



Mobile Marketing in Banking: A Scientometric and Bibliometric Review

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Abstract: In the banking industry, mobile marketing has become an essential instrument that is transforming financial transactions, client interaction, and service delivery. To investigate research trends, significant contributors, and topic development in mobile marketing within the banking sector, this study does a bibliometric analysis using Biblioshiny in R programming and VOSviewer. The study looks at citation trends, important journals, influential authors, and publication growth using data from top academic databases. The results draw attention to important study topics such as customer experience, digital payment innovations, regulatory obstacles, and the uptake of mobile banking. Co-citation and keyword analysis also highlight new trends, such as mobile banking, information technology, user acceptance and perceived risk. This bibliometric study offers a path for future research on mobile marketing techniques in banking, as well as insightful information for scholars and practitioners.

Keywords: Mobile marketing, Banking sector, Bibliometric analysis, Digital banking, Fintech, Customer engagement, Citation analysis.

I. INTRODUCTION

The rise of mobile technology has transformed many sectors, particularly banking. Mobile marketing, which means using mobile devices for communication, engagement, and serving customers, has become quite popular among banks. Financial institutions are adopting mobile marketing methods to improve customer satisfaction, increase interaction, and effectively advertise their financial products and services. In a world that is becoming more digital, banks are now using mobile marketing as an essential method to connect with customers, improve brand loyalty, and encourage the use of their products. This paper offers a thorough review that examines existing research on mobile marketing in the banking industry through scientometric and bibliometric approaches. The goal is to outline the theoretical framework of this area, pinpoint significant research trends, and point out new topics for future study.

By looking at patterns in publications, networks of citations, and the cooccurrence of keywords, this research delivers important information about how mobile marketing studies have changed and their current condition within the banking field.

As more people use smartphones and mobile apps, the importance of mobile marketing in the banking industry continues to grow. As digital banking and marketing methods change rapidly, there is an increasing amount of academic research focusing on mobile marketing in the banking sector. Scientometric and bibliometric studies provide organized ways to explore research patterns, recognize key players, and showcase significant works in this area. By using these strategies, researchers can gain numerical insights into the progress of mobile marketing in banking, helping both academics and professionals to identify new themes and possible future research paths. This study conducts a scientometric and bibliometric examination to investigate the scholarly conversation about mobile marketing techniques in banking. By looking at the amount, influence, and key themes of academic articles, this research seeks to deliver a strong comprehension of the strategic significance and research path of mobile marketing in the financial services sector. This paper intends to conduct an extensive review using scientometric and bibliometric methods to study mobile marketing within the banking sector by examining literature from primary academic sources. With this strategy, we plan to offer a clear overview of publication patterns, the influence of research, topic developments, and potential areas for future study in this field.

This paper is organized as follows: Section 2 discussed a review of the literature. Section 3 discusses the study's parameters and analytical approach. The analysis's findings are presented and explained in Section 4, and Section 5 ends with recommendations on how to apply this method to identify potential gaps in the corpus of current literature and discuss the novel study subjects.

II. LITERATURE REVIEW

The research examines how Malaysian millennials plan to use mobile banking applications during the COVID19 pandemic. It discovers that factors such as performance expectancy, effort expectancy, trust, and personal innovativeness significantly shape their willingness to adopt these technologies (Rahman et al., 2024). Focusing on privacy and security concerns, the study further looks into what drives consumers to share personal details when using mobile banking. It concludes that users are encouraged to use mobile banking since the advantages perceived outweigh their worries. Financial institutions can enhance trust and adoption by personalizing the user experience based on lifestyle clusters, which alter attitudes toward adopting these services (Lu, 2024). The analysis of BCA Mobile, Livin by Mandiri, and BNI Mobile in Indonesia exposes issues with service quality. It suggests that these services must improve productivity, privacy, system reliability, and compliance to retain their customers (Adiningtyas et al., 2024). Investigating the Technology, Organization, and Environment framework, the study studies how it influences the adoption of Islamic mobile banking in Indonesia, finding that elements such as perceived usefulness, business reputation, and risk greatly impact the Digital Banking Experience (Abdurrahman, 2024). The research delves into how mobile marketing influences the buying behavior of Bottom of the Pyramid (BoP) consumers regarding basic goods. The findings reveal that the quality of service significantly affects trust in mobile marketing, with a positive relationship noted among satisfaction, price sensitivity, and service quality. However, trust and satisfaction do not necessarily affect buying intentions. This research enhances our understanding of the development of mobile marketing in emerging economies (Dlamini et al., 2024). The study focuses on appbased mobile financial services, exploring technology's role in subsistence marketplaces. It suggests that while marketing strategies aimed at transactions may lessen engagement, those that build relationships can enhance it (Ferdous et al., 2024). Applying social constructivism and the elaboration likelihood model, the research investigates consumer perceptions of mobile marketing in luxury fashion, identifying four essential aspects that affect engagement and purchasing behavior (Azemi et al., 2023). The study assesses how mobile marketing strategies influence shopping behaviors at airports. The results indicate that even though mobile marketing reduces browsing time and boosts efficiency, it does not consistently lead to increased spending. Randomly pushed information works effectively for longer visits (Wu & Ma, 2022).

