



RESEARCH ARTICLE

Assessing the Effect of Mobile Banking Adoption on Customer Contentment in Handpicked Commercial Banks in Mogadishu Somalia

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ABSTRACT

Research Objectives was to determine the Impact of Functionality and Usability on Customer satisfaction selected Commercial Banks in Mogadishu, Somalia. To determine the Impact of Security and Privacy on Customer satisfaction selected Commercial Banks in Mogadishu, Somalia. To determine the Impact of Personalization and Contextual Relevance on Customer satisfaction selected Commercial Banks in Mogadishu, Somalia. Research design A descriptive survey focuses on the research design and is concerned with addressing the particular characteristics of a specific population of subjects, either at a fixed point in time or at varying times for comparative purposes. According to Lavrakas (2008), a research design is a general plan or strategy for conducting a research study to examine specific testable research questions of interest. Findings, Functionality and Usability and Customer Satisfaction at ($r=.544$ and $p>0.01$), Security and Privacy was statistically associated with Customer Satisfaction ($p<0.05$). Personalization and Contextual Relevance was statistically associated with customer Satisfaction with ($p<0.05$).

INTRODUCTION

M-banking refers to the services provided by financial institutions or banks and is considered one of the most important strategic changes to occur in retail banking in more than a decade. Changes in technological interfaces have made it possible for the financial industry to delight its customers with instant solutions to their problems through the use of self-service technologies. The services provide customers with the convenience of remotely conducting financial transactions on mobile devices such as tablets and smart phones. Contrary to internet banking, m-banking incorporates the use of an application that is developed and designed by the service provider. The shift to online transactions led to the evolution of financial institutions, especially banks that need to meet the contemporary needs to conduct operations online. The new venture is beneficial for the service providers, with an array of advantages, including expanding the scope of operations past international borders, penetrating new markets, and increasing trust in customers, significantly reducing operational costs, broadening delivery options, and enhancing performance levels. Customers enjoy a wide range of advantages from m-banking, including personalized and

customized services and increased convenience since m-banking saves time and money for the customer (Alsmadi et al., 2022).

Over the past few years, the world has witnessed significant advancements in wireless communication systems, which have provided various business opportunities and led to increased consumer adoption of mobile devices for daily activities. One noteworthy area is the growing acceptance and use of mobile payment services globally, with a tripling of the technology's adoption in recent years. However, researchers have paid little attention to the factors influencing the intention to use mobile payment services in emerging markets (Zhou et al., 2021).

The rapid popularity of web-based banking applications can be attributed to the advantages they offer to financial institutions, such as improved customer convenience, increased market reach, and enhanced service quality. Compared to traditional banking, online banking provides more features and functionalities at a lower cost (Laukkanen & Kiviniemi, 2010). Online banking and mobile apps offered by financial entities allow users to access their accounts from anywhere at any time, representing an advantage over traditional banking methods. Despite these benefits, the growth in the number of customers using online banking has not met initial expectations. Factors such as the lack of differentiation between banks, a lack of trust in the system, impersonal treatment, or perceived security concerns have led to some customer reluctance in adopting these tools (Mallat et al., 2006).

LITERATURE REVIEW

Mobile banking applications on customer satisfaction in commercial banks

Functionality and usability on customer satisfaction in the commercial banking sector has been extensively researched and documented in recent years. Functionality and Usability as Key Drivers of Customer Satisfaction A study by McKinsey & Company in 2021 found that the functionality and usability of mobile banking apps were the primary drivers of customer satisfaction, accounting for up to 70% of the overall customer experience (McKinsey & Company, 2021).

Importance of Intuitive and Responsive User Interface, A 2020 survey by Deloitte revealed that 82% of customers rated "ease of use" as a critical factor in their overall satisfaction with their bank's mobile app (Deloitte, 2020). Impact of Financial Insights and Budgeting Tools, Research by Accenture in 2022 showed that customers who used their bank's mobile app to access financial management tools, such as budgeting and spending insights, were 1.5 times more likely to be highly satisfied with their bank (Accenture, 2022).

