



# Towards Understanding the Consumer Behavior of Mobile Banking Applications for Management Decision Makers

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#### Abstract

The rapid growth of mobile applications in the banking sector has been increasing due to the ease of use and saving the time of users. However, the fierce competition between banks draws attention to the factors that increase the use of banking mobile applications to maintain the level of satisfaction of the customers of each bank. One of the crucial aspects that decision-makers need to understand is the consumer behavior of mobile banking applications. Therefore, this research paper aims to present a comprehensive exploration of mobile banking adoption by examining the interplay of cultural dynamics, usability, cross-cultural comparisons, economic factors, and the significance of longitudinal insights. It elucidates how cultural norms and societal expectations impact adoption, emphasizing regional variations. The study also dissects mobile banking app interfaces to enhance user-friendliness, tailoring them to diverse user preferences. Cross-cultural comparisons shed light on the interplay between culture, economics, and regulations. It scrutinizes economic factors, considering income levels and financial literacy while emphasizing the importance of longitudinal studies for tracking evolving adoption patterns. This research not only advances our knowledge of mobile banking adoption but also offers practical insights for banks, policymakers, and service providers as they navigate the rapidly evolving mobile banking landscape in an increasingly digital world.

Keywords: Mobile banking, consumer behavior, banking decision making

# Introduction

The landscape of the banking industry has been significantly reshaped by the emergence of disruptive mobile innovations, leading to a profound impact on traditional retail banks. These incumbents are encountering intense competition emanating from agile and tech-savvy entrants that have harnessed the power of mobile technology (Al Tarawneh et al., 2023). As a result, conventional banks are compelled to undertake strategic initiatives aimed at fortifying their market positions. One prominent response has been the heightened investment in mobile channels, as these establishments recognize the imperative of adapting to evolving consumer preferences and habits. The shift towards mobilecentric services is not merely an option for traditional banks; rather, it has become an essential avenue for them to uphold and enhance their competitive edge in the modern financial services landscape (Ho et al., 2020)

Attending to consumer behavior within the realm of mobile applications is of paramount importance for decision-makers. Understanding how users interact with these applications provides critical insights into preferences, pain points, and usage patterns. This knowledge aids refining app design, optimizing user experiences, and tailoring marketing strategies. Informed decisions rooted in consumer behavior data lead to increased customer satisfaction, higher retention rates, and improved app performance. Moreover, aligning app features with expectations enhances user competitiveness in the market. Hence, prioritizing consumer behavior analysis empowers decision-



makers to proactively address user needs, driving overall success in the dynamic landscape of mobile applications (Shahid et al., 2022)

There is a noticeable deficiency in the existing literature concerning thorough examinations of consumer behavior in mobile banking. This gap necessitates research that collects specific studies from diverse countries to comprehensively address five key aspects: factors influencing mobile banking adoption, cultural dynamics and adoption patterns, usability and interface quality, trust in mobile banking adoption, finally usability and user experience.

By addressing this gap and emphasizing the importance of comprehending consumer behavior in mobile banking, valuable insights will be provided to decision-makers. These insights will enable them to refine strategies and make informed decisions aimed at enhancing mobile banking services and consequently augmenting customer retention rates.

The aim of this study, as a review paper, is to establish a set of specific inclusion criteria crucial for defining the scope of this research. These criteria, outlined in the table below, encompass elements such as the search keywords used, the language of publications, publication dates, the countries where studies were conducted, and the subject field. Each of these criteria plays a vital role in shaping the methodology and context of this study, ensuring that the research is focused and relevant. By adhering to these inclusion criteria, this paper aims to maintain accuracy and integrity in its investigative approach.

The following Table 1 summary explains how the research was conducted, including what factors led to choosing which information to include or exclude. This helps clarify how the research participants were chosen and why certain information was considered while other aspects were not.