The study finds that factors such as perceived usefulness, ease of use, subjective norms, personal innovativeness, trust, and self-efficacy positively influence adoption intentions among consumers in India, which supports marketing initiatives (Kumar et al., 2020). Researching aspects like mobile convenience, interactivity, and influencer credibility, the study finds that interactivity negatively impacts views toward both social media influencers and products, with men demonstrating stronger connections (Ooi et al., 2023). Factors influencing customer switching behavior in the mobile financial services sector of Bangladesh include high prices, inadequate service quality, reputation issues, inconvenience, and loss of loyalty, according to the study's findings (Ahmed et al., 2025). Utilizing the valence framework and TACT, this research explores factors that affect mobile payment intentions and usage in India. The survey results aid policy development by revealing impacts related to convenience, reflection, and security (Pal et al., 2021). The investigation into how mobile technology influences consumer purchasing stages emphasizes the significance of locationspecific, realtime data and effective management of marketing resources (Baik et al., 2014). The study analyzes the role of international mobile marketing in the process of internationalization, highlighting its important function in recognizing, anticipating, and fulfilling customer needs during the pandemic (FloridoBenitez, 2022). By studying how mobile marketing tools affect dining customers' purchasing choices, the findings indicate that loyalty plays a major role in the effectiveness of these tools (Patsiotis et al., 2020). The research evaluates the adoption of mobile marketing technologies among Nigerian SMEs, employing qualitative interviews and thematic analysis. It uncovers 16 key factors affecting adoption across various levels, resulting in a theoretically rooted framework (Eze et al., 2019). The study identifies three eye movement signals and six layout features that influence aesthetic preferences in mobile marketing, suggesting a set of attributes to optimize interface aesthetics which, in turn, affects visual attention and cognitive responses (Xiao and Wang, 2023). The COVID19 pandemic has demonstrated that mobile marketing has significantly impacted the banking sector. Beyond facilitating daily transactions, mobile banking applications have considerably enhanced key performance indicators such as return on equity and return on assets (Juanda & Kitri, 2024). India is rapidly expanding its range of mobile services, such as voice messaging and Mservices, which offer social benefits in areas like healthcare, agriculture, finance, governance, and education.

To improve customer experiences, the Indian Banking Association invests in technology (Sahoo, 2021). The study proposes a systematic incorporation of electronic quality into digital marketing efforts, revealing a significant relationship between mobile marketing and customer perceptions within Jordanian commercial banks (Daoud et al., 2023).

Objectives Of The Study

- i. To study how research on mobile marketing in the banking industry has grown and changed by looking at publication patterns over the years.
- ii. To find the most impactful research works, which include important authors, journals, institutions, and nations involved in this field.
- iii. To examine the main themes and focus areas of research by analyzing keywords, networks of citations, and patterns of co-authorship.
- iv. To evaluate how new technologies like artificial intelligence, blockchain, and big data influence mobile marketing strategies in the banking sector.

III. METHODOLOGY

The study measured and illustrated the mobile marketing in banking sector using bibliometric analysis, a validated method for the quantitative assessment of scholarly publications in specific disciplines. Using a range of analytical and computational methods, including evaluations of authors, organizations, countries or regions, and journals, this approach examines the characteristics of literature on a certain subject.

Additionally, it predicts future research orientations and indicates research hotspots. The bibliometric analysis presented in this article was conducted using the Biblioshiny tool, developed by Massimo Aria of the Federico II University of Naples. The functionalities of the bibliometrix package are combined with the user-friendly interface of a web application created with the Shiny package environment in this Java application.

