

## **Mapping the Research Landscape on Adoption of Mobile Commerce: A Bibliometric Approach**

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**Abstract.** This bibliometric analysis systematically reviewed 382 articles on m-commerce adoption published between 2014-early 2023 in the Scopus database. Visualization tools like Vosviewer and Biblioshiny were used to analyze patterns in citations, keywords, active countries, institutions, journals, and authors. Results showed increasing publications on m-commerce adoption, with computer science, business, and engineering as top contributing fields. Key trends identified include a growing focus beyond the Technology Acceptance Model with theories like the Unified Theory of Acceptance and Use of Technology. Most contributions were from authors in India, China, and the United States. The review provides insights into the current state and evolution of m-commerce adoption research.

**Keywords:** m-commerce, adoption, vosviewer, bibliometric analysis

## 1. Introduction

M-commerce has become one of the very important aspects of the digital transformation of business in the modern era. It covers a wide range of commercial activities conducted through mobile devices such as smartphones and tablets. Due to technological advancements and lifestyle developments, m-commerce has grown tremendously and influenced the way consumers shop, interact with brands, and access information. Therefore, research in this domain is essential to understand the growing trends, challenges, and opportunities within it. In this context, bibliometric analysis of m-commerce can provide valuable insights into research developments, the urgency of this research, and the research gaps that need to be filled. (Ciupac-Ulici et al., 2023); (Jain & Tan, 2022); (Mehmood, 2015a).

The urgency of this research is particularly evident in the context of ongoing digital transformation around the world. Mobile commerce has been one of the key drivers of this transformation, enabling companies to reach their customers more effectively through mobile platforms. Post-COVID-19 pandemic, the importance of m-commerce has increased as physical restrictions have led to an increase in online shopping through mobile devices. Therefore, research on m-commerce has a high urgency in understanding its important role in today's business world.

However, despite the importance of m-commerce, there is a significant research gap that needs to be addressed. First, because m-commerce is still relatively new, many aspects of it have not been studied in depth. Some aspects that require special attention include transaction security, user experience, and socioeconomic impact. Second, with the advent of new technologies such as artificial intelligence and cloud computing, m-commerce continues to evolve, and existing research may no longer reflect current trends. Therefore, there is a need to conduct bibliometric analysis to identify the latest research trends and understand the direction of future research development. In addition, m-commerce bibliometric research can help identify the contributions of specific countries to the study, show whether there are significant differences in research focus between different regions, and identify existing collaborations between researchers and institutions. The analysis can also provide information on the journals that most often produce m-commerce research and the topics most discussed in the literature.

Thus, the urgency of this research lies in the need to understand the latest developments in m-commerce, fill existing research gaps, and provide an in-depth look at existing research trends, regional contributions, and research collaborations. Thus, this research can make a valuable contribution to the development of knowledge in this increasingly important domain of m-commerce. An increasingly common research method in various fields, including marketing, is known as bibliometric analysis. This method is relatively new. This article provides bibliometric analysis related to the use of m-commerce platforms. The processing of bibliometric data, such as published sources, is quantitatively a prerequisite for bibliometric research methodology. The process of evaluating the content of related literature has become a very difficult task as the number of academic publications is increasing at an exponential rate. The process of retrieving applicable academic literature becomes easier with several different visualization approaches (Borner, Chen, and Boyack 2003). By organizing academic literature relevant to the research topic in bibliometric analysis, for example, a greater conceptualization and understanding of the research subject is possible. (Gera et al., 2021).

Bibliometric analysis was used to understand and analyze the large expansion of data publications since 2014 in our year-round analysis. Different research and reference models use basic theories. This paper will analyze the development of research in m-commerce using Vosviewer and Biblioshiny. Both of these software create data that reflects graphs with various attributes from different data sources. Through visual mapping of published literature documents, researchers can organize information efficiently and effectively. In addition, this analysis makes it easy to identify significant research trends and the most frequently cited authors and articles in a large number of scientific publications on a particular topic. No previous publication has used this methodology to analyze m-commerce development. This paper offers a comprehensive overview of the development and relationships

between different areas of research, as well as the identification of related papers and authors who have recognized the use of m-commerce.

Based on the study literature from several sources. The literature on m-commerce has not been reviewed bibliometrically. Therefore, this study may be the first analysis to explore the topic of m-commerce using bibliometric analysis. This paper explores the existing literature on m-commerce to address this void. Biblioshiny and Vosviewer in this study analysis try to answer several research questions: What is the scope of the literature study on m-commerce? What is the most significant contribution to the subject of m-commerce? What are the main trends in m-commerce? What is the most used theory on m-commerce-related topics? The authors believe that the subject of m-commerce is new and this research can serve as a useful starting point for this effort.

## **2. Literature Review**

Some of the factors that encourage users to adopt m-commerce, most researchers refer to the theoretical basis of the Technology Acceptance Model (TAM). Perceived Usefulness and Perceived Ease of Use are the core variables of this theory. It is expected that the ease of an application will provide benefits for m-commerce users. The original TAM theory should build flexibility, as research conducted (Seiler & Fanenbruck, 2021) examines the adoption of m-commerce in Germany with the development of TAM theory and adds external constructs to the intent to be used from the perspective of content, design, risk, privacy, and demographic-specific controls and m-commerce. Perceived usability and perceived privacy are the most influential factors in the intention to use m-commerce. Another research developed the TAM theory by adding the norm variables Attitude and Subjective which are the main variables in the Theory of planned behavior. These two variables are key to m-commerce adoption. The perceived usability as part of TAM influences the user's intention to use m-commerce, while subjective norms have a significant influence on users with low knowledge of m-commerce and customers in Anglo-Saxon countries. (Davis et al., 1992); (Ashraf et al., 2016); (Ajzen, 1991).

Another theory used in m-commerce adoption is the Unified Theory of Acceptance and Use of Technology (UTAUT). The four main variables used are Performance Expectancy, Effort Expectancy, Social Influence, and Enabling conditions. researching the adoption of m-commerce in Malaysia after the COVID-19 pandemic based on TAM, UTAUT, and Technology-Organization-Environment (TOE) theories. The main construct variables that influence self-efficacy, demonstrability, and computer anxiety affect the adoption of m-commerce. (Van Long & Army, 2021); (Salimon et al., 2023). M-commerce is a new technology and research on m-commerce is still very sparse. His research explores the m-commerce picture and the potential for future research related to more comprehensive data-driven risk assessment models to achieve fully automated stages. Information Asymmetry Configuration phase with customers, Matching and Customization through changed information in recommendations, and customer service based on technology that fits their needs (Kalinic & Marinkovic, 2016)

Today, m-commerce technology continues to evolve until it reaches a fully automated stage in the future (Moulliet et al., 2016). Indeed, the development of m-commerce has not yet reached a fully automated level. So qualitative research to dig deeper needs to be reproduced. One qualitative study conducted by experts and top management in the field of digital marketing in Germany and the UK explains a deep understanding of the ability of m-commerce to provide effectiveness and efficiency to consumers when shopping. Factors of cost-effectiveness, trustworthiness, data security, behavioral bias, and consumer sentiment are important points that influence user perception. Some users make m-commerce as an alternative (Pousttchi et al., 2015); (Parker & Wang, 2016). The lack of a comprehensive and deep understanding of m-commerce is the reason this service is not the main tool in shopping. However, there is a belief that m-commerce will become an online shopping trend in the future. It is estimated that in the next five years, there will be a new shopping style for the people of Indonesia. Several factors, such as ease of use of applications for shopping, trust through company permission from regulators, more competitive consumer expectations, minimal or no cost, transparency

and unbiased without involving humans, and more diverse products provide the potential for m-commerce adoption in Indonesia. In addition, the relatively affordable cost of using m-commerce will be able to reach all market segments in Indonesia.

