GLOBUS

Cosmos Journal of Engineering & Technology
A Refereed Research Journal
Vol 10 / No 2 / Jul-Dec 2020 ISSN: 2231-4210

GROWTH OF DIGITAL ADOPTION IN INDIA

* Bhabani Charan Rath
**Dr. Kailsah Nath Tripathi

Paper Received: 14.12.2020 / **Paper Accepted**: 30.01.2021 / **Paper Published**: 01.02.2021
Corresponding Author: Bhabani Charan Rath; doi:10.46360/cosmos.et.xxxxxxxx

Abstract

India's fast adoption of digital technology has drastically changed a number of industries, boosting economic growth and improving millions of people's quality of life. The main forces behind this digital revolution are examined in this abstract, including the widespread use of the internet, governmental initiatives, and the development of reasonably priced smartphones. The government's Digital India initiative has been essential in advancing e-governance, digital infrastructure development, and digital literacy. The emergence of fintech, e-commerce, and online learning platforms has also expedited the adoption of digital technology in both urban and rural regions. Notwithstanding these developments, problems including inadequate digital literacy, restricted infrastructure, and cybersecurity issues still exist. To maintain and increase the advantages of digital adoption in India, these problems must be addressed through targeted investments and legislative changes. The abstract emphasizes how digital technologies have revolutionized India's socioeconomic environment and stresses the importance of ongoing attempts to close the digital gap.

Keywords: Digital Adoption, India, Internet Penetration, Digital India, E-Governance, E-Commerce, Online Education, Digital Literacy, Infrastructure, Cybersecurity.

Introduction

A significant change in India's socioeconomic landscape has resulted from the quick expansion of internet connectivity, the pervasive usage of smartphones, and the implementation of strong government initiatives. India's digital economy has been among the fastest-growing in the world during the last ten years, revolutionizing company operations, service delivery, and interpersonal communication.

Launched by the Indian government in 2015, the Digital India program has been the cornerstone of this digital revolution. This large-scale project intends to improve the country's digital infrastructure, make the internet more accessible, and encourage digital literacy. Because the initiative gives access to digital information and services that were previously inaccessible, it has played a significant role in closing the digital divide, particularly in rural and underserved areas. The exponential rise in smartphone penetration is one of the main factors driving digital adoption in India. With the help of reasonably priced smartphones and competitive data plans, internet connection has become more accessible, opening up the digital world to millions more Indians. Due to increased connectivity, a number of digital industries have grown, greatly influencing daily life and company operations. These industries include e-commerce, finance, online education, and telemedicine.

Fintech technologies have improved financial inclusion by providing digital payment solutions and banking services to the unbanked population, while e-commerce platforms have changed shopping experiences by putting a wide selection of products at customers' fingertips. Online learning environments have increased access to high-quality education by removing geographical constraints and giving students nationwide access to educational possibilities.

But even with these improvements, a number of problems still exist. Many people still struggle with digital literacy, making it difficult for them to use digital technologies efficiently. Restrictions on infrastructure make it difficult to connect seamlessly and access digital content, especially in rural and distant places. Furthermore, worries about cybersecurity put digital transactions and data privacy at danger, calling for strict user protection measures.

The country's economic and social fabric is being reshaped by the growing digital adoption in India. Sustaining this expansion will need ongoing efforts to expand digital literacy, upgrade digital infrastructure, and solve cybersecurity issues. India is well-positioned to seize new possibilities, spur innovation, and achieve inclusive growth as it continues to adopt digital technology, making sure that the advantages of the digital revolution are felt throughout the entire nation.

Review of Literature

Teece, D.J. et.al (2011) Innovation is a process where creative and knowledgeable people and communities frame problems and then search, select, integrate as well as combine information related about enhance their understanding & resolve the problems.

