

Integrating Digital Technologies and Strategies to Optimize Operations on M- Banking Services

Dr. V. Sasikala

Assistant Professor

Department of Commerce CA,

CMS College of Science and Commerce, Autonomous, Coimbatore

Abstract

Integrating digital technologies and strategies to optimize operations on M-Banking (MB) services is research work with comprehensive financial management tools, investment services, and seamless payment integrations. The current digital technology on m-banking services mention the essential of an android device to carry out cash or money deal with their customers and it is carried out by external institutions. The vast development of smart phones with input/output or android operating systems, the android app began to evolve. Today banking apps with android services create enlightened or revolutionary relationships with each other and build strong money deals. The research objectives are focused on: i) To measure the benefits of m-banking with customers satisfaction, ii) To study the types and challenges associated with M-banking services, iii) To determine the digital technologies on M-banking services. The present study on Integrating digital technologies and strategies to optimize operations on M- banking services is a descriptive in nature. The method of businesses transaction creates time saving by the digital technologies to the customer's relationship between banks. Thus, the essential of M-banking services to collaborate with the digital technologies and provide an efficient service and customer satisfaction. In this study the primary data has been collected on firsthand sources of online feedback from customers and the secondary data on various articles, journals and websites. The SPSS software analysis on Mean, SD and ANOVA test is used for the result and further research study.

Keyword: M-banking, digital technologies, types, challenges, importance and benefits

Introduction

The modern era refers to the m-banking services maintaining the use of a android technique to rendering cash or money deals with banking sectors. Many private sectors and public sectors provide the android app which may create more number of customers. The M-banking enables customers and banking surroundings to implement various money deals, which may deviate based on the bank to another bank. The bank makes internet facilities performed and activate their service to existing customers to access bank accounts like savings withdrawals for achieved an infinite amount of money deals resort to an android device, such as smart-phone and tablet essential to society. This money deal is made from android devices that include such above mentioned devices. The banking transaction is deals with anytime anywhere with multiple number of customers at a time. Through this android app the customers can collect and send their money within the nation or international transactions made possible or make instant payments or repayments at secure and protective rates via mobile apps. Modern stages of android technologies the ability on board many facilities provided by the banks and channeled their facilities and services more accurate and visible to access money deals. More customers can be created by efficient digital technology and banking surroundings more surveillance. The financial deals may take place money exchange, recharging devices, credits are quicker and more secure to use. Effectively android services may get good responses from the customer's viewpoints, and they can manage difficult tasks to conveniently and a user-friendly android app on banking sectors eliminating or avoiding the need to visit ATMs.

History of M-Banking Services

The history refers to in 1999, mobile web services was introduced and enablement on banking sectors. The services on m-banking were completed primarily through SMS or message text; thus, it is called as SMS banking. The mobile banking service offered in European banks that frontier using of the mobile web app. In the year 2010 message banking sectors and mobile browser-based services were more popular in m-banking services. The vast development of smart-phones with input/output or android OS, m-banking apps began to evolve and create multiple number of customers. The customers were able to transfer the file the m-banking apps with their smart-phones devices with more sophisticated interfaces and improved money deals. Many other institutions with money deals were using mobile app and SMS services to handle their customers in proper channels. Many banking sectors send or resend the alerts warning or maintenance of service efficiently with a period. The information notify from a banking sector that customers awareness on ATM or mobile apps sometimes hidden or isolate during a particular interval or duration due to system keeping up, or an authorization information from the bank regarding a transfer compassed by the customers or business party via the android app.

Review of Literature

S.J. Barnes et al (2003). The fact-finding treaty with internet and the mobile phone to technological elevation that have profoundly high-flown human behaviour in the last decade - have started to converge. The products of this association are mobile data utility. Using a variety of platforms, utilities are being created to enable mobile devices to perform many activities of the traditional internet, howbeit in a reduced format for mobile devices. One area of activity is mobile (m-) banking (one of the first areas of commercial transaction on the wireless internet). In the contemporary the m-banking utility overlong enormously effects to counting on telephone and online banking. M-banking provides yet another channel for banking utility, and in emerging markets, provides some possibility for becoming a root channel. This paper examines the strategic implications of m-banking and the deliberate positioning of m-banking utility in different markets. The paper concludes with a discussion of the future for m-banking services to the society.