In short, the theories that are widely used in m-commerce research are TAM and UTAUT. Using this theory in m-commerce studies. As one of the new technologies of artificial intelligence in the field of digital marketing, especially in online shopping. Based on Vos viewer analysis shows that several publications on the topic of m-commerce are divided into two main grouping area relationships: m-commerce algorithm, and influencing intention factor. Apart from being part of marketing innovation, m-commerce is closely related to consumer shopping transactions. The decision to use technology or one's own decision is an individual's decision to behave. So most of the theoretical bases used refer to TRA, TPB (Ajzen 1991), TAM (Davis 1985) & and UTAUT (Venkatesh et al. 2003). Some recent research uses (Faqih & Jaradat, 2015; Khan et al., 2015; Lai & Lai, 2014; Lu, 2014; Maity & Dass, 2014a, 2014b, 2014c) Diffusion Innovation Theory (DIT) by (Roger 1962) and Expectation Confirmation Theory (ECT) by (Oliver 1980). The beginning of the topic of m-commerce explores that m-commerce as an e-commerce innovation was studied by (Gomber, Koch, and Siering 2017) who explored digital innovations and one of them is m-commerce. Followed years of exploring intentions to adopt m-commerce using TAM and UTAUT and several new constructions of both quantitative and qualitative methods. The final part of the study will summarize the theoretical basis used for the adoption of m-commerce conducted by previous researchers and the potential novelty for future research.

### 3. Methodology

Scopus is widely regarded as a superior multidisciplinary database of abstracts and citations, so the authors of this paper decided to conduct their bibliometric research with it. Scopus, managed by Elsevier Analytics, provides easy access to peer-reviewed academic publications including books, journals, and symposia." In the metadata they provide, publishers include the author's name, their affiliation, the year the document was published, electronic identity (EID), source title, volume/issue/page, number of citations, source, document category, and identifier for digital object (DOI). Scopus is said to contain more than 84 million data records from more than 7,000 publishers in 27,000 journals. According to the data website Fast-Fact Elsevier, the company's articles account for about 18% of global research and 28% of citation share. (Biancone et al. 2020) conclude, based on previous information, that the Scopus database is an excellent and trustworthy resource for bibliometric analysis.

Research data on m-commerce, as taken on February 23, 2023, are summarized in the paper's bibliometric analysis. Scopus databases are searched using the terms "M-commerce" OR "Mobile Commerce" AND "Intention use" to collect relevant data. Article titles, abstracts, and keywords published in the Scopus database are used in searches. Many genres of writing, including novels, articles, book chapters, conference papers, book reviews, and books, were investigated in this study. Existing English-language publications are the only ones permitted. List of 678 results. This study only documents in the form of research articles so 382 articles were obtained in this study.

The research questions are addressed in the paper using bibliometric analysis: performance analysis, scientific mapping, and network analysis (Donthu et al. 2021). Performance analysis looks at the number of relevant publications and citations to find out how much authors, journals, and countries contribute to research on the topic of m-commerce adoption (Donthu et al. 2021). This method shows which journals, authors, and articles are the most cited or useful. Using scientific mapping techniques, this work shows how various studies on a particular topic relate to each other. This approach defines publications, underlying themes, and relationships between topics by performing analysis among other types of analysis, citation analysis and shared citations, collocation analysis, and co-authoring analysis. Lastly, the latter method allows network analysis to occur. Network groupings and metrics can be used to show different results. Figure 1 below shows how data extraction and bibliographic analysis are

performed in a planned manner.

Exctraction and Processing of Data	
Scopus	"M-Commerce" OR "Mobile Commerce" AND "Intention use" OR "Adoption" 690 documents were extracted
Tools	
The process	Bibliometric Analysis
The Result	Analysis of Performance
Scopus	Total number of publications
Scopus	Contributing Authors
Scopus	Year of publication (productivity/activity)
Scopus	Total of Citation
Scopus	Collaboration
Scopus	Number of publications cited
Scopus	H-Index
	Maps in Science
Biblioshiny	Connection between articles
Biblioshiny	The Most Influential Publications
Biblioshiny	Foundational Themes
Biblioshiny	Themes that are fundamental
Biblioshiny, Voswiewer	Written Materials
Voswiewer	Connection between authors
Biblioshiny, Voswiewer	Authors and affiliations of authors
	Analysis of Network
Biblioshiny	Degree/level of centrality
Voswiewer	Folder of cluster
Voswiewer	Visualization items

Fig. 1. Summary of operational procedures

The findings of the literature review and their discussion are given in the following sections.

## 4. Results

Data with the keywords "M-Commerce" OR "Mobile Commerce" AND "Intention use" OR "Adoption" generates 690 documents each year. The results show substantial academic interest in m-commerce and its adoption. Table 1 provides general data collection information. This shows that articles and conference papers make up the majority of documents that have been identified (69 percent of all documents). (17 percent of all documents), while Reviews (7 percent), Book Chapters (4 percent), and Books (3 percent of all documents) indicate the relative novelty of the subject.

Table 1. Basic data information, from the beginning of the year to January 25, 2023

Description	Result
Article	382
Conference paper	219
Reviews	11
Book chapter	63
Book	2
Editorial	1
Total Documents	678
Annual growth rate	(19.05)
Average citations per doc	12.83
Single Authored Docs	82
Co-Author per Doc	2.88

Source: Scopus, bibiloshiny

Documents extracted from Scopus data over the years resulted in data coming out only starting in 2014 with a total of 67 documents, the first document published in the journal Computers in Human Behavior, 2014 with the title "Antecedents of the adoption of the new mobile payment systems: The moderating effect of age" by As the first document, empirical results show that the proposed behavioral model has been adjusted appropriately, thus proving that the age of users provides a significant difference in the proposed relationship between the influence of third parties and the ease of use of payment systems, between the perception of trust in the system and its ease of use, and between trust and good attitudes towards its use. This was followed by 64 studies in 2015, with the title first published in the Journal of Retailing and Consumer Services, under the title "Assessing the moderating effect of gender differences and individualism-collectivism at individual-level on the adoption of mobile commerce technology: TAM3 perspective. The empirical findings conclude that perceived usefulness and perceived ease of use are important factors in explaining the individual's intention to adopt mobile commerce. The results reveal that the moderation role of individualism-collectivism at individual-level values on the adoption of mobile commerce is significant., but gender does not have any moderation effect on the adoption process, and many other researchers who study m-commerce adoption such as (Liébana- Cabanillas et al., 2014);( Chhonker et al., 2017),(Afrin et al., 2022; Almeida Lucas et al., 2023; Begum et al., 2021; Diehl- Wobbe, 2014; Goi, 2016; Maity & Dass, 2014b; Mehmood, 2015b; Pankomera & van Greunen, 2019; Parker & Lee, 2022; Pipitwanichakarn & Wongtada, 2020; Saidon & Moses, 2017a, 2017b; Tang, 2019a, 2019b; Tarhini et al., 2019; Ulkhaq et al., 2021).

