

## **Technological Leapfrog: from Amrit Mahotsav to the Digital Age**

**Ms. Ananya Dixit**

*Student*

*M.A. Economics*

*IIS (Deemed to be University), Jaipur, Rajasthan*

### **Abstract**

*This article explores India's extraordinary technological journey from the Amrit Mahotsav, marking 75 years of independence, to the present digital age. Using a data-driven approach, the narrative delves into key milestones, starting from the post-independence era, where the focus was on foundational nation-building, to the inflection point of the Information Technology (IT) revolution, the Mobile Revolution, and the transformative Digital India initiative. The data points highlight the exponential growth in the IT sector, the democratization of information through mobile technology, and the impact of initiatives like Aadhar and Digital India on governance and financial inclusion. The article also examines the rise of India's start-up ecosystem, its global impact, and the country's strategic investments in emerging technologies. As India steps into the Amrit Kaal, the data underscores the nation's resilience, adaptability, and potential for continued technological advancement, shaping a future where technology fosters inclusivity and propels India onto the global stage as a technological powerhouse.*

### **Keywords**

*Inclusive growth, Digital Transformation, Emerging Technologies, Sustainable Development, Digital Literacy.*

Reference to this paper  
should be made as follows:

**Ms. Ananya Dixit**

*Technological Leapfrog: from  
Amrit Mahotsav to the Digital Age*

*Vol. XIV, Special Issue,  
Dec. 2023  
pp.150-155  
Article No.18*

Similarity Check: 2%

**Online available at:**

[https://anubooks.com/journal/  
journal-global-values](https://anubooks.com/journal/journal-global-values)

**DOI:** [https://doi.org/10.31995/  
jgv.2023.v14iS3.018](https://doi.org/10.31995/jgv.2023.v14iS3.018)

## **Introduction**

Seventy-five years ago, as the echoes of freedom resonated across the Indian subcontinent, a nation embarked on a journey of self-discovery and resilience. The Amrit Mahotsav, commemorating 75 years of independence, stands as a testament to India's unwavering spirit. In this milestone celebration, from the nascent years post-independence to the present digital age, this article delves deep into the data-backed journey, highlighting the remarkable leapfrog that has propelled India onto the global technological stage. It is fitting to examine the incredible technological metamorphosis that has propelled India from the dawn of independence to the vibrant digital age we inhabit today.

### **I. Pioneering Independence to Silent Technological Whispers:**

#### **A. The Post-Independence Landscape:**

In the aftermath of independence, India faced the colossal challenge of nation-building (with a GDP per capita of just \$91 in 1950). The nascent nation grappled with economic stagnation, a predominantly agrarian economy, and an urgent need for infrastructure development. Technological advancements were limited, and the focus was on laying the groundwork for a self-reliant India.

#### **B. Early Technological Endeavours:**

The first few decades post-independence witnessed modest technological advancements. Industries like agriculture and manufacturing saw incremental improvements, and the Green Revolution of the 1960s marked a pivotal moment in enhancing food production (i.e. boosted agricultural productivity, contributing to an annual growth rate of 2.9% in the agriculture sector). However, the technological footprint was still faint compared to the rapid strides made by other nations.

### **II. The Inflection Point: Information Technology Revolution**

#### **A. Dawn of the IT Era:**

The 1990s heralded a seismic shift in India's technological landscape with the Information Technology (IT) revolution. The IT boom (in the 1990s) marked a watershed moment, propelling India's GDP growth from 1.1% in 1991 to an impressive 7.5% by 1996.

Globalization opened doors for Indian IT professionals, leading to the establishment of the country as a global outsourcing hub. The export revenue from the IT industry soared from \$100 million in 1990 to a staggering \$147 billion in 2020.

The Y2K boom acted as a catalyst, propelling India onto the international stage as a formidable player in the technology domain.

### **B. Outsourcing Phenomenon:**

The outsourcing phenomenon not only bolstered India's economy but also fuelled the growth of the IT sector. Cities like Bangalore and Hyderabad transformed into bustling tech hubs, attracting talent from across the nation. India became synonymous with software development and IT services as the share of India in the global outsourcing market reached approximately 56% by 2020 (i.e. reflecting the country's dominance in the IT services sector); signaling a paradigm shift in the country's economic trajectory.

## **III. Mobile Revolution: Connecting a Billion Dreams**

### **A. Rise of Mobile Technology:**

The dawn of the new millennium brought with it the Mobile Revolution, a phenomenon that would redefine connectivity in India. The widespread adoption of mobile phones witnessed an exponential increase in mobile phone users, reaching over 1.2 billion by 2020; coupled with affordable data plans and increased smartphone penetration resulting in an average monthly data consumption of 13.5 GB per user in 2021, transforming communication and accessibility. Remote areas that were once isolated from the digital realm now found themselves connected to a network of possibilities.

### **B. Democratization of Information:**

Mobile phones became more than communication devices; they became gateways to information. The rural-urban digital divide began to blur as even the remotest corners of the country gained access to educational resources, healthcare information, and government services. The digital wave was now reaching every nook and cranny of the nation leading to a substantial reduction in the rural-urban digital divide, with rural internet users accounting for 45% of the total user base in 2022.

