



Mobile Banking Service Quality and Customer Satisfaction: A Bibliometric and Content Analysis with Future Research Directions

Rahmanwali Sahar^{1,2*}, Abdullah Ziarmal³, Ismail Labib⁴, Samiullah Hotak²

¹ Master of Management, Postgraduate Program, Universitas Muhammadiyah Yogyakarta, 55183 Yogyakarta, Indonesia

² Department of Business Administration, Faculty of Economics, Mirwais Khan Nika Zabul University, 4001 Qalat, Afghanistan

³ Department of Finance and Banking, Kandahar University, 3801 Kandahar, Afghanistan

⁴ Department of Finance and Banking, Faculty of Economics, Mirwais Khan Nika Zabul University, 4001 Qalat, Afghanistan

* Correspondence: Rahmanwali Sahar (rahmansahar034@gmail.com)

Received: 07-29-2025

Revised: 08-29-2025

Accepted: 09-08-2025

Citation: R. Sahar, A. Ziarmal, I. Labib, and S. Hotak, "Mobile banking service quality and customer satisfaction: A bibliometric and content analysis with future research directions," *J. Intell Manag. Decis.*, vol. 4, no. 3, pp. 235–255, 2025. <https://doi.org/10.56578/jimd040305>.



© 2025 by the author(s). Licensee Acadlore Publishing Services Limited, Hong Kong. This article can be downloaded for free, and reused and quoted with a citation of the original published version, under the CC BY 4.0 license.

Abstract: The rapid proliferation of mobile banking has transformed the delivery of financial services, necessitating a comprehensive understanding of service quality and its impact on customer satisfaction. In this study, bibliometric and content analyses were employed to examine the evolution of research on mobile banking service quality and customer satisfaction, with emphasis placed on research trends, influential contributors, thematic structures, and emerging gaps. Data retrieved from the Scopus database spanning 2003–2025 were analyzed using VOSviewer and Biblioshiny software to conduct co-word analysis, citation analysis, co-authorship mapping, and bibliographic coupling. Findings indicate a marked acceleration of research activity after 2015, with significant contributions originating from India, Indonesia, and Saudi Arabia, while University Tun Hussein Onn Malaysia emerged as one of the most active institutions. The International Journal of Bank Marketing was identified as the leading publication outlet, and scholars such as Lee and Chung were recognized as influential authors. Network analysis revealed that customer satisfaction, trust, security, service quality, and usability constitute the dominant themes in this research domain. Co-authorship analysis demonstrated robust collaborations among Saudi Arabia, China, the United Kingdom, and the United States, whereas bibliographic coupling confirmed that trust and service quality are central drivers of mobile banking adoption. The originality of this study lies in the provision of a structured synthesis of the intellectual landscape of mobile banking research and in the articulation of critical knowledge gaps. Limitations include reliance on Scopus-indexed studies and the exclusion of non-English publications, which may restrict global comprehensiveness. Future research should prioritize the integration of artificial intelligence in mobile banking, the role of mobile financial services in advancing financial inclusion, and the implications of evolving regulatory frameworks for customer trust and satisfaction. By consolidating existing evidence and highlighting strategic research directions, this study offers a foundation for advancing theoretical, methodological, and practical understanding of mobile banking services.

Keywords: Mobile banking service quality; Customer satisfaction; Bibliometric analysis; Content analysis; VOSviewer; Biblioshiny

1 Introduction

Mobile banking services signify a revolutionary advancement in the banking sector by allowing users to perform financial transactions using mobile devices like smartphones and tablets [1]. This modern banking approach has significantly improved retail banking, driven by technological innovations and the growing need for quick, real-time access to financial services. In contrast to conventional Internet banking, mobile banking is centered on apps specifically developed and personalized by banks or financial institutions, providing a smooth and user-centric experience adapted to individual requirements.

The emergence of mobile banking has transformed how financial organizations engage with their customers. It has enabled a transition to self-service technologies that let customers autonomously undertake operations, like checking account balances and performing international money transfers [2]. This trend corresponds with the increasing focus on digital transformation in the banking sector, which addresses modern requirements for speed, accessibility, and efficiency in financial processes [3]. Mobile banking provides banks several strategic benefits, such as cost efficiency, market growth, and improved customer trust. Using mobile platforms, banks may access underserved demographics, enter new markets, and provide 24/7 services without the limitations of traditional branches. Moreover, mobile banking enhances operational efficiency, allowing institutions to economize resources while providing superior services. Customers enjoy exceptional convenience since mobile banking lets them oversee their funds anytime and anywhere. Customized offerings, reduced transaction expenses, and time-efficient functionalities make mobile banking an appealing choice for today's customers [4]. Nonetheless, implementing mobile banking presents problems, such as data security, privacy, and the digital divide in certain areas.

Several factors influence customer satisfaction in mobile banking, including usability, service quality, and security. According to Bouhlel and Mzoughi [5], mobile banking platforms' perceived ease of use is crucial in consumers' willingness to adopt these services. When users find mobile banking interfaces intuitive and easy to navigate, they are more likely to have positive experiences, leading to higher satisfaction [6]. Service quality, including responsiveness, reliability, and efficiency, also significantly impacts user perceptions, with studies showing that customers value prompt and accurate services in digital banking environments [7]. Furthermore, security concerns, such as data protection and fraud prevention, influence trust in mobile banking, as customers are more likely to continue using services they perceive as secure [8]. Thus, banks must prioritize user-friendly designs, high service quality, and strong security measures to enhance customer satisfaction and loyalty in mobile banking.

In recent years, extensive empirical research has been undertaken on mobile banking service quality and customer satisfaction. Notable contributions include the work of Jun and Palacios [9], who examined the key dimensions of mobile banking service quality; Mostafa [10], who explored mobile banking service quality as a new avenue for customer value co-creation; and Hussain et al. [11], who employed a text-mining approach to investigate service quality dimensions in Pakistan. Collectively, these studies have contributed to a growing body of literature, demonstrating that mobile banking service quality plays a critical role in enhancing customer satisfaction.

Previous bibliometric analyses, such as Alsmadi et al. [12], employed a bibliometric analysis using VOSviewer software to analyze 1206 articles related to mobile banking from the Scopus database. This method allowed for a quantitative assessment of the similarities between articles and the identification of key terms and trends in mobile banking research from 2000 to 2020. Another study by a systematic literature review and bibliometric analysis on mobile payment, this article seeks to provide a comprehensive perspective on mobile payment research. The present study examines both peer-reviewed and open-access publications. The articles are from the ScienceDirect, EBSCO, and ProQuest databases from 2007 to 2021. This research selected 250 publications for a systematic literature review and bibliometric analysis, from which 62 relevant papers published in 48 peer-reviewed and open-access journals were included in the final analysis. This study will provide future researchers with valuable insights into available literature and aid in qualitative literature evaluation.

The current study could not find a bibliometric analysis of mobile banking services quality and customer satisfaction, nor did it take on a complete bibliometric examination of mobile banking services quality and customer satisfaction studies. To fill this gap, this bibliometric approach is essential for providing an advanced perspective, understanding the progression of literature from conceptual confusion to theoretical investigation, and defining the primary constructs and relationships between them. Moreover, the progression of literature involves the collaboration among researchers that forms the research community for creating and distributing knowledge. Consequently, it is essential to understand the evolution of cooperation between scholars, institutions, and countries from varied backgrounds. The application is very beneficial to researchers and theorists in the scientific field. Accordingly, this study is guided by the core research question: What are the key research trends, contributors, and thematic directions in mobile banking service quality and customer satisfaction, and how can these insights inform future research and practice? We further explore the following specific research questions to operationalize this broad question.

RQ: What are the publication trends in mobile banking service quality and customer satisfaction?

RQ: Who are the top contributing authors, institutions, and countries in mobile banking service quality and customer satisfaction?

RQ: Which are the top-cited articles in mobile banking service quality and customer satisfaction?

RQ: What are the major themes and topics in the intellectual structure of mobile banking service quality and customer satisfaction?

RQ: Which are the top collaborative countries regarding mobile banking service quality and customer satisfaction?

RQ: Where else can future Research contribute to mobile banking service quality and customer satisfaction?

This study's primary purpose is to delineate the intellectual progression and knowledge framework predicated on publication quantity and examine the research patterns of sources, documents, authors, institutions, and countries.

Moreover, its goal is to explore the major topics in the intellectual structure of mobile banking service quality, impactful research papers, collaboration among nations, and contribute to future research in mobile banking service quality and customer satisfaction.

This study will considerably contribute in numerous ways that coincide with the anticipated conclusions of a bibliometric evaluation. This study will yield essential insights into the latest advancements in mobile banking services and will be a preeminent publication in the domain. This research will examine insights derived from performance metrics (such as publication trends, leading institutions, authors, articles, countries, and highly cited articles), intellectual structure (including key concepts and topics, citation patterns, co-authorship, and bibliographic coupling), and content analysis about mobile banking service quality and customer satisfaction. This work will improve future research by facilitating the more effective identification and incorporation of new contributions with old ones. This study will stimulate subsequent research by utilizing the insights derived from the current review to inform its proposed agenda. This study will identify deficiencies in current research that subsequent inquiries may rectify to affirm the significance and pertinence of mobile banking services. In addition, this study gives valuable advice to customers, banks, and governments.

2 Research Methodology

A bibliometric analysis of the literature, combined with a content analysis approach (also referred to as a hybrid review), was conducted to illustrate the best practices in scientific knowledge, particularly in mobile banking service quality and customer satisfaction. This combined approach demonstrates the progression of scientific knowledge in a specific field using quantitative bibliometric tools while incorporating detailed content analysis through a qualitative systematic review. The Research used quantitative and qualitative methods to analyze the literature on mobile banking service quality disclosure based on Scopus data.

2.1 Data Collection Method

The Scopus database, a scientific database known for providing one of the most extensive collections of peer-reviewed literature, was employed in this bibliometric analysis study. Furthermore, the Scopus database is renowned for its broad coverage, indexing numerous peer-reviewed articles from various academic fields. It is a valuable tool for bibliometric study since it also offers robust citation metrics. Its stringent editing standards also guarantee that only respectable publications are featured, which lessens the possibility of using inferior sources [13]. Scopus was chosen above other databases due to its vast coverage of peer-reviewed publications across numerous disciplines, ensuring a more comprehensive dataset. It offers comprehensive citation analysis tools, extensive author profiles, and structured metadata, which enable research tracking and bibliometric studies; in contrast to Google Scholar, which includes non-peer-reviewed sources, Scopus gives more curated and reliable data. While the Web of Science is prestigious, its journal selection is relatively limited, particularly in non-English publications [14].

