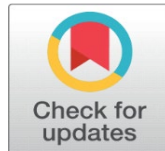


MOBILE BANKING AS AN EMERGING TREND IN COMMERCE

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ABSTRACT

Mobile banking has undergone rapid changes, and with that, these changes have transformed the scenery of modern commerce, which stands as a key drive for digital financial services. This review paper will highlight the fast-growing influence of mobile banking on commerce, emphasizing its role in accessibility, convenience, and financial inclusion. This paper further discusses key opportunities fostered through mobile banking that include the growth of digital transactions, support for small-scale business owners, and furthering the acceleration of cashless economy ventures. It also discusses major challenges such as cybersecurity threats, regulatory complexities, technological inconsistencies, and trust deficits from consumer ends. Using the latest studies, industry reports, and worldwide trends, the paper also attempts to give a detailed account of how mobile banking is affecting new commercial activities while grappling with operational and strategic challenges. The findings are anticipated to furnish useful information to policymakers and the financial sector on how to establish and promote mobile banking for sustainable growth in the emerging digital economy.

Keywords: Mobile Banking, Emerging Trends, Digital Commerce, Financial Inclusion, Cybersecurity Challenges

1. INTRODUCTION

The development of technology has dynamically altered global trade, and mobile banking is regarded as one of the most dynamic aspects introduced in recent years. This mobile banking refers to using smartphones, tablets, and other handheld devices to use banking services such as fund transfers, account management, bill payments, and even applications for loans. Now, a person can do possible transactions without going to a physical bank location with mobile banking. Thus, it has changed the definition of how a person or business would interact with the financial system. This is convenient, fast, and accessible, which helps the trade to take place irrespective of whether urban or rural.

Mobile banking is a major facilitator of e-commerce as an significant enabler to further reach and include persons in the economy. They expect the seamless availability of banking service anytime, anywhere; and businesses adopt mobile channels to speed cash flow and lower operational costs while increasing customer engagement and cost-effectiveness against traditional methods. Mobile banking has also worked wonders in bridging the gap to financial inclusion by providing banking opportunities for people previously deprived of them, be in developing economies or anywhere traditional banking networking has failed.

Mobile banking offers advantages as well as some serious disadvantages that require extra attention. The threats to users and institutions alike range from cyberspace trespassing to actual data breaches, phishing schemes, and distribution of mobile malware. Other considerations that come into play regarding carrying out mobile banking services include data privacy, user authentication, regional technological inequality, and different regulatory environments. Customers always tend to lose trust halfway through; they will want more importance to be given to their digital safety and security in embracing full digital banking.

The incorporation of advanced technologies such as artificial intelligence, machine learning, blockchain, and biometrics is further changing the face of mobile banking. Such innovations aim to secure mobile banking, personalize user experience, and simplify banking; however, this brings forth complexities that require strategic management.

This critical paper would attempt to have an all-encompassing analysis of mobile banking as an upcoming trend in commerce. It reviews existing academic research, industry reports, and international case studies, to discuss the twin aspects of opportunities and challenges in mobile banking. This article, therefore, hopes to deepen understanding of the effects of mobile banking on the commercial sector and to point out areas therein where strategic interventions are necessary for its sustainable growth, and viable integration into the future of commerce.

2. OBJECTIVES

To examine the impact of mobile banking on commerce by identifying its opportunities for growth and financial inclusion, along with the challenges related to security and trust.

3. RESEARCH METHODOLOGY

Having been successfully accomplished, this research study used an exhaustive systematic literature review methodology to analyze the emerging trends in commerce emanating from the use of mobile banking. An analysis of the synthesis and evaluation of the given literature is carried out on research and reports, case studies, and industry insights available from reputable academic journals, books, and online resources. The research process, therefore, follows the steps listed below:

- **Literature Search:** The database was thoroughly searched, which includes Google Scholar, Sciencedirect, and Springer, to obtain articles, papers, and reports published between 2010 to 2025. Key search terms used to refine search and filter studies relevant to the theme of the paper included "mobile banking", "digital commerce", "financial inclusion", "cybersecurity in mobile banking", and "challenges in mobile banking".

