**Bibliometric Analysis of Mobile Banking Adoption: A Comprehensive Review**

T. Raja Rupa, Research Scholar, Department of Banking Management, Alagappa University, Karaikudi.

Emailid: rajarupaphd@alagappauniversity.ac.in

Dr. G. Parimalarani, Professor, Department of Banking Management, Alagappa University, Karaikudi

Emailid: parimalaranig@alagappauniversity.ac.in

**Abstract:**

The aim of this paper is to study the bibliometric analysis done on the mobile banking domain. So with this aim a paper published by (Alsmadi et al., 2022) titled “ Twenty Years of Mobile Banking Services Development and Sustainability: A Bibliometric Analysis Overview (2000–2020)”. In their abstract the authors clearly explained that they have examined the keywords associated with mobile banking (often referred to as m-banking) difficulties by concentrating on the period between 2000 and 2020, when the first publication on the topic was found in the Scopus database. The authors investigated and evaluated  the Scopus database, and found 1206 research papers. To get the results, bibliometric and content analysis were done using Excel and VOS viewer software. Furthermore, the results of their study shows that global production growth and universal tendencies brought to a number of modifications, with mobile telecommunication systems being the most frequently mentioned topic related to m-banking.

**Key words:** Mobile Banking, Bibliometric Analysis and Content analysis.

**Introduction:**

The following sentences was a gist of the introduction given on the bibliometric paper: Mobile banking (m-banking) has transformed retail banking by allowing customers to perform financial transactions remotely using their mobile devices. In contrast to internet banking, m-banking utilizes apps designed by service providers and provides benefits such as tailored services, savings in time and costs for customers, and improved operational efficiency for banks. It facilitates activities like fund transfers, bill payments, investment management, and more, while also decreasing expenses and broadening the market reach for financial institutions. Nevertheless, despite its potential, the uptake of m-banking is still limited, particularly in developing areas, due to issues like low digital literacy and a lack of familiarity with mobile commerce.

 The existing bibliometric research paper explores significant terms and developments in mobile banking (m-banking) from 2000 to 2020 using bibliometric analysis, filling a void in existing studies. It offers insights into the changing perceptions of m-banking and its adoption over the years, making it a valuable resource for scholars and decision-makers. The paper is organized into five sections, including an introduction that outlines its focus and credibility, a theoretical background providing data on m-banking and contributions from notable authors, objectives and methodology describing the research approach, results from the bibliometric analysis, and a conclusion that summarizes the study's findings. By examining the transformations in the field, the paper highlighted the necessity of remaining updated on advancements in m-banking for both academic and managerial purposes.

**Review of Literature :**

In the literature review section the authors reviewed the concepts like, e-banking is important to is important to practitioners and foreign economists, and others. The article by (Dierksmeier, C & Seele, P 2018) analyzes the progress of the banking network in Ukraine, highlights the achievements of Internet banking and its benefits, demonstrates the possibilities and identifies open issues that require further development to optimize the online banking strategy. The researchers also explored the evolution and adoption of mobile banking (m-banking) from its origins to the period between 2000 and 2020. It highlights m-banking\'s advantages, such as convenience, cost savings, and customer empowerment, while comparing it to internet banking and emphasizing its superior mobility and usability.

 The rise of fintechs such as M-PESA in Kenya and mobile banking in the UK demonstrate the global impact of mobile banking on the transformation of banking services. The study identifies gaps in the literature on mobile banking adoption and aims to analyze the advances, trends and key terms in mobile banking research over three time periods. It also examines the factors that influence consumer attitudes and behavior, with a focus on the implications for cost reduction, profitability, and customer retention of banks.

Furthermore, the role of cryptocurrency in reducing transaction costs and its integration into the banking sector are briefly discussed.The review study provides a  M banking research map, solves existing problems and provides potential fields of future research to deepen understanding in this field.

**Methodology:**

This study analyzes 1206 articles in the Scopus database and is dedicated to Mobile Bank (M Banking) as a modern and discussion subject. Using analytical evaluation and statistical methods, this study clarifies important terms related to banks and follow the overtime changes. VOS Viewer software was used to create and graphically represent a bibliographic network based on co-citations, co-authors, and bibliographic links. This tool allows easy visualization and aggregation of data, providing insights into mobile banking research terms and trends from 2000 to 2020. The findings of this study aim to provide a better understanding of the evolution of mobile banking and its impact.