Sample Selection: We clarified that the dataset was obtained from the Scopus database on January 20, 2025, using the search terms “Mobile Banking Services,” “Mobile banking services,” and “Customer Satisfaction” in the title field. This search initially yielded 165 documents published between 2003 and 2025. After removing duplicates, editorials, notes, and reports, a final sample of 97 peer-reviewed research articles was retained for analysis.

2.2 Data Analysis Method

This research used two principal bibliometric analysis methods: descriptive and network analysis [14], and content analysis of the top five most cited articles in mobile banking service quality and customer satisfaction.

This research analyzes performance using descriptive analysis of publishing trends, leading contributing countries, authors, journals, and affiliations. This study investigates the principal themes and topics within the intellectual framework by employing science mapping techniques, including co-word analysis, citation analysis, co-authorship analysis, bibliographic coupling analysis, and content analysis of the five most cited articles in mobile banking service quality and customer satisfaction. We utilize the VOSviewer and biblioshiny software for data analysis and visualization. VOSviewer is a robust visualization tool that employs a distance-based mapping technique to display items [15]. It presents results as networks and clusters in various colours, reflecting linkages, link strength, and total link strength among articles [16]. Biblioshiny is a web-based graphical user interface (GUI) for Bibliometrix, an R package used for bibliometric analysis. Bibliometric analysis quantitatively analyses academic literature, helping researchers assess publication trends, citation networks, author collaborations, and keyword patterns. Biblioshiny allows users to perform bibliometric analysis without requiring coding skills, making it accessible to researchers from various disciplines [17, 18]. Figure 1 presents the research design of the current study.

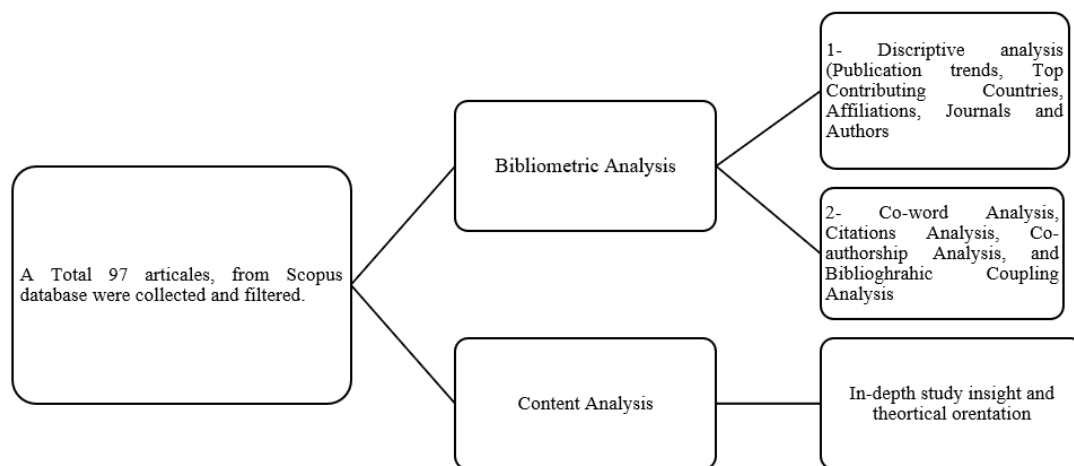


Figure 1. Research design

3 Result and Discussion

3.1 Descriptive Analysis

This section discusses the descriptive analysis of variables, including the 22-year publication timeline, leading journals, authors, research institutes, and countries. Figure 2 shows the yearly publishing trend in research on mobile banking service quality and customer satisfaction from (2003-2025). The early years, specifically from 2003 to 2014, saw little scientific activity, yielding just one to three papers yearly. This indicates the initial stages of mobile banking usage, during which the technology was developing, and its effects on user satisfaction had not yet received significant scientific focus. The figure shows the yearly publishing trend in research on mobile banking service quality and consumer satisfaction from (2003-2025). The early years, specifically from 2003 to 2014, saw little scientific activity, yielding just one to three papers yearly. This indicates the initial stages of mobile banking usage, during which the technology was developing, and its effects on user satisfaction had not yet received significant scientific focus [19].

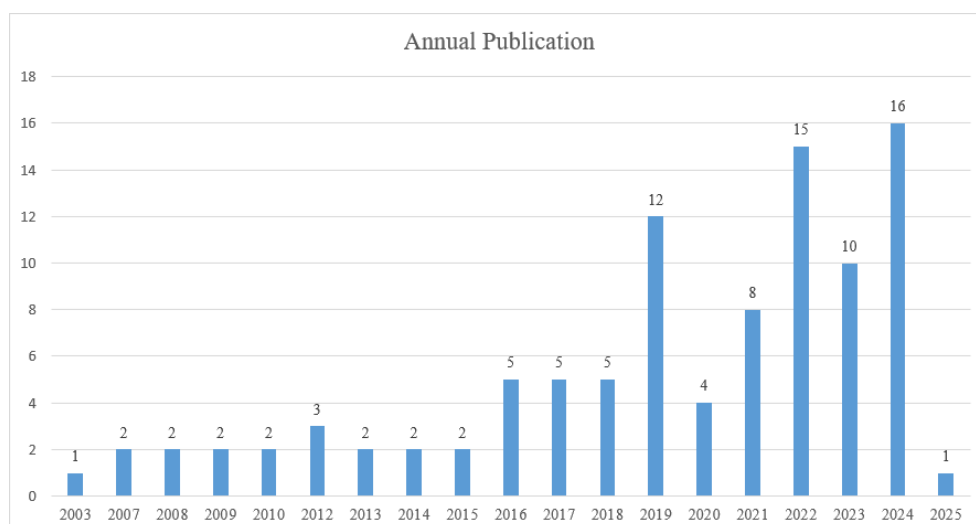


Figure 2. Annual publication trend

Source: Scopus Database

Since 2015, a noticeable rise in publications has been seen. This is due to the increasing use of mobile technology and its enhanced incorporation into financial services. The number of articles steadily increased from 2015 to 2019, resulting in a significant jump in 2019, totaling 12 publications. This increase likely reflects a broader recognition of the substantial impact of mobile banking on financial services and its capacity to improve customer

satisfaction [20]. Following 2019, the publication rate continues, with substantial increases in 2022 and 2024, with 15 and 16 publications, respectively. This increase may be attributed to many sources, such as the rapid progress in mobile technology, including artificial intelligence, safe verification techniques, and accessible interactions, which have made mobile banking more widespread and accessible [21]. Secondly, the COVID-19 epidemic probably increased the dependence on digital banking systems, requiring a more thorough examination of customer service and satisfaction [22].

The continuing rise in publications shows the growing academic and business interest in understanding the dynamics of mobile banking services and consumer satisfaction. Studies are likely addressing the emerging obstacles, including cybersecurity issues, limitations in digital literacy, competitiveness among financial institutions, and the possibilities and challenges these services pose. The increasing research output highlights the essential role of mobile banking in influencing current economic systems and its importance as a key area of study for enhancing customer engagement and satisfaction.

3.1.1 Top contributing affiliations

The top ten research affiliations have published the most papers on mobile banking service quality and customer satisfaction as presented in Table 1. The top ten research affiliations include the Universiti Tun Hussein Onn Malaysia, which has three publications recorded. Next, all nine affiliations produce two publications on mobile banking services and customer satisfaction. The top ten affiliations contribute 21 articles, accounting for about 21% of the publications on mobile banking services and customer satisfaction. These findings show that most institutions involving mobile banking service quality and customer satisfaction are still evolving, as the number of publications is still low, ranging between 2 and 3. It is emphasized that most of the top 10 research affiliations are situated in two countries, Indonesia and Saudi Arabia. The two countries show similarities in their laws and regulations, as officials have instituted strict standards for mobile banking services development, possibly leading to increased research on mobile banking service quality and customer satisfaction.

Table 1. Top contributing affiliations

Affiliation	Country	Publication	Average
University Tun Hussein Onn Malaysia	Malaysia	3	3%
King Abdulaziz University	Saudi Arabia	2	2%
K. N. Toosi University of Technology	Iran	2	2%
Chulalongkorn University	Thailand	2	2%
University of Huddersfield	UK	2	2%
Al-Balqa Applied University	Jordan	2	2%
Universitas Lambung Mangkurat	Indonesia	2	2%
Itä-Suomen yliopisto	Finland	2	2%
Universitas Negeri Jakarta	Indonesia	2	2%
Saudi Electronic University	Saudi Arabia	2	2%

Source: Scopus Database

3.1.2 Top contributing countries

Table 2 and Figure 3 show the top ten countries with the most published papers in the past 22 years. The top ten countries have produced 84 articles out of 99 articles, accounting for 84% of the total publications. India made the highest number of publications, with 18 articles, next to Indonesia and Saudi Arabia, with each country contributing at least 10 articles. The list includes a balanced representation of developed and developing countries engaged in mobile banking service quality and customer satisfaction. The balanced representation of developed and developing countries in mobile banking research provides a thorough comprehension of different situations. Developed countries emphasize innovative technology and user experience while developing countries prioritize financial inclusion and the elimination of access hurdles [23]. This equilibrium facilitates the interchange of optimal practices, addresses different obstacles, and creates inclusive services that enhance worldwide customer satisfaction [24]. The leading countries are also ranked with leading affiliations, as shown in Table 1. For instance, King Abdulaziz University, Saudi Electronic University (Saudi Arabia), Universitas Negeri Jakarta, Universitas Lambung Mangkurat (Indonesia), and Universiti Tun Hussein Onn Malaysia (Malaysia).

3.1.3 Top contributing journals

Table 3 presents the 10 leading journals with the most published papers on mobile banking service quality and customer satisfaction over recent years. The top 10 journals have published over 30% of the documents on mobile banking service quality and customer satisfaction, accounting for 30 out of 99 recorded articles. The International Journal of Bank Marketing has published nine papers, while the International Journal of Mobile Communications has

published five articles. Next, the eighth most contributing journals each published two articles. International Journal of Bank Marketing is a highly recognized journal indexed by Scopus, with a 104 H-index. Due to contributions to the business, management, accounting, and marketing fields, it is an Emerald publisher. Additionally, all journals in the top 10, such as the International Journal of Mobile Communications, Cogent Business and Management, and the International Journal of Applied Business and Economic Research, are also ranked in the Quartile Scores and indexed in Scopus.