- **Selection Criteria:** Sources were selected based on the relevance of the articles and topics in question, the credibility of the article sources, and their contributions in understanding the impact of mobile banking on commerce. The primary focus was given to peer-reviewed articles, industry reports, and research published by recognized financial institutions and government agencies. Only studies having a contribution to the understanding of the various opportunities and challenges posed by mobile banking in modern commerce were considered.
- **Data Extraction:** The key findings, trends, and themes that emerged from the selected studies included details of the adoption rates of mobile banking, technological advancements, regulatory frameworks and security issues, and so on-for mobile banking in developed and developing countries. These data were collected and segmented into thematic areas with respect to opportunities and challenges.
- **Data Synthesis:** This literature survey review was then organized thematically to give a reasonably good idea of how mobile banking could influence commerce. Key issues such as financial inclusion, consumer behavior, security issues, and its role in facilitating a cashless society have been integrated into an extensive discussion of the subject.
- **Critical Evaluation:** This study also comprised of critical identification of limitations and study of gaps in the existing literature. Some of the problems were analyzed from the aspects of regional differences in mobile banking, technological hurdles, and ostensive levels of trust in mobile banking systems that need to be explored further.

Conclusion: Findings extracted from the literature under review refer to the future of commerce being given opportunities and challenges by mobile banking. The paper further provides recommendations for various stakeholders, for instance, policymakers, financial institutions, and technology developers so that they can address such challenges and take advantages of mobile banking.

4. INTRODUCTION TO MOBILE BANKING TRENDS

The rising interfacing of mobile technology into financial services has deeply affected banking behavior around the world. Mobile banking has therefore become one of the most potent tools, enabling users to manage their finances from anywhere, anytime. The ever-accelerating adoption of mobile banking keeps pace with growing customer preference for digital solutions over traditional branch banking. Accessibility of mobile banking has further been enhanced in tandem with the growing smartphone adoption, internet penetration, and government initiatives directed at promoting digital financial inclusion. While this act provides opportunities for economic growth and access to financial services, it has also raised very serious dialogues regarding data security and user trust. In more general terms, statistical trends indicate that mobile banking weaving in and reshaping commerce is becoming increasingly evident for its forefront role in enabling the paradigm shift toward a digital economy.

4.1. GLOBAL MOBILE BANKING USERS

Global mobile banking is set to grow at a compound annual growth rate (CAGR) of 12.2% from 2021 to 2026 [Research and Markets. \(2024\)](#). This increase in demand is fuelled by various factors, from an ever-increasing need for banking convenience

to young fintech companies offering mobile-first services and banks focusing on post-COVID digital transformation. Additional features on mobile banking applications include AI chatbots, investment services, and loan management, all appealing to the tech-savvy market.

4.2. GROWTH RATE

According to research from the Economic Times at the start of 2023, this app holds the active use of mobile banking opened over 75% of smartphone users in India. Such increasing consumption is based upon certain initiatives and factors like Digital India initiative of the government, development of smartphone market, and acceptance of mobile payments through Unified Payments Interface-based applications. Formerly excluded from the formal financial systems, rural and semi-urban areas are transforming into the primary marketplace for mobile banking services, which aims to enhance the financial inclusion of people in the country.

4.3. MOBILE BANKING ADOPTION IN INDIA

A survey by [Deloitte \(2024\)](#) shows that globally, 89% of bank customers preferred to use mobile banking instead of going to bank branches. This is caused by a need for rapid, convenient, and omnipresent access to banking services. Mobile apps provide a whole range of uses from fund transfer to investment tracking without queuing or opening hours. The change has been even more made irreversible by the COVID-19 pandemic. A new relationship between a bank and a customer is already shaping up.

