

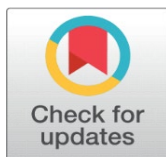
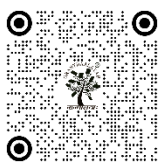
CAN INCLUSIVE EDUCATION GUARANTEE INCLUSIVE GROWTH IN INDIA? REIMAGINING EDTECH FOR VIKSIT BHARAT@2047

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ABSTRACT

Education Technology (EdTech) has emerged as a transformative instrument for advancing digital empowerment, educational inclusion, and inclusive growth in India, particularly in the post-pandemic era. The rapid expansion of online learning platforms, artificial intelligence (AI)-enabled educational tools, mobile-based learning applications, and virtual classrooms has significantly reshaped the country's educational ecosystem. Despite these advancements, deep structural inequalities continue to widen the urban-rural learning divide, limiting equitable access to quality education and digital opportunities. Against the broader developmental vision of *Viksit Bharat@2047*, this paper critically examines how EdTech can serve as a pathway for bridging educational disparities and fostering inclusive socioeconomic transformation in India. Drawing upon secondary data, policy documents, government reports, and existing scholarly literature, the study analyses the key barriers affecting rural educational inclusion, including inadequate digital infrastructure, affordability constraints, low digital literacy, gender disparities, linguistic exclusion, and socioeconomic inequalities. The paper further evaluates major government initiatives such as *Digital India*, *PM eVIDYA*, *SWAYAM*, *DIKSHA*, and *BharatNet*, alongside the growing role of private EdTech enterprises, start-ups, and civil society organizations in expanding access to digital education. The study argues that EdTech can become a powerful driver of digital empowerment and inclusive growth only when technological innovation is complemented by equitable policy interventions, localized learning content, teacher capacity-building, affordable internet connectivity, and community-centred digital ecosystems. The paper concludes by proposing policy recommendations for strengthening India's digital education architecture to ensure that the benefits of technological transformation reach marginalized and rural populations, thereby contributing to educational justice, human capital development, and the realization of *Viksit Bharat@2047*.

Keywords: Education Technology, Inclusive Growth, Digital Divide, Rural Education, India, EdTech, Digital Inclusion, Viksit Bharat@2047

1. INTRODUCTION

Education is widely recognized as the “foundation to skills development and jobs, and the surest way out of poverty, empowering generations to earn an income and drive economic growth” (World Bank, 2026). All students, irrespective

of their abilities, disabilities, or learning differences, should be integrated into mainstream education; in other words, education must be inclusive. “Inclusive education,” can be defined, as “a process of addressing and responding to the diverse needs of all learners by increasing participation in learning and reducing exclusion within and from education” (UNESCO, 1994). “Inclusive education”, according to the World Bank, “means creating systems and environments that enable all students to have equal access to education and learning” (World Bank, 2025). Inclusive education is the foundational pillar of inclusive growth because it guarantees equal learning opportunities, dismantles societal barriers, and empowers marginalized individuals to participate meaningfully in economic and social development (Deroncelle-Acosta & Ellis, 2024; India Education Forum, 2024; Pradhan & Naik, 2024). The United Nations Development Programme (UNDP) defines inclusive growth as both the process and the outcome where all groups of people participate in economic growth and benefit equitably from it. It emphasizes expanding opportunities for marginalized groups and ensuring growth is broadly shared, rather than limited to a few (UNDP, 2025). India’s National Education Policy, 2020 (NEP 2020) “emphasizes upon inculcating Inclusive educational structure and inclusive educational culture in our school education system through infrastructural support and by making corresponding changes in curriculum incorporating materials on human values such as respect for all persons, empathy, tolerance, human rights, gender equality, non-violence, global citizenship, inclusion, and equity” (NCERT, 2020). One of the most powerful drivers of inclusive growth and socioeconomic transformation, education is a powerful tool to bridge income gaps and gender inequalities, allowing marginalized groups, particularly women, to enter the workforce (Reddy, et al., 2026). In developing economies such as India, equitable access to quality education is essential for reducing poverty, enhancing productivity, and promoting social mobility, as noted by National Education Policy 2020 (Chaudhary & Kumar, 2026; Li et al., 2024; Qureshi, et al., 2020). However, India continues to face a deep urban–rural divide in educational access and learning outcomes. Rural students frequently encounter inadequate school infrastructure, shortage of trained teachers, limited access to digital resources, and poor internet connectivity (Samy, 2026). These structural inequalities restrict educational opportunities and perpetuate cycles of economic deprivation.

The emergence of Education Technology (EdTech) has created new possibilities for democratizing education—and also includes expanding access to quality learning resources. EdTech refers to the integration of digital technologies, online platforms, mobile applications, artificial intelligence, and data-driven learning systems into education delivery (Mhlongo et al., 2023; Todino, 2025). During the COVID-19 pandemic, EdTech became a lifeline for millions of students as schools shifted to online learning (Dhawan, 2020; Imran et al., 2024; Singh & Kumar, 2022). However, the pandemic also exposed the stark digital divide between urban and rural India (Anon et al., 2022; BBC, 2020), where access to smartphones, broadband connectivity, and digital literacy remained highly unequal (Jafar et al., 2023).

The researchers of this study agree with Global Education Monitoring Report 2023 that:

While technology promises easier access to education, the reality is that digital divides still exist, to the point of actually increasing educational inequalities – which is the second paradox that this report highlights. During the pandemic, almost a third of pupils did not have effective access to distance learning – unsurprisingly, since only 40% of primary schools worldwide currently have Internet access. Even if connectivity was universal, it would still be necessary to demonstrate, from a pedagogical point of view, that digital technology offers real added value in terms of effective learning, especially at a time when we are all becoming aware of the risks of excessive screen time (UNESCO, 2023).

India’s educational transformation is increasingly linked with its broader vision of inclusive growth and the development agenda of “Viksit Bharat 2047” (Pal, et. al., 2026) and involves EdTech like AI (Rehman, et al., 2025). Educational inclusion is recognized as a cornerstone of inclusive growth, ensuring that economic progress is shared, equitable, and sustainable. By breaking down barriers related to geography, gender, and socioeconomic status, inclusive education acts as a critical driver for societal advancement and economic prosperity (World Bank, 2025).

This paper explores the role of EdTech in bridging the urban–rural learning divide in India for inclusive growth. It analyses the challenges and opportunities associated with digital education and examines whether technological innovation can promote educational equity and sustainable development.