Table 2. Top contributing countries

Country	Publication	Average
India	18	18%
Indonesia	10	10%
Saudi Arabia	10	10%
United States	8	8%
Malaysia	7	7%
South Korea	7	7%
United Kingdom	7	7%
China	6	6%
Thailand	6	6%
Bangladesh	5	5%

Source: Scopus Database

Country Scientific Production

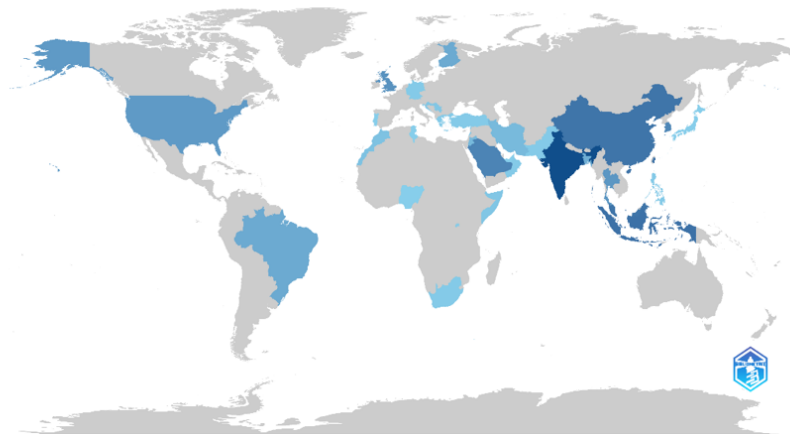


Figure 3. Top contributing countries

Source: Biblioshiny Software

Table 3. Top contributing journals

Source	Publication	Average
International Journal of Bank Marketing	9	9%
International Journal of Mobile Communications	5	5%
Cogent Business and Management	2	2%
International Journal of Applied Business and Economic Research	2	2%
International Journal of Environmental Research and Public Health	2	2%
International Journal of Information Management	2	2%
Journal of Advanced Research in Dynamical and Control Systems	2	2%
Journal of Distribution Science	2	2%
Journal of Global Information Management	2	2%
Journal of Infrastructure, Policy, and Development	2	2%

Source: Scopus Database

3.1.4 Top contributing authors

Table 4 presents the top 10 authors with the most publications on mobile banking service quality and customer satisfaction. Among the top 10 authors, each published two articles, and the top 10 authors contributed to 20 papers, accounting for 20% of the total publications, emphasizing that authors with fewer publications are seen to be emerging and are not categorized as dominating authors. According to the result, specialists in this area are still in the early stages of growth. However, these researchers have demonstrated their competence by producing significant work within nine years.

Table 4. Top contributing authors

Author	Publication	Average
Chung, N.	2	2%
Geebren, A.	2	2%
Hamidi, H.	2	2%
Jabbar, A.	2	2%
Khan, M. A.	2	2%
Laukkanen, T.	2	2%
Puspasari, N.	2	2%
Rusniati, R.	2	2%
Said, L. R.	2	2%
Usman, O.	2	2%

Source: Scopus Database

3.2 Network Analysis

3.2.1 Co-word analysis

Co-word analysis is a bibliometric method to examine the relationships between keywords or phrases within a text collection, revealing the study area's subject framework. It determines the frequency and situations in which certain words or phrases co-occur, hence defining the intellectual landscape of a field [25]. Co-word analysis discusses primary issues, developing trends, and conceptual connections throughout the literature by grouping related words. This approach is especially beneficial for comprehending the progression of research topics and identifying possible gaps or opportunities for further investigation. It is based on the premise that frequently co-occurring words indicate closely related concepts, offering insight into the emphasis and progression of academic research [26]. Co-word analysis is extensively used in bibliometric research to monitor multidisciplinary studies and examine the developing links among themes across diverse domains.

Table 5 shows the co-occurrence of the keywords Customer satisfaction, Mobile banking, and Sales, which are the themes with the highest occurrence of mobile banking services and customer satisfaction studies, indicating their popularity in the existing literature. Customer satisfaction, mobile banking, and sales are closely linked. Mobile banking enhances convenience and security, directly influencing customer satisfaction [27]. Mobile banking also supports personalized offers, increasing sales conversions and reinforcing customer satisfaction [1].

Table 5. Co-occurrence of keywords

Keyword	Occurrences	Total Link Strength
Customer satisfaction	57	607
Mobile banking	56	428
Mobile bankings	20	332
Sales	20	331
Banking	9	161
Trust	11	146
Human	5	122
Service Quality	16	121
Cellular telephone systems	7	102
Satisfaction	13	93

Source: VOSviewer Software

Other prominent themes include banking, trust, service quality, and customer satisfaction, all of which are closely associated with mobile banking services. Trust is essential since consumers need confidence in the security

of their financial transactions and data, impacting their satisfaction level [28]. Superior service quality, defined by reliability, responsiveness, and user-friendliness, supports consumer trust and satisfaction by enabling smooth and efficient mobile banking experiences [29]. Banking institutions emphasizing secure systems and superior services build strong customer relationships, enhancing satisfaction and loyalty.

Figure 4, Figure 5 show the network visualization of popular keywords derived from co-word analysis. Consistent with the findings in the Table, the customer satisfaction theme is a big cluster with a significant relationship with mobile banking. In addition, six significant individual clusters demonstrate significant correlations among various word pairs.

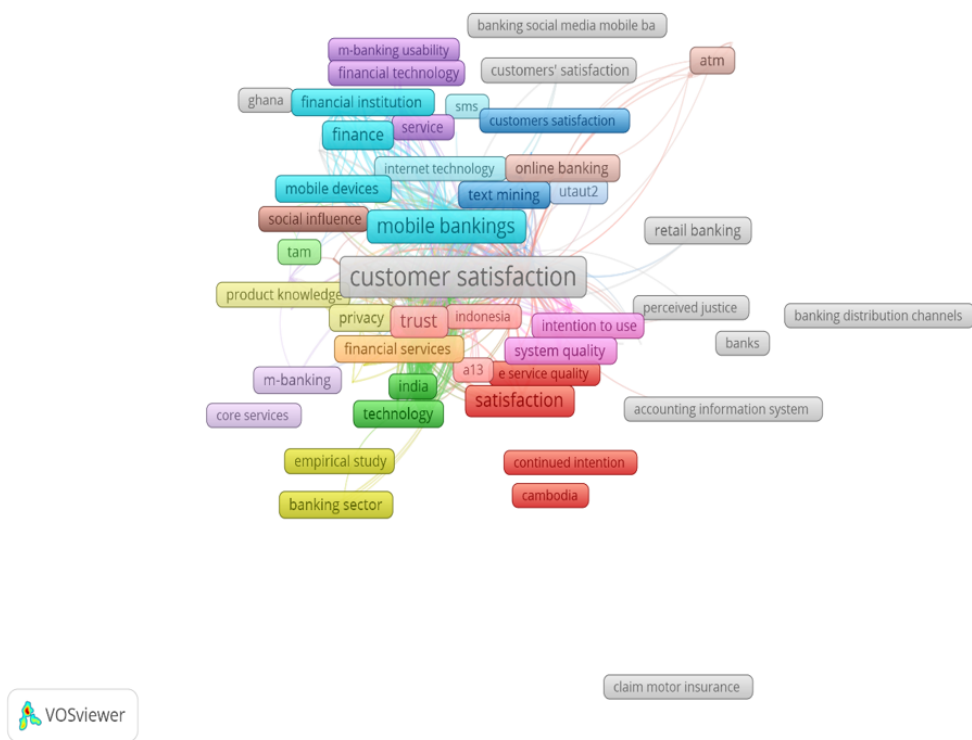


Figure 4. Network visualization
Source: VOSviewer Software



Figure 5. Network visualization
Source: Biblioshiny Software

First, the mobile banking cluster combines mobile devices, finance, financial institutions, and internet technology, developing an integrated system in which these themes converge to transform financial services. Mobile devices provide a channel, facilitating quick access to banking services and promoting financial inclusion [30]. Financial institutions use Internet technology to provide safe, real-time transactions and novel solutions such as digital wallets and peer-to-peer transfers [31]. This collaboration improves accessibility and lowers operating expenses, facilitating broader engagement in the financial ecosystem while promoting technical progress in the sector [32].

Second, within the e-service quality cluster, satisfaction and continuing intention are closely linked, since superior e-services immediately impact user satisfaction, enhancing their intention to continue using the service [33]. User satisfaction occurs when individuals believe that the e-service fulfills or exceeds their expectations about reliability, responsiveness, and usability [34]. This positive experience fosters trust and loyalty, encouraging customers to use and endorse the service to others consistently [33].

Third, the mobile banking usability cluster combines financial technology and services using advanced techniques to improve the accessibility, efficiency, and convenience of financial services [35]. Fintech advancements, including user-friendly interfaces and real-time data processing, streamline complex economic processes, enhancing service understanding and accessibility for users [36]. This simple integration enhances the user experience, fostering trust and broader acceptance of mobile financial services [37].

Fourth, the banking sector and empirical studies have a relationship since empirical research offers evidence-based insights into the sector's dynamics and difficulties. Empirical studies, via the analysis of real-world data, facilitate identifying trends, measuring performance, and evaluating customer behavior, hence informing decision-making and policy formulation in the banking sector [28]. These studies assess the influence of innovations, laws, and external influences, ensuring the industry adapts efficiently to changing market circumstances.

Fifth, Mobile banking and core services are interrelated since Mobile banking platforms provide fundamental banking services such as account management, cash transfers, and bill payments directly to customers using mobile devices. The basic services of Mobile banking provide accessibility and convenience for customers, especially in areas with limited physical banking infrastructure [38]. Mobile banking utilizes digital technology to improve service delivery, providing speed, security, and 24/7 availability, which are essential for customer satisfaction and retention [39].

Sixth, Online banking and ATMs jointly provide users flexible access to financial services. Online banking enables customers to conduct transactions, manage accounts, and pay bills remotely over the Internet, whilst ATMs offer physical access for cash withdrawals and deposits, therefore balancing digital and physical banking requirements [40]. Together, they improve the banking experience by providing ease and accessibility and addressing diverse consumer preferences and requirements [41].