4.4. PREFERENCE FOR MOBILE BANKING

Mobile banking, says the [World Bank. \(2023\)](#), has pushed up financial inclusion rates in developing economies by 31% over the last six years. Mobile banking serves to bridge the financial divide among people in remote and underserved areas where physical banking outlets are scarce or non-existent. It allows them to open accounts, receive remittances, access government subsidies, and perform daily transactions in a secure and efficient manner. This expansion has helped not only better personal financial management but also spurred smallscale business activity and local economic development.

4.5. FINANCIAL INCLUSION IMPACT

Despite mobile banking providing increased convenience, approximately 56% of users have security and privacy concerns [PwC. \(2024\)](#). Cybersecurity threats such as phishing attacks, malware, unauthorized access, and identity theft remain some of the serious threats to building widespread trust in mobile banking. Supposedly, skeptical users' fear is that their sensitive financial data may be compromised, resulting in monetary losses. Banks and fintech companies spend huge resources, therefore, on two-factor authentication, biometric logins, and advanced encryption technologies to combat these securities and assure customers.

4.6. SECURITY CONCERNS

According to [Statista. \(2024\)](#), forecasts of the total value of mobile payment transactions in the world are expected to go beyond \$14 trillion by 2025. There are three major driving forces behind this growth: increased smartphone usage, greater

access to the internet, and a change in attitude towards cash transactions. The hottest buzzwords today are mobile wallets, payment through QR codes, and contactless mobile payment. However, this increase in the adoption of mobile payments by businesses to enhance customer convenience will increase the links between mobile banking and commerce and create more opportunities for innovation and customer engagement.

4.7. MOBILE PAYMENT GROWTH

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5. LITERATURE REVIEW

Mobile banking has come to be seen as a true game-changer for the finance industry because it allows commerce activities with banking activities on the move. There have been indications that mobile banking is an important means of conserving financial inclusion through the provision of banking services to underserved and unbanked populations [Chen & Zhang \(2021\)](#). Those studies emphasized how mobile banking basically alleviated the gap between urban and rural locales, empowering people who find it difficult to access conventional banking infrastructure [Mansour \(2019\)](#).

The effect of mobile banking has been a major transformation in the way people and businesses conduct their business regarding financial services. It allows its users to access such services as money transfer, payments, and account management right in their palm via mobile devices. [Lee and Lee \(2020\)](#) state that mobile banking has thereby established increased accessibility and convenience, as it allows users to access financial services at all times of the day. In fact, this development has led to the widespread uptake of mobile banking services around the world, especially in developing countries.

Financial inclusion is one of the principal advantages of mobile banking. By using mobile banking, a means for individuals who reside in areas without formal banking services is offered to access banking services outside the traditional brick-and-mortar bank. [Kumar and Yadav \(2021\)](#) find out that mobile banking is more advantageous to the rural people where the bricks and mortar banking infrastructure is either less developed or non-existent. As mobile devices have penetrated society, combined with a surge in the availability of mobile banking applications, more formerly unbanked persons are gaining access to essential financial services, thus advancing financial inclusion.

Not only that, mobile banking has really changed how consumers behave and do business. Their instant payments, money transfers, and effective management make transactions highly popular and easy. Mobile banking, as defined by [Singh and Soo \(2020\)](#), accelerates monetary transactions, but it also broadens the scope of e-commerce with its easy payment collection method for businesses. It is now possible

to do so without even the need for physical terminals for payments so vital to small businesses.

However, with the help of mobility, broad goodies are provided to it; not without its share of hurdles. One of the primary issues is that of security. While transferring highly confidential information, such as money, one is liable to be badly hurt by fraud, cyberpunks, or unauthorized entries. Research by [Sharma and Nair \(2021\)](#), mentions that even as mobile banking reaches new heights, still a considerable number of end-users are reluctant to use such services fearing breaches into their personal information. Trust issues are an evil spell cast for insecurity to further growth in mobile banking adoption.