2. CONCEPTUAL FRAMEWORK: EDUCATION TECHNOLOGY AND INCLUSIVE GROWTH

Inclusive growth emphasizes equitable access to economic opportunities and social services. Education plays a central role in this process because it equips individuals with knowledge, skills, and capabilities necessary for

participation in the modern economy (Chen, et al., 2022). The relationship between education and inclusive growth is particularly important in India, where regional disparities, caste inequalities, gender gaps, and rural underdevelopment continue to shape educational outcomes.

Educational inclusion facilitates the key components of inclusive growth:

2.1. ENHANCEMENT OF HUMAN CAPITAL FORMATION

Education is the primary mechanism for accumulating human capital, which boosts productivity and economic growth (Claude & Charlotte, 2019; Leoni, 2025; Sorto-Bueso, et al., 2026).

- **Lifelong Learning:** Inclusive systems, including early childhood development, lay the foundation for continuous skill development (Sorto-Bueso, et al., 2026; World Bank, 2016).
- **Broadening Access:** By providing equitable education to marginalized and underserved groups, nations increase their overall skill base (Buabeng & Amo-Darko, 2024; Qureshi, et al., 2020).
- **Quality and Equity:** Investing in qualified and well-trained teachers, strengthening inclusive pedagogical practices, and reducing student–teacher ratios—particularly for disadvantaged, marginalized, and rural learners—significantly enhances human capital development, educational equity, and long-term socioeconomic inclusion (Alhassan, et al., 2025; NITI Aayog, 2026).

2.2. IMPROVEMENT OF EMPLOYABILITY

Inclusive education acts as a bridge between the workforce and the labour market, ensuring more people can engage in productive economic activities (Chaudhary & Kumar, 2026).

- **Skill Alignment:** Education systems that integrate vocational training, technical competencies, digital literacy, and accessible learning opportunities promote inclusive development by enhancing the employability and economic participation of individuals from diverse social, economic, and geographical backgrounds (Ebom-Jebose, 2025; World Bank, 2026).
- **Reduced Unemployment:** By providing equitable access to quality education, vocational training, and market-relevant skills, inclusive education systems empower individuals from diverse and marginalized backgrounds to secure stable, dignified, and well-paying employment opportunities (OECD, 2023). Targeted educational strategies help overcome disparities for marginalized populations, allowing them to participate in the formal economy.
- **Empowerment of Vulnerable Groups:** Inclusive and targeted educational strategies help reduce social, economic, gender, and regional disparities by ensuring equitable access to learning opportunities, thereby enabling marginalized communities to develop skills, enhance capabilities, and participate meaningfully in the formal economy and broader development process (UNESCO, 2024; UNICEF, 2025).

2.3. BOOSTING INNOVATION CAPACITY

Education technology (EdTech) plays a critical role in strengthening innovation capacity by fostering critical thinking, creativity, problem-solving abilities, and technological literacy among learners. In the context of a rapidly evolving digital economy, innovation-driven education systems are essential for promoting long-term inclusive growth, productivity, and socioeconomic transformation.

- **Critical Thinking and Problem-Solving:**

EdTech-enabled learning environments encourage analytical thinking, collaborative learning, and problem-solving skills that empower individuals to address complex social, economic, and technological challenges beyond conventional frameworks.

- **Research, Digital Skills, and Technological Advancement:**

Higher education institutions, digital learning platforms, and specialized vocational and technical training programs promote research capabilities, digital competencies, and the development of emerging technologies. These are essential for fostering innovation-led growth and strengthening knowledge-based economies.

- **Adaptability and Future-Ready Workforce:**

A digitally educated and technologically skilled workforce is more adaptable to changing labour market demands, enabling faster adoption of new technologies, digital transformation, and innovative work practices across sectors.

- **Inclusive Innovation through EdTech:**

By expanding access to quality education and digital resources, EdTech can democratize innovation opportunities for learners from rural, marginalized, and economically disadvantaged backgrounds, thereby contributing to more equitable and inclusive development.

Education Technology (EdTech) expands the reach of educational delivery beyond traditional classroom boundaries. It includes:

1. Online learning platforms
2. Mobile learning applications
3. Artificial Intelligence-based personalized learning
4. Virtual classrooms
5. Digital libraries
6. Massive Open Online Courses (MOOCs)
7. Smart classrooms and interactive learning tools

The theoretical foundation of EdTech and inclusive growth can be understood through the Digital Divide Theory, Human Capital Theory, and Capability Approach.

The Digital Divide Theory explains that unequal access to technology, including high-speed internet and digital devices, creates significant gaps in education, employment, and economic opportunities. It encompasses not just physical access (first-level), but also disparities in digital literacy, skills, and effective usage, which disproportionately affect low-income, rural, and older populations (OECD, 2024). Rural populations often lack access to digital infrastructure, thereby limiting their participation in the digital economy. Limited access restricts students' abilities to utilize online learning tools, complete assignments, or participate in remote learning, exacerbating learning gaps. As the modern economy becomes more reliant on digital tools, lack of skills and access hampers employment opportunities, reducing social mobility.

Human Capital Theory (HCT) posits that education and training are investments—not just expenses—that increase an individual's knowledge, skills, and productivity, ultimately driving higher wages and economic growth. Developed by Gary Becker and Theodore Schultz, it views education as a primary tool for developing human resources to foster long-term economic development (Eide & Showalter, 2010; Leoni, 2025; Oltulular, 2025; Schultz, 1961). EdTech can improve human capital formation by increasing access to quality educational content and skill development opportunities.

Amartya Sen's Capability Approach redefines development as the expansion of human freedoms and opportunities, rather than mere economic growth (GDP). It focuses on what people are actually able to do and be—their "capabilities"—arguing for inclusive development that ensures everyone has the real opportunity to achieve a life they value (Crocker & Robeyns, 2009; Sebagala, et al., 2025). Digital education can empower marginalized communities by enhancing access to knowledge and reducing educational exclusion.

