

Digital Financial Inclusion and Competitive Advantage in Jordanian Islamic Banks

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Abstract

The current study proposes a comprehensive framework that examines the impacts of digital financial inclusion, represented by digital financial access, usage, and quality, on the competitive advantage of Jordanian Islamic banks (JIB). It particularly focuses on the Technology Acceptance Model (TAM) as a mediating variable and sheds light on usefulness and ease of use as the main factors of TAM. This framework explores how customer acceptance of digital financial services enhances Islamic banks' market positioning, operational efficiency, and customer experience. Furthermore, the study addresses the gap in the literature by connecting digital financial access, usage, and quality with competitive advantage in the Islamic finance sector, particularly in developing countries like Jordan. Additionally, by extending TAM within the scope of Islamic banking in Jordan, the study offers both a theoretical contribution and practical implementation for practitioners, policymakers, and bank managers aiming to enhance digital finance adoption and overall digital financial inclusion while complying with Shariah principles.

Keywords: Digital Financial Inclusion, Islamic Banking, Competitive Advantage, Technology Acceptance Model TAM, Perceived Usefulness, Perceived Ease of Use, Jordan

Introduction

Since its introduction in 2005, financial inclusion has received tremendous attention from both scholars and policymakers (Ozili, 2021). Digital financial inclusion is not just an emerging concept, but an essential area of research due to the increasing relevance of digital services in the financial sector. With the advancement of financial technologies, it is imperative to examine how digital platforms can bridge the gap for populations previously excluded from formal financial services. This study focuses on Jordan, where digital financial inclusion is rapidly transforming the banking landscape, especially in providing financial access to underserved populations, particularly people who live rural areas. (Ozili, 2018). The advancement of the financial system has resulted in the swift development seen in the financial institution space. This evaluation has created room for innovation in numerous products and services offered. Globally, around 1.2 billion people have been excluded from

financial services (Demirguc-Kunt, Klapper, Singer, Ansar, & Hess, 2018). This created room for financial providers to increase their customer base by providing more accessible financial services, as financial institutions make a large contribution to providing financial access across countries (Beck, Demirgüç-Kunt, & Honohan, 2009).

Between 2014 and 2017, financial inclusion in Jordan improved notably, with adult ownership of financial institution accounts rising from 25% to 42% and debit/credit card ownership increasing from 19% to 31% (World Bank, 2017). To promote further inclusion, the Central Bank of Jordan (CBJ) issued regulatory guidance for financial institutions and launched the National Financial Inclusion Strategy (NFIS) in 2020. This initiative led to a rise in financial inclusion from 33.1% to 43% and significantly reduced the gender gap from 53% to 22% by the end of 2023 (CBJ, 2023). The CBJ aims to continue this progress by 2028 through collaboration with financial institutions, including Islamic banks, to ensure broader access to formal financial services and products.

The significance of this study lies in its potential to demonstrate how digital financial inclusion can enhance the competitive advantage of Jordanian Islamic banks. As these banks continue to explore digital financial solutions, this study seeks to illuminate how digital financial tools, such as mobile banking and digital wallets, are driving innovation within the sector. The findings will be especially beneficial for policymakers, financial regulators, and bank managers in Jordan, as they seek to enhance financial inclusion and better serve previously underserved populations. This study not only contributes to the growing academic discourse on digital finance but also offers practical insights into how Islamic banks can leverage digital platforms to improve market positioning and operational efficiency. According to (Datareportal, 2025) The proliferation of mobile technology and internet access (82% penetration) has supported the emergence of platforms like Zain Cash and Orange Money. In addition, the COVID-19 pandemic further accelerated digital adoption, underscoring the importance of continued investment in digital infrastructure and inclusive policies (Banna, Hassan, & Alam, 2020)

For Islamic banks, DF presents opportunities to expand their customer base through Shariah-compliant, tech-driven solutions that lower transaction costs, improve convenience, and customer satisfaction (Hassan, Muneeza, & Hasan, 2025). Despite the growing adoption of digital financial services in Jordan, limited research has focused on how digital financial inclusion specifically impacts the competitive advantage of Jordanian Islamic banks (Shehadeh, Almohtaseb, Aldehayyat, & Abu-ALSondos, 2023). While financial inclusion initiatives have been recognized for improving access to financial services, there is a lack of comprehensive studies exploring how these advancements contribute to the strategic positioning and market differentiation of Islamic banks in a competitive environment.