Significance of Omni channel Integration, A 2023 report by J.D. Power found that customers who used multiple banking channels, such as mobile, online, and branch, had a 15% higher satisfaction level compared to those who used a single channel (J.D. Power, 2023). Impact of Personalization and Customization, A 2021 study by Capgemini revealed that banks that offered personalized and customized mobile experiences saw a 20% increase in customer satisfaction and a 15% increase in customer loyalty (Capgemini, 2021).

Security and privacy on customer satisfaction in the commercial banking sector has been a significant area of focus for researchers and industry experts. Importance of Secure Banking Experiences, A 2022 study by PwC found that 85% of banking customers considered security as the most important factor in their satisfaction with their bank's digital services (PwC, 2022).

Impact of Perceived Data Privacy, Research by Accenture in 2021 revealed that 77% of banking customers were more likely to be satisfied with their bank if they perceived the bank as being transparent and responsible in handling their personal data (Accenture, 2021).

Significance of Biometric Authentication, A 2020 report by Juniper Research found that the use of biometric authentication, such as fingerprint or facial recognition, in mobile banking apps increased customer satisfaction by 20% due to the enhanced security and convenience (Juniper Research, 2020).

Role of Cyber security Measures, A 2021 survey by Deloitte showed that 72% of banking customers were more satisfied with their bank's services when they perceived the bank as having robust cyber security measures in place to protect their accounts and personal information (Deloitte, 2021).

Impact of Proactive Security Communication, Research by McKinsey & Company in 2022 indicated that banks that proactively communicated with their customers about security and privacy measures saw a 15% increase in customer satisfaction, as it built trust and confidence in the bank's ability to protect their assets (McKinsey & Company, 2022).

Personalization and contextual relevance on customer satisfaction in the commercial banking sector has been a significant area of focus for industry researchers and experts. Importance of Personalized Banking Experiences, A 2021 study by Accenture found that 77% of banking customers were more satisfied with their bank when they received personalized product and service recommendations based on their individual needs and preferences (Accenture, 2021).

Impact of Contextual Relevance, Research by McKinsey & Company in 2022 showed that banks that provided customers with contextually relevant financial insights and recommendations (e.g., based on their spending patterns, life events, or financial goals) saw a 20% increase in customer satisfaction and a 15% increase in customer loyalty (McKinsey & Company, 2022).

Significance of Proactive Personalization, A 2020 report by Deloitte revealed that 72% of banking customers were more satisfied with their bank when they received proactive, personalized suggestions and notifications (e.g., about upcoming bills, investment opportunities, or money-saving tips) based on their unique financial situations (Deloitte, 2020).

Impact of Omni channel Personalization, Research by J.D. Power in 2023 found that customers who experienced a consistent, personalized experience across multiple banking channels (e.g., mobile, online, and in-branch) were 30% more satisfied with their overall banking experience compared to those who did not (J.D. Power, 2023). Importance of Personalized Financial Guidance, A 2022 study by PwC showed that 65% of banking customers were more satisfied with their bank when they received personalized financial guidance and advice tailored to their specific goals and life stage (PwC, 2022).

THEORETICAL FRAMEWORK

Innovation diffusion theory

Anyasi and Otubu (2009) describe the process of diffusion as the communication of an innovation through specific channels over a certain period of time within a social group. They characterize this communication as a process where individuals create and distribute information to reach a common understanding.

Moreover, Porteous (2011) argues that the innovation diffusion process involves four stages: invention, diffusion through the social system, time, and consequences. The ease of use and novelty of an innovation can determine how an individual responds to it. Some key factors that have been identified as determinants of innovation adoption include complexity, relative advantage, and compatibility. It is believed that an innovation with a relative advantage, lower complexity, and compatibility will be more easily and rapidly adopted by individuals (Ibrahim et al., 2024)

RESEARCH METHODOLOGY

Research design

A descriptive survey focuses on the research design and is concerned with addressing the particular characteristics of a specific population of subjects, either at a fixed point in time or at varying times for comparative purposes. According to Lavrakas (2008), a research design is a general plan or strategy for conducting a research study to examine specific testable research questions of interest.