Srivastava et al (2020). In this inspect the factfinder may refers to the Indian banking sector can take advantage of the mushrooming of smart phones as well as the government's encouragement of overdrawn dealings to accelerate the use of mobile and online banking. The purpose of this reflection is to compassion the initial acceptance of m-banking be alive Net- banking to the customers. This inspection has focused on online banking customerbehavioral struggle to use similar amenityon m-banking in India. The developed use ofthe technology acceptance model on a theoretical model which was held- forth to cover the fostering factors that influence customers of m-banking to use of internet. These acquiring factors like mobile self-concept, social guidance, customers satisfaction and perception, easily use, more hostage. The reflectiondependent variable is customers' behavioral intention to use m-banking services.To test the theoretical model with sample data from 420 online banking customers of various public, private, foreign and co-operative banks on a partial least squares structural equation modelling analysis was used effectively. The scrutinizefound that the adoption constituent had a significant impact on customers' behavioural preconception to use m-banking solution. The findings of research provide insight into digital technologies, channels, contribute to existing research on digital banking adoption and will educate banks and money deals with the adoption of m-banking.

Shahnaz Akbari Emami (2024), it refers to the study indicates on the target to adopt m-banking has been extensively studied, many factors guide on perpetual use of m-banking services post-adoption remain relatively underexplored. To employ a qualitative approach, research aims to develop a comprehensive framework for understanding sustained m-banking usage determinants. Data

were collected through open and in-depth interviews with 10 experts and specialists in the field of information technology and analyzed using a phenomenological approach. The results were categorized into three main measures: organizational, environmental, and individual factors. The organizational dimension encompasses 15 factors, including performance / service quality, information quality, aesthetic design, user compatibility, human interactive features, confidentiality assurance/ privacy protection, system integration, authenticity, reducing interactive costs, security measures/ security of banking apps, ease of use, reputation / organizational credibility, customer support, secure authentication, and customization. The environmental dimension comprises four factors, including cultural context and social distance, economic development, education and digital literacy, and technological development. The individual user dimension identifies 12 factors such as perceived service value, user trust, satisfaction, perceived self-efficacy, previous experience, subjective norms, attitudes, digital resilience, and adaptability to technological changes.

Objectives of The Study

1. To measure the benefits of m-banking with customers satisfaction
2. To explore the types and challenges associated with M-banking services
3. To determine the digital technologies on M banking services

Hypothesis Testing

- **H1:**Mean variation has a significant relationship between types and challenges associated with M-banking services
- **H2:**Mean variation has a significant relationship between digital technologies on M banking services with customers.

Methodology

The present study on Integrating digital technologies and strategies to optimize operations on M-banking services is a descriptive in nature. The method of businesses transaction creates time saving by the digital technologies to the customer's relationship between banks. Thus, the essential of M-banking services to collaborate with the digital technologies and provide an efficient service and customer satisfaction. In this study the primary data has been collected on firsthand sources of online feedback from customers and the secondary data on various articles, journals and websites. The SPSS software analysis on Mean, SD and ANOVA test is used for the result and further research study.

Classification on M-Banking Services

M-banking services can be categorized as:

1. Account information access

Account information access allows clients to view their account balances and statements by requesting a mini account statement, review transactional and account history, keep track of their term deposits, review and view loan or card statements, access investment statements (equity or mutual funds), and for some institutions, management of insurance policies.

2. Transactions

Transactional services enable clients to transfer funds to accounts at the same institution or other institutions, perform self-account transfers, pay third parties (such as bill payments), and make purchases in collaboration with other applications or prepaid service providers.

3. Investments

Investment management services enable clients to manage their portfolios or get a real-time view of their investment portfolios (term deposits, etc.)

4. Support services

Support services enable clients to check on the status of their requests for loan or credit facilities, follow up on their card requests, and locate ATMs.

5. Content and news

Content services provide news related to finance and the latest offers by the bank or institution.

Effective Provocation on MB services

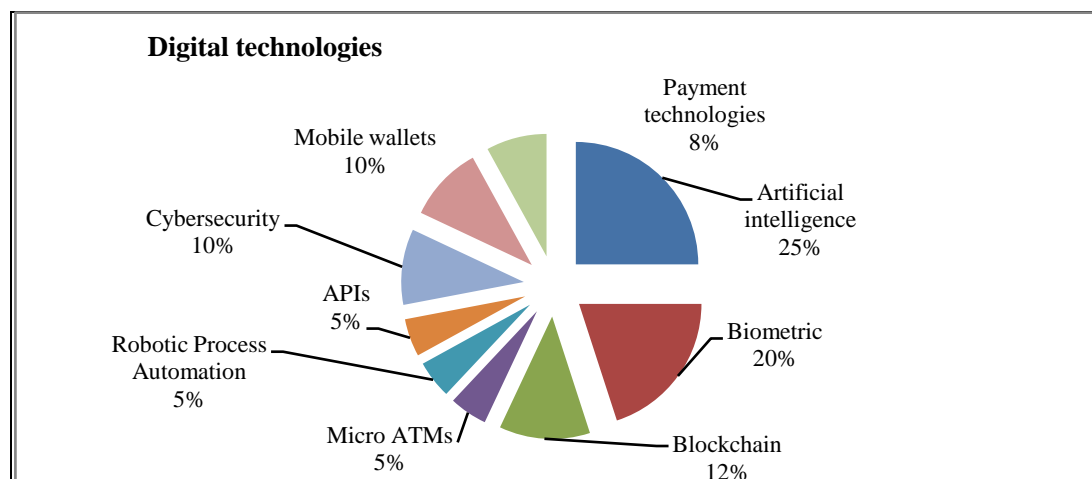
- Obtainability on android handset.
- Safety Hazards
- Credibility and portability
- Customized ability
- Dispensation
- Upgrade contemporize abilities

