital skills is crucial for an inclusive healthcare system.
- Affordability and access remain challenges for low-income populations; ensuring equitable access to digital health solutions is essential for universal health coverage.

Discussion and Recommendation

The reviewed literature and these findings converge on a shared understanding digital transformation is the backbone of India's self-reliance mission. This research paper agrees that digital transformation is a key part of making India self-reliant. There has been good progress in areas like online education, digital businesses, and inclusive government services. However, some challenges still remain such as the gap between people who have access to digital tools and those who don't online security issues, and the lack of proper digital skills. To move forward, it is important for everyone to work together-government, private companies, universities, and the public. This teamwork will help make sure that digital growth is strong, safe, and benefits all parts of society, supporting the goals of Atmanirbhar Bharat and Viksit Bharat.

To build a Self-Reliant Bharat and address the challenges hindering digital transformation, India must adopt a holistic and inclusive approach. Key recommendations include investing in rural digital infrastructure so that equitable access to digital platforms for all citizens, particularly in underserved areas. Strengthening cyber security is essential to protect users from fraud and guarantee safe digital interactions. Additionally, launching comprehensive digital literacy programs, especially in rural regions, will help citizens to actively engage with digital services. In the finance sector, continuous monitoring and improvement of systems like UPI will ensure their stability and reliability. Lastly, reinforcing data privacy regulations across all sectors is crucial to maintaining user trust and safeguarding personal information. These steps will create a secure, inclusive, and resilient digital ecosystem, supporting India's vision of a Self-Reliant Bharat.

Conclusion

India is undergoing a comprehensive digital transformation across sectors like education, healthcare, and finance, fueled by technological innovations and government initiatives. These changes are not only enhancing accessibility and improving efficiency but also driving economic growth, aligning with the vision of a Self-Reliant Bharat. However, challenges such as digital exclusion, cyber security risks, and infrastructure gaps in rural areas need to be addressed to ensure that the benefits of digital transformation reach every citizen. By focusing on infrastructure development, digital literacy, and enhanced security, India can harness the full potential of its digital revolution, ensuring a more inclusive and self-reliant economy that empowers all sectors of society and secures India's position as a global digital leader. The study concludes that digital transformation is not just a technological change but a crucial enabler of India's journey toward self-reliance and global competitiveness. Moving forward, smart policies, stronger institutions, and public participation are essential to maximize the benefits of digital tools for inclusive and sustainable development.

Limitation of the Study
- This study in relay on existing literature and statistical data which may vary in terms of accuracy and comprehensiveness
- The study relies on secondary data, which may not capture real-time changes in sectors undergoing rapid digital transformation.
- The absence of firsthand insights from stakeholders in healthcare, education, and finance may limit a deeper understanding of sector-specific challenges and opportunities

Refrences

1. Abbott. Abbott and Americares India Foundation enhance primary healthcare. https://www.abbott.in
2. Apollo Hospitals. Apollo and University of Leicester launch digital health centre. https://www.apollohospitals.com
3. Ayushman Bharat PMJAY. https://pmjay.gov.in
4. Abbott India. Health and wellness centers initiative. https://www.abbott.in
5. All India Council for Technical Education (AICTE), AWS Academy, EduSkills. Virtual AI internship