**Table 1**Research Methodology for Selecting Papers

| Inclusion Criteria                                     | Description   |  |
|--|---|--|
| Search String:   | "Consumer Behavior" AND "Mobile Banking"  |  |
| Language   | English   |  |
| Publishing date  | After 2018  |  |
| Country of conducting study                            | Select different studies form distinctive countries as possible to enrich the study                                 |  |
| Subject Field  | Consumer behavior from business perspective   |  |
| Source of Papers                                       | ProQuest digital Library  |  |
| Journals   | IEEE, Elsevier, ScienceDirect   |  |
| Excluded Criteria                                      |   |  |
| Absence of clear methodology                           | The absence of having clear methodology to follow inside the research   |  |
| Absence of business values for banking Decision makers | The papers who failed to provide recommendations to business decision makers have been excluded                     |  |
| Type of research                                       | Surveys are excluded, in order to have authentic systematic review without affecting this study with prior surveys. |  |
| Number of papers                                       | 10 papers will be included in this study to for focusing reason.  |  |

In the upcoming paragraph, a detailed explanation will be provided concerning the selection and examination of ten specific papers. This discussion aims to offer insights into the rationale behind the choice of these papers and the subsequent analysis they underwent. By elaborating on the selection process and the significance of these chosen papers, a comprehensive understanding of their relevance to the study will be established.

Drawing upon the strengths identified within these selected studies, this research centered its attention on specific focal points. Primarily, this paper endeavored to provide answers to the following research inquiries:

- Factors Influencing Mobile Banking Adoption: What are the key factors influencing mobile banking adoption in different cultural contexts such as India, Australia, Lebanon, the UK, the USA, Egypt, Brazil, and China?
- 2. Cultural Dynamics and Adoption Patterns: How do cultural factors impact the adoption intentions and patterns of mobile banking among diverse customer segments, with a focus on India and the countries of Lebanon, the UK, the USA, and Egypt?
- 3. Usability and Interface Quality: What essential elements shape user decisions and contribute to the development of user-friendly interfaces in the context of mobile banking applications, and how do these factors vary between different regions such as Australia and Saudi Arabia?
- 4. Trust in Mobile Banking Adoption: How do privacy and security concerns influence user engagement and trust in the adoption of mobile banking, particularly in countries like Brazil and China?
- 5. Usability and User Experience: What role does the seamless and intuitive user experience play in the adoption of mobile banking applications, and how does it differ in terms of usability factors between countries like Malaysia and Australia?

These research questions reflect the strengths of the selective studies by addressing the gaps in the literature and seeking to provide a more in-depth, nuanced understanding of mobile banking adoption and user behavior in various cultural, economic, and regulatory contexts. Answering these questions can contribute valuable insights to inform strategies

for banks, policymakers, and service providers in the dynamic mobile banking landscape.

## Discussion

Examining consumer behavior across various countries necessitates a comprehensive approach that considers multiple dimensions. Decision-makers need to address several aspects to enhance the effectiveness of mobile banking applications. The intricacies of consumer behavior, especially when studied in diverse cultural contexts, highlight the importance of a nuanced strategy. This involves understanding interplay of socio-cultural, economic, technological, and psychological factors that influence how consumers use mobile banking. Improving the usage of mobile banking applications requires incorporating insights from this in-depth analysis of global consumer behavior trends.

Exploring the landscape of mobile banking adoption across the globe involves a complex tapestry of factors. This review amalgamates a spectrum of studies examining adoption drivers, cultural impacts, user interface intricacies, trust dynamics, and usability facets. By interweaving these diverse elements, the review aims to paint a comprehensive picture, shedding light on the intricate web of influences that delineate the adoption trends of mobile banking applications on a global scale.