This study has significant practical implications for the broader banking sector in Jordan. From Academic perspective, the study contributes to a deeper understanding of how digital financial inclusion and the Technology Acceptance Model (TAM) interact to shape the competitive advantage of JIBs. From a practical standpoint, the findings will provide valuable insights to policymakers and banking professionals on how to improve digital financial services and enhance overall financial inclusion. The results will guide future strategies for Islamic banks, helping them to strengthen customer trust, reduce operational costs, and increase customer engagement, ultimately enhancing their competitive advantage in the

market. The study also evaluates the customers' perspective on how these technologies impact their financial experience and translate into a competitive advantage.

Particularly this study addresses two primary question questions: First, how does digital financial inclusion impact the competitive advantage of JIBs? Second, how does TAM include perceived usefulness and perceived ease of use mediates the relationship between digital financial inclusion and competitive advantage of JIBs? By addressing these questions, the study offers better understanding on how digital finance integrated with traditional financial services impacts the competitive advantage of the Islamic banks in Jordan. This paper will cover a review of current literature and hypothesis development in Section 2, along with a discussion and conclusion, will be outlined in Sections 3 and 4, respectively.

Literature Review and Hypothesis Development

Digital Financial Inclusion

Digital financial inclusion (DFI) has become a significant driver of financial access, usage, and quality, particularly in developing economies such as Jordan. The rise of mobile banking, digital wallets, and online payment systems has substantially improved access to financial services, providing opportunities for individuals and businesses to participate in the financial system. Research shows that digital finance contributes to financial inclusion by breaking down traditional barriers such as geographic location, high transaction costs, and limited physical infrastructure (Ediagbonya & Tioluwani, 2023). This is particularly important in Jordan, where the CBJ has launched initiatives such as eFAWATEERcom and JoMoPay, which aim to enhance access to financial services, particularly for underserved populations, including women and SMEs (CBJ, 2023).

In terms of financial access, Jordanian Islamic banks, through the integration of digital financial services, have opened new avenues for previously excluded individuals to access Shariah-compliant financial products. As mobile phone penetration increases in Jordan, reaching over 82% (Datareportal, 2025), digital financial services can effectively extend to rural areas, thereby promoting access to banking services. This aligns with studies on the role of financial inclusion in enhancing economic growth, particularly in underserved regions (Demirguc-Kunt, Klapper, Singer, & Ansar, 2018). Digital inclusion is seen as a key enabler of financial services in emerging markets, making Islamic banking more accessible to the broader population, including traditionally excluded groups like women and low-income households. When considering usage, the proliferation of mobile wallets like Zain Cash and Orange Money has allowed customers to conduct transactions, pay bills, and access financial products through their smartphones. Usage is critical for measuring the success of financial inclusion, as it reflects the frequency and practicality of financial tools in users' daily lives (Demirgüç-Kunt & Klapper, 2013). Islamic banks in Jordan that embrace digital platforms can offer customers a more convenient and user-friendly experience, encouraging higher transaction volumes and customer retention. Moreover, mobile payments and digital platforms reduce transaction costs, which is a significant advantage for both banks and customers, fostering increased usage of financial products (Hidayat-ur-Rehman & Hossain, 2024). On the contrary, in a study by Banna et al. (2020), financial usage is found to be insignificant due to the lack of knowledge of the benefits of financial usability and the immaturity of digital finance tools in the banking sector.