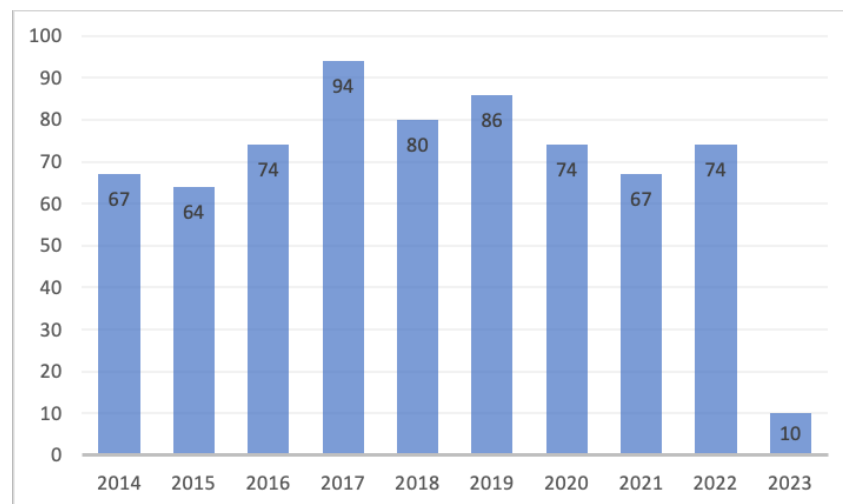


Fig. 2. Annual scientific production. Scopus and created by Excel

#### 4.1. Publication Focus Areas

The subject matter of m-commerce and adoption is vast and diverse in different regions (see Table 2). Most publications (30.46%) are in the field of Computer Science, followed by Business, Management, and Accounting (20.51%), Engineering (12.48%), and social sciences (6.76%). There is a lot of research in these four fields because the topic of m-commerce is a combination of technology, artificial intelligence (computer science), and management and economics concerning digital marketing management.

Table 2. Subject matter areas of publications

Subject Area	# of Result	%
Computer Science	410	30,46%
Business, Management and Accounting	276	20,51%

Subject Area	# of Result	%
Engineering	168	12,48%
Social Sciences	91	6,76%
Decision Sciences	89	6,61%
Economics, Econometrics and Finance	81	6,02%
Mathematics	63	4,68%
Environmental Science	25	1,86%
Energy	20	1,49%
Arts and Humanities	19	1,41%
Psychology	18	1,34%
Physics and Astronomy	17	1,26%
Materials Science	14	1,04%
Medicine	12	0,89%
Multidisciplinary	10	0,74%
Agricultural and Biological Sciences	9	0,67%
Chemical Engineering	6	0,45%
Earth and Planetary Sciences	6	0,45%
Pharmacology, Toxicology and Pharmaceutics	5	0,37%
Biochemistry, Genetics and Molecular Biology	3	0,22%
Chemistry	2	0,15%
Neuroscience	1	0,07%
Immunology and Microbiology	1	0,07%

Source: Scopus, created in Excel

#### 4.2. Most cited publication sources

Table 3 displays the 20 most cited sources for articles on m-commerce. The five most cited sources are Computers in Human Behavior, Internet Research, Journal of Management Information Systems, Decision Support Systems, and Information Technology and Management each with over 100 citations in this analysis. The five most cited also belong to the first quartile (Q1) group of journals. This means that a definite ranking of a journal by any database based on the journal's impact factor (IF), citations, and indexing is adequate in this analysis.

Table 3. Subject field of the publication

Publications	# of Cited
Computers in Human Behavior	297
Internet Research	219
Journal of Management Information Systems	161
Decision Support Systems	129
Information Technology and Management	122
International Journal of Contemporary Hospitality Management	89
Behavior and Information Technology	73
Decision Support Systems	53
Textile Progress	50
International Journal of Electronic Commerce	48

Mediterranean Journal of Social Sciences	33
International Journal of Systems Science	32
International Journal of Electronic Commerce Studies	29
Industrial Management and Data Systems	29
Information Development	27
Journal of Internet Banking and Commerce	19
Electronic Journal of Information Systems in Developing Countries	19
International Journal of Wine Business Research	15
Proceedings - Pacific Asia Conference on Information Systems, PACIS 2014	13
International Journal of Mobile Communications	13

Source: Scopus, created in Excel

### 4.3. Most Cited Publication Sources

Based on Scopus data, Figure 3 shows the top ten publications by m-commerce-related countries. The number of citations is dominated by the United States, China, and India. This is understandable considering that the United States, China, and India are quite massive countries in m-commerce-based trade.

Figure 3 shows the number of citations by country. The document originating in the United States has the highest number of citations (998) with an average of 35.60 article citations, followed by China (883) with an average per article of 17 and India (831) with an average of 15.40 citations per article.

Figure 4 shows the top 10 citations by document source. the top five citations, including reputable journals such as *Computers in Human Behavior*, *Internet Research*, *Journal of Management Information Systems*, *Decision Support Systems*, and *Information Technology and Management*. All five journals are included in Q1.

