

Digital Literacy as a Determinant of Customer Adoption of E-Banking Services in India

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Abstract

In India, the introduction of e-banking services to the customers is also largely dependent on digital literacy as it defines how the people will engage with the technology-based banking systems. This paper will review scholarly articles, reports by RBI, and newspaper stories to understand how digital literacy affects the adoption of e-banking. It focuses urban differentiations in literacy, the understanding of digital loans and the fear of data security. The results have shown that the level of literacy improves the level of confidence, trust, and adoption, whereas the lack of awareness and security issues is a major problem particularly in semi-urban and rural settings. The paper also discusses the efforts by banks and governmental institutions towards enhancing digital literacy, advancing financial inclusion and the provision of secure digital banking infrastructure. The discussion highlights the need to implement focused educational campaigns, technological innovation, and support of appropriate policies in addressing the inclusive digital financial development in India.

Keywords: Digital Literacy, E-banking Services, Customer Adoption, Digital Banking, Trust and Security, Financial Inclusion, Public and Private Banks.

Introduction

India Indian banking is experiencing a rapid development process caused by digital technologies and increased consumption of e-banking services. This is as customers are moving out of the traditional branch banking to online and mobile banking due to the convenience, accessibility and efficiency factors. Nevertheless, the adoption rates differ depending on the city, region, and demographics, and it turns out that the digital literacy can be considered an important factor affecting the engagement.

Digital literacy is the knowledge to use digital technologies and platforms to access and comprehend and make good use of them. In banking, it comprises the familiarity with online banking process, mobile apps, online payments, as well as the knowledge about online financial services, including loans and investment services. More literate customers tend to be more confident and trust the digital platforms less and are not easily discouraged by the security issues or technical difficulties.

It has been reported that the adoption of e-banking has been stable with varying literacy and awareness in the urban and semi-urban regions. In the case of the public sector banks, the institutional trust is high, whereas in the case of the private banks, the customers are incited to use the services of the bank due to the faster

service and technological innovations. Issues like insecurity of data, lack of awareness regarding digital loans, and minimal exposure to mobile banking guidelines remain a problem to most customers.

By analyzing the article evidence in the newspapers about digital literacy and its influence on the adoption of e-banking in India, this paper will relate the article information with trends in the banking industry. It examines the literacy trends of cities, industry variations, and the importance of trust and security with a primary focus on specific programs to advance digital banking and financial inclusion.

Objectives

The study aims to:

1. Measuring digital literacy levels in cities and how these influence the adoption of e-banking.
2. Compare adoption patterns across the public sector and the private sector banks, noting the variation in trust, adoption of technology as well as service delivery.
3. Determine key adoption complications such as data security, privacy and lack of awareness of digital financial products.
4. Research programs that banks and government agencies have implemented to foster digital literacy and make more people adopt it.

Review of Literature

- Digital literacy Digital literacy has been established as a very important factor in determining customer adoption of e-banking services because it helps the customers to access, comprehend and make proper use of online portal, mobile applications, online payment systems, and financial products which are all digitally based and are offered by e-banking services. More literate customers feel better, have more confidence in digital systems, and are easier to provide with e-banking services (Gupta and Yadav, 2017; Yadav and Pathak, 2017).
- Gupta and Yadav (2017) also discovered that having digital literacy lowers the perceived complexity of e-banking systems and improves customer confidence. Customers who can read will engage more sophisticated facilities like fund transfers, bill payments, and online loans, which increases the online transaction.
- Yadav and Pathak (2017) have identified that the level of familiarity with online banking tools and mobile applications is strongly linked with the adoption rates. They emphasized in their research that more digitally literate customers are willing to explore new banking products, including mobile wallets and instant loans and have a higher propensity to get involved in more higher-order online financial transactions.
- According to Singh and Srivastava (2020), literacy enhances the competency of users in their proficiency in digital platforms, alleviating anxiety levels in users because of making mistakes or facing security risks. More literate customers also have superior decision making capabilities in digital banking settings, thus are able to access a variety of banking services at the same time.
- Kaur and Kaur (2018) have discovered that digital literacy has a positive impact on the customer satisfaction and adoption of mobile banking, especially in urban regions. The e-banking is convenient, reliable, and time-saving to literate users, which stimulates the utilization of digital channels on a regular basis and the use of new digital banking products.
- Mishra and Singh (2019) reported that the level of awareness about online banking features, mobile payment systems, and digital financial products is one of the significant predictors of

adoption. They noted in their study that tutorials, workshops, and demonstrative practices have a great impact on the confidence and readiness of customers to use digital banking platforms.