program for students. 2022. https://www.aicte-india.org
6. Business Standard. ConveGenius raises $7 million to scale AI-based edtech. 2023. https://www.business-standard.com
7. Business Standard. Byju's raises $250 million from existing investors. 2022. https://www.business-standard.com
8. Business World. UnfoldU ventures into Metaverse-based education. 2022. https://www.businessworld.in
9. Chaddha S, Jain S. Digital transformation of financial sector in India: evolution, issues and challenges. SAMRIDDHI. 2024 Jan;1(2):1-8. Mahatma Gandhi State Institute of Public Administration, Government of Punjab.
10. ConveGenius. https://www.convegenius.com
11. Custom Market Insights. India digital health market size. 2024. https://www.custommarketinsights.com/press-releases/india-digital-health-market-size
12. Careers360. SWAYAM enrolment crosses 4 crore. 2024. https://news.careers360.com
13. DNA Wellness. DNA Wellness to invest ₹200 crore in cervical cancer screening. https://www.dnawellness.in
14. DNA Wellness. https://www.dnawellness.in
15. Edseer. https://www.edseer.org
16. Economic Times. Foreign tourists in India can now make UPI payments. 2023. https://economictimes.indiatimes.com/news/technology/foreign-tourists-travellers-in-india-can-now-make-payments-using-upi-know-more-details/98179802
17. Economic Times. India's e-commerce market size to reach $120 billion by 2026. 2022. https://economictimes.indiatimes.com/tech/technology/indias-e-commerce-market-size-to-reach-120-billion-by-2026-report
18. Food Safety and Standards Authority of India (FSSAI). Spot food license initiative launched for ease of doing business. 2024. https://www.fssai.gov.in
19. Financial Express. Sunstone raises $35 million for higher education programs. 2022. https://www.financialexpress.com
20. Great Learning. PG program in Life Insurance launched with Bharti AXA. 2022. https://www.greatlearning.in
21. Government of India. Union Budget 2025-26. 2025. https://www.indiabudget.gov.in
22. India Brand Equity Foundation. Medical devices industry overview. https://www.ibef.org
23. Indian Institute of Technology Bombay (IIT Bombay). BFI-Biome initiative funds IIT Bombay for health tech innovation. https://www.iitb.ac.in
24. Iswarya Hospital. AI-enabled super specialty hospital in Chennai. https://www.iswaryahospital.com
25. IIT Bombay. https://www.iitb.ac.in
26. India Brand Equity Foundation. Education sector overview. https://www.ibef.org/industry/education-Sector-India
27. Technavio. Online education market in India. 2022. https://www.technavio.com/report/online-education-market-in-india-analysis-share-2022
28. Indira Gandhi National Open University (IGNOU). https://www.ignou.ac.in
29. International Financial Services Centers Authority (IFSCA). Developments at GIFT City. 2023. https://www.ifsca.gov.in
30. Internet and Mobile Association of India (IAMAI). https://www.iamai.in
31. The Times of India. SWAYAM tops e-learning platforms. 2023. https://timesofindia.indiatimes.com
32. India Brand Equity Foundation. Pharmaceutical industry overview. https://www.ibef.org/industry/pharmaceutical-industry-india
33. KPMG. Online education in India: 2021 insights. 2021. https://home.kpmg/in/en/home/insights/2021/01/online-education-in-india.html
34. Khan S, Joshi S. Skill development in the digital era: a study of Atmanirbhar Bharat Mission. 2021.
35. Ministry of Education. Meta partners with Government on education to entrepreneurship. 2023. https://www.education.gov.in
36. Ministry of Skill Development and Entrepreneurship. Skill India Digital platform launched. 2023. https://www.msde.gov.in
37. Ministry of Electronics and Information Technology (MeitY). India Stack and digital public infrastructure overview. 2023. https://www.meity.gov.in
38. Ministry of Finance. JAM Trinity and financial inclusion. 2023. https://www.finmin.nic.in
39. Ministry of AYUSH. India and Indonesia sign MoU for traditional medicine collaboration. 2025. https://www.ayush.gov.in
40. Ministry of Health and Family Welfare. COVID-19 vaccination update. 2023. https://www.mohfw.gov.in
41. Ministry of Health and Family Welfare. MedTech Mitra platform launched to support local innovation. 2024. https://www.mohfw.gov.in
42. Ministry of Health and Family Welfare. NQAS and IPHS dashboard for Ayushman Arogya Mandirs. 2025. https://www.mohfw.gov.in
43. Ministry of Women and Child Development. Poshan Abhiyan digital initiatives. 2024. https://wcd.nic.in
44. Maulana Azad National Urdu University (MANUU). SWAYAM outreach report. 2023. https://manuu.edu.in
45. Ministry of Finance. Union Budget documents 2025-26. 2025. https://www.indiabudget.gov.in
46. Ministry of Financial Services. Growth in digital payment modes. https://financialservices.gov.in/beta/en/page/growth-various-modes-digital-payment
47. Ministry of Electronics and Information Technology. Digital India Programme. 2022. https://www.meity.gov.in/digital-india
48. Ministry of Commerce & Industry. FDI policy updates. https://www.commerce.gov.in
49. Ministry of Tourism. India tourism statistics. https://www.incredibleindia.org
50. Ministry of Health and Family Welfare. https://www.mohfw.gov.in
51. Metropolis Healthcare. https://www.metropolisindia.com
52. Metropolis Healthcare. Metropolis and Roche launch self-sampling HPV DNA test. https://www.metropolisindia.com
53. Nath S. Role of ICT in transforming India towards