Additionally, regulatory challenges remain a critical factor. Mobile banking operates across borders, and different countries have different regulatory frameworks for financial services. Research by [Chaturvedi and Patel \(2020\)](#) suggests that regulatory uncertainty is a significant challenge for mobile banking service providers, especially when dealing with cross-border payments and ensuring compliance with varying legal standards. These challenges hinder the smooth expansion of mobile banking, especially in countries with stringent regulatory policies.

The evolution of mobile banking has been shaped mainly by technological advancements. Some more current innovations that promote security and efficiency in mobile banking systems include biometric authentication, AI for fraud detection, and blockchain technology [Singh et al. \(2022\)](#). All of these innovations are anticipated to generate a secure and reliable mobile banking system, thereby enticing even further adoption and commercial significance.

Mobile banking has ushered in innumerable opportunities towards very quickly progressing towards becoming cashless and vigorously engaging in e-commerce. [Sharma and Patel \(2020\)](#), note that mobile banking minimizes and fastens financial transactions and also supports plurality by enabling small businesses to reach wider markets. Such shift towards digital transactions is also driven by the comfort and saving time by having mobile banking, making it the chosen method for consumer payments [Jain and Singh \(2020\)](#).

Economic power requires mobile banking to grow rapidly, but with it has come rampant challenges in security and privacy. [Williams et al. \(2022\)](#) indicate that cybersecurity threats, including phishing, fraud, and malware attacks, are among the most critical concerns of both consumers and banks. This consumer confidence in mobile banking has been deemed a great barrier to adoption [Singh and Gupta \(2021\)](#). In addition, regulatory issues emerging with mobile banking's acceleration include compliance with data protection laws and anti-money laundering statutes [Thomas \(2021\)](#).

The digital divide in emerging economies is another significant challenge, where the inadequacy of technological infrastructure limits the full-blown realization of mobile banking services. [Patel and Joshi \(2020\)](#) cite that very large gaps in mobile banking adoption exist between developed and developing countries due to internet access, smartphone penetration, and digital literacy.

Technological advancement in artificial intelligence (AI) and blockchain presently reinforces the security and efficiency of mobile banking. AI systems with an increasing role in fraud detection and customer service automation [Khan and Lee \(2022\)](#) offer transparency as well as secure transaction records to fight fraud and boost customer confidence [Wang \(2021\)](#).

It is evident from the literature that while mobile banking holds opportunities for financial inclusion, economic development, and consumer ease, risks, security, trust, and digital inequality are some of the challenges that require consideration if mobile banking is to aspire toward modern-day-commerce perfection.

5.1. OPPORTUNITIES IN MOBILE BANKING

Mobile banking has become a revolutionizing change for the financial services market with opportunities for consumers and businesses alike. One major opportunity presented is financial inclusion enhancement. According to [Kumar and Singh \(2021\)](#), mobile banking gives individuals living in remote or underserved areas the capability to access banking services, minimizing the gap between urban and rural financial services. This is a major change in developing economies where there is very little traditional banking infrastructure. Financial services are reaching people through mobile phones who otherwise would not have had such resources.

Mobile banking also provides small enterprises with a smooth operating platform in the digital economy, not merely to ensure financial inclusion. In the opinion of [Shah and Sharma \(2020\)](#), mobile banking has allowed SMEs to process payments and do transactions digitally without having to invest in costly infrastructures or in-person point-of-sale systems. This would give SMEs an opportunity to engage with a wide customer base, including international markets, facilitating the growth of the business and digital transformation.

Convenience is what mobile banking holds in store for the consumer. With it, a certain individual can manage his/her finances anywhere any time and carry out transactions without entering a physical bank branch. Such convenience drives consumer satisfaction, that is noted by [Gupta and Sharma \(2021\)](#) who argued that mobile banking improves consumer experience by providing easy and fast access to financial services. Moreover, mobile banking facilities allow pay-for-apps and real-time fund transfers which are very important in this increasingly hastened and connected world.