- It was reported by Rajan and Menon (2020) that digitally literate customers adopt digital loans and investment products to a greater extent. Literacy enables customers to learn new complex functions, evaluate financial opportunities, and make decisions that enable them to be more involved with digital banking products.
- Perception of trust and security is very important in adoption. As observed by Singh and Srivastava (2020), even literate customers might turn out to be reluctant to use e-banking in case they feel that there is a risk of fraud, privacy invasion, or malfunction and this proved that literacy cannot be a sole cause to embrace e-banking.
- Sharma and Chauhan (2024) highlighted that a combination of literacy programs and secure banking platforms would lower the anxiety of customers and allow them to adopt them. Their study has noted that educational campaigns and tutorials on what constitutes safe practices will increase trust and positively influence the use of digital banking services.
- According to Gupta et al. (2019), there was a mediating effect of trust between digital literacy and adoption. Literate and secure platform-accessed customers are more confident, enjoy more e-banking services and are less inclined to default to previous banking systems of visiting the banks.
- Patel and Shah (2018) discovered that security perceptions play a major role in the adoption of mobile banking, and so do first-time users in urban regions. According to their research, customer education on safe internet behavior leads to greater confidence levels and a more favorable uptake of online shopping.
- The researchers emphasized that digital safety awareness activities enhance trust and decrease the level of resistance to the adoption of e-banking (Kumar and Verma, 2021). Their results are that security literacy must be encompassed in digital literacy programs to achieve optimal adoption.
- Public and private sector banks have different adoption trends. The study by Gupta and Yadav (2017) established that the institutional trust of public banks is greater because they are more likely to adopt them despite slower technological infrastructure. However, faster services, convenient mobile apps, and new technology are some of the features that help private banks to lure digitally literate customers (Sharma and Chauhan, 2024). According to Choudhary and Singh (2019), the use of technology and efficiency of services offered by the private banks is higher than those offered by the public banks and the latter has better trust with customers who are older and less digitally literate.
- Agarwal and Tripathi (2020) noted that customer perception of the quality of the services mediates between the difference in adoption between a public and a private bank. The digital literacy enhances the preference of the customers to the private banks that provide innovative and technology-based services and also the trust maintains the adoption in the public banks.
- The adoption is also different in different cities and population groups. As Yadav and Pathak (2017) observed, there are more literate and adopting centers than semi-urban or even rural regions. According to Singh et al. (2021), younger and better educated customers are more likely to adopt e-banking whereas older age groups tend to struggle because of their lack of literacy and not being acquainted with digital technology.
- Rao and Sharma (2022) discovered that the semi-urban cities, where awareness campaigns are available, enhance adoption by informing customers about mobile banking applications and digital loan services, particularly among those who are using them first. They focus their research on how targeted literacy programs can solve the urban-semi-urban adoption gap.

- According to Patel and Mehta (2023), female and marginalised literacy programs are associated with a considerable improvement in confidence and the desire to use digital banking services. Specific educational activities were discovered to enhance interest and decrease the unwillingness to use internet banking.
- Gupta et al. (2019) emphasized that online banking feature education has a direct positive effect on the intentions to adopt. According to Mishra and Singh (2019), first-time users and moderate literacy levels are the most effective when it comes to workshops, tutorials, and digital loan awareness programs.
- Sharma and Chauhan (2024) found that the integration of digital literacy and the use of secure platforms is related to an increased adoption of e-banking services by customers and the maintenance of the engagement with the bank. They focus their research on the fact that literacy, awareness, and security combine to implement sustainable adoption patterns.

Research Methodology

The research proposed takes a secondary research design as it aims to understand the influence of digital literacy on adoption of e-banking services among customers in India. The descriptive and qualitative method was used to combine the results of scholarly research, the reports of RBI and the Ministry of Finance, and the current evidence in the newspapers. The qualitative analysis of data in journals, official governmental publications, and newspaper articles was conducted to combine the insights of the empirical analysis with the real-life observations to receive a complete picture of the role of digital literacy in the adoption of e-banking.