3. URBAN-RURAL EDUCATIONAL DIVIDE IN INDIA

India's educational inequalities are deeply connected to geographic disparities. India's educational landscape is characterized by significant disparities that are deeply intertwined with geographic, socioeconomic, and spatial factors. Despite an overall decrease in national educational inequality—with the Gini index dropping from 72.4% in 1986 to 46.6% in 2023—severe gaps remain, particularly between rural and urban areas (Aneesh et al., 2024; Das, 2023; Gope & Baidya, 2026; Takher, 2024; Upadhyay, 2024). Educational inequality in India remains a deep structural challenge in 2026. Severe infrastructure gaps, chronic teaching vacancies, and a stark rural-urban divide continue to fracture the system. Marginalized communities and rural female students are the most disadvantaged, relying on underfunded public schools while wealthier peers access premium private education (Gope & Vaidya, 2026; Kamal &

Roluahpuia, 2025; NITI Aayog. (2026). Urban regions generally possess better schools, stronger internet infrastructure, greater teacher availability, and higher digital literacy compared to rural areas in India. According to several studies, rural students face major disadvantages in digital access and educational quality (Ahiaku, et al., 2025; Mustafa et al., 2024). The rural–urban digital divide in India is associated with disparities in internet connectivity, smartphone ownership, electricity availability, and digital skills.

Major dimensions of the urban–rural learning divide include:

3.1. DIGITAL INFRASTRUCTURE GAP

Quality internet access remains unevenly distributed across India. Many rural households continue to experience poor broadband connectivity, low network coverage, and unstable electricity supply (Thomas, 2025). This restricts participation in online learning. In fact, reliable internet access in India is severely uneven, with only 3.8% of rural households enjoying high-speed fibre compared to 15.3% in urban areas. While mobile data is widespread, rural areas often rely on unstable 2G/3G connections, leaving ~24% rural coverage against ~66% in cities, highlighting a deep digital divide (Thomas, 2025).

Key Aspects of India’s Uneven Internet Landscape:

- **Rural-Urban Gap:** Rural areas have roughly twice the lack of internet access compared to urban homes, with over 70% of total users concentrated in top cities.
- **Infrastructure Disparities:** The North-Eastern region accounts for under 2% of national broadband subscriptions despite representing 3.7% of the population. Key states like Bihar, Odisha, and Uttar Pradesh struggle with lower connectivity (Chakravarty & Tyagi, 2025)
- **Barriers Beyond Access:** Approximately 50% of rural residents lacking internet cite low digital readiness (lack of knowledge or awareness) rather than just infrastructure availability.
- **Gender and Socioeconomic Factors:** Over 50% of rural women lack personal mobile phones, creating a significant “digital invisibility” issue, further widened by income levels.
- **Quality Issues:** Despite 974.87 million subscribers by May 2025, many rural areas struggle with low, unstable speeds, unsuitable for high-bandwidth tasks like education or telemedicine (Sambodhi, 2025; Thomas, 2025; Zhao, 2024).

Research indicates that low-income states and rural populations possess lower levels of digital infrastructure and digital skills (Thomas, 2025).

3.2. ECONOMIC INEQUALITY

Digital education requires access to smartphones, laptops, tablets, and internet subscriptions. Many rural households cannot afford these technologies, creating barriers to participation in online education. Digital inequality in rural areas creates a significant barrier to education, as low-income households struggle to afford essential devices (smartphones, laptops) and internet, leading to exclusion from online learning (Banerjee, 2020). This “digital divide” exacerbates existing educational disparities, resulting in lower academic outcomes for students without reliable technology.

Key Aspects of the Rural Digital Divide:

- **Cost of Technology:** Purchasing laptops, tablets, or smartphones is often unaffordable for rural families, limiting their access to online platforms (Thekkumbad, 2025).
- **Connectivity Issues:** Rural households often lack adequate, high-speed broadband infrastructure, hindering participation in synchronous (real-time) video learning (Tahmasebi, 2023).
- **Persistent Inequalities:** The gap is not just in hardware, but also in digital literacy skills, which are required for effective online engagement (Graves et al., 2021).
- **Long-Term Impact:** The inability to participate in digital education can create long-term educational and economic opportunities, hindering the development of needed skills (Raihan et al., 2024).

- **Solution Needs:** Bridging this gap requires a multifaceted approach involving affordable technology, improved infrastructure, and tailored digital training (Francis & Weller, 2021; Graves et al., 2021; Raihan et al., 2024; Tahmasebi, 2023; Thekkumbad, 2025)

Economic inequality intersects with caste and gender inequalities, intensifying educational exclusion among marginalized communities. The intersection of economic, caste, and gender inequalities creates a “compounded disadvantage” that significantly intensifies educational exclusion for marginalized communities in India. This intersection means that the barriers faced by a student are not merely additive but multiplied, particularly for girls from Scheduled Castes (SC), Scheduled Tribes (ST), and economically weaker households (Chayashree, 2026; IDSN, 2025; Kumar & Kumar, 2025).

3.3. TEACHER AND INSTITUTIONAL DISPARITIES

Urban schools in India hold a distinct advantage with better-trained teachers and superior digital infrastructure, while rural schools struggle with teacher shortages and limited technology access. This divide extends to student outcomes, with rural learners having fewer resources to bridge the learning gap (Sampark Foundation, 2026); Ahsanullah, 2025).

3.4. LINGUISTIC AND CULTURAL BARRIERS

Digital education in India is heavily centralized around English and Hindi, creating significant access barriers for students from diverse linguistic backgrounds and disadvantaging rural learners. This language gap, compounded by a lack of regional content, forces a reliance on English/Hindi for competitive exams and higher education, excluding roughly 90% of regional language learners.

Key aspects of this linguistic disparity include:

- **Marginalization of Regional Languages:** The digital landscape in India presents a significant contradiction: while over 57% of urban internet users prefer local language content, and nearly 99% of Indian language users access the internet via mobile, the ecosystem remains heavily skewed towards English (KPMG, 2017). While 57% of users prefer local languages, content, AI applications, and EdTech platforms remain heavily English-first. This disparity exists despite the fact that local language content generates higher engagement—sometimes 1.5 to 2 times higher than English—and that 9 out of 10 new internet users prefer local languages (ET Education, 2026).
- **Rural and Gender Gaps:** The digital divide in rural areas, particularly concerning gender, severely impacts access to tailored educational content. As of early 2026, data confirms a significant gender gap, with rural males frequently having higher rates of smartphone ownership and, consequently, greater access to online learning platforms compared to their female counterparts (Balasundaram et al., 2026).
- **Systemic Educational Hurdles:** National-level exams and public/private employment often prioritize English/Hindi, disadvantaging students from non-Hindi-speaking backgrounds (Raihan, et al., 2024; UNESCO, 2026; UNICEF, 2024).
- **Efforts Toward Inclusion:** Despite these challenges, initiatives like DIKSHA and e-pathshala are being encouraged, alongside AI tools like Bhashini, aimed at creating multilingual content. (Debbarma, 2025; Kalra, 2020; Panda & Panda, 2026)

The National Education Policy (NEP) 2020 and various initiatives aim to address this, but the shortage of localized, regional-language digital tools remains a major hurdle to equitable education (Government of India, 2020).