Gattiker, T. et.al (2011) An Enterprise Application Software (EAS) is a large-scale, integrated, cross-functional, and datacentric software package that

* *Research Scholar, Kalinga University, Naya Raipur, Chhattisgarh, India.*
** *Supervisor, Kalinga University, Naya Raipur, Chhattisgarh, India.*

provides service as the whole organization platforms.

Vincent Rainardi, (2011) amid this book has given spearheading ideas for information distribution center advancement with tests of SQL Server keeping in sight the extent of this investigation the part seven and 9 of this book is of prime significance as they consider ETL improvement, reasonableness and learning quality confirmation in an exceedingly learning stockroom. amid this part, the creator examines what information quality is and why it's accordingly important. extra the information quality strategy and furthermore the parts worried inside the technique are referenced. The classes of data quality is guidelines as far as approval and furthermore.

Analysis

In the year of 2020, it is noted that 4G-enabled contraptions are being grow about 550 million devices being utilized. Meanwhile, reliable quick data is getting the chance to be both widespread and what's more sensible (data rates have reduced to shy of what 33% in just about 4-5 months). This is noted that expansion related to advanced substance is considering as additionally driving utilization. The portable internet related clients are relied upon to almost twofold from 650 million now-a-days & about 1000 million upto 2025 while information utilization for each client is evaluated to trend about 10-14 times & achieve about 10-15 GB/month.

A few other trends in analytics industry in India:

1. While Bengaluru and Delhi NCR have generally been the center of examination in India, there are new urban communities like Pune, Hyderabad and Chennai coming up quick on the warmth outline.

2. In terms of devices, SAS would even now command the piece of the overall industry as the greater part of the banks, telecom players and CPG players depend on SAS. Notwithstanding, the new companies and consultancies have plainly begun concentrating on R and Python. Along these lines, this may be up for a change, particularly given the pattern in the U.S.

3. Currently, there are just a restricted arrangement of organizations taking a shot at genuine Big Data examination issue. While Big Data has produced a considerable measure of buzz, the vast majority of the employment opportunities today are engaged towards designers rather than examiners.

4. The industry is experiencing extremely intense rivalry in enlisting the best ability specifically from universities. This has brought about an extremely solid increment in pay bundles to the best ability from head organizations.

5. In coming circumstances, I expect a great deal of activity in investigation in the warmed web based business space in the nation. With any semblance of Flipkart and Snapdeal setting up their own examination units and Amazon being Amazon, information resources are relied upon to make a separation in coming circumstances. Make in India type of activity program is the dream project of Government of India as to urge organizations for producing new products in India. This was propelled by our Hon'ble Prime Minister Shri Narendra Modi ji at the time on 25 September 2014.

Objective behind "MII": The Make in India crusade bases on pulling in and helping associations to contribute and set up their assembling units in India. The crusade covers and advances 25 zones. The activity is locked in to focus on the pre-adult, who are coming ahead with new pioneering thoughts and thought development. MII has chosen pulling in worldwide associations to put and make in India to make the India a worldwide assembling focus point. Social Success of "Make in India" According to the measurements from the administration, MII's Official FB page is including another part or fan every 2-3 seconds. Strikingly, it is out of nowhere that any such government activity has been made intelligent through a 'questions and answers' session on Twitter on the issue of simplicity of cooperating in India. Not just the social frameworks, even the MII's site (www.makeinindia.com) has gotten unfathomable response with page points of view of over +5.5 million gotten to by over approx. 1.7 million customers over the world which unmistakably demonstrates the eagerness of open in favorable circumstances of make in India crusade.

1. Ease of business
2. Skill & occupations related to adolescent
3. Making India as the manufacturer

Discussion

India's increasing digital usage is a complex phenomenon that has changed the socioeconomic environment of the nation. This report explores the main drivers of this expansion, the industries most affected, and the issues that must be resolved to maintain and improve digital adoption.