Figure 6 shows the progression of significant research issues in mobile banking service quality and consumer satisfaction over time. The size of the circles denotes the frequency of each word in the literature, with bigger circles signifying more study interest in a particular year. Customer satisfaction and mobile banking have emerged as prominent topics in recent years, as seen by increased word frequencies from 2018 forward. This underscores the increasing significance of comprehending the impact of mobile banking service quality on user experience, trust, and loyalty. A recent study on customer satisfaction indicates a shift in emphasis towards service quality, security, and user-friendly interfaces in digital financial services [42]. Mobile banking became a prominent topic, particularly post-2018, with a heightened scholarly focus on its uptake, security issues, and advantages for financial inclusion. This corresponds with the worldwide development of digital banking services and the growing dependence on mobile apps for financial transactions [21]. Cellular telephone networks support the idea that the expansion of mobile banking is closely linked to progress in mobile communication technology [43].

The development underscores the significance of sales in mobile banking research, reaching its peak in 2018. This indicates that enterprises and financial organizations have been actively investigating revenue generation, customer interaction, and marketing techniques in the mobile banking domain. Moreover, banking and financial services have seen a consistent rise in academic interest, reflecting continuous discourse around digital banking laws, cybersecurity, and policy formulation. Emerging themes, such as humans and articles, indicate the need for multidisciplinary approaches in mobile banking research, potentially integrating elements of behavioral science, digital literacy, and academic discussions on financial technology. The study path demonstrates ongoing growth in mobile banking studies, focusing significantly on user experience and technology innovations.

Figure 7 illustrates the main topics in research about mobile banking service quality and customer satisfaction. The primary term, customer satisfaction (13%), indicates that many research studies examine the effects of mobile banking services on user experiences, service quality, and general trust. This suggests that studies emphasize comprehending client attitudes and expectations for mobile financial transactions [44].

The significant term mobile banking (9%) underscores the extensive use of digital financial services. This corresponds with worldwide trends whereby mobile banking is increasingly essential for financial inclusion, especially in newly industrialized countries [45]. The existence of sales (9%) indicates that mobile banking is

being evaluated from a business perspective, possibly focusing on revenue creation, client acquisition, and market development. Additional notable terms, including trust (3%), service quality (2%), and information quality (2%), suggest that the study emphasizes the determinants affecting customer loyalty and sustained use of mobile banking services. Trust is a vital factor in the adoption of mobile banking since concerns over security, fraud, and data privacy consistently influence user behavior [1].

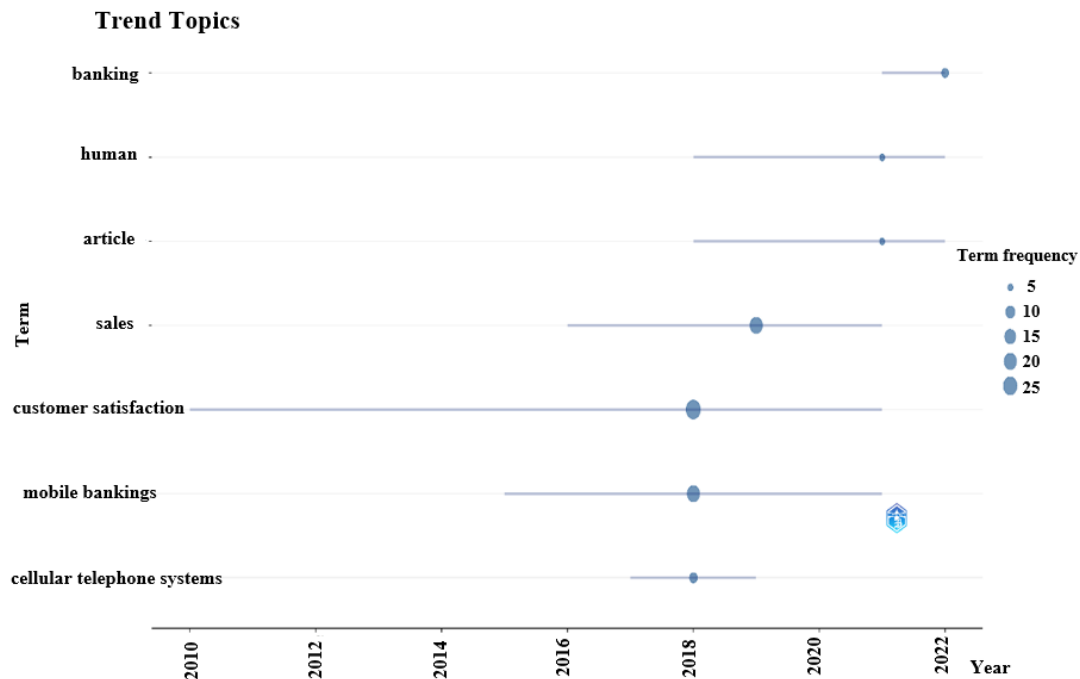


Figure 6. Trend topics of mobile banking services and customer satisfaction
Source: Biblioshiny Software

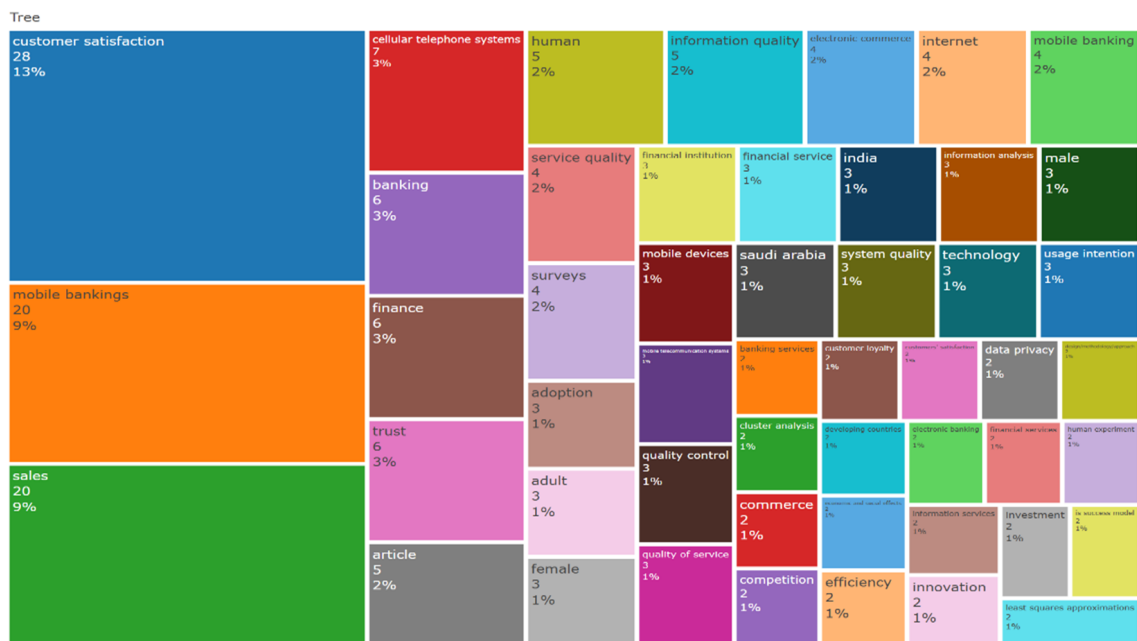


Figure 7. Treemap of the keyword of mobile banking services and customer satisfaction
Source: Biblioshiny Software

The incorporation of finance (3%), banking (3%), and financial services (1%) highlights the broader framework within which mobile banking functions. These terms indicate that research investigates mobile banking as a technological advancement and a fundamental component of the financial ecosystem. Furthermore, technology (1%), acceptance (1%), and innovation (1%) underscore the significance of new digital solutions in augmenting mobile banking capabilities. Minor terms like data privacy (1%), efficiency (1%), and quality control (1%) indicate concerns related to regulatory compliance, cybersecurity, and system dependability. These are key domains since customer satisfaction in mobile banking is closely associated with the security and efficiency of digital transactions [3].

3.2.2 Citation analysis

Citations are used to assess the impact and significance of scholarly work in academia [46]. A research publication with a high citation index typically signifies its significant impact within a field. Moreover, a publication's citation trends can show the influence the Research exerts on scholars [47].

Table 6 presents the top five articles based on the link strength of citation analysis and citation index. The study Understanding factors affecting trust and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective by Lee and Chung [48] found that trust is the most significant variable impacting customer satisfaction in mobile banking. This highlights the importance of building trust in online and offline banking environments. Moreover, system and information quality were identified as having a greater effect on trust than user satisfaction. This suggests that ensuring high-quality systems and accurate information is crucial for fostering trust among users.

Another impactful article by Thakur [49] utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the relationships among constructs. The study confirmed that customer satisfaction significantly influences loyalty to mobile banking services. Higher satisfaction leads to increased loyalty among customers. Usability and customer service were identified as critical factors affecting customer satisfaction. A user-friendly interface and effective customer service positively impact satisfaction levels. Kumar et al. [50] utilized fixed- and random-effect models to assess the relationship between various factors and mobile banking satisfaction. The random-effect model was chosen due to the high heterogeneity indicated by Q-statistics and I-squared values exceeding 75% across studies. The findings revealed that quality factors, including service quality, system quality, and information quality, positively influence satisfaction with m-banking, supporting hypotheses H1 to H3.

Table 6. Highest cited articles

References	Citation	Total Strength Link
Lee and Chung [48]	454	15
Kumar, Chauhan, Kumar and Gupta [50]	121	13
Thakur [49]	3	11
Jun and Palacios [9]	111	11
Saibaba [51]	5	7

Source: VOSviewer Software

Figure 8 presents the network visualization of influential articles derived from citation analysis. The study by Lee and Chung [48] forms one of the largest clusters, underscoring its foundational role in shaping subsequent research. Baabdullah et al. [52] emphasized the importance of model fit and the identification of key predictors of mobile banking adoption among Saudi customers. Thakur [49] contributed to understanding the interplay of satisfaction, trust, and loyalty, particularly in developing countries. Jun and Palacios [9] highlighted the originality of focusing specifically on mobile banking, providing a foundation for further research in customer relationship management. Sampaio et al. [53] extended the discussion by examining cultural differences in the relationship between mobile applications and customer satisfaction. Collectively, these highly cited works illustrate the diverse yet interconnected themes of trust, service quality, satisfaction, and loyalty that dominate the intellectual structure of mobile banking research.

3.2.3 Co-authorship analysis

Co-authorship is when two or more authors collaborate to publish a research work [54]. It can be analyzed by exploring co-authorship networks through bibliometric techniques [55]. The increasing collaboration among researchers in recent years requires a knowledge of the level of collaboration and the network patterns within mobile banking services quality and customer satisfaction.