3.5. GENDER-BASED DIGITAL DIVIDE

The gender-based digital divide in Indian schools is a significant barrier, where girls—particularly in rural areas—face lower access to devices, internet, and digital literacy training compared to boys, exacerbated by cultural norms and economic constraints. During and after the pandemic, this gap resulted in fewer girls accessing remote learning tools.

Scholars including P. Manchanda (2024) and Balasundaram and others (2026) have observed the following trends between 2024 and 2026:

- **Device Ownership Gap:** Smartphone ownership is biased toward boys (36.2% of boys vs. 26.9% of girls in rural areas).
- **Access Disparity:** A 2026 study in rural Tamil Nadu found only 34.9% of girls had regular access to educational technology, compared to 68.4% of boys (Balasundaram, et al., 2026).
- **Digital Skills Gap:** Boys exhibit higher cybersecurity awareness and digital skills, with notable gaps in basic usage (e.g., setting an alarm) (Ahamed, et al., 2026).
- **Usage Patterns:** While 90% of rural teenagers have home access to a smartphone, 76% use it for social media rather than educational content, a trend that disproportionately impacts girls' educational opportunities (Tulsyan, 2026).
- **Cultural Factors:** Household restrictions, safety concerns regarding online spaces, and prioritizing education/technology for males in resource-poor settings further limit girls' access (Bag & Mitra, 2025; Balasundaram, et al., 2026; Global Girls Glow, 2026). Female students in rural areas frequently experience restricted access to digital devices due to socio-cultural norms and household priorities. The gender digital divide remains a significant obstacle to educational inclusion.

4. GROWTH OF EDTECH IN INDIA

India has emerged as one of the world's fastest-growing EdTech markets (MarketsandMarkets, 2026) with expanding EdTech start-ups (Chakraborty, 2025). The expansion of affordable smartphones, declining data costs, and increased internet penetration have accelerated the adoption of digital learning platforms.

The COVID-19 pandemic dramatically accelerated the demand for online education, compelling schools, universities, and coaching institutions to rapidly transition to digital learning platforms. This shift led to the widespread adoption of technologies and edtech services such as Zoom, Google Classroom, BYJU'S, Unacademy, Vedantu, and Khan Academy, transforming the educational landscape and expanding access to remote learning. The pandemic indeed triggered a historic boom in edtech, permanently altering global education. However, as classrooms reopened, the sector underwent a massive structural reset from pure-play digital learning to "phygital" (hybrid) models, driven by a shift in consumer expectations (Gopika & Rekha, 2023; Goswami et al., 2021; Verma & Verma, 2022).

Government-led initiatives also contributed to the expansion of digital learning ecosystems. Important initiatives include:

4.1. SWAYAM

SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) (<https://swayam.gov.in/>) is a premier, government-run Indian EdTech platform designed to provide, access, equity, and quality in education. It functions as a Massive Open Online Courses (MOOCs) platform, offering courses ranging from high school to post-graduation, developed by top-tier faculty and institutions. Accessible by anyone, anywhere at any time free of cost, SWAYAM provides free online courses for school and higher education learners. It aims to democratize access to quality education across India.

4.2. DIKSHA

DIKSHA (Digital Infrastructure for Knowledge Sharing) platform (<https://dic.gov.in/diksha/>) is India's national, free-to-use public edTech platform, initiated by the National Council for Educational Research and Training (NCERT) under the Ministry of Education. Launched in 2017, it serves as a massive, open-source repository of digital resources for teachers, students, and parents, adopted by nearly all states, UTs, and central education boards. The DIKSHA platform offers digital learning materials, teacher training resources, and QR-coded textbooks accessible through smartphones (Bhatia, et al., 2025; Pachori, et al., 2026).

4.3. PM eVIDYA

PM e-Vidya has evolved from an emergency response during the COVID-19 pandemic into a robust, scalable, and inclusive digital public infrastructure that embodies the transformative vision of NEP 2020. It ensures multi-modal access—online, on-air, and offline—to high-quality, curriculum-aligned, and multilingual learning resources for over 24.8 crore school-going children, educators, adult learners, and competitive exam aspirants across urban and rural India. PM e-Vidya has effectively bridged the digital divide while advancing foundational literacy, teacher empowerment, and lifelong learning (Jain, 2025).

PM eVIDYA is a comprehensive initiative launched by the Ministry of Education, Government of India, on May 17, 2020, as part of the Atmanirbhar Bharat Abhiyan to unify all efforts related to digital, online, and on-air education. It aims to provide multi-mode access to education for school-going children (Classes 1 to 12) and higher education, benefiting roughly 25 crore learners (Ministry of Social Welfare, 2017). PM eVIDYA integrates television channels, radio broadcasting, and digital platforms to ensure educational continuity (Ministry of Social Welfare, 2017).

As India marches ahead towards Viksit Bharat@2047, PM e-Vidya stands as a global benchmark for technology-enabled, equitable, and adaptive education system. By prioritising inclusion and last-mile connectivity, it empowers every learner regardless of location, language, or ability, to realise their full potential. Sustained investment, stakeholder collaboration, and continuous innovation will ensure that PM e-Vidya not only sustains but accelerates India's journey toward universal, joyful, and future-ready education.

4.3.1. CORE COMPONENTS OF PM EVIDYA

The initiative is built around several key pillars, often referred to as an “EdTech” ecosystem, to ensure education reaches the last mile:

- One Class, One TV Channel (Swayam Prabha): Expanded from 12 to over 200 DTH TV channels, providing dedicated educational content in regional languages, ensuring access for areas with limited internet.
- DIKSHA (One Nation, One Digital Platform): A digital infrastructure for school education offering e-content and QR-coded "Energized Textbooks" for all grades.
- SWAYAM MOOCS: Online courses platform for school and higher education, providing interactive, massive open online courses.
- Radio & Podcasts: Extensive use of radio, community radio, and podcasts (e.g., Shiksha Vani) to broadcast audio content.
- Special Content for Divyangs: Specially developed content for children with special needs (CwSN), including Indian Sign Language (ISL) videos and DAISY format audiobooks.
- SATHEE: A dedicated portal for online coaching for competitive exams, such as JEE and NEET, in partnership with IIT Kanpur.