Target population

The target population for this initiative consists of 13,546 employees from three commercial banks operating in Mogadishu, Somalia. The target population for this study was the employees of three private bank companies in Mogadishu: Dahabshill bank, IBS bank, and Premier bank. These banks are chosen as they are more dependent on banks and can serve as a good source of information to analyze the topic.

FINDINGS

4.1 Functionality and usability on customer satisfaction the first objective of the study was to establish **Functionality and Usability** influences in **Customer satisfaction** in commercial banks in Mogadishu- Somalia. Results showed that the commercial banks **Functionality and Usability**, there is positive relationship among all variables as following: **Functionality and Usability** and Customer Satisfaction at ($r=.544$ and $p>0.01$), overall average mean of 3.13 suggesting that **Functionality and Usability** are implemented commercial banks.

4.2 Security and privacy on customer satisfaction the second objective of the study was to determine the impact of **Security and Privacy on Customer satisfaction** in commercial banks in Mogadishu-Somalia. Results indicated that **Security and Privacy** was statistically associated with Customer Satisfaction ($p<0.05$). An increase in **Security and Privacy** will lead to increase the Customer Satisfaction by 0.414 which is less than 0.05, with a p-value of 0.000 Mathuva (2009).

4.3 Personalization and Contextual Relevance and Customer Satisfaction the last objective of the study was to establish the impact of **Personalization and Contextual Relevance** in Customer Satisfaction in commercial banks in Mogadishu. The study findings showed that **Personalization and Contextual Relevance** has contributed to Customers Satisfaction in the commercial banks in Mogadishu. **Personalization and Contextual Relevance** was statistically associated with customer Satisfaction with ($p<0.05$). A unit increases in cash management will lead of having effective on Customer Satisfaction by 0.184 with a p-value of 0.014. A study was carried out by Nazir and Afza (2009).

Correlation analyze among variables

Table below shows correlation analyze of the variables. The study has three objectives which are: 1) To determine the Impact of **Functionality and Usability on Customer satisfaction** selected Commercial Banks, 2) To determine the Impact of **Security and Privacy on Customer satisfaction** selected Commercial Banks, 3) To determine the Impact of **Personalization and Contextual Relevance on Customer satisfaction** selected Commercial Banks. After analyzing the data, the study found that there is positive relationship among all variables as following: **Functionality and Usability on Customer satisfaction** at ($r=.544$ and $p>0.01$). **Security and Privacy on Customer satisfaction** at ($r=.232$ and $p>0.01$) finally the study indicated positive relationship between **Personalization and Contextual Relevance on Customer satisfaction** at ($r=.449$ and $p>0.01$).

Correlation analysis

		Functionality and Usability	Security and Privacy	Personalization and Contextual Relevance	Customer Satisfaction
Functionality and Usability	Pearson Correlation	1	.342**	.412**	.544**
	Sig. (2-tailed)		.001	.000	.000
	N	13,546	13,546	13,546	13,546
Security and Privacy	Pearson Correlation	.342**	1	.387**	.232*
	Sig. (2-tailed)	.001		.000	.000
	N	13,546	13,546	13,546	13,546
Personalization and Contextual Relevance	Pearson Correlation	.412**	.387**	1	.449**
	Sig. (2-tailed)	.000	.000		.000
	N	13,546	13,546	13,546	13,546
Customer Satisfaction	Pearson Correlation	.544**	.232*	.449**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	13,546	13,546	13,546	13,546

** . Correlation is significant at the 0.01 level (2-tailed).

RECOMMENDATIONS

Functionality and Usability, Ensure the mobile banking application has an intuitive and responsive user interface that is easy to navigate. Incorporate useful financial management tools, such as budgeting and spending insights, to improve the customer experience. Integrate the mobile app with other banking channels (online, branch) to provide a seamless omni-channel experience. Continuously gather customer feedback to identify areas for improving functionality and usability.