In addition, mobile banking accelerates the creation of new financial products and services. The incorporation of AI and ML has led to the provision of such personalized services in mobile banking. [Kumar and Yadav \(2020\)](#) suggest that AI can empower mobile banking apps to analyze individual user behavior and preferences so as to tailor financial recommendations, investment options, and savings plans to users accordingly. Such high levels of personalization mean that new opportunities are presenting themselves for financial service providers in optimizing their offerings toward better servicing of their customers; thus, engagement increases and follows loyalty.

Lastly, mobile banking is a very favorable avenue when it comes to innovating the payment systems. The growing popularity of contactless payments and mobile wallets directs customers from physical cards or cash. Rapid development in mobile payment technologies, like NFC (Near Field Communication) or QR code payments, has reinvented the payments landscape - providing convenience, security, and speed - according to [Patel and Soni \(2021\)](#).

5.2. CHALLENGES IN MOBILE BANKING

Security concerns and issues related to the digital divide raise obstacles for mobile banking with respect to growth and widespread acceptance. One of the core challenges is related to security. Sending sensitive financial information via mobile

devices is certainly a challenge because of the risks of cyberattacks, fraud, and identity theft in the mobile banking arena. [Kumar and Verma \(2021\)](#) state that, notwithstanding the recent advancements in security features, such as encryption and multi-factor authentication, a good number of users still hesitate to adopt the mobile banking facility due to fear for the compromise of their personal information. Thus, a lack of trust in security is among the top barriers to the acceptance of mobile banking.

Another problem is access to digital technology, known as the digital divide. Though mobile banking is poised to reach populations left behind by technology, it deepens the disparity in such access. [Jain and Singh \(2020\)](#) mention that in developing countries, a major chunk of the population has had no access to smartphones or reliable services such as the internet. This means that those without such access find it difficult to benefit from mobile banking services, thus perpetuating financial exclusion rather than alleviating it.

Regulatory aggravations, in addition to the above barriers, are another genuine hindrance to the growth of mobile banking. [Patel and Thakur \(2021\)](#) consider that the regulatory framework concerning mobile banking and financial services varies significantly from one country to another. In many cases, this also means that coping with regulations can bring formidable challenges to mobile banking players trying to serve globally, starting from differences in these different standard frameworks. More rigid regulatory acceptance can be the death knell for budding mobile banking systems as regulators tend to whisk away the necessary perception lines by enforcing uncertain regulatory mechanisms in areas of anti-money laundering (AML) and know-your-customer (KYC). One such instance that can be cited is if a regulatory authority insists that the KYC process in the two Asian countries would use the same platform.

A very big task is the issue of digital literacy. Mobile banking offers convenience if you are well up in technology! To this minimum level of capabilities, somebody may have the basic understanding of what is expected of them with mobile banking. Across the board, there are individuals-big time oldies consisting of considerable percentage of people in Nigeria; some right there in some other regions of the world like Asia-all of whom do not have the command, comprehension, or computer knowledge to exploit mobile banking applications for what they're worth. Maybe it is important to take note of a report by [Sharma and Soni \(2021\)](#) which stated, "even though mobile banking has shown a trend-up, there exists a need for complete educational programs to educate users into safe use of its services." In the absence of such education acknowledgment, mobile banking could become an uninteresting subject to the older, teck wary folks.

Further, operational and infrastructural barriers have compelled the need for resolving. It is crucial to describe heavy infrastructure necessary for mobile banking platforms constituted by fail-safe servers, cloud storage, and reliable internet connectivity. There are no impediments for huge improvements. [Singh and Yadav \(2021\)](#) went on to profess that many regions, especially rural or less-developed areas, were yet to have a very reliable backbone for internet connections that could support, for example, the full operation and reliability of mobile banking systems. Further, non-standard mobile banking setups and their dismal failure to integrate with the traditional banking systems breed inconsistencies and bafflement from end-users.