Kumar et al. (2020) and Shankar et al. (2020) contribute to this understanding by exploring factors influencing mobile banking adoption in India and Australia, respectively. Kumar et al. extend the Technology Acceptance Model (TAM) to grasp adoption intentions among customers, focusing on effective marketing strategies. Shankar et al. employ the Elaboration Likelihood Model to assess the impact of online word-of-mouth and trust in India. acknowledging nuanced differences in consumer behavior. Both studies collectively underscore the importance of trust and user involvement in mobile banking adoption.

Merhi et al. (2020) and Hassan & Wood (2020) delve into the influence of cultural factors on mobile banking adoption, examining different national settings such as Lebanon, the UK, the USA, and Egypt. Merhi et al. emphasize the role of gender and age in Lebanon and the UK, while Hassan & Wood identify the collective nature of

Egyptian society's influence on adoption. Both studies highlight the complex interplay between cultural norms and adoption patterns, suggesting a need for more detailed exploration of the cultural dynamics shaping user behaviors in these regions.

Turning to the user elements and interface quality of mobile banking applications, Van Deventer (2022) and Alhejji et al. (2022) contribute with some insights. Van Deventer identifies essential elements, such as attitude, trust, and structural assurances that shape user decisions, emphasizing the importance of a userfriendly interface and support. Alhejji et al. present a benchmark comparison of mobile applications in Saudi Arabia, recognizing challenges in user interface design and customer support. Both studies concur on the significance of user-friendly interfaces and reliable customer support but suggest a need for more in-depth analysis of these issues.

Hochin & Jaroenwanit (2023) and Gbongli et al. (2020) focus on trust as a critical element in

mobile banking adoption, but within different national contexts, Brazil and China, respectively. Hochin & Jaroenwanit underscore privacy and security concerns as pivotal determinants of sustained engagement in the Brazilian context. Gbongli et al. examine trust and perceived risk in technology adoption within the Chinese context. Both studies highlight the importance of trust but differ in their contextual approaches and methodological foundations.

Lastly, Al Tarawneh et al. (2023) and Zubaydi & Gide (2018) explore the usability and user experience of mobile banking applications. Al Tarawneh et al. underline the significance of seamless and intuitive user experiences in service delivery, especially for Generation Y in Malaysia. Zubaydi & Gide conduct a comparative analysis in Australia, focusing on factors like purchase-related inconveniences and transactional efficacy. Both studies offer valuable insights into usability, considering distinct contexts and acknowledging potential regional disparities.

**Table 2**Highlighted Addressed Themes in this Study of Selected Papers

| Theme  | Studies   |  |  |
|--|---|--|--|
| Factors Influencing Mobile<br>Banking Adoption | Kumar et al. (2020): Investigating factors influencing mobile banking adoption in India.  Shankar et al. (2020): Examining factors affecting mobile banking adoption in Australia.  Hochin & Jaroenwanit (2023): Investigating trust in mobile banking adoption in Brazil.  Gbongli et al. (2020): Exploring trust and perceived risk in mobile banking adoption in China.  |  |  |
| Cultural Dynamics and<br>Adoption Patterns     | Kumar et al. (2020): Examining adoption intentions among Indian customers.  Hassan & Wood (2020): Emphasizing the role of cultural factors in Lebanon, the UK, the USA, and Egypt.  |  |  |
| Usability and Interface Quality                | Van Deventer (2022): Identifying essential elements shaping user decisions and user-friendly interfaces.  Alhejji et al. (2022): Presenting a benchmark comparison of mobile applications in Saudi Arabia and addressing user interface design.  Al Tarawneh et al. (2023): Highlighting usability and user experience in mobile banking applications in Malaysia.  Zubaydi & Gide (2018): Comparing usability factors in banking and gaming applications in Australia. |  |  |
| Trust in Mobile Banking<br>Adoption            |   |  |  |
| Usability and User Experience                  | Al Tarawneh et al. (2023) - Underscoring the importance of seamles and intuitive user experiences in Malaysia.  Zubaydi & Gide (2018) - Conducting a comparative analysis of usability factors in Australia.  |  |  |

Finally, Table 3 presents a comprehensive summary of the findings, organized according to various key aspects. These include the method of data collection and the underpinning framework whether derived from established theories or developed as an independent conceptual model. Additionally, the table highlights the volume of

records scrutinized within each study, offering insight into the scale of analysis. Lastly, the geographical context is also provided, denoting the country in which each respective study was conducted, thereby enhancing the contextual understanding of the research.