Finally, the quality of digital financial services plays a vital role in creating a competitive advantage for Islamic banks. Studies emphasize that the quality of digital platforms, including ease of use, security, and transaction speed, determines the extent to which consumers trust and engage with digital finance services (Gao & Waechter, 2017). For Islamic banks, maintaining high service quality while ensuring compliance with Shariah law is crucial for gaining customer trust and loyalty. The quality of digital finance offerings, such as those provided through mobile payment systems, directly influences the bank's ability to differentiate itself from competitors (Hadid, Soon, & Amreghah, 2020). Quality services, such as secure digital payment systems and transparent transaction processes, also enhance customer satisfaction, which can lead to greater customer retention and brand loyalty (Alghizzawi, Ahmed, Albanna, Alkhlaifat, & Jadu, 2024). Furthermore, the integration of innovative technologies like blockchain in Islamic finance can improve service transparency and trust, key factors in maintaining high-quality offerings (Gao & Waechter, 2017). Many studies have underscored the significant impacts of digital financial quality on enhancing the competitive advantage of the banks (Auka, Bosire, & Matern, 2013; Hadid et al., 2020).

Empirical research supports the positive influence of digital financial inclusion on financial access, usage, and quality, which collectively contribute to the competitive advantage of banks (Al-Duhaidahawi, Zhang, Abdulreza, Harjan, & Shah, 2019; Chinoda & Kapingura, 2023; Musau, Muathe, & Mwangi, 2018). Digital financial inclusion offers Jordanian Islamic banks the opportunity to expand their customer base by providing accessible, affordable, and user-friendly financial services, thus enhancing their competitive positioning in the market. However, challenges remain, such as regulatory frameworks, digital literacy, and technological infrastructure, which need to be addressed for Islamic banks to fully capitalize on the benefits of digital finance (World Bank, 2025).

In conclusion, digital financial inclusion not only drives financial access, usage, and service quality but also enhances the competitive advantage of Jordanian Islamic banks. By leveraging digital finance to serve a wider customer base and improve the quality of their offerings, these banks can position themselves as leaders in a rapidly evolving financial landscape. Thus, the following hypothesis proposed:

- H1. Digital financial access has a positive and significant impact on the competitive advantage of JIB.
- H2. Digital financial usage has a positive and significant impact on the competitive advantage of JIB.
- H3. Digital financial quality has a positive and significant impact on the competitive advantage of JIB.

Technology Acceptance Model

Digital finance, similar to other financial technologies, has been integrated into the banking system, which is imperative to evaluate its acceptance by the customers. This study adopted the technology acceptance model (TAM) to assess customers' perceptions of DF tools as a new technology in Islamic banks' operations.

TAM was introduced by Davis (1989) and gained popularity in the banking domain to understand customer perception of adopting new technologies. TAM posts two main factors to evaluate and determine the customer's acceptance of certain technology. First, perceived

ease of use (PEOU), which refers to what extent customers perceive certain technology and would be free of effort. Which is important because customers are more likely to adopt and use new technology if it does not require a lot of mental effort. Second, perceived usefulness (PU) refers to what degree customer believes that using certain technology would be beneficial and enhance their performance.

Therefore, when the customer perceives digital finance channels such as mobile banking, online payments, or any other online services as useful and easy to use, their probability of adopting this technology will rapidly increase, therefore enhancing access to the banks and in turn leveraging market competition. According to Jahangir and Begum (2008), electronic bank service users prefer financial technology. This has substantial benefits such as service mobility, cost, and time saving, which in turn enhance customer satisfaction, and directly affect banks' competitive advantage (Chong, Ooi, Lin, & Tan, 2010; Juwaheer, Pudaruth, & Ramdin, 2012; Salimon, Yusoff, & Mohd Mokhtar, 2017). Similarly, many studies confirmed the impact of PU and EU on financial inclusion and bank performance (Ashoer, Jebarajakirthy, Lim, Mas' ud, & Sahabuddin, 2024; Thathsarani & Jianguo, 2022; Vyas & Jain, 2021). Additionally, customers are more likely to use and adopt new technology if they perceive it as easy to use (Davis, 1989).