5.3. IMPACT OF MOBILE BANKING ON GROWTH OF ECONOMY

Mobile Banking has effectively created a better economy and infrastructure by increasing financial access and consumer spending, as also improving business activities. Mobile banking has managed to keep it aside with cost-effective electronic transactions and acceleration in monetary circulation within and across economies by enhancing efficiency. This has altered economic and financial dynamics and channels by enhancing activities they overlook by accessing financial services through mobile devices. Contributions of such kinds, especially in emerging economies and countries, play a far better role in the growth and expert transition of economies and economic systems.

One of the most significant contributions of mobile banking is the promotion of financial inclusion. Studies conducted by [Sharma and Bansal \(2020\)](#) underscore the fact that mobile banking services now offer millions of hitherto unbanked persons into the system of capitalism. Through mobile banking, access to savings accounts, credit products, and insurance has actually benefited marginalized populations who were living in the cold. This has improved the capacity of economic sustenance and labour mobility across a majority of the local communities.

Another important area under mobile banking is small and medium-sized business (SME) development for economic development. [Reddy and Thomas \(2021\)](#) explain that mobile banking gives SMEs easier access to digital payment options, credit opportunities, financial services that will assist in expanding their operations and entering new markets; this, in turn, improves cash flow. As they flourish, they create employment and consequently contribute toward GDP growth.

Increasingly becoming cashless, in a positive manner, is another advantage of mobile banking in economic endeavor. The decrease in reliance on cash owing to digital transactions through mobile financial services has been emphasized by [Singh and Kapoor \(2020\)](#). This cashless transition touts a more transparent financial market while helping lower transaction costs. Furthermore, it serves to enhance tax compliance as well as narrow the informal sector in favor of national economy nurturing.

Contribution by mobile banking to build up consumer expenditure is an added advantage for the easy credit access and payment facilities. [Agarwal and Verma \(2021\)](#) put forward the idea that mobile-banking users, which will also create better shopping experiences, increase the level of expenditure in numerous sectors, thus improving the potential for better business development.

Despite their contributions to the economic system, mobile banks may present a certain set of drawbacks. As a matter of fact, this could sound risky. These would be the conditions found in the present economy that make mobile banking challenging and risky: Internet infrastructure exists, there are cyber risks, plus weak distribution and infrastructural links for such services in rural or underdeveloped areas. The main focus of [Joseph and Mathew \(2021\)](#) is the need to eradicate these drawbacks for an increasingly widespread and sustainable economy.

Mobile banking has emerged as a key innovation that can enhance financial inclusion, especially for the impoverished and unbanked. It is one of the most affordable, accessible, and convenient means to remove the traditional cumbersome banking setups. In their words [Kapoor and Bansal \(2021\)](#), the cost-effective mobile banking services appear as the bridge between banks and people; this fills in the gap

between banks and the marginalized- that is gained largely through distance, limited banking presence, and high transaction costs.

More inaccessibility to digital financial services worthfully has brought new vigor to all the more distant rural places, mobile banking being the main instrument in this context. As substantiated in [Sharma and Gupta \(2020\)](#), mobile banking provides rural customers access to banking services without the need to chain themselves to a bricks and mortar branch. Hence, such encounters lead to rural people opening savings accounts, transfer money, receipt of payments, and even access the microloan benefit, to integrate themselves into the mainstream financial system.

Moreover, mobile banking has been found to greatly empower women and low-income groups as well since it brings more financial control to these groups of people. As articulated by Menon and [Thomas \(2021\)](#), mobile financial service technologies have promoted greater female participation in financial activities, raised household savings, and provided voluntary investments in a child's education and health, thus boosting both the in-vogue individual empowerment and broader socio-economic development.

Mobile banking is very much in support of government efforts to expand financial inclusion and has been active bringing ground developments. For mobile banking and social welfare payments being transferred directly to beneficiaries 'bank accounts have possibly caused the worst leakage and accountability. These digital transactions have led the banking system to the doors of millions in developing economies.