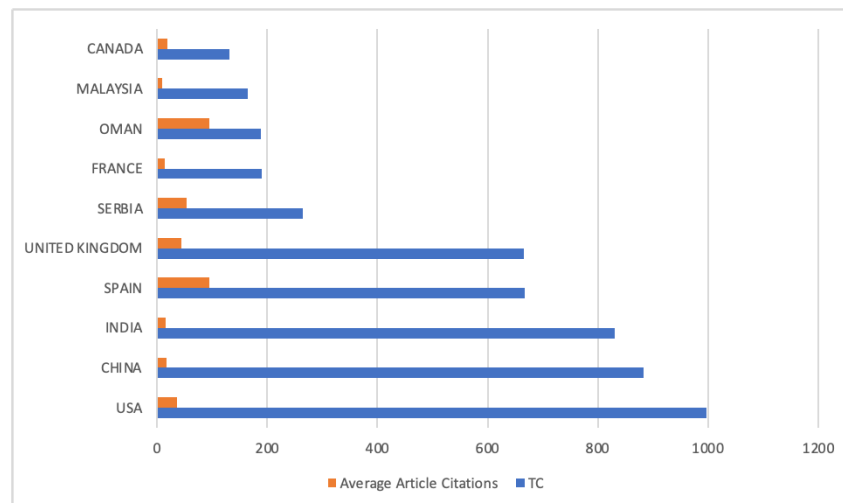


Fig. 3. The most cited documents. Source: Scopus, parsed in Excel



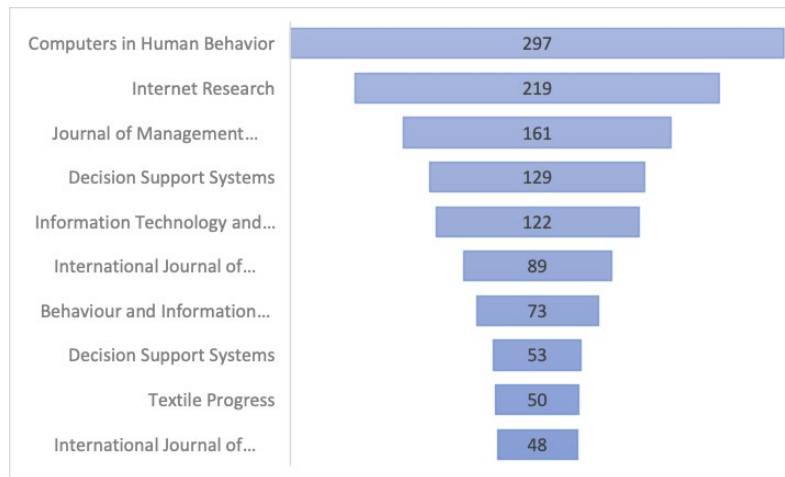


Fig. 4. The most cited publication source. Source: Scopus, created in Excel

#### 4.4. Publications with the most citations

Citation documents by authors exploring m-commerce and adoption are provided in Figure 4. (Liébana-Cabanillas et al., 2014, 2017a) Based on the analysis of co-authors, it was found that it was the article with the most citations, namely 297 citations in 2014, and 261 in 2017. The article was published in *Computers in Human Behavior* and the *International Journal of Information Management of Management Information Systems*. The most citations followed by the article were published in the *Journal of Retailing and Consumer Services*. (Faqih & Jaradat, 2015).

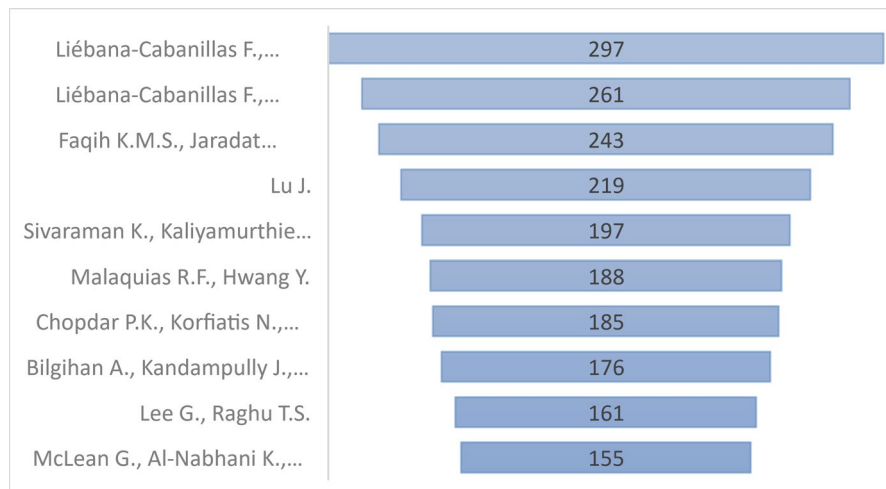


Fig. 4. Document excerpt. Source: Scopus, created in Excel

#### 4.5. Most Used Popular Keywords

Figure 5. The author's most commonly used words are presented. The term "mobile commerce" is the most frequent with a frequency of 46 (16%). "Sales" came next, with a frequency of 23 (8%), and "Mobile Telecommunication System" with a frequency of 18 (6%).

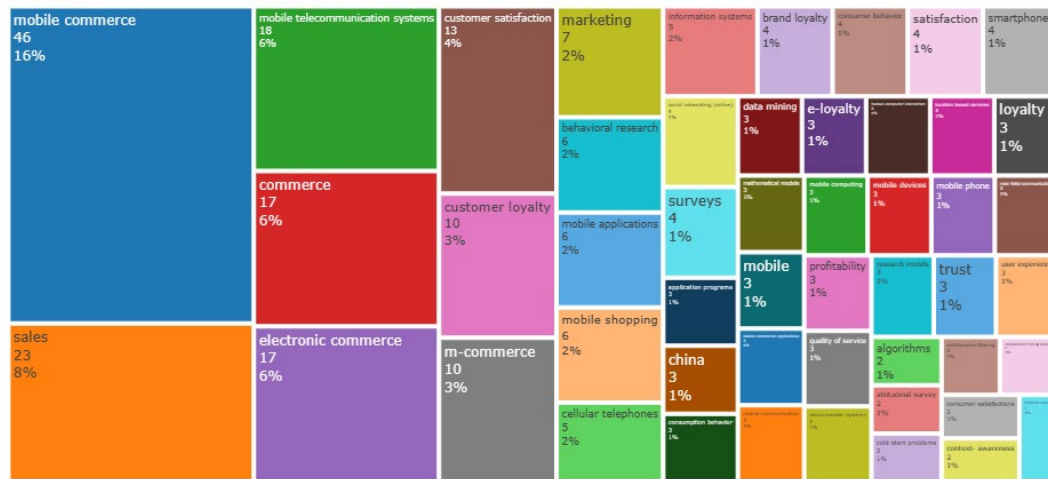


Fig. 5. The highest frequency keyword combination used by the author. Scopus, created by Biblioshiny

Figure 6 shows a Vosviewer map of the keyword-weighted occurrence of authors, with 3 groupings. The most frequently used keywords in cluster 1 by the authors are "m-commerce," "marketing," and "challenge." The terms "wireless network," and "key cryptography," dominate Cluster 2. Cluster 3 includes "network protocols," and "user interfaces." The color scheme of the map makes it possible to track how popular words have become over time. Thus, words like "trust" "perceived value," "perceived usefulness," and "TAM," have gained popularity. These trends can be approved by regulators and applied by industry, making it interesting for academics to investigate intentions in terms of trust, perception, and utility, as well as the theories used as the basis for these topics.