IV. RESULT AND ANALYSIS

This sections shows the analysis of bibliometric data with the keyword 'Mobile Marketing' and 'Bank'. This section is organized as main information of data followed by trend of publication, Leading Authors, Organizations and Countries, salient keywords and author's keywords and trend of publication related to citation.

4.1 Main information about the data

A vital component for bibliometric analysis, the information comes from the Web of Science Database. This research primarily focused on a period from 1991 to 2025 to reach its findings. The key terms "Mobile Marketing" and "Bank" were linked together using the "AND" operator, which served as the foundation for the entire evaluation. Only publications in English matched the screening requirements. Our final dataset includes 730 articles, as depicted in figure 1. There were 2101 authors linked to works produced by individual authors, with 99 of these authors being interconnected.



Figure-1: Main information about the data

4.2 Annual Scientific Production

The graph clearly shows that there has been a huge rise in scientific output, particularly since around 2013. This indicates a significant boost in research activity. In the earlier years from 1991 to 2007, the yearly number of articles was relatively low, often below 10. This implies that during that period, scientific production was limited.

However, from 2013 to 2023, there has been a sharp upward trend, reflecting a major increase in scientific productivity. The graph also suggests that 2023 might be a peak year, followed by a slight decline in 2025. This decline could be due to several factors, such as delays in data collection, changes in research focus, or potential limitations on data for the years ahead.

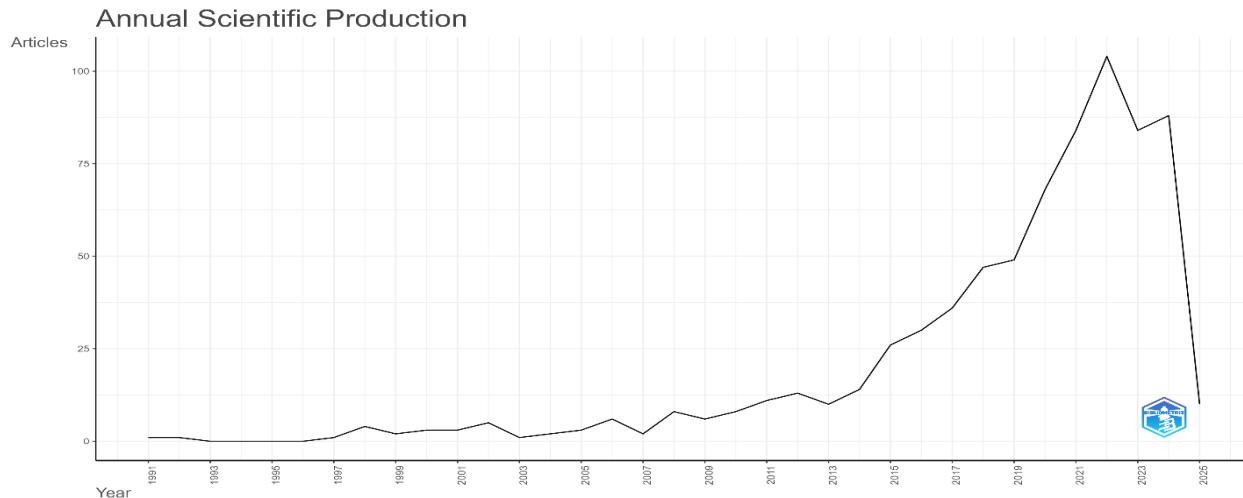


Figure-2: Annual Scientific Production

The 'International Journal of Bank Marketing' leads the way with 155 published articles, highlighting a significant focus on mobile marketing research within the banking sector. Other prominent journals, such as the Journal of Sustainability, Technological Forecasting and Social Change, Journal of Retailing and Consumer Services, and International Journal of Mobile Communications, also cover this important area.

For researchers seeking comprehensive insights and evaluations on mobile marketing productivity in banking, these papers serve as valuable resources. The growth of mobile marketing in banking is promising, as it offers data that can assist banks, stakeholders, and policymakers in creating effective strategies.