4.3.2. KEY FEATURES AND IMPACT

- Multilingual Content: Curriculum-based content is available in various Indian languages.
- Inclusivity: Focuses on bridging the digital divide by offering offline and air-based alternatives (TV/Radio).
- Teacher Training: Incorporates teacher professional development through the NISHTHA program.
- UNESCO Recognition: The Central Institute of Educational Technology (CIET), NCERT, which manages the initiative, was awarded the UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of ICT in Education for 2021.
- Mobile App: The PMeVidya app provides free access to these resources.

4.4. BHARATNET

The BharatNet project (<https://usof.gov.in/en/bharatnet-project>) is a foundational pillar for EdTech in India, aimed at bridging the digital divide by providing high-speed broadband connectivity to rural areas, essential for digital education. It enables the delivery of government-backed educational platforms to schools and community centres

(Sindakis & Showkat, 2024). BharatNet seeks to improve rural broadband connectivity by extending optical fibre networks to villages.

Key impacts of BharatNet on EdTech include:

- **Access to Digital Platforms:** It facilitates access to platforms like DIKSHA, e-Pathshala, and SWAYAM, bringing quality learning resources to rural schools.
- **Infrastructure for Digital Tools:** The initiative supports the integration of ICT (Information and Communication Technology) in classrooms, enabling the use of e-content and tablet devices.
- **Empowering Rural Learners:** It helps overcome rural-urban divides in education, offering opportunities for personalized and continuous learning.
- **Empowering Teachers:** It provides teachers with access to online professional development programs and tools.
- **Enabling Future Tech:** It lays the infrastructure necessary for emerging technologies like AI-driven adaptive learning platforms.

5. NATIONAL EDUCATION POLICY (NEP) 2020

According to Government of India (2026):

India has 24.8 crore school-going children and 4.33 crore students enrolled in higher education (AISHE 2021-22), but many of them live in remote geographies where access to educational institutions remains limited, and regular classroom attendance is often constrained by socioeconomic compulsions such as household responsibilities and the need to engage in livelihood activities. These challenges are further compounded by persistent shortages of trained teachers in several regions, leading to uneven learning outcomes.

The NEP 2020 emphasizes digital learning, online education, and technology integration as critical components of India's educational transformation.

These initiatives reflect the Indian government's recognition that digital education is essential for inclusive development and human capital formation.

6. ROLE OF EDTECH IN BRIDGING THE URBAN-RURAL DIVIDE

Education Technology possesses transformative potential for reducing educational inequality in India.

6.1. EXPANDING ACCESS TO QUALITY EDUCATION

EdTech enables rural students to access high-quality educational content regardless of geographic location. Students from remote villages can learn from expert teachers through online lectures and digital platforms.

Organizations such as eVidyaloka connect volunteer teachers with rural government schools using digital platforms.

Similarly, AISECT has played a major role in extending computer education and ICT-based learning to rural populations.

6.2. FLEXIBLE AND PERSONALIZED LEARNING

Digital platforms support self-paced and personalized learning experiences. Artificial intelligence and adaptive learning systems can identify learning gaps and tailor educational content according to student needs.

This is especially beneficial for first-generation learners and students with interrupted educational backgrounds.

6.3. SKILL DEVELOPMENT AND EMPLOYABILITY

EdTech platforms increasingly provide vocational education, coding, entrepreneurship training, and digital skills programs that enhance employability.

Skill-based education is particularly important for rural youth seeking opportunities in the digital economy.

6.4. REDUCING EDUCATIONAL COSTS

Digital learning reduces travel costs, accommodation expenses, and dependence on physical educational infrastructure. Open educational resources and MOOCs make quality learning more affordable.

6.5. PROMOTING EDUCATIONAL CONTINUITY

EdTech proved crucial during the COVID-19 pandemic when physical schools remained closed. Digital learning platforms ensured continuity of education for millions of students.

7. CHALLENGES LIMITING INCLUSIVE EDTECH GROWTH

Despite its transformative potential, EdTech faces major structural challenges in India.

7.1. DIGITAL INFRASTRUCTURE DEFICITS

Large sections of rural India still lack reliable internet connectivity and electricity access. Weak digital infrastructure limits participation in online education.

Studies demonstrate that rural populations possess significantly lower digital infrastructure and digital skills compared to urban areas.

7.2. AFFORDABILITY CONSTRAINTS

The cost of smartphones, tablets, laptops, and internet subscriptions remains prohibitive for many low-income households.

Educational inequality is therefore reproduced through technological inequality.

7.3. DIGITAL LITERACY GAPS

Many students, parents, and teachers lack adequate digital literacy. Rural teachers often receive insufficient training in online pedagogy and digital tools.

7.4. LANGUAGE AND ACCESSIBILITY ISSUES

Digital content frequently excludes regional languages and localized educational needs. Students from tribal and marginalized communities may struggle to engage with standardized digital content.

7.5. OVERDEPENDENCE ON PRIVATE EDTECH FIRMS

The commercialization of education technology has raised concerns about educational inequality and profit-driven learning models. Many premium EdTech services remain inaccessible to economically disadvantaged students.

7.6. DATA PRIVACY AND ALGORITHMIC CONCERNS

The increasing use of AI-driven educational platforms raises concerns regarding data privacy, surveillance, and algorithmic bias.

8. EDTECH, HUMAN CAPITAL, AND INCLUSIVE GROWTH FOR VIKSIT BHARAT 2047

India's aspiration to become a Viksit Bharat (Developed India) by 2047 depends not only on economic growth but also on the quality of its human capital. In the twenty-first century, knowledge, skills, innovation, and digital capabilities have become the most valuable drivers of national development. In this context, Educational Technology (EdTech) and

digital education are emerging as transformative instruments for strengthening human capital formation and promoting inclusive growth in India. By democratizing access to quality education, enhancing skill development, and bridging socioeconomic disparities, EdTech can play a crucial role in realizing the vision of Viksit Bharat 2047.

Human capital refers to the stock of education, skills, health, creativity, and productivity possessed by individuals that contribute to economic growth and social progress. Economists such as Theodore Schultz and Gary Becker emphasized that investments in education and training increase labour productivity, innovation, and long-term economic development.

Human capital development enhances productivity, innovation, entrepreneurship, and economic participation. Rural educational inclusion can generate long-term economic benefits such as:

- Higher labour productivity
- Improved employability
- Increased digital participation
- Reduced poverty
- Enhanced social mobility
- Greater gender inclusion

For a country like India, which possesses one of the world's largest youth populations, investment in human capital is not merely a social objective but also an economic necessity. However, traditional educational systems often face challenges such as inadequate infrastructure, teacher shortages, regional inequalities, and limited access to quality learning resources. EdTech and digital education provide an opportunity to overcome these structural barriers.