## **IV. Digital India Initiative: Transformative Governance**

### **A. Catalyst for Change:**

In 2015, the government launched the Digital India initiative, a visionary plan to transform the nation into a digitally empowered society and as a result witnessed a surge in digital transactions, with the total number reaching 40 billion in 2021, a significant jump from 17 billion in 2019. The initiative encompassed various facets, including e-governance, digital infrastructure development, and the push for digital literacy. The goal was to bridge socio-economic gaps and ensure that the benefits of technology reached every citizen.

### **B. Aadhar, E-Governance, and Financial Inclusion:**

Key components of the Digital India initiative included the Aadhar identification system (i.e. a cornerstone of Digital India), which became the linchpin

for various services, that enrolled over 1.3 billion citizens, facilitating streamlined and secure digital interactions. E-governance initiatives streamlined administrative processes, reducing bureaucracy and corruption. Financial inclusion efforts like the Pradhan Mantri Jan Dhan Yojana ensured that even the financially marginalized could participate in the formal economy which led to the opening of over 430 million bank accounts for the unbanked population by 2022.

## **V. Start-ups and Innovation: A New Era Dawns**

### **A. Entrepreneurial Spirit:**

As the digital wave gained momentum, a parallel surge was witnessed in India's start-up ecosystem. Entrepreneurs armed with innovative ideas ventured into various domains, from e-commerce to healthcare. The government's support through initiatives like Startup India fostered a culture of innovation, transforming India into a breeding ground for cutting-edge solutions. This ecosystem flourished, with over 50,000 start-ups operating in India by 2023, covering diverse sectors from fintech to health tech.

### **B. Global Impact:**

Indian start-ups began making waves globally, challenging established norms and contributing to the global tech narrative. The success stories of companies like Flipkart, Ola, and Zomato exemplified India's prowess in innovation and entrepreneurship. Indian start-ups attracted significant global investments, with cumulative funding crossing \$100 billion in 2023, reflecting international confidence in India's innovative capabilities. The world started to view India not just as an outsourcing destination but as a hotbed of creativity and technological ingenuity.

## **VI. Artificial Intelligence and Beyond: Shaping the Future**

### **A. Emerging Technologies:**

As we step into the digital age, the spotlight is now on emerging technologies like Artificial Intelligence (AI), blockchain, and the Internet of Things (IoT). India is increasingly investing in research and development in these fields, as an investment in Artificial Intelligence (AI) exceeded \$8 billion in 2022, signaling its intent to be at the forefront of shaping the future of technology and positioning India as a key player in shaping the future.

### **B. Challenges and Opportunities:**

However, with great technological strides come significant challenges. The digital divide, cybersecurity threats, and the ethical implications of advanced technologies demand careful consideration. The nation is at a crossroads, facing the dual challenge of reaping the benefits of technological advancements while mitigating the risks.

Despite these challenges, the information security market in India witnessed a compound annual growth rate (CAGR) of 22% from 2018 to 2022, underlining the increasing focus on cybersecurity.

## **VII. The Amrit Kaal: A Glimpse into the Future**

### **A. Unfinished Symphony:**

As India enters the Amrit Kaal, the symphony of technological progress continues to play. Challenges persist, but so do opportunities. The journey from the Amrit Mahotsav to the present has been one of resilience, adaptation, and growth. The Amrit Kaal holds the promise of a future where technology becomes an even more integral part of the nation's identity. In other words, the digital literacy rate has surged to 75%, laying the groundwork for a future where technology becomes an integral part of everyday life.

### **B. Fostering Inclusivity:**

The digital age, while transformative, has also accentuated existing disparities. Bridging the digital divide and ensuring that the benefits of technology reach the marginalized sections of society is a challenge that needs urgent attention. The Amrit Kaal beckons us to build a future where the fruits of technology are inclusive and accessible to all.

Initiatives addressing inclusivity challenges, such as the Skill India program, have led to an increase in employability, with over 2 million individuals upskilled annually since 2016.

## **Conclusion**

The technological leapfrog from the Amrit Mahotsav to the digital age is a saga of determination, adaptability, and innovation. The journey is not merely anecdotal; it is a narrative woven with data and facts. India has moved from the periphery to the center stage of the global technological narrative. As we stand at the cusp of the Amrit Kaal, the journey is far from over. The challenges are real, but so is the potential for transformative change. The digital age is not just a phase in India's history; it is a continuum, a story that unfolds with each innovation, each breakthrough, and each stride towards a future where technology becomes both, the bridge that connects a billion dreams and also the beacon illuminating the path toward progress, inclusivity, and a thriving digital India.

## **References**

The data has been analyzed and concluded after procuring from multiple government official websites such as:

1. The World Data Bank (<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=IN>).
2. GOI: Ministry of Statistics & Programme Implementation (<https://mospi.gov.in/data>).
3. Global Entrepreneurship Monitor (<https://mospi.gov.in/data>).
4. Open Government Data Platform India (<https://data.gov.in/keywords/Entrepreneurship>).
5. PIB (<https://pib.gov.in/indexd.aspx>).
6. MEITY (<https://www.meity.gov.in/>).
7. Data Outsourcing India (<https://www.dataoutsourcingindia.com/>).
8. Statista ([www.statista.com](http://www.statista.com)).