**Table 3**Summary of the Reviewed Papers that Illustrated Data Collection Method, Consumer Behavior Framework Number of Records of Users, and Country of the Study.

| Paper                             | Data<br>Collection<br>Methodology | Consumer Behavior Framework of the study     | Number of<br>studied<br>Users | Country of the<br>Study |
|-----------------------------------|-----------------------------------|--|-------------------------------|-------------------------|
| Kumar et al<br>(2020)             | Survey                            | Extended Traditional Acceptance Model (ETAM) | 302                           | India                   |
| Van Deventer<br>(2022)            | Survey                            | Conceptual Model<br>Six-Factor Structure     | 334                           | South Africa            |
| Merhi et al.<br>(2020)            | Online Survey                     | Extension of UTAUT2 Framework                | 897                           | England<br>Lebanon      |
| Shankar et al.<br>(2020)          | Survey                            | New Conceptual Model                         | 1153                          | India                   |
| Al Tarawneh et al. (2023)         | Survey                            | UTAUT  | 504                           | Malaysia                |
| Alhejji et al.<br>(2022)          | Observation,<br>Data-Driven       | Conceptual Model                             | 8396                          | Saudi Arabia            |
| Gbongli et al.<br>(2020)          | Online Survey                     | Conceptual Model                             | 612                           | China                   |
| Hassan & Wood<br>(2020)           | Survey                            | Technology Acceptance Model (TAM)            | 660                           | USA<br>Egypt            |
| Hochin &<br>Jaroenwanit<br>(2023) | Survey                            | UTAUT  | 400                           | Brazil                  |
| Zubaydi & Gide,<br>(2018)         | Online Survey                     | Quantitative Analysis                        | 202                           | Australia               |

Table 3 encompasses diverse research methodologies in studies on mobile banking adoption across several countries. Kumar et al. (2020) utilized a survey with the Extended Traditional Acceptance Model (ETAM) in India, while Merhi et al. (2020) conducted an online survey in England, extending the UTAUT2 framework. Alhejji et al. (2022) employed a conceptual model with observations from an online database in Saudi Arabia, and Gbongli et al. (2020) used an online survey with a

conceptual model in China. Zubaydi & Gide (2018) adopted an online survey with quantitative analysis in Australia. These varied methodologies underscore the global nature of mobile banking adoption research, emphasizing the necessity for nuanced insights tailored to diverse cultural contexts.

#### Recommendations

In forthcoming research endeavors, it is imperative to advance the current

comprehension of mobile banking adoption. This necessitates an in-depth exploration of cross-cultural intricacies, a nuanced refinement of usability analyses, and a comprehensive examination of the multifaceted dynamics governing trust. Comparative studies spanning diverse geographic regions coupled with granular scrutiny of cultural influences will serve to enrich our understanding, enabling the formulation of precise strategies and the augmentation of user experiences within the dynamic landscape of mobile banking services.

# Conclusion

The synthesis of findings from diverse studies on mobile banking adoption underscores the intricate tapestry of factors influencing user behavior. Cultural dynamics, usability considerations, and trust emerge as pivotal determinants shaping adoption patterns across varied geographical contexts. This nuanced understanding is of paramount importance for decision-makers in the banking Acknowledging these multifaceted influences equips them to formulate targeted strategies that resonate with diverse user preferences and cultural intricacies. In an evolving landscape, such insights are imperative for informed decision-making, ensuring the effective implementation of mobile banking services and the optimization of user experiences.

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