The same goes for financial usage. Therefore, High PU between customers leads to a better and positive use performance relationship (Davis, 1989); thus, electronic banks' service users prefer using financial technology (Jahangir & Begum, 2008). This has substantial advantages like banking services mobility, time and cost efficiency, and also provides banking operations privacy (Chong et al., 2010; Juwaheer et al., 2012; Salimon et al., 2017). Numerous studies have confirmed the important role of PU and PEOU in enhancing customer usage of certain technologies (Belanche, Casaló, & Flavián, 2019; Jahangir & Begum, 2008; Salimon et al., 2017). According to Venkatesh, Morris, Davis, and Davis (2003), both PU and EU are considered important factors in determining the usage of certain technologies. Similarly, Alalwan, Dwivedi, Rana, and Williams (2016) both PU and EU significantly enhance the use of mobile banking services. when customers perceive digital products such as mobile apps and online banking as useful and easy to use, they are more likely to use them more often, which in turn will increase usage and directly contribute to higher customer loyalty and stronger competitive advantage.

Likewise, the quality of financial services can be mediated by PU and PEOU, which are essential for shaping the customer perception of digital banking products. Venkatesh et al. (2003) stated that customers rate the service quality of banks highly when they find digital banking products useful and easy to use. This means that for Islamic banks, the platform should be regarded as both easy to use and beneficial, rather than solely being perceived as a high-quality service characterized by secure payments and smooth transactions, among other attributes.

In summary, PU and PEOU offer insights into how these factors can mediate the impacts of digital financial access, usage, and quality on the competitive advantage of JIBs. when JIB's customers perceive financial services as useful and easy to use, they are more likely to access and use them, which ultimately enhances the competitive advantage of JIBs. See the conceptual framework in Figure 1.

- H4: PU positively and significantly mediates the relationship between digital financial access and the competitive advantage of JIBs.
- H5: PU positively and significantly mediates the relationship between digital financial usage and the competitive advantage of JIBs.
- H6: PU positively and significantly mediates the relationship between digital financial quality and the competitive advantage of JIBs.
- H7: PEOU positively and significantly mediates the relationship between digital financial access and the competitive advantage of JIBs.
- H8: PEOU positively and significantly mediates the relationship between digital financial usage and the competitive advantage of JIBs.
- H9: PEOU positively and significantly mediates the relationship between digital financial quality and the competitive advantage of JIBs.