Table 7 presents the top 10 countries based on the total link strength of the co-authorship analysis. The result showed that Saudi Arabia, China, the UK, and the USA play a significant role in co-authorship, with total link strength varying between 6 and 8. The analysis revealed equality between developed and developing countries among the top 10 rankings. Among the developing countries, India has the highest number of publications, and Saudi Arabia

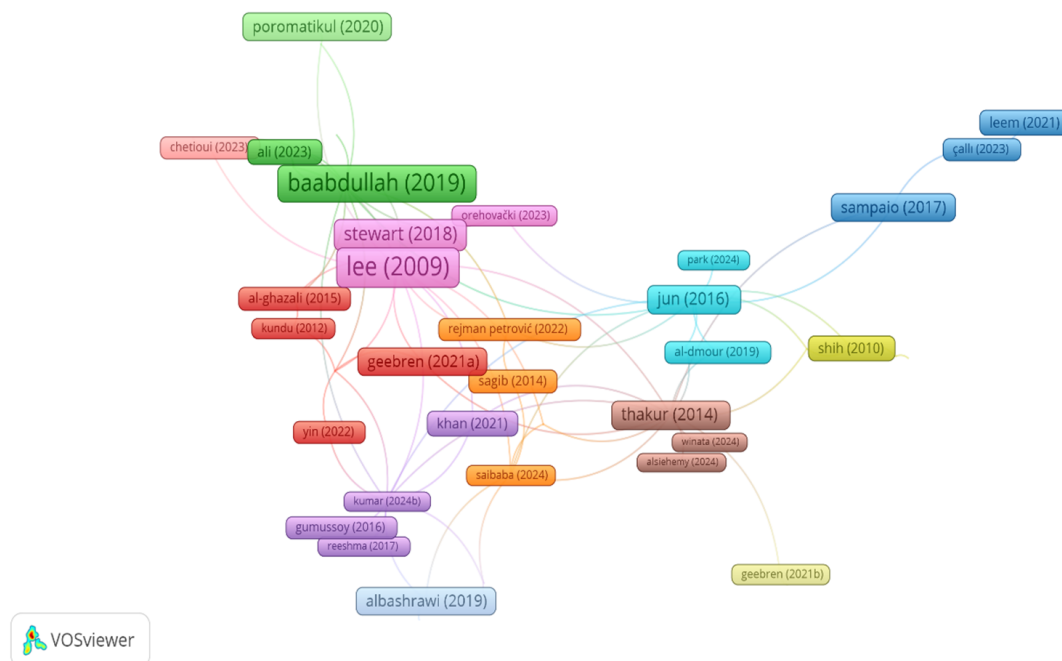


Figure 8. Network visualization of co-authorship
Source: VOSviewer Software

has high citations. The elevated citations of Saudi Arabia in mobile banking and customer satisfaction arise from extensive research on service quality, user experience, and technological adoption. India's extensive research output on mobile banking services and customer satisfaction is driven by the country's rapid digital transformation and the banking sector's emphasis on enhancing customer experiences. This academic focus reflects India's commitment to understanding and improving the digital banking experience for its vast and diverse population.

Table 7. Co-authorship of countries

Country	Publication	Citation	Total Link Strength
Saudi Arabia	10	534	8
China	6	113	7
United Kingdom	7	557	6
United States	8	312	6
Bangladesh	5	120	3
India	18	187	3
Malaysia	7	172	3
Brazil	4	167	2
Indonesia	10	78	2
Jordan	3	381	2

Source: VOSviewer Software

Figure 9 highlights collaborative research networks across countries regarding mobile banking services and customer satisfaction. The closeness and connectivity of the nodes correlate positively with the strength of research collaboration across countries.

India emerges as a unique node, signifying significant study contributions although showing restricted direct co-authorship relationships. Saudi Arabia, the United Kingdom, and Jordan constitute a focal cluster, indicating strong relationships abroad. Bangladesh has a strong connection with Saudi Arabia, indicating mutual research interests. The United States, Thailand, and Nigeria are situated instead far away, indicating a modest affiliation with the center network.

China and Brazil are categorized together but remain relatively far away from the primary cluster, suggesting independent research initiatives with little international collaboration. Indonesia has a weak relationship, maybe signifying the development of research affiliations. The graphic highlights strong collaboration in research in some

places while also exposing gaps in worldwide co-authorship.

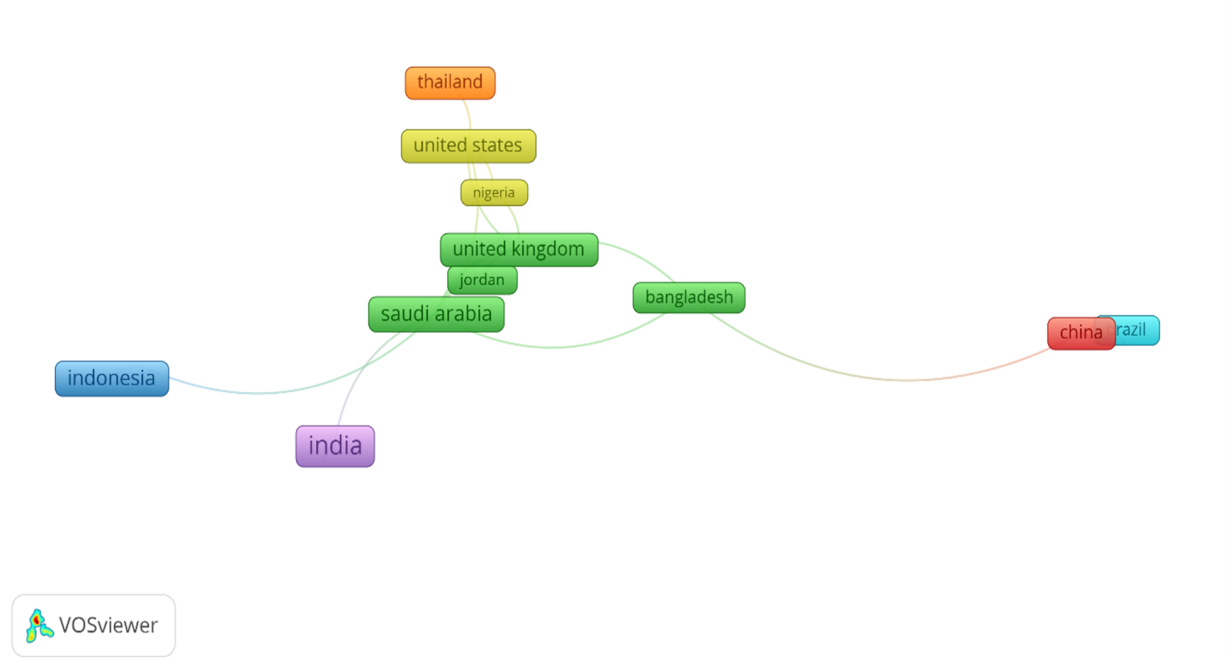


Figure 9. Network visualization of co-authorship
Source: VOSviewer Software

3.2.4 Bibliographic coupling analysis

Bibliographic coupling occurs when two articles have the same reference [56]. Assessing bibliographic coupling aims to identify the current state of active Research within a field and provides a dynamic methodology for examining the conceptual framework of an academic field [57].

Table 8 presents the five most-cited publications based on total citations obtained from bibliographic coupling analysis, indicating their status as foundational references in mobile banking service research and customer satisfaction studies. Among these, Lee and Chung [48] received the highest citation count. Their study surveyed 276 mobile banking users, providing empirical evidence to support key findings. The analysis demonstrated that trust, along with three dimensions of service quality—system quality, information quality, and interface design quality—are significant determinants of customer satisfaction.

Baabdullah et al. [52] reported that both the usability of mobile banking applications and perceived customer service significantly influence customer satisfaction. Specifically, usability was found to increase satisfaction($\beta = 0.2556, p < 0.05$), whereas customer service exhibited a stronger effect($\beta = 0.5404, p < 0.001$). Customer satisfaction was identified as a mediator in the relationships between usability and loyalty, and between customer service and loyalty, indicating that higher satisfaction leads to greater customer loyalty in mobile banking contexts. Similarly, Karjaluoto et al. [58] demonstrated significant relationships between mobile banking satisfaction and multiple antecedents, including service quality, technology acceptance, and credibility factors. These satisfaction levels were also found to influence behavioral outcomes, such as actual usage, continued intention to use, and customer loyalty.

Table 8. Bibliographic coupling of documents

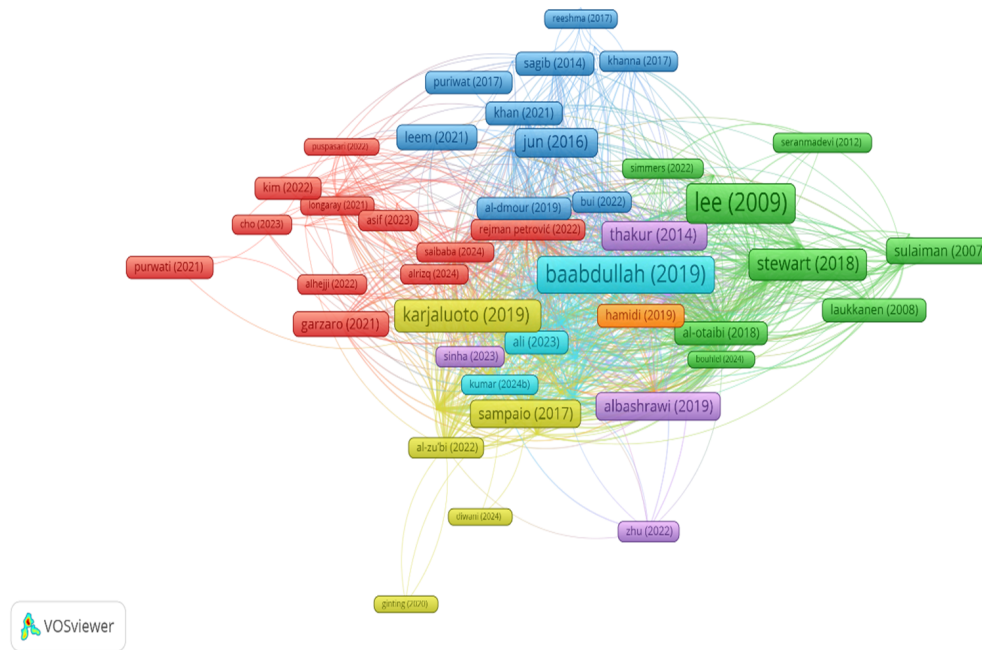
References	Citation	Direction
Lee and Chung [48]	454	<ol style="list-style-type: none"> 1. Future studies should explore how cultural differences impact trust and satisfaction in mobile banking across various countries. 2. Since interface design quality did not significantly affect customer satisfaction in this study, further research could investigate specific design elements that might influence user experience and satisfaction in mobile banking. 3. Conducting longitudinal studies could provide insights into how trust and satisfaction evolve with the increasing use of mobile banking services. 4. Future research could expand the model to include additional quality factors beyond system, information, and interface design quality, such as security features or customer support, to provide a more comprehensive understanding of user satisfaction.
Baabdullah, Alalwan, Rana, Kizgin and Patil [52]	355	<ol style="list-style-type: none"> 1. Future studies should aim for a more representative sample across different demographics, including older, less educated, and high-income users, to enhance generalizability. 2. Implementing longitudinal research is crucial to observe over time, particularly regarding technology adoption and usage patterns. 3. Future studies should explore the role of culture in shaping customer perceptions and behaviors towards mobile banking. 4. Future studies should consider including variables such as perceived security and privacy, which are vital in financial transactions, to better understand their impact on user behavior.
Karjaluoto, Shaikh, Saarijärvi and Saraniemi [58]	228	<ol style="list-style-type: none"> 1. Future studies should focus on establishing causal relationships between perceived value and its antecedents, utilizing experimental or longitudinal research designs to gain deeper insights into these dynamics. 2. Given that Finland has advanced digital-banking adoption, future studies should investigate markets where mobile banking and payment services are still developing, to understand different user behaviors and preferences.
Stewart and Jürjens [59]	173	<ol style="list-style-type: none"> 1. Future studies could expand beyond Germany to include other European countries, as technology acceptance varies by region. 2. Future analysts can modify the determinants in the Unified Theory of acceptance and use of technology model to explore additional factors influencing FinTech adoption.
Chung and Kwon [60]	125	<ol style="list-style-type: none"> 1. Future studies should focus on improving the quality of information provided in mobile banking. 2. Conducting longitudinal studies may provide insights into how customer perceptions of system and information quality change over time. 3. Future research should employ simultaneous, multivariate analytical approaches to understand better the relationships between system quality, information quality, trust, and customer satisfaction.