Significant on M-banking services

The m-banking services access android app that allows consumers more accurate at anytime and anywhere. The business owners save time by to process their payments making use of digital technologies. The vital role of banking services creates the android app to a particularly popular among customers and SME. Digital technology in banking sectors sanctions the chop-down on general expenses while still maintaining customer satisfaction. The customers of a bank can utilize of android app to request a banking service like opening a customer account or drawn the ability to schedule debit orders or other payments from a mobile app, concede for larger transmittable magnitude, eventually driving business growth.

MB Technologies

- Artificial intelligence
- Biometric
- Blockchain
- Micro ATMs
- Robotic Process Automation
- APIs
- Cybersecurity
- Mobile wallets
- Payment technologies



Benefits of MB

Many welfare of m-banking as such as

1. Accessibility and Convenience

The AC to remote banking allows to bank from anywhere to the customer. Easily access the internet connection, and customer can access bank transaction with a short time.

2. Quick money dealings

The m-banking services provided by banking sectors in INSTANT and customer need not to visit bank and banking transactions with minimum time and period required.

3. More Secure

Android app can provide to track and monitor the banking transactions for every customer and more secure process. The bank takes immediate action for any fraudulent money deals. The m-banking is enhanced safety checks measurements, and being customers aware on safety measurements.

4. Reduce the savings measures

The m-banking services can value-added service such as investments, payment of bills, opening new accounts and tax, all the app services are performed at a minimal cost. The digital technologies can monitor the m-banking services to charge many services and customer satisfaction.

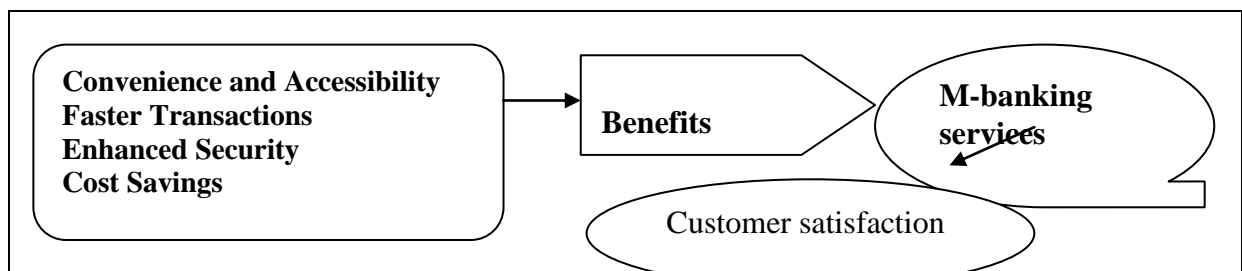


Figure 1: Conceptual framework on benefits of M-banking

Result and Discussion

Table -1
Benefits on M-Banking

Benefits	Percentage
Convenience and Accessibility	34
Faster Transactions	23
Enhanced Security	20
Cost Savings	23

The above table mentioned on majority 34% is benefits on m-banking with Convenience and Accessibility of its usage and customer satisfaction.

Chart-1

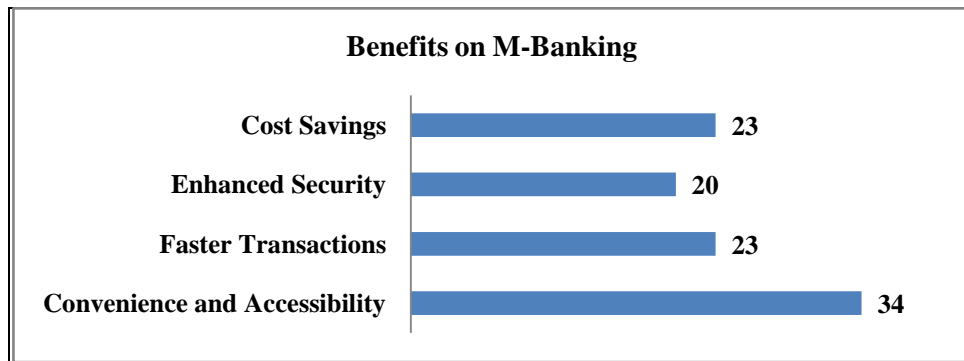


Table -2 Measure of dispersion and one-way Anova test association between types and challenges associated with M-banking services