**Table-1:
Top 10 Leading Journals**

Sources	Articles
International Journal of Bank Marketing	155
Sustainability	25
Technological Forecasting and Social Change	16
Journal of Retailing and Consumer Services	15
International Journal of Mobile Communications	14
Asia Pacific Journal of Marketing and Logistics	11
International Journal of Information Management	11
Telecommunications Policy	11
Wireless Communications & Mobile Computing	10
Plos One	8

4.3 Leading Authors, Organizations and Countries

The goal was to showcase the most famous writers in mobile marketing for banking by using Biblioshiny for initial analysis. Figure4 displays the top ten authors who have significantly impacted mobile marketing in the banking industry.

LiebanaCabanillas and Shaikh, with five articles, are seen as the leading authors. Asongu SA and Rana NP follow closely in second place, each having published nine papers.

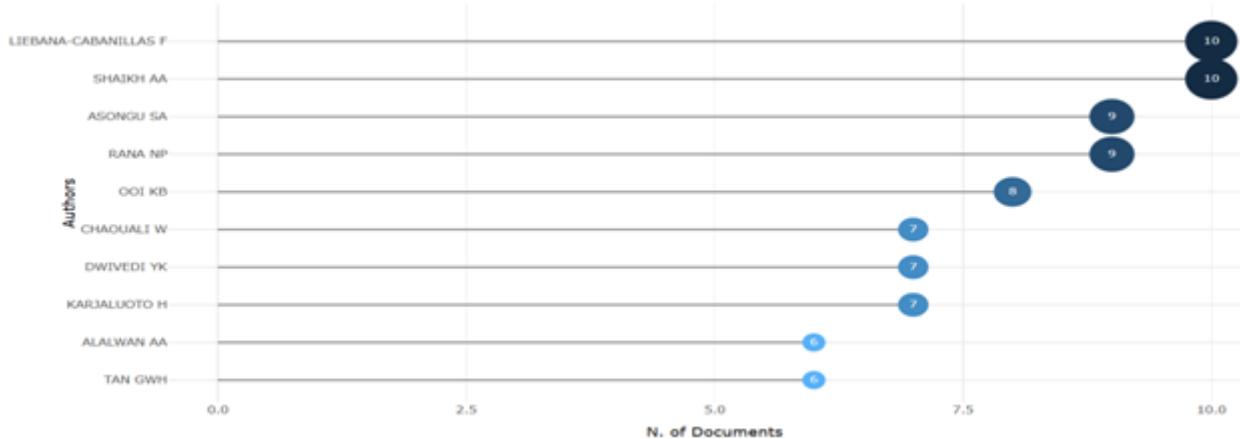


Figure-3: The most relevant authors

Figure-4 presents the findings from a study examining the key organization that aids mobile marketing research specifically in the banking sector. The World Bank stands out as one of the leading institutions, having published 25 articles in this area.

Corresponding to these findings, Figure6 details the nations that have contributed the most research on this topic, as per VOSviewer, with the United States at the forefront, having published 137 studies (see Table2). The top five nations also consist of India, China, the United Kingdom, and Malaysia.