Source: VOSviewer Software

Figure 10 shows the network mapping of currently active articles using bibliographic coupling analysis. The blue cluster focuses on foundational research and methodological approaches related to technology adoption. Authors like Jun and Palacios [9], Khan and Alhumoudi [37], and Thakur [49] are central figures, linking multiple studies that emphasize user behavior and technology diffusion models. The dense connections within this cluster suggest a strong theoretical foundation that informs later empirical studies.

The green cluster is dominated by Lee and Chung [48], Stewart and Jürjens [59], indicating influential works in understanding user acceptance and the role of external factors in technology adoption. This cluster integrates early

contributions to digital transformation, emphasizing the interplay of trust, perceived usefulness, and social influence. The red cluster is centered around Karjaluoto et al. [58] pointing to more recent research on digital marketing, e-commerce, and consumer behavior. Existing research suggests a focus on business applications of emerging technologies, possibly covering social media, AI-driven personalization, and customer engagement strategies.



3.3 Content Analysis

Karjaluoto et al. [58] examined how perceived value influences customer satisfaction and commitment in mobile financial services, providing practical insights for service providers. Data were collected through self-reported surveys, with measures taken to address common method variance and response bias. Advanced statistical techniques were applied to enhance the validity and reliability of the findings. The results highlighted the critical role of perceived value in shaping satisfaction and commitment, with specific drivers and user characteristics moderating these relationships. Stewart and Jürjens [59] investigated factors affecting FinTech adoption, focusing on strategies that enable financial institutions to achieve economies of scale in competitive markets. A quantitative survey approach was used to assess customer perceptions of data security, trust, and user engagement. The study concluded that,

while data security and trust are essential, user interface design and value-added features exert a stronger influence on adoption intentions in the German context. Chung and Kwon [60] explored the impact of trust on customer satisfaction in mobile banking using a modified IS success model. Structured data collection and analysis were employed to ensure robust and reliable findings. The study demonstrated that trust is a significant determinant of customer satisfaction, providing a validated framework for both future research and practical applications in mobile banking.

Table 9. The content of the five most cited publications

Journal/ Reference	Title	Aims of the Study	Method	Result	Conclusion
Interacting with Computers. [48]	Understanding Factors Affecting Trust in and Satisfaction with Mobile Banking in Korea: A modified DeLone and McLean's Model Perspective.	The study's primary aim is to explore how various quality factors associated with mobile banking influence user trust and satisfaction.	A survey was conducted to gather data from mobile banking customers. The data were analyzed using PLS regression, a confirmatory approach suitable for theory testing. This method allows for the examination of the existence of relationships between variables, and it was conducted using PLS-Graph version 3.0.	The study involved an empirical analysis of data collected from 276 mobile banking users, confirming that trust and three quality factors (system quality, information quality, and interface design quality) are significant variables affecting customer satisfaction.	The study concludes that trust plays a significant role in determining customer satisfaction with mobile banking in Korea. System quality and information quality strongly impact trust and satisfaction, while interface design quality influences trust but does not directly impact satisfaction. The findings suggest that mobile banking providers should enhance system stability, accuracy, and information reliability to build customer trust and satisfaction. The study also highlights the need for further research on mobile banking experiences in different cultural and technological contexts.
International Journal of Information Management. [52]	Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model.	The study's primary aim is to explore and clarify the factors influencing the use of mobile banking among Saudi Users.	The study measured constructs from the UTAUT2 and DandM success models, focusing on system, service, and information quality. A seven-point Likert scale was used. Data were gathered from six major cities in Saudi Arabia to enhance generalizability and cover a broad segment of the Saudi community.	Factors from the UTAUT2 model significantly impacted actual use behavior, with performance expectancy being the strongest predictor.	An integrated model combining UTAUT2 and the IS success model was proposed to cover essential aspects of mobile banking adoption. Data was collected through a self-administered questionnaire from Saudi banking customers in major cities, and SEM was used for analysis. The model explained 62% of the variance in usage behavior and 54% in customer loyalty, indicating strong predictive power. Significant factors affecting usage behavior included performance expectancy, price value, facilitating conditions, hedonic motivation, habit system quality, and service quality. In contrast, effort expectancy, social influence, and information quality did not show a significant effect. A strong relationship was found between actual usage behavior and customer satisfaction.
International Journal of Information Management. [58]	How perceived value drives the use of mobile financial services apps.	The study explores how perceived value (PV) influences mobile financial services applications (MFSAs) use.	The study involved mobile banking users (N=992) and m-wallet users (N=524). This approach allowed for a comprehensive analysis of different types of mobile financial service applications (MFSAs) in Finland. Data were collected through a survey conducted over six weeks during the summer, resulting in 1516 valid responses.	The study identified self-congruence (SC) and new product novelty (NPN) as the primary drivers of perceived value in the context of mobile financial service applications (MFSAs). The findings revealed that utilitarian value significantly affects the overall satisfaction of drivers among users of MFSAs. Hedonic value was a stronger predictor of commitment than utilitarian value.	The study explored how personal identification, self-congruence, perceived risk, and new product novelty influence perceived value in mobile financial services applications. It emphasized the significance of these factors as banking increasingly shifts to mobile platforms. The findings indicated that utilitarian value is the primary driver of overall satisfaction, while hedonic value is a stronger predictor of commitment. This suggests that both practical and emotional values are essential for enhancing customer relationships with banks.
Information and Computer Security. [59]	Data security and consumer trust in FinTech innovation in Germany.	The study's primary aim is to empirically analyze the key factors that influence the adoption of financial technology innovation in Germany.	Quantitative methodology evaluated customer perceptions regarding data security concerns and trust in adopting FinTech services.	The analysis identified four main factors influencing FinTech adoption: data security (DS), customer trust(CT), user design interface(UI), and value-added (VA).	The study aimed to extend the Technology Acceptance Model (TAM) by incorporating additional factors like data security and trust, which are often overlooked in traditional models.

				<p>The data was collected through a questionnaire survey. The questionnaires were distributed to 700 respondents.</p>	<p>Data security was found to strongly influence customer trust, with a 99% confidence level. The SEM results showed that user design interface and value-added significantly influence customers' intention to adopt FinTech. The findings emphasize that enhancing data security and transparency can significantly increase consumer trust.</p>	<p>Data security issues were found to influence customer trust significantly. The study concluded that enhancing data security measures is vital for increasing consumer confidence in FinTech services.</p>
Behaviour and Information Technology. [60]	Effect of trust level on mobile banking satisfaction: a multi-group analysis of information system success instruments.	The study aims to empirically validate existing theories about mobile banking services by examining the relationships between various factors and customer satisfaction.	A self-administered Korean version questionnaire was used to gather data from undergraduate and graduate students enrolled in mobile commerce and internet business courses. The study employed Partial Least Squares(PLS) for data analysis.		<p>The study found that trust significantly moderates the relationship between system quality, information quality, and customer satisfaction. Customer Satisfaction was influenced by both the quality of the system and the quality of the information provided. The results indicated that higher system quality and better information quality increase customer satisfaction, mainly when trust in the system is high.</p>	<p>The study successfully demonstrated that trust in mobile banking significantly influences customer satisfaction. It confirmed that trust moderates system quality, information quality, and customer satisfaction, supporting the existing customer satisfaction model. The findings emphasized that system and information quality are critical to customer satisfaction. Trust is crucial in how these quality factors impact satisfaction levels, indicating that higher trust leads to better customer experiences. The study highlighted that trust in new systems has a significant moderating effect, suggesting that users may need time to build confidence in new mobile banking platforms. This finding is essential for understanding user behavior when adopting new technologies.</p>

Source: VOSviewer Software

4 Practical Recommendations

Customers should enhance their awareness of mobile banking security to prevent fraud and unauthorized access. Regularly updating mobile banking apps ensures security and functionality. Using strong passwords and multi-factor authentication adds an extra layer of protection. Verifying transaction details before confirming payments helps avoid errors, and reporting suspicious activities immediately to the bank ensures a quick resolution. Banks must improve user experience by making mobile banking interfaces more intuitive and accessible. Strengthening cybersecurity measures protects customer data and prevents cyber threats. Offering financial literacy programs educates customers on mobile banking benefits and risks. Expanding mobile banking services to rural and underserved areas promotes financial inclusion. Ensuring 24/7 customer support helps users with any banking issues or concerns. Governments should implement strict regulations to safeguard the security and privacy of mobile banking transactions. Promoting policies encouraging financial inclusion through digital banking services helps bridge economic gaps. Supporting public awareness campaigns increases trust in mobile banking. Collaborating with banks to establish cybersecurity frameworks protects digital transactions. Incentivizing banks to develop secure and accessible mobile banking platforms ensures broader adoption. Policymakers need to develop policies supporting mobile banking innovation while maintaining security standards. Encouraging competition among banks improves service quality and reduces transaction costs. Establishing guidelines for consumer protection in digital banking ensures that user rights are safeguarded. Supporting research and development in fintech enhances mobile banking solutions. Monitoring the adoption of mobile banking and making data-driven policy adjustments keeps regulations relevant and effective.