The rapid growth of digital platforms has revolutionized the educational landscape in India. The COVID-19 pandemic significantly accelerated the adoption of online learning tools and digital classrooms. Platforms such as BYJU'S, Unacademy, Vedantu, Khan Academy, Coursera, SWAYAM, and DIKSHA transformed how students access education. Schools, universities, coaching institutions, and skill development centres increasingly adopted hybrid and online modes of teaching. This digital shift demonstrated that education could transcend physical boundaries and become more flexible, scalable, and accessible.

One of the most important contributions of EdTech is the democratization of education. Digital education allows students from rural, remote, and economically disadvantaged regions to access quality educational content that was previously concentrated in urban centres. Through smartphones, tablets, and internet connectivity, learners can attend virtual classes, access e-books, watch recorded lectures, and participate in online assessments. Government initiatives such as Digital India, PM eVIDYA, SWAYAM, National Digital Library, and BharatNet are helping expand digital infrastructure and educational access across the country. These initiatives contribute to reducing regional disparities and promoting educational inclusion.

EdTech also enhances the quality and efficiency of learning. Artificial Intelligence (AI), Machine Learning (ML), adaptive learning systems, and data analytics enable personalized education tailored to the learning pace and capabilities of individual students. Unlike traditional classroom systems that often follow a uniform teaching approach, digital platforms can identify learning gaps, provide customized recommendations, and improve student engagement through interactive content, gamification, and multimedia learning. Such innovations strengthen cognitive development, critical thinking, and problem-solving skills, which are essential for a knowledge-driven economy.

Skill development and employability are central to the Viksit Bharat 2047 vision. India's demographic dividend can become a demographic disaster if the youth lack relevant skills for the modern economy. EdTech platforms are increasingly offering vocational training, coding, financial literacy, entrepreneurship programs, digital marketing, AI training, and industry-oriented certification courses. Online learning ecosystems help bridge the gap between academic education and market requirements. Through platforms such as Skill India Digital, Coursera, Udemy, and LinkedIn Learning, students and workers can continuously upgrade their skills and remain competitive in the rapidly changing labour market.

Digital education also promotes lifelong learning, which is critical in the era of automation and technological disruption. As industries evolve due to artificial intelligence, robotics, and digital transformation, workers must continuously reskill and upskill themselves. EdTech enables flexible learning opportunities for working professionals,

women, senior citizens, and individuals who may not have access to traditional educational institutions. This flexibility supports labour productivity, innovation capacity, and economic resilience.

Another important dimension of EdTech is its role in fostering inclusive growth. Inclusive growth refers to economic growth that creates opportunities for all sections of society and ensures equitable distribution of its benefits. In India, socioeconomic inequalities based on income, caste, gender, region, and language continue to affect educational access and outcomes. Digital education can help reduce these inequalities by providing affordable and multilingual educational resources. Regional language content, subtitles, audio learning, and accessible digital tools can empower marginalized communities and differently-abled learners.

Women's empowerment is another significant aspect of digital education. Many women in India face barriers to formal education due to social norms, safety concerns, early marriage, or domestic responsibilities. Online learning platforms provide women with opportunities to continue education, acquire professional skills, and participate in the digital economy from their homes. Financial inclusion, digital literacy, and entrepreneurial education through EdTech can contribute to greater female labour force participation and gender equality, both of which are essential for sustainable economic development.

EdTech can also strengthen India's innovation ecosystem and research capacity. A digitally educated workforce is more adaptable to technological change and more capable of generating innovation. Universities and research institutions can use digital tools for virtual laboratories, collaborative research, online journals, and global academic partnerships. The integration of technology into education encourages creativity, scientific temperament, and entrepreneurial thinking among students. This aligns with India's ambition to become a global knowledge economy and innovation hub by 2047.

Despite its transformative potential, digital education in India faces several challenges. The digital divide remains a major concern, especially in rural and tribal regions where internet connectivity, electricity, and digital devices are limited. Many students still lack access to smartphones, laptops, or stable internet connections. Digital literacy among teachers and parents is also uneven. Moreover, excessive commercialization of EdTech may increase educational inequality if quality digital learning becomes accessible only to affluent sections of society. Data privacy, cyber security, screen addiction, and misinformation are additional concerns associated with digital learning ecosystems.

To fully harness the potential of EdTech for Viksit Bharat 2047, India requires a comprehensive and inclusive policy framework. First, investment in digital infrastructure must be significantly expanded, particularly in rural and underserved areas. Universal internet connectivity and affordable digital devices should be treated as public developmental priorities. Second, teacher training programs must focus on digital pedagogy and technological adaptability. Teachers remain central to educational transformation, and technology should complement rather than replace human instruction. Third, public-private partnerships can play an important role in scaling digital education initiatives. Collaboration between government institutions, universities, EdTech companies, and civil society organizations can improve innovation and accessibility. Fourth, regulatory frameworks must ensure affordability, data protection, ethical AI use, and quality standards in online education. Finally, digital education policies should prioritize inclusivity by developing regional language content, accessible technologies, and gender-sensitive learning strategies.

In conclusion, EdTech and digital education have the potential to redefine India's human capital architecture and accelerate the journey toward Viksit Bharat 2047. By expanding access to quality education, promoting skill development, enhancing employability, and reducing socioeconomic inequalities, digital learning can become a powerful catalyst for inclusive and sustainable growth. However, the success of this transformation depends on equitable access, robust digital infrastructure, effective governance, and continuous investment in human development. If strategically implemented, EdTech can empower millions of Indians and transform India into a globally competitive, knowledge-driven, and inclusive economy by 2047.

However, inclusive growth requires equitable distribution of technological opportunities. Without targeted policy interventions, EdTech may unintentionally deepen inequality by privileging already advantaged urban populations.