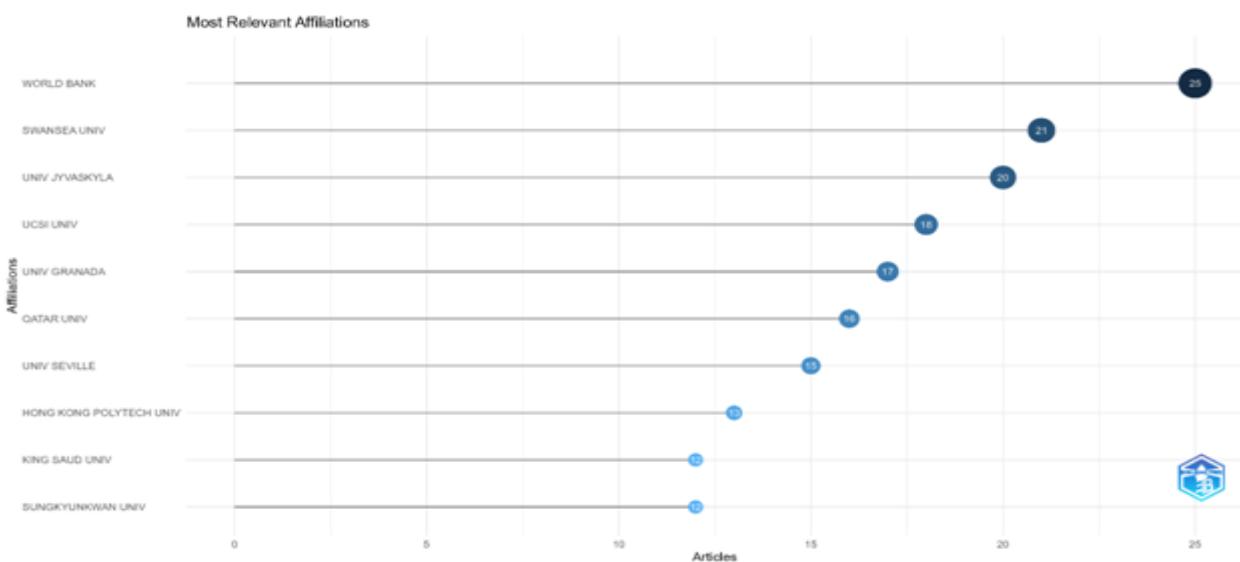


Figure-4: The most relevant organizations (Biblioshiny)

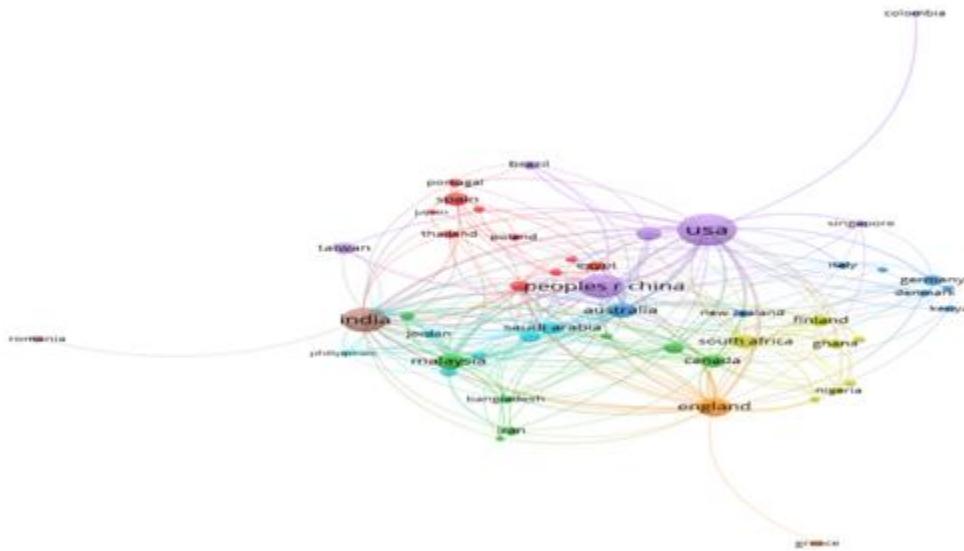


Figure-5: Co-authorship Countries (VOSviewer)

Table-2:
Top 10 Author's Countries

Country Name	No. of Documents	Citations	Total Link Strength
USA	174	8575	137
India	100	3984	98
Peoples R China	98	2005	96
England	61	2450	85
Malaysia	41	2159	65
Australia	39	2114	56
Saudi Arabia	30	1116	50
Pakistan	24	590	43
Vietnam	19	432	37
Canada	29	899	36

4.4 Salient Keywords and Authors Keywords

The goal of this secondary bibliometric study is to identify key themes that frequently appear in Mobile Marketing research related to banks. This method employs VOSviewer to analyze how often keywords occur together in the literature, examining each keyword from all articles and organizing them into groups based on their frequency and the connections between the terms. Figures 7 and 8 present the bibliometric map resulting from this examination.

This visualization helps to clarify the connections among different topics and concepts in the Mobile Marketing literature for banks by emphasizing the most commonly mentioned words and themes. The displayed clusters are significant to both the banking sector and mobile marketing, demonstrating a strong link between them. The primary term in the largest cluster is 'mobile banking,' which encompasses several related keywords like adoption, information technology, user acceptance, and trust.