Initiatives to Promote Digital Literacy and E-Banking Adoption

Digital literacy is directly related to the use of e-banking services in India. Several efforts by banks and governmental and regulatory organizations are trying to increase literacy and foster trust and secure digital banking habits. The government reports, RBI publications, and newspaper reports and records indicate that there are continuous efforts to enhance awareness and adoption at the urban, semi-urban, and rural segments of the population.

Key Initiatives:

- The socialization of mobile banking, online transactions, and digital loans is done through campaigns by the public and private banks and the government agencies. These campaigns are aimed at urban and semi-urban citizens and focus on knowledge gaps and instill trust in digital resources (RBI, 2023; Dainik Bhaskar, 2026).
- Banks and NGOs: organise workshops, tutorials and practical demonstrations to educate the customers in using mobile banking applications, internet banking portals as well as digital payment systems. The programs will boost the level of practicality and lower the anxiety levels about internet banking, especially among first-time internet banking users in the semi-urban regions (NPCI, 2022).
- Programs like the Pradhan Mantri Jan Dhan Yojana (PMJDY) and literacy programs organized by the RBI are aimed at informing its customers of the digital wallet, mobile payment, and online loans. These are in order to raise the number of marginalized and low-literate people to adopt digital banking (Ministry of Finance, 2022).
- In the case of the private sector banks, digitally literate customers are drawn in by easy to use mobile applications, AI-powered support, and quicker digital offerings. Such innovations make e-banking

solutions more convenient and motivate the use of their services repeatedly (Sharma and Chauhan, 2024).

➤ Banks also offer principles of safe practices in digital activities to curb the threat of data privacy and fraud. The educational campaigns accompanied by safe online platforms lead to a higher level of trust and encourage the customer to embrace online and mobile banking without fear (Singh and Srivastava, 2020).

➤ Special female, geriatric, and semi-urban client programs provide tutorials and workshops, which make them more confident operating digital banking products (Patel and Mehta, 2023).

➤ Newspaper reports, social media campaigns and online advertisements are some of the strategies that would strengthen information on e-banking services, which include digital loans and mobile banking tutorials. The article written by Dainik Bhaskar (11 January 2026) emphasized the trend in the literature levels city-by-city and increasing awareness of e-banking, which proves the necessity of further studies and outreach.