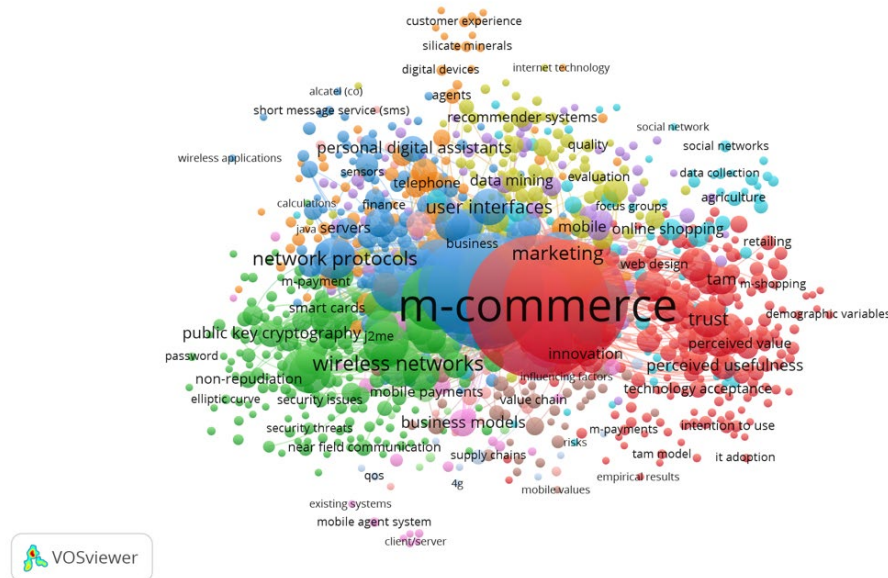


Fig. 6. The weight of the occurrence of words. Source: Scopus, created in Vosviewer

## Most Trending Topics of M-commerce and Adoption

Using Biblioshiny you can also see what are trending topics related to m-commerce and their adoption (Figure 7). In 2014-2023, trending topics regarding "m-commerce", "mobile telecommunication system", and "sales" are explained in connection with the context of m-commerce which is closely related to digital marketing.

Figure 8 shows how often the ten most used keywords are related to the analysis of m-commerce topics and the adoption of their use each year. The word "behavioral research" has been the top word since the topic was researched in 2005. Next are the words "m-commerce" and "customer loyalty," occupying a growing position as words used in recent research.

Figure 9 is a thematic map of the conceptual structure of keywords. Using the network's keyword grouping algorithm, biblioshiny analysis can identify multiple themes. There are two conceptual map analyses. First, the importance of motives is indicated by the centrality of the map. Second, Density, which defines the level of development of the theme. Based on the analysis, the clusters "m-commerce", "sales", and "mobile telecommunication system" determine the topic of the central theme regarding m-commerce, the significance of which requires further development.