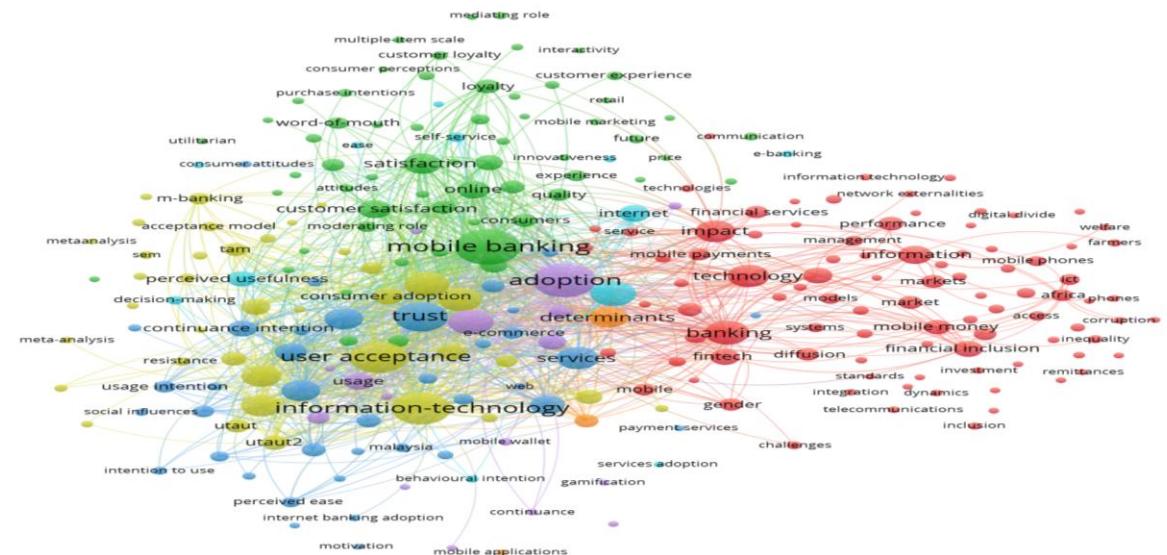


Figure-6: Co-occurrence all keywords (VOSviewer)



Figure-7: Word Cloud (Biblioshiny)

A fascinating element of the research involves examining the keywords chosen by authors, which reflect the concepts frequently found in their abstracts. The analysis was performed using Rstudio's 'Biblioshiny' feature. In Figure-8, a graphical representation of bibliometric mapping is shown, centering on the key terms that authors predominantly use in their abstracts. One purpose of these keywords is to enhance the discoverability of research articles in database searches, based on the content of their abstracts.

Notably, the most frequently used keywords are 'Adoption' (7%), 'Information technology' (6%), 'Acceptance' (5%), along with 'user acceptance', 'mobile marketing', and 'model' (4% each). This arrangement of keywords underscores their importance within the scope of mobile marketing and highlights their role in understanding the central themes and topics prevalent in scholarly writing.



Figure-8: Tree Map

4.5 Thematic Analysis

This analysis led to the identification of key themes by clustering author keywords and exploring their interconnections. Various factors such as density and centrality help define these themes, with the horizontal axis representing centrality and the vertical axis indicating density. Centrality refers to how connected nodes are, while density focuses on the relationship between different themes. Both attributes evaluate the significance and development of various topics. The location of nodes and their centrality grow as they have more connections with other nodes within a thematic network.

The thematic map for Mobile Marketing in the banking sector is divided into four quadrants, labeled Q1 through Q4. The main theme appears in Q1, while Q2 features welldeveloped and specialized themes that relate to the central topic. Foundational and crosscutting themes are located in Q4, while Q3 consists of themes that are fading or just starting to emerge. Themes that drive the discussion appear in the upper left quadrant, while those that underlie it are in the lower right quadrant. Highly specialized themes occupy the upper left quadrant, and themes that are emerging or fading are found in the lower left quadrant.