However, due to the extent that it has not been straightforwardly addressed, many challenges like the digital literacy gap, affordability of smartphones, and network connectivity will set pickup points on the realization of full financial inclusion from mobile banking. Regardless, according to [Das and Roy \(2021\)](#), ongoing efforts in upgrading digital infrastructure, reducing costs, and promoting user education will positively entrench the role of mobile banking in undertaking inclusive financing.

5.4. MOBILE BANKING CHALLENGES RELATED TO SECURITY AND TRUST

Two of the most critical challenges that have postured towards mobile banking service uptake and growth are the problem associated with security and trust, according to another occasionally found research article. Yet a numerous security option comprises a wide array of convenience offerings such as mobile banking. And as repeatedly stated by numerous contextual articles, data breach, fraud, and lack of transparency are areas of slight fear to the users.

Security threats like phishing attacks, malware, and access to information seclude complete acceptance of mobile banking use. The apparent probability certainly messes with trust which messes with user willed adoption of mobile banking facilities, highlighting the necessity for cybersecurity measures as a *conditio sine qua non* for utilizing trust in users.

Trust is an important factor for shaping attitudes towards mobile banking for customers. Users make an evaluation about the reliability of the mobile banking service provider based on past experiences, brand reputation, and a number of visible security features such as two-factor authentication and encryption [Yadav and Singh \(2020\)](#). Lack of visibility about security practices creates mistrust and thus discouragement from the use of such services. Another significant dilemma is

restriction to the privacy of the individual. [Banerjee and Dasgupta \(2021\)](#) elaborated that users always fear, such as how their personal or financial data about them could be garnered, stored, and shared by mobile banking providers. Unclear information on privacy policies also weakens trust and prompts a hesitancy to use mobile banking services for transactions involving a high worth.

Technical challenges represent a further threat to trust. [Fernandes and Rao \(2021\)](#) argue that technical challenges, such as the apps crashing, servers being down, and technical errors at the time of transactions, can have serious implications on the trust that an individual puts in using it. Users expect a smooth and faultless experience, and any malfunction occurs leads to a feeling of unreliability.

Besides the technological ones, social factors of digital literacy cast a particular grave shadow on users' security perceptions. According to [Sharma and Bhardwaj \(2021\)](#), the binary knowledge on digital devices does create an exaggerated threat perception in persons who are technologically not very knowledgeable, to add to this insecurity regardless of the actual security measures already in place. For this reason, education and awareness campaigns are crucial to building trust in mobile banking platforms.

6. DISCUSSION

The rapid advent of mobile banking can only be taken as a novel and emerging word in commerce. It opens innumerable business opportunities to business ventures as well as changes in the consumption behaviours of people. In the literature, financial inclusion is mediated through mobile banking in order to provide banking services to the population living in remote and underserved areas [Kapoor and Bansal \(2021\)](#), [Sharma and Gupta \(2020\)](#). Obviously, the opening of banking services on mobile devices has removed geographical barriers, as a result reducing the time as well as cost of transactions and opening the formal economy to the rest of the otherwise unbanked population.

By facilitating easier savings, investments, and payments, mobile banking has opened doors for increased economic activities, especially in developed states [Das, and Roy \(2021\)](#), [Menon and Thomas \(2021\)](#). The strategy of the present government, as was used for the wages below the poverty line, has enhanced the intensity of activities on several projects coupled with financial transparency [Rao, and Iyer \(2021\)](#). This paves the way for new opportunities, which the study accentuates in illustrating the role of mobile banking in broadening the horizon of commerce.