Essential Factors for Digital Adoption

1. Internet penetration & affordable connectivity: The widespread availability of reasonably priced smartphones & competitive data plans has greatly boosted India's internet penetration. India has among of the lowest data rates in the world,

according to the Telecom Regulatory Authority of India (TRAI), increasing access to digital technology.

2. Government initiatives: India's Digital India program was introduced in 2015 with the goal of making the country a knowledge economy and society empowered by technology. The Common Service Centers (CSCs), which provide digital services at the community level, and BharatNet, a program that aims to bring high-speed internet to rural areas, are two important efforts within this program that have played a key role in closing the digital divide.

3. Fintech innovations: Particularly with regard to digital payment systems such as UPI (Unified Payments Interface), the fintech industry has been instrumental in fostering the adoption of digital technology. By making financial services and banking available to the underbanked and unbanked populations, these developments have led to a rise in financial inclusion.

4. E-commerce boom: Increasing internet availability and shifting customer behavior have led to an exponential rise in the e-commerce sector. Shopping has become more convenient thanks to websites like Amazon, Flipkart, & regional startups that provide a large selection of goods and services at affordable costs.

5. Online education: Students all around India may now receive a top-notch education from renowned universities and instructors thanks to the growth of online learning platforms like Coursera, Unacademy, and Byju's.

Industries Affected

1. Retail & e-commerce: With online sales hitting previously unheard-of heights, the e-commerce industry has completely changed retail in India. The expansion of related industries like digital marketing and logistics is another result of this change.

2. Financial services: The use of digital payments as well as banking services has increased dramatically, leading to the widespread recognition of websites like Paytm, Google Pay, as well as PhonePe. This change has simplified financial transactions and increased financial inclusion.

3. Healthcare: With the COVID-19 epidemic, telemedicine and internet health services have become more popular. Access to healthcare has improved thanks to platforms like Practo & 1mg, especially in rural areas.

4. Education: The field of online education has grown quickly, providing learners of all ages with a wide range of courses and educational materials. The epidemic has increased this growth and made the switch to remote learning necessary.

Obstacles & Difficulties

1. Digital literacy: In spite of the advancements, there are still several obstacles related to digital literacy. A lot of people, particularly in rural regions, lack the necessary abilities to use digital technology efficiently.

2. Infrastructure limitations: Despite a growth in internet usage, distant and rural areas still lack suitable infrastructure. The availability of consistent high-speed internet is still a problem, which impacts the consistency of digital access.

3. Cybersecurity issues: As the use of digital devices grows, so do cybersecurity risks. Retaining customer trust requires ensuring the security & privacy of digital transactions related data.

4. Socio-economic barriers: The adoption of digital technology is still impacted by socio-economic differences. Lower-income populations might find it difficult to pay for internet and digital gadgets, which would limit their access to online opportunities.

Prospects

With ongoing investments in digital infrastructure & literacy initiatives predicted to spur additional growth, India's embrace of digital technology appears to have a bright future. To maintain this momentum, strategic measures to improve cybersecurity and close the digital divide will be essential. The cooperation of the public, commercial, and civil society sectors will be essential to guaranteeing that the advantages of digital adoption are widespread and equitable.

An important turning point in India's progress may be seen in the country's increasing adoption of digital technology. India can become a more wealthy, empowered, and inclusive society by tackling the current issues and taking use of the potential provided by digital technologies.

Conclusion

India's march toward greater digital usage has been revolutionary, dramatically changing the nation's socioeconomic environment. Millions of Indians have benefited from this digital revolution, which has democratized access to knowledge and amenities and empowered them. It has been propelled by widespread internet usage, reasonably priced smartphones, including proactive government programs like the Digital India program. The effects of digital adoption are noticeable in many different industries. Online

education has increased learning options, fintech has improved financial inclusion, and e-commerce has altered retail. These developments have not only raised living standards but also aided in the expansion and development of the economy. However, a number of issues need to be resolved in order to fully realize the promise of digital adoption. Digital literacy is still a major obstacle, especially in rural areas where many people still lack the knowledge and abilities needed to use digital platforms efficiently. Limitations in infrastructure, particularly in isolated areas, persist in impeding uninterrupted connectivity and accessibility. Furthermore, cybersecurity issues require strong security measures and regulatory frameworks since they pose serious hazards to data privacy and the integrity of digital transactions.