Types and Challenges		Mean	St.d	F Value and sig
Accessibility and Convenience	Obtainability on android handset.	1.341	0.542	Overall** 18.489 0.00
Quick money dealings	Safety Hazards	1.212	0.456	
More Secure	Credibility and portability	2.301	0.562	
Reduce the savings measures	Customized ability	2.112	1.478	
	Dispensation Upgrade contemporize abilities	1.872	0.478	

**The hypothesis framed is accepted and it has been declared that there exists association between types and challenges associated with M-banking services

Table -3 Measure of dispersion and one-way Anova test association between Digital technologies on M-banking services with customers

Digital technologies on M-banking services with customers		Mean	St.d	F Value and sig
Artificial intelligence	Customer satisfaction	1.567	0.589	Overall** 14.892 0.00
Biometric		0.781	0.389	
Blockchain		0.544	0.559	
Micro ATMs		0.691	1.201	
Robotic Process Automation		0.324	0.562	
APIs		0.477	0.266	
Cybersecurity		0.256	0.211	
Mobile wallets		0.783	0.478	
Payment technologies		0.498	0.356	

**The hypothesis framed is accepted and it has been declared that there exists association between digital technologies on M-banking services with customers

Conclusion

The research study on Integrating digital technologies and strategies to optimize operations on M-banking services is engrossed on online banking users' behavioural intention to use m-banking amenity. The public to continue use of m-banking facilities, discern, handiness, recognize, value are the major criteria to be considered when the banks attempt to increase the customer net under m-banking services. The above table mentioned on majority 34% is benefits on m-banking with Convenience and Accessibility of its usage and customer satisfaction. The hypothesis framed is accepted and it has been declared that there exists association between types and challenges associated with M-banking services. The hypothesis framed is accepted and it has been declared that there exists association between digital technologies on M-banking services with customers.. Mobile banking is a specialized application developed by banks to provide services to their customers. This app enables users to carry out various financial concerns, such as transferring money, recharging credit, etc., quickly and simple. With mobile banking, customers can manage these tasks conveniently through a user-friendly app, eliminating the need to visit ATMs. The findings of this research provide insight into digital banking channels, artificial intelligence, biometric, blockchain, micro ATMs, pobotic process automation, APIs, cybersecurity, mobile wallets, payment technologies etc contribute to existing research on adoption and will educate banks and financial institutions on the adoption of m-banking in the society.

Reference

- Barnes, S. J., & Corbitt, B. (2003). Mobile banking: concept and potential. *International journal of mobile communications*, 1(3), 273-288.
- Singh, S., & Srivastava, R. K. (2020). Understanding the intention to use mobile banking by existing online banking customers: an empirical study. *Journal of Financial Services Marketing*, 25(3), 86-96.
- Mostafa, R. B. (2020). Mobile banking service quality: a new avenue for customer value co-creation. *International Journal of Bank Marketing*, 38(5), 1107-1132.
- Predana, P. G. W., Jayawarsa, A. K., Purnami, A. S., LARASDIPUTRA, G. D., & SAPUTRA, K. A. K. (2020). Effect Of Easy In The Use, Trust And Benefits Of The Use Of Mobile Banking Services. *International Journal of Environmental, Sustainability, and Social Science*, 1(2), 36-40.
- Souiden, N., Ladhari, R., & Chaouali, W. (2021). Mobile banking adoption: a systematic review. *International Journal of Bank Marketing*, 39(2), 214-241.
- Sari, I., & Siregar, F. A. (2024). Analysis of the influence of mobile banking on the profitability level of sharia banks in indonesia in 2019-2023. *Journal of Islamic Financial Technology*, 3(1).
- Pokhrel, L., & KC, A. (2024). Mobile banking service quality and continuance intention: mediating role of satisfaction: a two-stage structural equation modeling-artificial neural network approach. *International Journal of Bank Marketing*, 42(3), 389-413.
- Palamidovska-Sterjadovska, N., Rasul, T., Lim, W. M., Ciunova-Shuleska, A., Ladeira, W. J., De Oliveira Santini, F., & Bogoevska-Gavrilova, I. (2025). Service quality in mobile banking. *International Journal of Bank Marketing*.
- Teshome, A., Arshad, M., & Borji, B. (2025). The Effect of Mobile Banking Services on Banking Performance with the Mediating Role of Customer Intention: A Case of Selected Commercial Banks in Borena, Southern Ethiopia. *Journal of Society Innovation and Development (JSID)*, 6(2), 105-123.