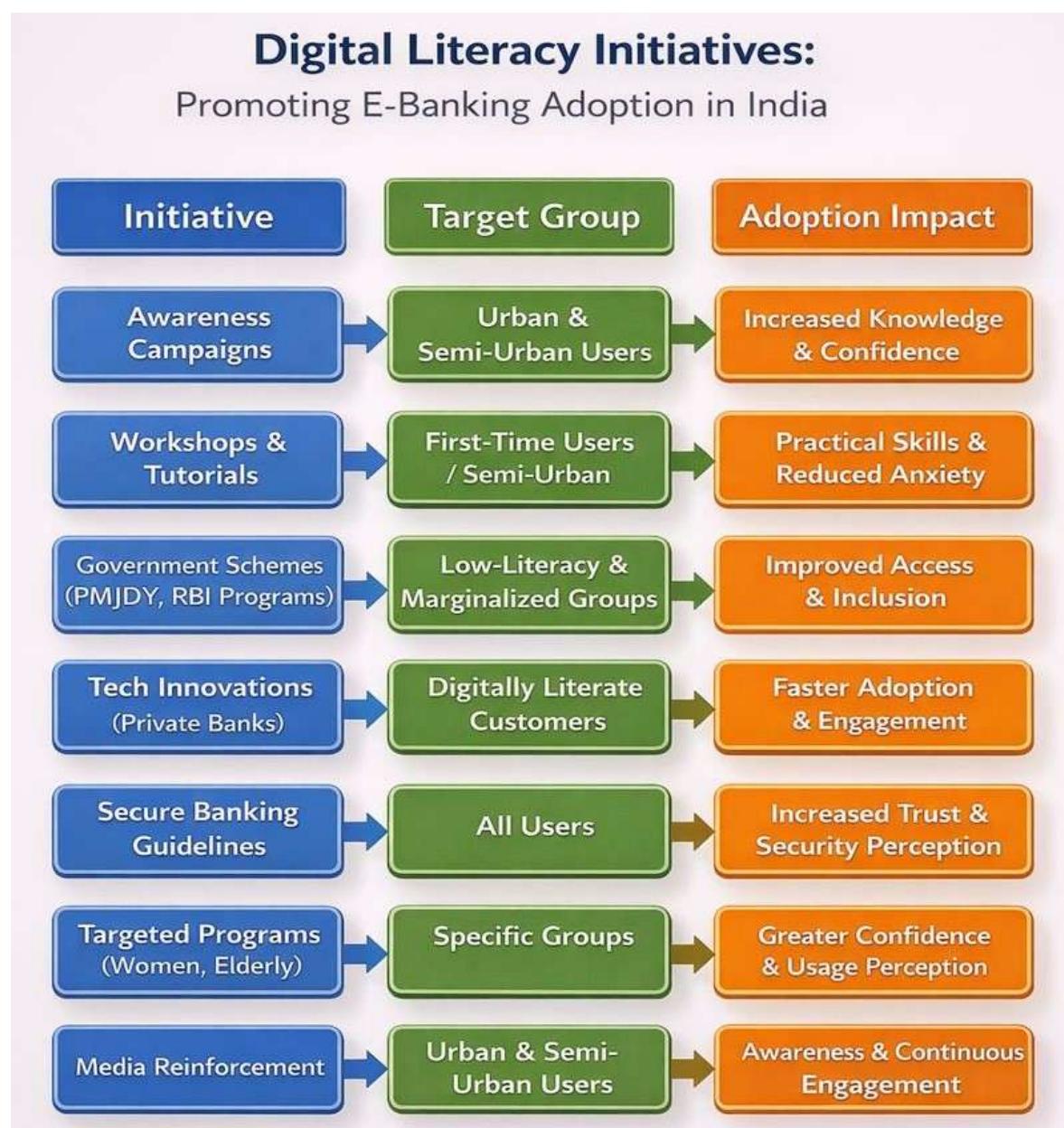


Figure 1: Digital Literacy Initiatives and E-Banking Adoption in India

Source: Author's own compilation based on secondary data from RBI (2023), Ministry of Finance (2022), NPCI (2022), Dainik Bhaskar (2026), and relevant academic literature (2017–2024).

Discussion and Conclusion

The review of literature, government documents, and newspaper data point out the fact that digital literacy is a decisive factor of customer acceptance of the e-banking services in India. More digitally literate customers are more confident about using online banking platforms, mobile apps, and other forms of digital financial products like digital loans and investment services.

The trend in the adoption is not uniform in all sectors in banking. Long-trusted institutions have a positive aspect on the use of the local public sector banks; customers who are less digitally literate tend to embrace it. In comparison, the digitally savvy customers of private banks are enticed by the use of technology, easy to use mobile applications and a quicker service, which enhance interaction and general usage.

Perception of trust and security are still one of the key factors affecting adoption. It is possible that even digitally literate customers will be reluctant in case of insecure digital platforms. The banks that integrate educational tools with safe space have higher chances of decreasing anxiety and persuading more people into using e-banking services.

The trends in city and demographics mean that the urban centers like Jaipur, Kolkata, and Delhi will be more accepting because they are more digitally literate and have been exposed to awareness campaigns. Semi-urban areas are still disadvantaged by the lack of exposure to digital tools and lower rates of literacy. E-banking is embraced by younger and educated customers more and the old age population needs to be guided by specific literacy programs. Women and marginalized programmes also increase literacy and trust and increase the adoption rates.

The aggregated data show that digital literacy, trust-building options, awareness campaigns and technology-supported innovations all contribute to the e-banking adoption. The insights provided by the newspaper confirm that the actual trends are consistent with the trends seen in the banking industry, which include the need to be constantly educated, have a safe platform, and participate in literacy programs.

Finally, digital literacy is not as much as a knowledge-based variable but is as well a confidence factor, a trust-building instrument that has been found to be an influential factor in the suffering of e-banking services. Specific policies, such as financial literacy, awareness efforts, and secure digital communities, are critical to the growth of adoption among urban and semi-urban and marginalized groups. To realise inclusive and sustainable growth in the digital banking sector in India, close achievement of adoption disparities between public and private banks, and national financial inclusion, it is therefore important to enhance digital literacy and trust.

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