Challenges like security and trust hinder the open ground for mobile banking notwithstanding its advantages. Several user-related issues regarding security, privacy violations, frauds, and scams serve as major roadblocks for mobile banking purposes as evident in various studies [Kaur and Arora \(2021\)](#), [Banerjee and Dasgupta \(2021\)](#). Thus, in addition to the above-cited concerns, users would confine the engagement for big-value transactions in fear of the unknown and protection of personal information. [Fernandes and Rao \(2021\)](#).

Trust issues further confound the issue of mobile banking growth. Absence of strong visible security features, technical flaws, and poor communication about data policy serve to further foster the lack of trust in the users [Yadav and Singh \(2020\)](#), [Sharma and Bhardwaj \(2021\)](#). In this view, mobile banking in democratizes commerce by broadening market access and offering financial participation to the maximum, but its full potential may perish should security and trust issues not be squarely confronted.

Altogether, mobile banking poses a transformative innovation, broadly challenging business and finance by enhancing markets and enabling inclusive growth. However, any hope of sustainable propagation will hinge upon concerted efforts by all concerned to address cybersecurity issues, improve service delivery levels, and salvage consumer trust.

7. CONCLUSION

Mobile Banking as a trend in commerce for reshaped the service acquisition as well as the delivery of financial services. It has propelled economic growth opportunities by enhancing financial inclusion, minimizing transaction fees, and inclusively related market interactions. The development and use of mobile banking, especially in bridging the rural-urban divide and other marginal communities in digital financial initiatives are very crucial for commerce.

However, despite this, there is still the problem of security and trust proven to be a pain in the neck for the successful adoption and growth of mobile banking. Data breach, cyber fraud, and lack of honest communication continue to be the problems that spoil client confidence. To surmount these challenges, the bank may try hard to promote highly robust cybersecurity infrastructure, higher transparency, and the spread of information on safe mobile banking practices.

From these, it can be safely said that mobile banking possesses tremendous potential to push commerce forward, and processes leading to the guarantee of a secure, reliable, and allinclusive environment stand to benefit everyone and any forward-moving objectives of processes benefiting individuals, groups, or even entire economies.

8. RECOMMENDATIONS

To effectively grapple with the challenges and exploit the wealth of opportunities of mobile banking, various stakeholders should collaboratively formulate a mechanism for meticulous and strategic action-sharing. Government stakeholders can approach by creating an enveloping legislative framework for regulation tampered just a little for technical innovation, keeping privacy and cybersecurity and financial inclusion in check. Special attention is given to encouraging digital literacy by means of public campaigns and training programs- for which the programs will mainly focus on the aged and those living in rural areas. In addition, the policy-makers should foster some level of cooperation between banking platforms and mobile networks, subject to seamless interaction amongst users promoting experience. Financial incentives- that is, tax exemptions, subsidies, etc.- given to institutions extending mobile banking services to the relatively underserved regions are strong incentives for growth.

An eminently important role is played by financial institutions in the popularisation of mobile banking. An adequate user experience can be achieved when the set of mobile interfaces is intuitive, multilingual, and inclusive of all customer segments. Security is a paramount issue. Institutions must hence prioritize security features that will mandatorily include cybersecurity in the list of infrastructure development, meaning biometric authentication, dual or unified authentication, and intensive AI-powered self-detection fraud systems. Institutions should strive to make available customizable mobile-banking products that cater to specific needs of various segments (small business owners, students, or the elderly).

Technology developers should work toward designing mobile banking platforms that are very secure, reliable, and user-friendly. Strongly rooted should be

the issues of security and privacy with a heavy investment in encryption and with secure APIs, not forgetting regular checks to confirm security maintenance. The developer needs to ensure that these platforms allow functions that tolerate high transaction level traffic having minimal downtime. Emerging technologies such as AI, machine learning, and blockchain will go a long way in augmenting functionalities and enhance the efficiency of mobile banking. Essentially, the development of mobile banking solutions should be user-centric, whereby propositions will be forwarded to end-users for feedback and further testing for usability, hence enabling the developers' design to align through the true banking experience of the target audience.

CONFLICT OF INTERESTS

None.

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