Atmanirbhar Bharat: a study. Int J Adv Multidiscip Res. 2024;11(6):.
54. National Payments Corporation of India (NPCI). UPI monthly statistics. 2024. https://www.npci.org.in
55. Omer O. Academicians' view on digital transformation in education. 2018. PMJAY. Ayushman Bharat dashboard and analytics. 2023. https://pmjay.gov.in
56. Press Information Bureau. Government update. 2023. https://pib.gov.in/PressReleasePage.aspx?PRID=1890314
57. Press Information Bureau. Digital education statistics. 2023. https://pib.gov.in
58. Press Information Bureau. Transforming education: NEP 2020 and Atmanirbhar Bharat. 2021. https://pib.gov.in/PressReleasePage.aspx?PRID=1742342
59. Press Information Bureau. India report digital education 2021. 2023. https://static.pib.gov.in/WriteReadData/specificdocs/documents/2023/jul/doc2023726228501.pdf
60. Press Information Bureau. NEP innovations like BUILD program. 2024. https://pib.gov.in/PressReleasePage.aspx?PRID=1942115
61. Press Information Bureau. https://www.pressinformationbureau.gov.in
62. Press Information Bureau. India's digital healthcare transformation. 2024. https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2094604
63. Press Information Bureau. E-health developments. https://pib.gov.in
64. Press Information Bureau. Telemedicine updates. https://pib.gov.in
65. Patel S, Gupta N, Kumar A. Entrepreneurship development through digital education: a case study of Atmanirbhar Bharat Abhiyan. 2019.
66. Patil S. Role of research and innovation in shaping Atmanirbhar Bharat and Viksit Bharat. 2025. Startup India, Sapkal Engineering College, Nashik, Maharashtra, India.
67. Press Information Bureau. PM gives a clarion call for Atmanirbhar Bharat. 2020. https://pib.gov.in
68. Reserve Bank of India. Public sector initiatives. https://www.rbi.org.in/Scripts/PSIUserView.aspx?Id=2
69. Reserve Bank of India (RBI). Introduction of account aggregator framework. 2022. https://www.rbi.org.in
70. Reserve Bank of India (RBI). Pilot launch of Central Bank Digital Currency - Digital Rupee. 2023. https://www.rbi.org.in
71. Redseer Strategy Consultants. Digital enrollment trends in India. 2023. https://www.redseer.com
72. Sharma S. Digital transformation in India: perspectives, challenges, and future. 2024 Feb.
73. Sinku S. Digital transformation in education sector: the way forward for India. J Emerg Technol Innov Res. 2021;8(9):. https://www.jetir.org
74. Singh P, Sharma M. Harnessing digital technologies for inclusive growth: lessons from Atmanirbhar Bharat. 2020.
75. Sharma R, Singh A. Digital education: a catalyst for inclusive development in Atmanirbhar Bharat. 2020.
76. Testbook. SWAYAM - Study Webs of Active Learning for Young Aspiring Minds. https://testbook.com/ias-preparation/swayam
77. TechCrunch. IGNOU launches online MA in Sustainability Science. 2022.
78. UNICEF India. What we do: Education. https://www.unicef.org/india/what-we-do/education
79. University Grants Commission (UGC). https://www.ugc.gov.in
80. Yadav R, Kapoor A. Promoting innovation through digital education: a case study of Atmanirbhar Bharat Abhiyan. 2020.