Security and Privacy, Prioritize secure banking experiences by implementing robust security measures, such as multi-factor authentication and biometric login options. Enhance data privacy by being transparent about how customer data is handled and stored, and provide clear privacy policies. Regularly review and update cyber security measures to protect against evolving threats and maintain customer trust. Educate customers on security best practices to help them feel confident in using the mobile banking app.

Personalization and Contextual Relevance, Offer personalized and customized mobile experiences based on customer preferences and behavior. Leverage customer data to deliver relevant financial insights, product recommendations, and targeted offers. Continuously analyze customer interactions and feedback to refine the personalization and contextual relevance of the mobile app. Empower customers to personalize the app settings and features to suit their individual needs.

REFERENCES

Alsmadi, A. A., Shuhaiber, A., Alhawamdeh, L. N., Alghazzawi, R., & Al-okaily, M. (2022). Twenty Years of Mobile Banking Services Development and Sustainability : A Bibliometric Analysis Overview (2000 – 2020). 1–14.

Accenture, (2022). the Future of Banking: Insights for 2022 and Beyond. Retrieved from <https://www.accenture.com/us-en/insights/banking/future-banking-insights-2022->

- beyond.
- Anyasi, F.I. and Otubu, P.A. (2009) Mobile Phone Technology in Banking System: Its Economic Effect. *Research Journal of Information Technology*, 1, 1-5.
- Capgemini.(2021). World Retail Banking Report 2021. Retrieved from <https://www.capgemini.com/research/world-retail-banking-report-2021/>
- Deloitte.(2020). 2020 Banking and Capital Markets Outlook. Retrieved from <https://www2.deloitte.com/us/en/pages/financial-services/articles/banking-industry-outlook.html>
- Ibrahim, A. A., Hussein, J. M., & Kulmie, D. A. (2024). Islamic Banking in Africa: A Booming Market with Growing Pains. *International Journal of Religion*, 5(9), 318–333. <https://doi.org/10.61707/3dg7rh70>
- (Ibrahim et al., 2024)
- J.D. Power. (2023). 2023 U.S. Retail Banking Satisfaction Study. Retrieved from <https://www.jdpower.com/business/financial-services/2023-us-retail-banking-satisfaction-study>
- Juniper Research. (2020). Digital Banking: Technology Trends, Opportunities & Market Forecasts 2020-2024. Retrieved from <https://www.juniperresearch.com/researchstore/fintech-payments/digital-banking-research-report>
- Laukkanen, T., & Kiviniemi, V. (2010). The role of information in mobile banking resistance. *International Journal of Bank Marketing*, 28(5), 372–388. <https://doi.org/10.1108/02652321011064890>
- Lavrakas, P.J. (2008) *Encyclopedia of survey research methods*. Sage Publications, Inc., Thousand Oaks.
- Mallat, N., Rossi, M., Tuunainen, V. K., & Öörni, A. (2006). The impact of use situation and mobility on the acceptance of mobile ticketing services. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2(February 2006). <https://doi.org/10.1109/HICSS.2006.472>
- McKinsey & Company. (2021). The Future of Mobile Banking. Retrieved from <https://www.mckinsey.com/industries/financial-services/our-insights/the-future-of-mobile-banking>
- McKinsey & Company. (2022). The Future of Cybersecurity in Banking. Retrieved from <https://www.mckinsey.com/industries/financial-services/our-insights/the-future-of-cybersecurity-in-banking>.
- Nazir, M. S., & Afza, T. (2009). Impact of Aggressive Working Capital Management Policy on Firms' Profitability. *IUP Journal of Applied Finance*, 15, 19-30.
- Porteous, D. (2011) The Enabling Environment for Mobile Banking in Africa, *Bankablefrontier*.
- Zhou, Q., Jie, F., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X., & Xu, H. (2021). Journal of Retailing and Consumer Services A study on factors affecting service quality and loyalty intention in mobile banking. *Journal of Retailing and Consumer Services*, 60(June 2020), 102424. <https://doi.org/10.1016/j.jretconser.2020.102424>