5 Conclusion

This study thoroughly examines mobile banking services and customer satisfaction using bibliometric and content analysis, yielding significant insights into their development, applications, and prospective future. By analyzing publication trends, leading contributors, and the intellectual themes shaping this discipline using Scopus data from 2003 to 2025, this analysis demonstrates how research on mobile banking has grown substantially since 2015, with marked increases in 2019, 2022, and 2024. This growth underscores the rising importance of digital financial services in the global economy. India, Indonesia, Saudi Arabia, and the United States emerged as the leading contributors, with institutions such as Universiti Tun Hussein Onn Malaysia and King Abdulaziz University, and journals like the International Journal of Bank Marketing and the International Journal of Mobile Communications, playing key roles in advancing this field. Influential authors, including Lee, Chung, Thakur, and Karjaluoto, significantly shaped the intellectual foundation of the domain. Network analysis revealed customer satisfaction, mobile banking, trust, and

service quality as central themes, while co-authorship patterns highlighted collaborations across countries such as Saudi Arabia, China, the UK, and the USA, with India showing notable research growth. Bibliographic coupling further confirmed that trust, usability, and service quality are critical factors driving mobile banking adoption. In addition to its scholarly contributions, this study offers practical implications for multiple stakeholders. For banks, the results highlight the need to strengthen security mechanisms, improve user-friendly interfaces, and personalize digital services to foster trust and enhance customer loyalty. Policymakers can use these findings to design regulatory frameworks that safeguard customer data, promote financial inclusion, and encourage innovation while maintaining consumer protection standards. Expanding mobile banking access to underserved and rural populations can help reduce economic inequalities and support inclusive growth. Governments and regulators can also collaborate with banks to establish robust cybersecurity frameworks and raise public awareness about safe mobile banking practices. For customers, adopting security measures such as strong passwords, multi-factor authentication, and regular updates can improve both safety and satisfaction when using mobile platforms. Looking ahead, future research should concentrate on enhancing security mechanisms and trust-building strategies, investigating the role of artificial intelligence and fintech in creating personalized banking experiences, conducting comparative analyses of regulations and consumer protection policies across countries, and exploring how mobile banking can expand financial accessibility in underserved areas.

6 Limitations and Future Research Directions

This study has multiple limitations that may affect the generalizability of its results.

1- Limitations of Scopus Database: We acknowledge that exclusive reliance on Scopus may omit pertinent studies from alternative databases, like Web of Science and Google Scholar. This decision, albeit guaranteeing high-quality peer-reviewed sources, may induce selection bias. Future studies could integrate multiple databases to offer a more thorough analysis of mobile banking service quality and consumer satisfaction.

2- Exclusion of Non-English Publications: We recognize that restricting the study to English-language journals may exclude significant research from non-English-speaking areas. Subsequent research should incorporate multilingual sources to provide a more comprehensive global perspective on the effects of mobile banking services and consumer satisfaction.

3- Restricted Range of Source Categories: The omission of books, book chapters, and review articles may have limited the comprehensiveness of our findings. Future research should encompass a wider array of academic and institutional sources to obtain more profound insights into mobile banking service quality and customer satisfaction.

Author Contributions

Formal analysis and writing of the manuscript, conceptualization, data curation: R. S., A. Z., I. L., and S. H.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

References

- [1] M. Arcand, S. PromTep, I. Brun, and L. Rajaobelina, "Mobile banking service quality and customer relationships," *Int. J. Bank Mark.*, vol. 35, no. 7, pp. 1068–1089, 2017. <https://doi.org/10.1108/IJBM-10-2015-0150>
- [2] S. Al-Otaibi, N. R. Aljohani, M. R. Hoque, and F. S. Alotaibi, "The satisfaction of saudi customers toward mobile banking in Saudi Arabia and the United Kingdom," *J. Glob. Inf. Manag.*, vol. 26, no. 1, pp. 109–126, 2018. <https://doi.org/10.4018/JGIM.2018010105>
- [3] H.-F. Lin, "Determining the relative importance of mobile banking quality factors," *Comput. Stand. Interfaces*, vol. 35, no. 2, pp. 195–204, 2013. <https://doi.org/10.1016/j.csi.2012.07.003>
- [4] D. Suhartanto, D. Dean, T. A. T. Ismail, and R. Sundari, "Mobile banking adoption in Islamic banks: Integrating tam model and religiosity-intention model," *J. Islam. Mark.*, vol. 11, no. 6, pp. 1407–1420, 2020. <https://doi.org/10.1108/JIMA-05-2019-0096>
- [5] O. Bouhlel and M. N. Mzoughi, "An investigation of users' continuance intention toward mobile banking applications," *Int. J. Bus.*, vol. 29, no. 1, pp. 1–20, 2024. [https://doi.org/10.55802/IJB.029\(1\).005](https://doi.org/10.55802/IJB.029(1).005)
- [6] A. P. Lestari, Y. Fernando, R. B. Ikhsan, and I. S. Wahyuni-Td, "A direct path modeling of mobile banking systems on user satisfaction," in *2022 IEEE 8th International Conference on Computing, Engineering and Design (ICCED)*, 2022, pp. 1–6. <https://doi.org/10.1109/ICCED56140.2022.10010693>

- [7] H. V. Nguyen, T. D. Vu, B. K. Nguyen, T. M. N. Nguyen, B. Do, and N. Nguyen, "Evaluating the impact of e-service quality on customer intention to use video teller machine services," *J. Open Innov. Technol. Mark. Complex.*, vol. 8, no. 3, p. 167, 2022. <https://doi.org/10.3390/joitmc8030167>
- [8] M. A. Almaiah, S. Al-Otaibi, R. Shishakly, L. Hassan, A. Lutfi, M. Alrawad, M. Qatawneh, and O. A. Alghanam, "Investigating the role of perceived risk, perceived security and perceived trust on smart m-banking application using SEM," *Sustainability*, vol. 15, no. 13, p. 9908, 2023. <https://doi.org/10.3390/su15139908>
- [9] M. Jun and S. Palacios, "Examining the key dimensions of mobile banking service quality: An exploratory study," *Int. J. Bank Mark.*, vol. 34, no. 3, pp. 307–326, 2016. <https://doi.org/10.1108/IJBM-01-2015-0015>
- [10] R. B. Mostafa, "Mobile banking service quality: A new avenue for customer value co-creation," *Int. J. Bank Mark.*, vol. 38, no. 5, pp. 1107–1132, 2020. <https://doi.org/10.1108/IJBM-11-2019-0421>
- [11] A. Hussain, A. Hannan, and M. Shafiq, "Exploring mobile banking service quality dimensions in Pakistan: A text mining approach," *Int. J. Bank Mark.*, vol. 41, no. 3, pp. 622–644, 2023. <https://doi.org/10.1108/IJBM-08-2022-0379>
- [12] A. A. Alsmadi, A. Shuhaiber, L. N. Alhawamdeh, R. Alghazzawi, and M. Al-Okaily, "Twenty years of mobile banking services development and sustainability: A bibliometric analysis overview (2000–2020)," *Sustainability*, vol. 14, no. 17, p. 10630, 2022. <https://doi.org/10.3390/su141710630>
- [13] O. V. Kirillova, "Scopus database as a source of representing bulgarian science to the international academic community: The present and future prospects," in *Digital Presentation and Preservation of Cultural and Scientific Heritage*, 2017, pp. 63–72. <https://doi.org/10.55630/dipp.2017.7.6>
- [14] L. S. Lau, K. J. Yii, C. F. Ng, Y. L. Tan, and T. H. Yiew, "Environmental kuznets curve (EKC) hypothesis: A bibliometric review of the last three decades," *Energy Environ.*, p. 0958305X231177734, 2023. <https://doi.org/10.1177/0958305X231177734>
- [15] N. J. Van Eck and L. Waltman, "Software survey: VOSviewer, a computer program for bibliometric mapping," *Scientometrics*, vol. 84, no. 2, pp. 523–538, 2010. <https://doi.org/10.1007/s11192-009-0146-3>
- [16] A. Kemeç and A. T. Altınay, "Sustainable energy research trend: A bibliometric analysis using VOSviewer, RStudio Bibliometrix, and CiteSpace software tools," *Sustainability*, vol. 15, no. 4, p. 3618, 2023. <https://doi.org/10.3390/su15043618>
- [17] A. Thakuria, I. Chakraborty, and D. Deka, "A bibliometric review on serendipity literature available in Web of Science database using histcite and biblioshiny," *Inf. Discov. Deliv.*, vol. 52, no. 2, pp. 129–142, 2024. <https://doi.org/10.3390/su15043618>
- [18] E. A. Abafe, Y. T. Bahta, and H. Jordaan, "Exploring biblioshiny for historical assessment of global research on sustainable use of water in agriculture," *Sustainability*, vol. 14, no. 17, p. 10651, 2022. <https://doi.org/10.3390/su141710651>
- [19] M. Gupta and K. Bhatt, "A multidimensional measure of system quality – An empirical study in context of mobile banking apps in india," *Int. J. Bus. Inf. Syst.*, vol. 38, no. 1, pp. 1–25, 2021. <https://doi.org/10.1504/IJBIS.2021.118636>
- [20] M. P. Nguyen and A. Phan, "Customer's satisfaction about mobile banking distribution channel in Vietnamese commercial banks," *J. Distrib. Sci.*, vol. 20, no. 8, pp. 69–78, 2022. <https://doi.org/10.15722/jds.20.08.202208.69>
- [21] A. A. Shaikh and H. Karjaluo, "Mobile banking adoption: A literature review," *Telemat. Inform.*, vol. 32, no. 1, pp. 129–142, 2015. <https://doi.org/10.1016/j.tele.2014.05.003>
- [22] M. Suoranta and M. Mattila, "Mobile banking and consumer behaviour: New insights into the diffusion pattern," *J. Financ. Serv. Mark.*, vol. 8, no. 4, pp. 354–366, 2004. <https://doi.org/10.1057/palgrave.fsm.4770132>
- [23] S. Yap, H. S. Lee, P. X. Liew, W. M. Har, and K. S. Kuang, "Achieving sustainable development goals through digitalization of financial inclusion: Evidence from developed countries," in *2023 IEEE 11th Conference on Systems, Process and Control (ICSPC)*, 2023, pp. 1–6. <https://doi.org/10.1109/ICSPC59664.2023.10420025>
- [24] S. Shi, "Customer relationship and sales," *J. Econ. Theory*, vol. 166, pp. 230–260, 2016. <https://doi.org/10.1016/j.jet.2016.09.012>
- [25] X. Y. Leung, J. Sun, and B. Bai, "Bibliometrics of social media research: A co-citation and co-word analysis," *Int. J. Hosp. Manag.*, vol. 66, pp. 89–101, 2017. <https://doi.org/10.1016/j.ijhm.2017.06.012>
- [26] Á. J. Rojas-Lamorena, S. Del Barrio-García, and J. M. Alcántara-Pilar, "A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling," *J. Bus. Res.*, vol. 139, pp. 1067–1079, 2022. <https://doi.org/10.1016/j.jbusres.2021.10.025>
- [27] H. Hamidi and M. Safareeyeh, "A model to analyze the effect of mobile banking adoption on customer interaction and satisfaction: A case study of m-banking in Iran," *Telemat. Inform.*, vol. 38, pp. 166–181, 2019. <https://doi.org/10.1016/j.tele.2018.09.008>