9. THE UPWARD SPIRAL: EDTECH FOR INCLUSIVE EDUCATION, INCLUSIVE EDUCATION FOR INCLUSIVE GROWTH, AND INCLUSIVE GROWTH FOR VIKSIT BHARAT@2047

Upward spiral refers to a positive process in which one improvement leads to another improvement, creating continuous progress and growth over time. The relationship between EdTech, inclusive education, and inclusive growth

creates an upward spiral essential for achieving Viksit Bharat@2047. EdTech expands access to quality learning by bridging geographical, social, linguistic, and economic barriers, particularly for rural, marginalized, and differently abled learners. Inclusive education, in turn, enhances human capital formation, digital literacy, employability, and social mobility. As more individuals gain access to equitable educational opportunities, productivity, innovation, and workforce participation increase, contributing to inclusive economic growth. This inclusive growth further strengthens investments in education, digital infrastructure, and technological innovation, thereby reinforcing the cycle. Thus, EdTech-driven inclusion can become a transformative force for India's sustainable development.

India's vision of becoming a developed nation by 2047, popularly referred to as Viksit Bharat@2047, depends fundamentally on the creation of an inclusive, skilled, and innovation-driven society. Economic growth alone cannot guarantee national development unless its benefits are equitably distributed across regions, genders, social groups, and income categories. In this context, inclusive education emerges as a powerful instrument for achieving inclusive growth. Education not only enhances individual capabilities and productivity but also promotes social mobility, economic participation, and human dignity. The rise of Educational Technology (EdTech) and digital learning platforms has further transformed the educational landscape, creating new possibilities for democratizing knowledge and bridging structural inequalities. Therefore, inclusive education, supported by EdTech, can indeed foster inclusive growth by strengthening human capital, reducing socioeconomic disparities, and empowering marginalized communities in the journey toward Viksit Bharat@2047.

Inclusive education refers to an educational system where all learners, irrespective of their socioeconomic status, gender, caste, disability, language, or geographical location, have equal access to quality education and learning opportunities. It aims to ensure that no student is excluded from mainstream education due to structural disadvantages. Inclusive growth, on the other hand, refers to a model of economic development that generates opportunities for all sections of society while ensuring equitable distribution of economic benefits. The relationship between inclusive education and inclusive growth is deeply interconnected because education enhances employability, productivity, entrepreneurship, innovation, and social participation.

Human capital theory strongly supports this relationship. Economists such as Theodore Schultz and Gary Becker argued that investment in education increases the productive capacities of individuals and contributes to long-term economic growth. A well-educated population is more capable of adapting to technological changes, participating in modern industries, and generating innovation. For a developing country like India, with one of the world's largest youth populations, education becomes a critical driver of demographic advantage. However, the benefits of human capital formation can only be fully realized when educational opportunities are inclusive and accessible to all.

Despite progress in literacy and enrolment rates, India continues to face substantial educational inequalities. Rural areas often suffer from inadequate infrastructure, teacher shortages, poor internet connectivity, and limited access to quality institutions. According to recent educational studies, although India's educational inequality has declined over the decades, significant urban-rural and socioeconomic gaps remain. Students from economically weaker sections, tribal communities, and marginalized castes continue to face barriers in accessing quality education. Gender disparities also persist in many regions, particularly in higher and technical education. These inequalities ultimately translate into unequal economic opportunities and perpetuate cycles of poverty and exclusion.

EdTech has emerged as a transformative force capable of addressing many of these challenges. The rapid expansion of smartphones, internet penetration, and digital platforms has revolutionized access to education in India. Platforms such as SWAYAM, DIKSHA, BYJU'S, Unacademy, Khan Academy, and Coursera have enabled millions of students to access educational resources beyond traditional classrooms (Sheikh & Nath, 2026). The COVID-19 pandemic further accelerated the adoption of digital learning, demonstrating that education can continue even in times of disruption through online and hybrid learning models.

One of the most important contributions of EdTech is the democratization of knowledge. Digital education removes geographical barriers by enabling students from remote and rural areas to access lectures, e-books, recorded classes, and skill-based courses. A student in a rural village can now access the same educational content as a student in a metropolitan city. This has significant implications for educational equality and social mobility. Government initiatives such as Digital India, PM eVIDYA, BharatNet, and the National Digital Education Architecture (NDEAR) are further strengthening India's digital education ecosystem and promoting educational inclusion.

EdTech also improves the quality and personalization of learning. Artificial Intelligence (AI), Machine Learning (ML), and adaptive learning systems enable personalized educational experiences tailored to individual learning abilities and needs. Interactive videos, gamification, virtual simulations, and multilingual content make learning more engaging and accessible. Students who struggle in conventional classroom settings can benefit from flexible and self-paced digital learning environments. Such innovations contribute to improved learning outcomes and skill development, which are essential for economic productivity and innovation-led growth.

Inclusive education supported by EdTech can significantly contribute to employment generation and skill development. India's future economy will increasingly rely on digital skills, artificial intelligence, data analytics, financial literacy, and technological adaptability. EdTech platforms provide affordable access to vocational training, coding programs, entrepreneurship courses, and professional certifications. This helps bridge the gap between academic education and labour market requirements. Through continuous reskilling and upskilling opportunities, digital education strengthens workforce competitiveness and enhances employability, particularly among youth and women.

Women's empowerment is another area where inclusive education and EdTech can foster inclusive growth. Many women in India face barriers such as early marriage, domestic responsibilities, social restrictions, and safety concerns that limit access to formal education. Online learning platforms provide flexible educational opportunities that allow women to continue education and acquire professional skills from their homes. Financial literacy, digital literacy, and entrepreneurial training through EdTech can increase female labour force participation and economic independence. Since gender equality is closely linked with sustainable development, empowering women through digital education contributes directly to inclusive economic growth.

EdTech can also play a crucial role in empowering differently-abled learners and marginalized communities. Assistive technologies such as screen readers, speech-to-text software, subtitles, and audio learning tools can make education more accessible for students with disabilities. Regional language content and culturally inclusive educational materials can help tribal and minority communities participate more effectively in the learning process. Such measures ensure that development becomes broad-based and socially inclusive rather than concentrated among privileged sections of society.

Furthermore, inclusive education strengthens democratic participation and social cohesion. Education promotes awareness, critical thinking, constitutional values, and civic responsibility. A more educated society is better equipped to address social inequalities, communal tensions, and misinformation. By creating equal opportunities for learning and economic participation, inclusive education helps reduce social exclusion and strengthens national integration. Therefore, the role of education extends beyond economic productivity to broader societal transformation.

However, the transformative potential of EdTech also faces important challenges. The digital divide remains a major obstacle in India. Many rural households still lack reliable internet connectivity, electricity, smartphones, or computers. Digital literacy among teachers and parents is uneven, limiting effective utilization of online learning platforms. Excessive commercialization of EdTech may also widen inequalities if quality digital education becomes affordable only for privileged sections. Concerns related to data privacy, cyber security, misinformation, and excessive screen time must also be addressed through appropriate regulation and policy frameworks.