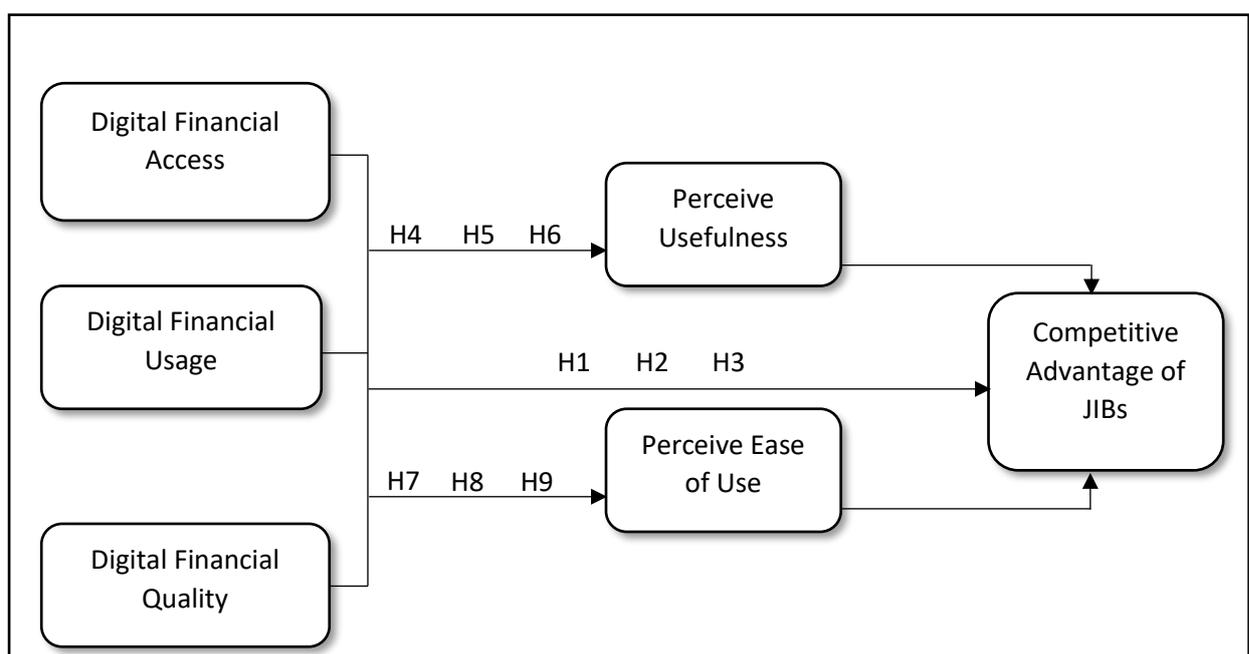


Figure: 1 conceptual framework

Discussion

The current study examines the role of digital financial access, usage, and quality in achieving the competitive advantage of JIBs. using the technology acceptance model as a mediator variable, including PU and PEOU of digital financial services as critical factors that impact the customers' acceptance and resulting competitive advantage of JIBs. according to this model, customers are more likely to use and adopt new technology if they perceive it as easy to use and useful (Davis, 1989; Venkatesh & Davis, 2000). By enhancing the accessibility, usability, and quality of digital financial services, Islamic banks in Jordan will increase their customer base by attracting more customers, particularly the young generation, including previously unserved populations. This increase can be translated into enhancing the market position of JIBs, improving customer trust, and meeting the customer expectation in getting convent, secure, and Sharia-compliant solutions.

The discussion further underscores the crucial role of TAM as a mediator between digital financial access, usage, quality, and competitive advantage, indicating that fostering

customer use and adoption of digital financial platforms impacts the market position of JIBs. Additionally, the results highlight that to enhance customer engagement, satisfaction, and loyalty, digital platforms must be useful and easy to use. This relationship contributes to market differentiation and operational efficiency, which are important in gaining a competitive advantage in the increasingly digital finance sector.

From a practical standpoint, this review praised the need for regulators to support policies that promote digital financial services. In emerging markets such as Jordan, these policies should include initiatives regarding digital financial literacy and establish a regulatory framework that encourages enhancing the use of digital platforms securely and user-friendly. The current review suggested that JIB should focus on enhancing digital financial access, usage, and quality to achieve customer adoption. Ensuring that digital financial services meet the customer expectations and desire of being both useful and easy to use, thereby JIBs can strengthen the relationship between the customers and the bank, ultimately achieving a competitive advantage.

Conclusion

This study reviewed the mediating role of the technology acceptance model in explaining how digital financial inclusion represented by digital financial access, usage, and quality impacts the competitive advantage of JIBs. It showed that factors such as perceived usefulness (PU) and perceived ease of use (PEOU) positively influence customer adoption of digital financial platforms, thereby enhancing the competitive advantage of JIBs. However, in many cases, the results were not significant for several reasons, such as customers being still unfamiliar with the technology, the adoption of these technologies still being in its early stages in Jordan, particularly in Islamic banks, and other factors attributed to religious influences. The results further indicated the importance of integrating traditional financial services with digital finance to enhance customer satisfaction and cost efficiency, thereby improving the competitive position of JIBs in the market. For emerging countries like Jordan, the study highlights the crucial role of aligning digital financial services with technological advancements and customer desires. It further suggested that JIBs should continue enhancing their digital tools to meet the increasingly demanding needs of young customers. Additionally, for future research, the study suggested that researchers should focus on the broader implications of digital finance in the MENA region and beyond. Future research could consider other factors such as financial literacy, cultural influences, and trust to refine the understanding of how digital financial inclusion impacts competitive advantage. This current study contributes to a deeper understanding of how TAM mediates the connections between digital financial inclusion represented by digital financial access, usage, quality and the competitive advantage of JIBs. The study further offers empirical results for future research on digital banking and Islamic finance.

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