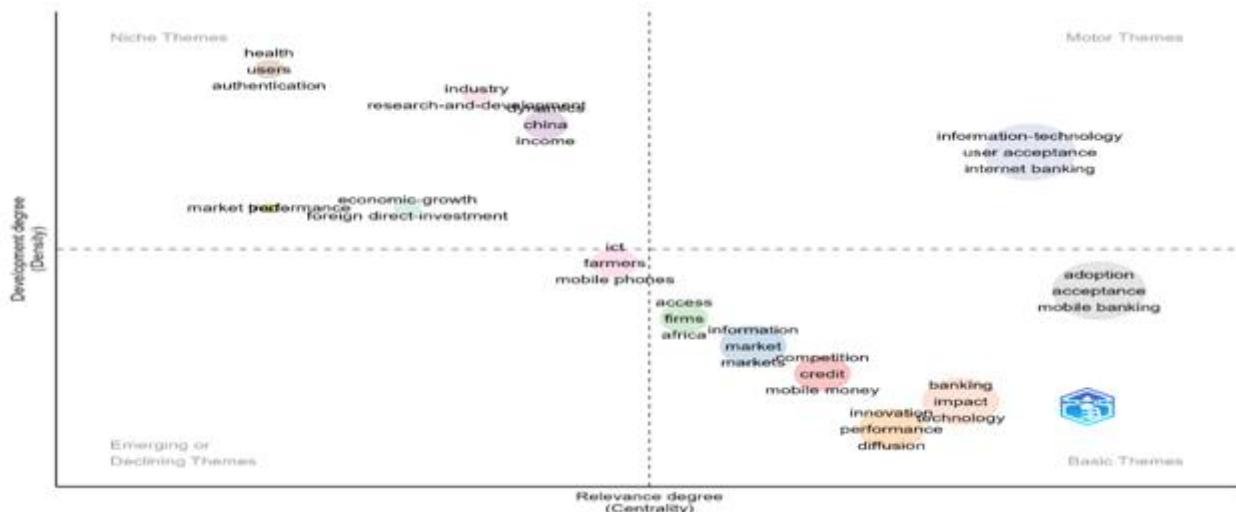


Figure-9: Thematic Map

V. CONCLUSION

This research presents a detailed analysis using scientometric and bibliometric methods of mobile marketing within the banking industry, highlighting important trends, significant research contributions, and new themes. The results show that mobile marketing has become vital for banks to improve customer interaction, service effectiveness, and competitive edge. The analysis points out a consistent rise in academic interest, with meaningful contributions from various geographical locations and institutions. The study also reveals key themes, including the adoption of mobile banking, trust among customers, digital changes, and the influence of new technologies like artificial intelligence and blockchain on mobile financial services. Additionally, it emphasizes the significance of personalization, security, and compliance with regulations in developing successful mobile marketing strategies. Although there has been progress, there are still shortcomings in areas like cultural comparisons, the effects of mobile marketing on financial accessibility, and ethical issues related to data privacy. Future studies should investigate these aspects more thoroughly, using interdisciplinary methods to enhance understanding. In summary, this review acts as an important resource for scholars, industry professionals, and decisionmakers by charting the development of mobile marketing in banking and offering insights into its prospective path.