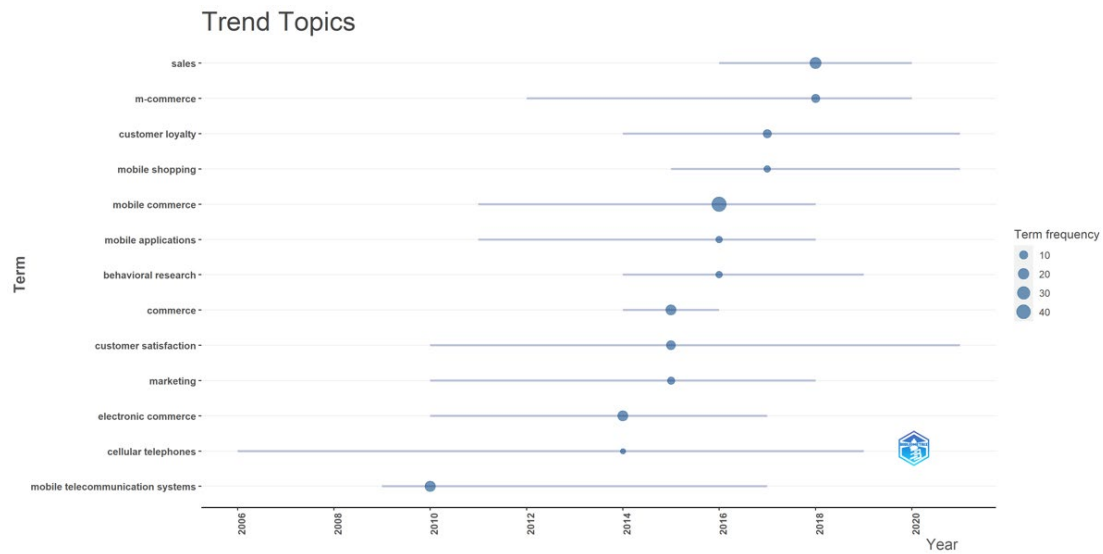


Fig. 7. Trending topics. created in Biblioshiny. Source: Scopus

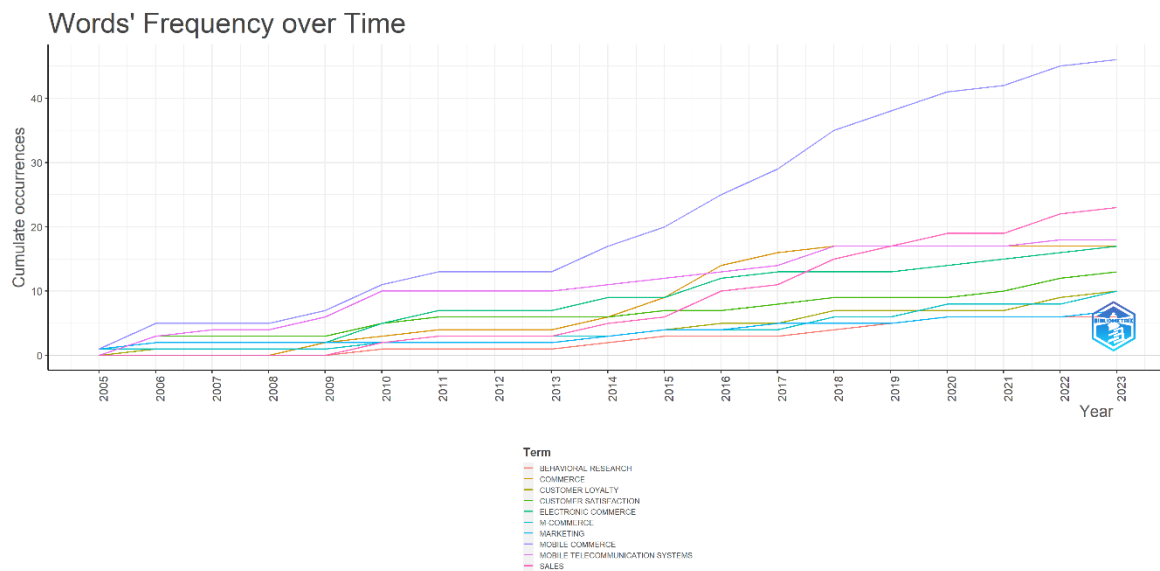


Fig. 8. Word growth. Source: Scopus, created in Biblioshiny

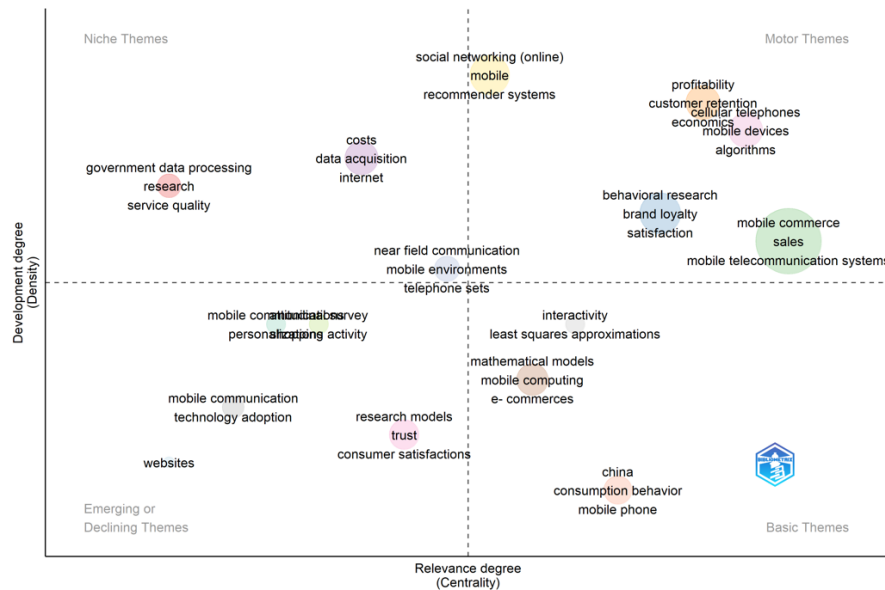


Fig. 9. Thematic map. Source: Scopus, analysis at Biblioshiny

#### 4.6. Most Prolific Author

Figure 10 illustrates the results of a bibliometric analysis of authors who have published on the subject of m-commerce, Ashraf, A.R., Pelet, J.E., Vorugunti, and C.S. are the most prolific writers. The three are the authors of the most published documents in the paper entitled "The Role of M-commerce Readiness in Emerging & developed markets" with a total of 64 citations. consistently produce papers that focus on m-commerce as the number one paper in 2017, 3 papers in 2018, 1 paper in 2020, and 2 papers in 2021. followed by the author who produced this topic in 2014 under the title "(Ashraf et al., 2018),(J.-E. Pellets & Lecat, 2014)Smartphones and wine consumers: A study of Gen-Y" got 20 citations and the title "Social media and m-commerce" in 2015 had 7 cited. It defines that this topic needs to be explored in some Asian countries as developing countries.

Table 4. Production of author publications

Authors	Document
Ashraf, A.R.	7
Pellets, J.E.	6
Vorugunti, C.S.	6
Alqatan, S.	5
Chau, N.T.	5
Deng, H.	5
Kalinić, Z.	5
Marinković, V.	5
McLean, G.	5
Pellets, J.É.	5
Taieb, B.	5
Anwar, A.	4
Goldstein, A.	4
Heinze, J.	4
Hu, S.K.	4

Authors	Document
Lapa, L.	4
Morosan, C.	4
Papadopoulou, P.	4
Pulabaigari, V.	4
Thongpapanl, N.	4
Tzeng, G.H.	4
Yang, J.	4

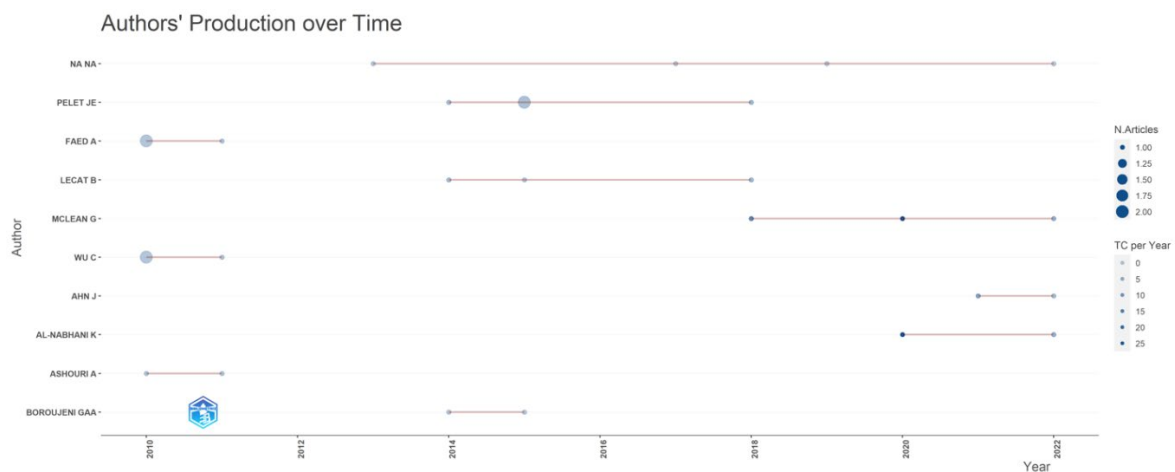


Fig. 10. Paper production by the Author., created in the Biblioshiny. Source: Scopus

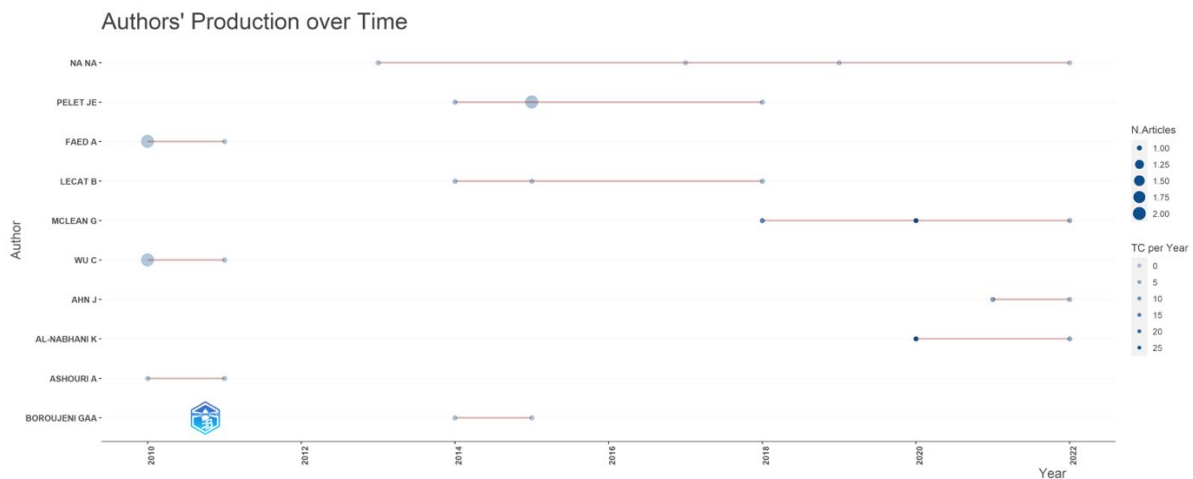


Fig. 11. The most relevant author. Source: Scopus, created in Biblioshiny

According to Figure 12, the top ten countries by number of citations are listed. The United States has the most citations with 998, followed by China with 883 and India with 831. The data also shows that most research on this topic has been conducted in Europe (Spain, UK, Serbia, France, Canada), while that in Asia (Oman and Malaysia) represents a small minority.