To ensure that inclusive education truly fosters inclusive growth, India must adopt a comprehensive and equitable policy approach. Investment in rural digital infrastructure, affordable internet access, teacher training, and public digital learning platforms is essential. Public-private partnerships can help scale technological innovation while maintaining affordability and accessibility. Educational content should be multilingual, disability-inclusive, gender-sensitive, and culturally diverse. Regulatory frameworks must also ensure ethical AI use, data protection, and quality standards in digital education.

In conclusion, inclusive education can indeed foster inclusive growth by expanding opportunities, strengthening human capital, reducing inequalities, and promoting social empowerment. EdTech has the potential to become a transformative catalyst in this process by democratizing access to quality education and preparing India's population for the digital economy of the future. However, technology alone cannot achieve educational justice unless supported by inclusive policies, equitable infrastructure, and social commitment. If India successfully integrates inclusive education with technological innovation, it can create a skilled, empowered, and resilient society capable of realizing the vision of Viksit Bharat@2047.

10. POLICY RECOMMENDATIONS

To ensure that EdTech contributes to inclusive growth, India must adopt a multidimensional policy framework.

10.1. STRENGTHEN RURAL DIGITAL INFRASTRUCTURE

The government should accelerate broadband expansion under BharatNet and improve electricity reliability in rural areas.

Public investment in rural digital infrastructure is essential for educational inclusion.

10.2. AFFORDABLE DEVICE ACCESS

Subsidized smartphones, tablets, and internet access should be provided to economically disadvantaged students.

Public-private partnerships can help reduce technology costs.

10.3. TEACHER TRAINING AND DIGITAL CAPACITY BUILDING

Teachers require continuous professional development in digital pedagogy, AI-enabled learning tools, and online assessment methods.

Digital literacy should become a core component of teacher education.

10.4. LOCAL LANGUAGE AND INCLUSIVE CONTENT

Educational platforms should expand regional-language content and culturally relevant learning materials.

Inclusive design principles should address the needs of tribal communities, differently abled learners, and marginalized groups.

10.5. COMMUNITY-BASED DIGITAL LEARNING CENTRES

Village-level digital learning centres and mobile digital labs can enhance access to technology in underserved regions.

Innovative initiatives such as mobile digital literacy laboratories demonstrate the importance of localized educational outreach.

10.6. GENDER-INCLUSIVE DIGITAL POLICIES

Special programs should encourage digital participation among girls and women in rural areas.

Gender-sensitive educational strategies are essential for equitable digital transformation.

10.7. ETHICAL REGULATION OF EDTECH PLATFORMS

India requires a transparent regulatory framework governing data privacy, AI ethics, algorithmic accountability, and commercialization in digital education.

11. CONCLUSION

Inclusive education is not merely a social welfare objective; it is an economic imperative for achieving sustainable and equitable development in India. As the nation aspires to realize the vision of *Viksit Bharat@2047*, the transformation of India's education system must move beyond conventional access-based approaches toward a more inclusive, technology-enabled, and capability-driven framework. This paper argues that inclusive growth cannot be achieved

without inclusive education, and inclusive education itself cannot be effectively realized in the twenty-first century without the strategic integration of Educational Technology (EdTech).

EdTech has emerged as a transformative instrument capable of democratizing knowledge, reducing regional disparities, and expanding learning opportunities across socioeconomic groups. Digital learning platforms, artificial intelligence-enabled personalized learning systems, virtual classrooms, multilingual educational content, and low-cost mobile-based education models have the potential to bridge India's persistent urban-rural learning divide. In a country characterized by inequalities in income, geography, gender, disability, and digital access, EdTech can function as an equalizer by enabling affordable, flexible, and accessible learning opportunities for marginalized populations.

However, the paper also emphasizes that technology alone cannot guarantee inclusivity. The benefits of EdTech can only be realized when supported by robust digital infrastructure, affordable internet access, teacher training, inclusive curriculum design, regional language integration, and strong public policy interventions. Without addressing the digital divide, EdTech risks reproducing existing inequalities rather than reducing them. Therefore, the role of the state remains crucial in ensuring that technological innovation aligns with the broader goals of social justice, educational equity, and human development.

Furthermore, inclusive education contributes directly to inclusive growth by strengthening human capital formation, enhancing labour productivity, fostering innovation, and increasing socioeconomic mobility. A more educated and digitally skilled population enhances India's competitiveness in the global knowledge economy while simultaneously empowering historically disadvantaged communities. In this sense, investments in inclusive education should not be viewed merely as expenditures, but as long-term investments in economic resilience, demographic dividends, and social cohesion.

The journey toward Viksit Bharat@2047 requires a paradigm shift in how education is conceptualized and delivered. India must adopt a holistic educational ecosystem where technology complements pedagogy, inclusion complements growth, and innovation complements equity. Policies such as the National Education Policy (NEP) 2020, Digital India, PM eVIDYA, SWAYAM, and DIKSHA represent important steps in this direction, but their effectiveness depends on inclusive implementation and institutional accountability.

In conclusion, inclusive education has the potential to foster inclusive growth by empowering individuals with the capabilities necessary to participate meaningfully in the economy and society. Reimagining the role of EdTech within this framework offers India a historic opportunity to transform its demographic diversity into developmental strength. If inclusivity, accessibility, and technological innovation are integrated effectively, India can build a more equitable knowledge economy and move decisively toward the realization of Viksit Bharat@2047.

India's EdTech sector, valued at approximately \$7.5 to \$12.75 billion, is the second-largest e-learning market globally. Its success is driven by the world's lowest mobile data costs, a massive addressable population of over 580 million youth, and a cultural emphasis on highly competitive exams (IBEF, 2025; PwCPL, 2021). The success of EdTech in India depends not merely on technological innovation but also on institutional capacity, public investment, and inclusive policy design. Digital infrastructure, affordability, teacher training, linguistic diversity, and gender inclusion are critical determinants of successful educational transformation. India's aspiration to become a knowledge-driven and globally competitive economy requires the democratization of digital education. Bridging the urban-rural learning divide is therefore not only an educational priority but also an economic and social imperative. If effectively implemented, EdTech can become a powerful instrument for human development, social justice, and sustainable inclusive growth in India, leading it to become Viksit Bharat (Developed India) by 2047.

CONFLICT OF INTERESTS

None.

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