To maintain and increase the advantages of digital adoption in the future, significant investments in digital infrastructure, extensive digital literacy initiatives, and strict cybersecurity measures are necessary. These initiatives must be led by cooperation between the public, business, and civil society sectors in order to guarantee an inclusive and fair digital transformation. India's increasing embrace of digital technology is evidence of the nation's ability to use technology to advance its socioeconomic conditions. Through persistent innovation and tackling current obstacles, India can firmly establish itself as a frontrunner in the digital economy, promoting equitable progress and advancement for its entire populace. India is at a critical turning point in its transition to a digital future as the country continues to undergo a digital revolution that promises to open up new opportunities, spur innovation, and improve people's quality of life overall.

References

1. Pant, C., et al. (2016). Educating and the market: Which parts of the neoliberal solution are correct? World Development, 24(4), 10-21.
2. Aaker, D. J. (2016). The brand relationship spectrum: The key to the brand architecture challenge. California Management Review, 42, 8-23.
3. Agarwal, M. K. (2016). An empirical comparison of consumer-based measures of brand equity. Marketing Letters, 7(3), 237-247.
4. Utz, S. (2015). The emotional responses of browsing Facebook: Happiness, envy, and the role of tie strength. Journal of Social and Personal Relationships, 52(23), 29-38.
5. Agwu, E. (2015). The use of social media networks as a strategic tool for organizational marketing management. Journal of Internet Banking and Commerce, 13(23).
6. Kumar, P. (2009). Convergence of rural marketing strategies and trends in developing economies. Globus: An International Journal of Management & IT, 1(1), 61-66.
7. Krishna, A. R., & Kumar, S. (2017). Location information leaks from apps and web browsing. Cosmos Journal of Engineering & Technology, 7(1), 1-4.
8. Agarwal, N., Kumar, P., & Mishra, S. (2010). Need to acquire democratic competency by teacher educator in global scenario. Maa Omwati Journal of Education Research & Development, 1(1), 0976-1365.
9. Naveen, & Agarwal, N. (2016). Social media & academic performances: An empirical analysis. Cosmos: An International Journal of Art & Higher Education, 5(2), 5-7.
10. Yadav, A., & Dwivedi, P. K. (2016). Model based on the utilization of utilitarian documentation. Cosmos: An International Journal of Management, 5(2), 1-3.
11. Agarwal, N. (2018). A Study of Innovations in Instructional Strategies and Designs for Quality Enrichment in Higher Education. Cosmos An International Journal of Art & Higher Education, 7(2), 01-23.
12. Kumar, P. (2003). Impact of education on consumer behavior with social change. IndianMBA.com, 22.
13. Kaila, R. P., & Singhal, S. (2014). A study on the Indian mutual fund industry. Globus: An International Journal of Management & IT, 6(1), 12-14.
14. Agarwal, N., & Kumar, P. (2009). Role of Information Technology in Education. In AICTE Sponsored National conference on Information Integrity & Supply chain Management Abstracts Proceeding, Book World Publisher, Dehradun, 18.
15. Praveen, M. (2011). Learning as a generative process. Globus Journal of Progressive Education, 1(1), 1-7.
16. Rao, C. R. K., & Raja, C. (2018). Mutual fund industry and market scenario of India. Globus: An International Journal of Management & IT, 9(2), 1-3.
17. Agarwal, N. (2008). Enterprises Information Systems & Technology. Excel Publishers.
18. Nautiyal, A. (2015). Role of life insurance in India. Cosmos: An International Journal of Management, 5(1), 1-3.