**Research results :**

The sharp increase in the number of publications in scientific databases is mainly due to technological development and the concomitant development of banking services, as well as changes in the criteria for evaluating academic staff. Higher education institutions such as universities and their staff are evaluated on the basis of publications found in scientific databases.Scopus is one of the recognized databases.Bank publications were filtered in 1206 articles and divided into three groups according to the period. The main objective is to study the evolution of perceptions of m-banking. Therefore, key terminologies from the articles were analyzed in the VOS viewer to understand how their numbers and relationships have been changed. The first group analyzed contained articles that were published between 2000 and 2006.At least thirteen key terms were utilized in the articles.

 By introducing the mandatory rule that a keyword must be present in three articles, the number of keywords was reduced to almost five .

 The prime cause for the significant increase in publications in scientific databases is the technological development and the accompanying development in banking services, and changes in the evaluation criteria for academic personnel.

 Higher education institutions such as universities and their staff are evaluated on the basis of publications found in scientific databases. Scopus is one of the recognized databases.

 Publications on mobile banking were narrowed down to 1206 articles and divided into three groups according to time period: The main objective is to explore how perceptions of mobile banking have changed. Therefore, the key terms of the articles were analyzed in the VOS viewer to understand how their numbers and relationships changed. The first group analyzed contained articles published between 2000 and 2006. At least thirteen key terms were utilized in the articles.

Establishing the compulsory rule of a keyword being present in three articles caused a decrease to almost five key terminologies. The authors also examined the evolution of mobile banking (m-banking) research from 2007 to 2020, highlighting key trends and challenges. Initially associated with mobile telecommunication systems and electronic commerce, m-banking research expanded over time to include themes such as innovation, authentication, network security, and customer satisfaction. Between 2014 and 2020, new topics like financial inclusion, mobile applications, and social networking gained prominence. Thematic analysis categorized research areas into motor themes (e.g., security), specialized themes, general themes, and emerging or underdeveloped themes (e.g., mobile banking apps). During the COVID-19 pandemic, m-banking adoption surged due to lockdowns, but security and privacy risks became pressing concerns, necessitating robust countermeasures to protect user data and foster trust. Overall, the field has advanced by addressing technological, economic, and security-related aspects while adapting to evolving user needs and global challenges.

**Conclusion :**

The bibliometric paper highlighted that the perception and use of M-Banking changed during the reporting period. M-Banking related keywords continued to be widely used. However, the main group of selected words remained unchanged: bank, mobile phone system, customer satisfaction, electronic commerce, internet, mobile, telecommunication system, wireless communication system. The perception of the M-Banking phenomenon is heavily influenced by universal trends in the evaluation of economy, finance and technology. This has resulted in a huge increase in publications produced on a global scale. Universal trends and an increase in global production have led to many changes. By showcasing the creation of key terms in M-Banking, significant changes in the development of the field’s key terminologies were identified.

 Consequently, it is deemed important for developments in future decades to be followed up, particularly in how recent universal occurrences have influenced changes in M-Banking use at a global level. This would enable M-Banking to better understand global trends in this field in different contexts and establish M-Banking benchmarks through research initiatives, which would result in an improved customer experience.

The authors also quoted the importance of cellular communication systems, customer satisfaction, e-commerce, Internet and mobile telecommunications systems were associated with mobile banking services in each period analyzed. The most utilized and analyzed terminology related to Mobile Banking was located, contributing to the achievement of the paper’s purpose.

They have identified mobile banking as a fast-growing trend requiring analysis within the context of the deep recession following the pandemic, to identify alterations in M-Banking application behaviour in individual practices. After analysing this bibliometric study, it is concluded that M-Banking is an interdisciplinary research field where topics from different fields and areas can be studied. Furthermore, it is recommended that future research should focus on mobile banking over an entire period, rather than a group, as they have done in their bibliometric paper.

**References:**

1. Alsmadi, A. A., Shuhaiber, A., Alhawamdeh, L. N., Alghazzawi, R., & Al-Okaily, M. (2022). Twenty Years of Mobile Banking Services Development and Sustainability: A Bibliometric Analysis Overview (2000–2020). *Sustainability*, *14*(17), 10630. <https://doi.org/10.3390/su141710630>