- [28] R. F. Malaquias and Y. Hwang, "An empirical study on trust in mobile banking: A developing country perspective," *Comput. Hum. Behav.*, vol. 54, pp. 453–461, 2016. <https://doi.org/10.1016/j.chb.2015.08.039>
- [29] A. Juwaini, G. Chidir, D. Novitasari, J. Iskandar, D. Hutagalung, T. Pramono, A. Maulana, K. Safitri, M. Fahlevi, A. B. Sulisty, and A. Purwanto, "The role of customer e-trust, customer e-service quality and customer e-satisfaction on customer e-loyalty," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 435–442, 2022. <https://doi.org/10.5267/j.ijdns.2021.12.006>
- [30] C. Tam and T. Oliveira, "Literature review of mobile banking and individual performance," *Int. J. Bank Mark.*, vol. 35, no. 7, pp. 1044–1067, 2017. <https://doi.org/10.1108/IJBM-09-2015-0143>
- [31] M. Marinč, "Banks and information technology: Marketability vs. relationships," *Electron. Commer. Res.*, vol. 13, no. 1, pp. 71–101, 2013. <https://doi.org/10.1007/s10660-013-9107-2>
- [32] G. Baptista and T. Oliveira, "Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators," *Comput. Hum. Behav.*, vol. 50, pp. 418–430, 2015. <https://doi.org/10.1016/j.chb.2015.04.024>
- [33] X. J. Mamakou, P. Zaharias, and M. Milesi, "Measuring customer satisfaction in electronic commerce: The impact of e-service quality and user experience," *Int. J. Qual. Reliab. Manag.*, vol. 41, no. 3, pp. 801–821, 2024. <https://doi.org/10.1108/IJQRM-07-2021-0215>
- [34] H. H. Chang, Y. H. Wang, and W. Y. Yang, "The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value," *Total Qual. Manag. Bus. Excell.*, vol. 20, no. 4, pp. 423–443, 2009. <https://doi.org/10.1080/14783360902781923>
- [35] M. Mujinga, M. M. Eloff, and J. H. Kroeze, "System usability scale evaluation of online banking services: A south african study," *S. Afr. J. Sci.*, vol. 114, no. 3-4, pp. 1–9, 2018. <https://doi.org/10.17159/sajs.2018/20170065>
- [36] A. Mobarek, "E-banking practices and customer satisfaction - A case study in Botswana," *SSRN Electron. J.*, 2011. <https://doi.org/10.2139/ssrn.1011112>
- [37] M. A. Khan and H. A. Alhumoudi, "Performance of e-banking and the mediating effect of customer satisfaction: A structural equation model approach," *Sustainability*, vol. 14, no. 12, p. 7224, 2022. <https://doi.org/10.3390/su14127224>
- [38] C. W. Lin, "User purpose analysis for mobile banking service," *J. Test. Eval.*, vol. 43, no. 3, pp. 1–10, 2015. <https://doi.org/10.1520/JTE20130055>
- [39] P. Van Der Boor, P. Oliveira, and F. Veloso, "Users as innovators in developing countries: The global sources of innovation and diffusion in mobile banking services," *Res. Policy*, vol. 43, no. 9, pp. 1594–1607, 2014. <https://doi.org/10.1016/j.respol.2014.05.003>
- [40] R. Hernández-Murillo, G. Llobet, and R. Fuentes, "Strategic online banking adoption," *J. Bank. Financ.*, vol. 34, no. 7, pp. 1650–1663, 2010. <https://doi.org/10.1016/j.jbankfin.2010.03.011>
- [41] M. Mavri and G. Ioannou, "Consumers' perspectives on online banking services," *Int. J. Consum. Stud.*, vol. 30, no. 6, pp. 552–560, 2006. <https://doi.org/10.1111/j.1470-6431.2006.00541.x>
- [42] A. G. Khan, R. P. Lima, and M. S. Mahmud, "Understanding the service quality and customer satisfaction of mobile banking in Bangladesh: Using a structural equation model," *Glob. Bus. Rev.*, vol. 22, no. 1, pp. 151–170, 2021. <https://doi.org/10.1177/0972150918795551>
- [43] N. Souiden, R. Ladhari, and W. Chaouali, "Mobile banking adoption: A systematic review," *Int. J. Bank Mark.*, vol. 39, no. 2, pp. 214–241, 2021. <https://doi.org/10.1108/IJBM-04-2020-0182>
- [44] S. D. Ramadhanty and T. Faturohman, "Satisfaction of mobile banking customers in Indonesia," *Int. J. Econ. Policy Emerg. Econ.*, vol. 1, no. 1, pp. 1–15, 2022. <https://doi.org/10.1504/ijepee.2022.10045318>
- [45] D. Chawla and H. Joshi, "Scale development and validation for measuring the adoption of mobile banking services," *Glob. Bus. Rev.*, vol. 20, no. 2, pp. 434–457, 2019. <https://doi.org/10.1177/0972150918825205>
- [46] J. Tan, H.-Z. Fu, and Y.-S. Ho, "A bibliometric analysis of research on proteomics in science citation index expanded," *Scientometrics*, vol. 98, no. 2, pp. 1473–1490, 2014. <https://doi.org/10.1007/s11192-013-1125-2>
- [47] B. Cronin, "Bibliometrics and beyond: Some thoughts on web-based citation analysis," *J. Inf. Sci.*, vol. 27, no. 1, pp. 1–7, 2001. <https://doi.org/10.1177/016555150102700101>
- [48] K. C. Lee and N. Chung, "Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified delone and mclean's model perspective," *Interact. Comput.*, vol. 21, no. 5-6, pp. 385–392, 2009. <https://doi.org/10.1016/j.intcom.2009.06.004>
- [49] R. Thakur, "What keeps mobile banking customers loyal?" *Int. J. Bank Mark.*, vol. 32, no. 7, pp. 628–646, 2014. <https://doi.org/10.1108/IJBM-07-2013-0062>
- [50] P. Kumar, S. Chauhan, S. Kumar, and P. Gupta, "A meta-analysis of satisfaction in mobile banking: A contextual examination," *Int. J. Bank Mark.*, vol. 42, no. 3, pp. 491–517, 2024. <https://doi.org/10.1108/IJBM-04-2023-0236>

- [51] S. Saibaba, "Examining the determinants of mobile banking app continuance intention in India: An extension of the IS success model," *J. Internet Commer.*, vol. 23, no. 1, pp. 1–30, 2024. <https://doi.org/10.1080/15332861.2023.2236428>
- [52] A. M. Baabdullah, A. A. Alalwan, N. P. Rana, H. Kizgin, and P. Patil, "Consumer use of mobile banking (m-banking) in Saudi Arabia: Towards an integrated model," *Int. J. Inf. Manage.*, vol. 44, pp. 38–52, 2019. <https://doi.org/10.1016/j.ijinfomgt.2018.09.002>
- [53] C. H. Sampaio, W. J. Ladeira, and F. D. O. Santini, "Apps for mobile banking and customer satisfaction: A cross-cultural study," *Int. J. Bank Mark.*, vol. 35, no. 7, pp. 1183–1207, 2017. <https://doi.org/10.1108/IJBM-09-2015-0146>
- [54] P. R. Mourao and V. D. Martinho, "Forest entrepreneurship: A bibliometric analysis and a discussion about the co-authorship networks of an emerging scientific field," *J. Clean. Prod.*, vol. 256, p. 120413, 2020. <https://doi.org/10.1016/j.jclepro.2020.120413>
- [55] S. Rovira-Esteva, J. F. Aixelá, and C. Olalla-Soler, "A bibliometric study of co-authorship in translation studies," *Onomazein*, no. 47, pp. 209–237, 2020. <https://doi.org/10.7764/ONOMAZEIN.47.09>
- [56] F. A. F. Ferreira, "Mapping the field of arts-based management: Bibliographic coupling and co-citation analyses," *J. Bus. Res.*, vol. 85, pp. 348–357, 2018. <https://doi.org/10.1016/j.jbusres.2017.03.026>
- [57] F. Most, F. J. Conejo, and L. F. Cunningham, "Bridging past and present entrepreneurial marketing research: A co-citation and bibliographic coupling analysis," *J. Res. Mark. Entrep.*, vol. 20, no. 2, pp. 229–251, 2018. <https://doi.org/10.1108/JRME-11-2017-0049>
- [58] H. Karjaluoto, A. A. Shaikh, H. Saarijärvi, and S. Saraniemi, "How perceived value drives the use of mobile financial services apps," *Int. J. Inf. Manage.*, vol. 47, pp. 252–261, 2019. <https://doi.org/10.1016/j.ijinfomgt.2018.08.014>
- [59] H. Stewart and J. Jürjens, "Data security and consumer trust in FinTech innovation in Germany," *Inf. Comput. Secur.*, vol. 26, no. 1, pp. 109–128, 2018. <https://doi.org/10.1108/ICS-06-2017-0039>
- [60] N. Chung and S. J. Kwon, "Effect of trust level on mobile banking satisfaction: A multi-group analysis of information system success instruments," *Behav. Inf. Technol.*, vol. 28, no. 6, pp. 549–562, 2009. <https://doi.org/10.1080/01449290802506562>