REFERENCES

- [1] Abdurrahman, A. (2024), 'Investigating the impact of digital business ecosystem in enhancing Islamic mobile banking adoption through the TOE framework', *Digital Business*, 4(2), <https://doi.org/10.1016/j.digbus.2024.100096>
- [2] Adiningtyas, H. &Auliani, A. S. (2024), 'Sentiment analysis for mobile banking service quality measurement', *Procedia Computer Science*, 234, pp-40-50, <https://doi.org/10.1016/j.procs.2024.02.150>
- [3] Ahmed, I., Masud, A. A., Hossain, M. A. & Hossain, M. A. (2025), 'Understanding customer switching behavior: An empirical examination of mobile financial services', *Social Sciences & Humanities Open*, 11, <https://doi.org/10.1016/j.ssho.2024.101270>
- [4] Aria, M. & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), pp. 959-975, Elsevier
- [5] Azemi, Y., Ozuem, W., Wiid, R. & Hobson, A. (2022), 'Luxury fashion brand customers' perceptions of mobile marketing: Evidence of multiple communications and marketing channels', *Journal of Retailing and Consumer Services*, 66, <https://doi.org/10.1016/j.jretconser.2022.102944>
- [6] Baik, A., Venkatesan, R. & Farris, P. (2014), 'Mobile Shopper Marketing: Assessing the Impact of Mobile Technology on Consumer Path to Purchase', *Shopper Marketing and the Role of In-Store Marketing (Review of Marketing Research, Vol. 11)*, Emerald Group Publishing Limited, Leeds, pp. 1-25. <https://doi.org/10.1108/S1548-643520140000011001>
- [7] Daoud, M. K., Alqudah, D., Al-Qeed, M., Al Qaied, B. A., Ahmad, A. Y. A. (2023), 'The Relationship Between Mobile Marketing and Customer Perceptions in Jordanian Commercial Banks: The Electronic Quality as A Mediator Variable', *International Journal of Membrane Science and Technology*, 10(2), <https://doi.org/10.15379/ijmst.v10i2.1469>
- [8] Dlamini, S., Mvula, W. & Donga, G. (2024), 'The effect of mobile marketing antecedents on the purchase intention of staple products: A case of the bottom of the pyramid (BoP) market segment in Khayelitsha, South Africa', *Helijon*, 10, <https://doi.org/10.1016/j.helijon.2024.e32066>
- [9] Eze, S.C., Chinedu-Eze, V.C., Bello, A.O., Inegbedion, H., Nwanji, T. and Asamu, F. (2019), "Mobile marketing technology adoption in service SMEs: a multi-perspective framework", *Journal of Science and Technology Policy Management*, Vol. 10 No. 3, pp. 569-596. <https://doi.org/10.1108/JSTPM-11-2018-0105>
- [10] Ferdous, A. S., Akareem, H. S., Viswanathan, M., Hollebeek, L. D. & Ringer, A. (2024), 'Boosting app-based mobile financial services engagement in B2B subsistence marketplaces: The roles of marketing strategy and app design', *Industrial Marketing Management*, 119, <https://doi.org/10.1016/j.indmarman.2024.04.014>
- [11] Florido-Benítez, L. (2022), 'International mobile marketing: a satisfactory concept for companies and users in times of pandemic', *Benchmarking: An International Journal*, Vol. 29 No. 6, pp. 1826-1856. <https://doi.org/10.1108/BIJ-06-2021-0303>
- [12] Juanda, K. Y. A. & Kitri, M. L. (2024), 'Impact of Mobile Banking Usage Intensity On Idx-Listed Banks' Performance: Analysis of Pre-And During-Post Covid-19 Periods', *Journal Integration of Social Studies and Business Development*, 2(2), <https://doi.org/10.58229/jissbd.v2i2.254>
- [13] Kumar, A., Dhingra, S., Batra, V. & Purohit, H. (2020), 'A Framework of Mobile Banking Adoption in India', *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2), <https://doi.org/10.3390/joitmc6020040>
- [14] Lu, C. (2024), 'The moderating role of e-lifestyle on disclosure intention in mobile banking: A privacy calculus perspective', *Electronic Commerce Research and Applications*, 64, <https://doi.org/10.1016/j.elerap.2024.101374>
- [15] Ooi, K., Lee, V., Hew, J., Leong, L., Tan, G. W. & Lim, A. (2023), 'Social media influencers: An effective marketing approach?', *Journal of Business Research*, 160, <https://doi.org/10.1016/j.jbusres.2023.113773>
- [16] Pal, A., Herath, T., De, R. & Rao, H. R. (2021), 'Why do people use mobile payment technologies and why would they continue? An examination and implications from India', *Research policy*, 50, <https://doi.org/10.1016/j.respol.2021.104228>
- [17] Patsiotis, A., Atik, M. and Perrea, T. (2020), 'The influence of m-marketing tools on consumer buying process: evidence from the dining sector', *International Journal of Retail & Distribution Management*, Vol. 48 No. 10, pp. 1037-1056. <https://doi.org/10.1108/IJRDM-06-2018-0109>
- [18] Rahman, M., Yee, H. P., Masud, M. A. K. and Uzir, M. U. H. (2024), 'Examining the dynamics of mobile banking app. Adoption during the COVID-19 pandemic: A digital shift in the crisis', *Digital Business*, 4(2), <https://doi.org/10.1016/j.digbus.2024.100088>
- [19] Sahoo, P. (2021), 'Mobile Marketing and Banking Services in India', *Journal of International Business Research*, Print ISSN: 1544-0222; Online ISSN: 1544-0230



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[20] Van Eck, N. J. Waltman, L., 2010. Software survey: VOSviewer, a computer program for bibliometric mapping, *Scientometrics* 84, 523-538. <https://doi.org/10.1007/s11192-009-0146-3> 2019 IFAC MIM, Berlin, Germany, August 28-30, 20192892

[21] Wu, C. & Ma, N. K. (2022), 'The impact of customised mobile marketing on passenger shopping behaviour in the airport terminal', *Journal of Retailing and Consumer Services*, 66, <https://doi.org/10.1016/j.jretconser.2022.102941>

[22] Xiao, L. and Wang, S. (2023), "Mobile marketing interface layout attributes that affect user aesthetic preference: an eye-tracking study", *Asia Pacific Journal of Marketing and Logistics*, Vol. 35 No. 2, pp. 472-492. <https://doi.org/10.1108/APJML-07-2021-0477>