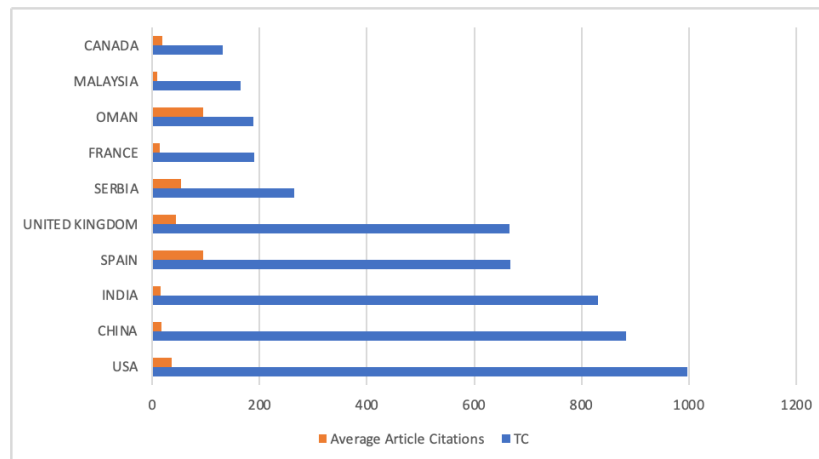


Fig. 12. Most cite State. Source: Scopus, created in Excel

#### 4.7. H-Index Author

Figure 13 shows the impact of authors on the h-index. It combines productivity by the author with citation impact. Faed, A, Mc Lean, Pelet, G, and Wu, C have the highest h-index of 3. In the analysis, the h-index is only defined for m-commerce and adoption topics, and not for the authors' aggregate h-index.

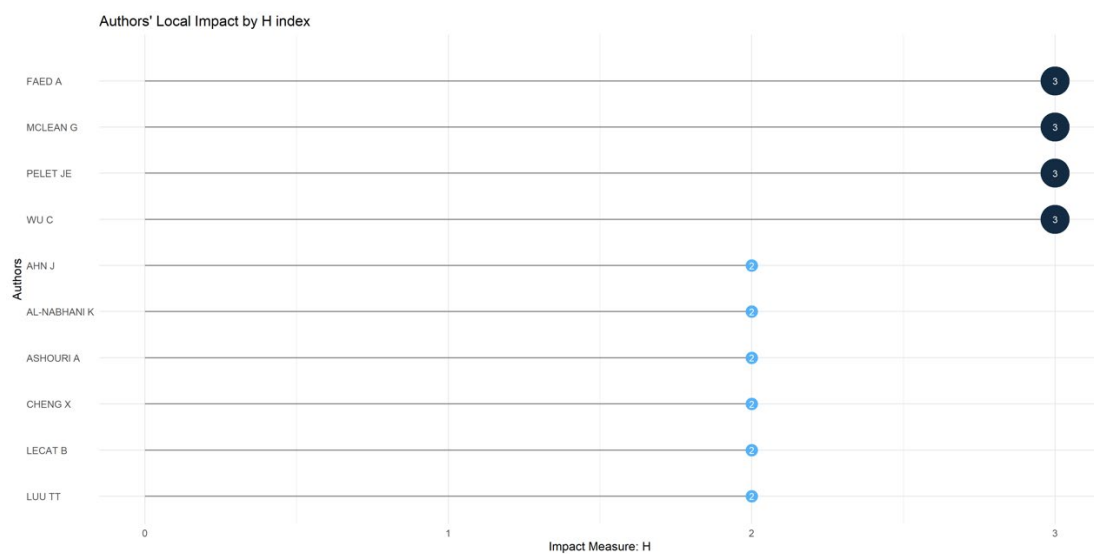


Fig. 13. Impact author (h-Index). Source: Scopus, created in Excel

Figure 14 illustrates the Author's most influential activities over a specified period. The spherical dimension represents the number of annual distributions, while the color gradient represents the number of annual quotes. Regardless, larger bubbles with brighter colors and smaller bubbles with darker colors indicate that a larger number of distributions does not necessarily lead to a larger number of citations per year. Belanche, D., Casalo, L.V., and Flavian, C produce the most documents, total citations, and several citations. Following Jung, D are Dolata, M and Bhatia, A.

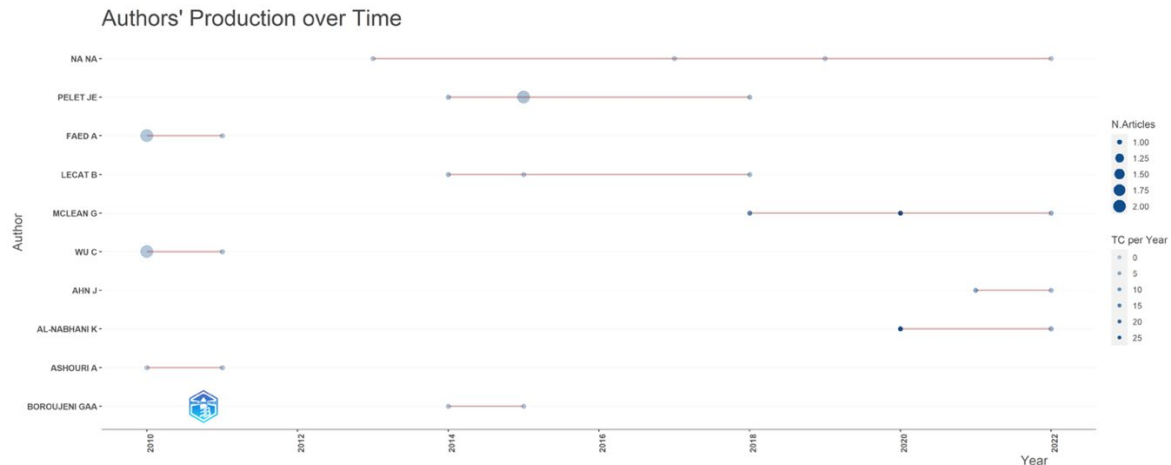


Fig. 14. Production from time to time by the Author. Source: Scopus, created in Biblioshiny

#### 4.8. Author and Co-Authorship

Figure 16 shows Vosviewer's mapping of co-authorship. Fourteen co-authors have co-author limitations. Pellets, J. E has published 6 documents with 2 authors. Co-authorship began to develop because this topic is so new and most research production still explains the existence of m-commerce and few do it using quantitative methods. The discussion section of the paper summarizes some of the methods used by the authors on the topic of m-commerce and their adoption to understand and provide direction for future research.

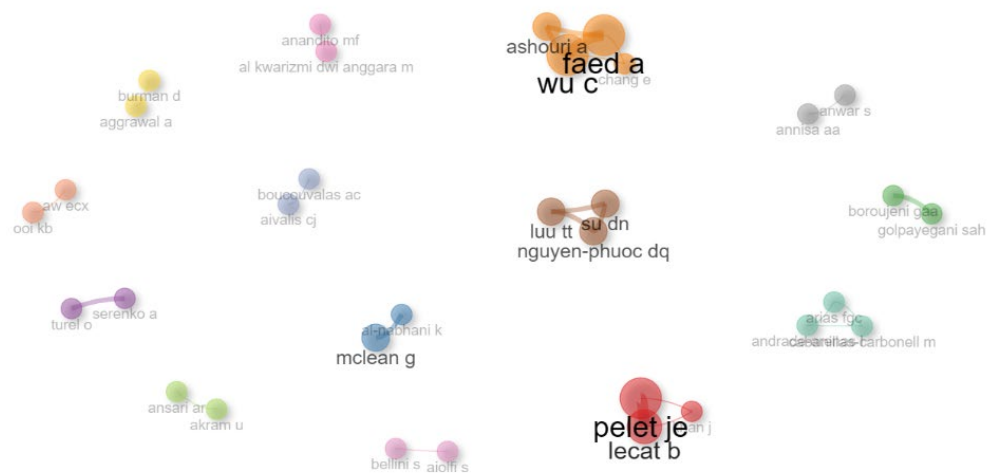


Fig. 15. Author and Co-authorships. Source: Scopus, created in Vosviewer

#### 4.9. Author Affiliation

The most prolific author is associated with Bina Nusantara University (12 documents), University of Craiova (11 documents), Universiti Sains Malaysia (10 documents), Notreported, and University of Kragujevac (8 documents), Amity University, Brock University, Universiti Utara Malaysia, University of Economics (8 documents), and National Chengchi University 6 documents). Based on statistics, it is possible to conclude that The authors of the study study on this topic are affiliated with the majority of universities in Europe, and Asia.

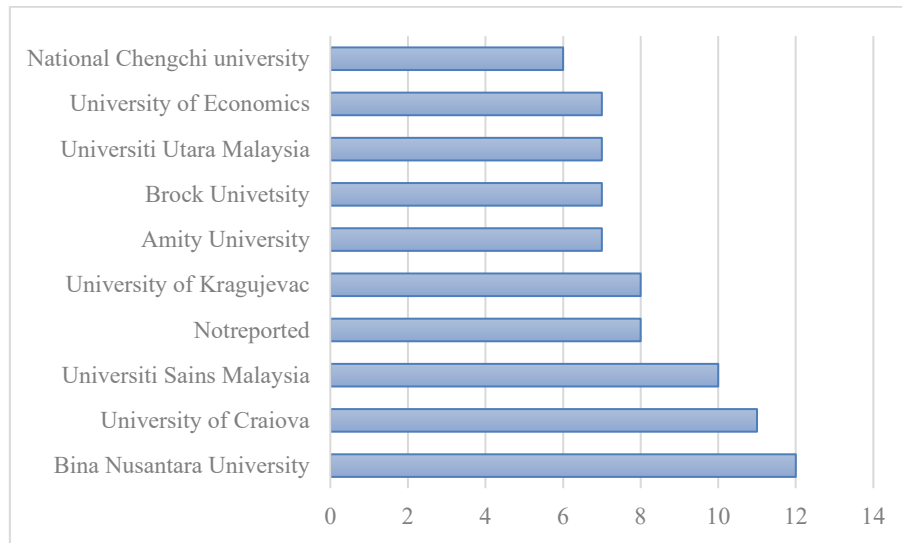


Fig. 16. Author affiliation. Source: Scopus, created in Excel

#### 4.10. Publications by State

According to Figure 17, India has published (232 documents) on this subject, followed by China (180 documents), the United States (101 documents), and Malaysia (66 documents). Figure 18 illustrates Multiple Countries Publications (MCP), which shows the number of papers with at least one co-author from different countries for each country. Indian writers have the most collaborations, followed by China and the United States. In contrast, only Indonesian researchers write papers in collaboration with local authors.

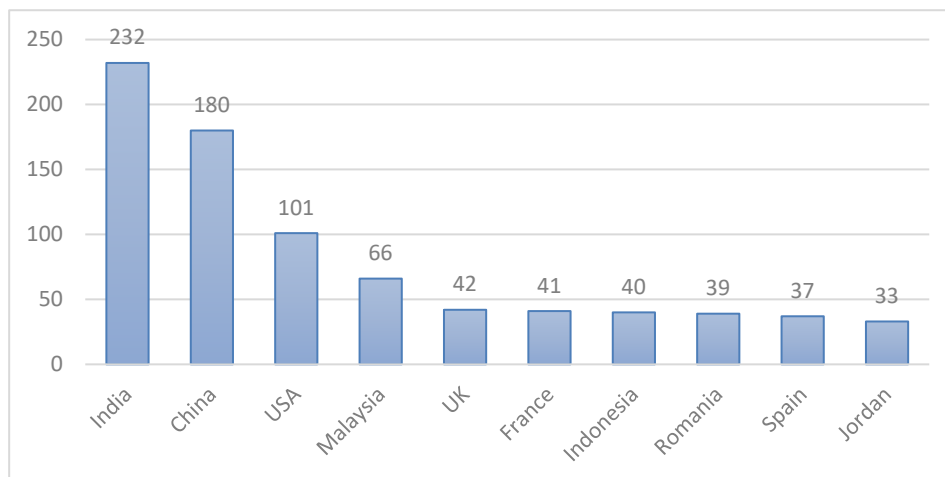


Fig. 17. Country of publication. Source: Scopus, created in Excel



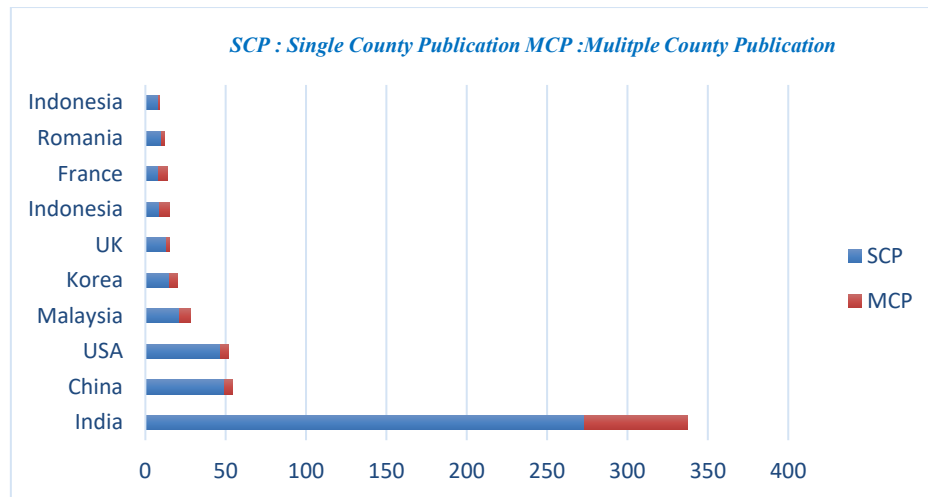


Fig. 18. Country of Correspondence Author. Source: Scopus, created in Excel

#### 4.11. Selected papers focusing on the topic

In this section, this study will generally summarize a selection of papers that focus on discussing m-commerce specifically in their research. Of the 678 documents, 78 papers were found in the fields of management, business, and economics using different theories based on methods.

Table 5. Summarized Theory, Method, and State by the Author

Author	Theory	Method	Country
(Lu, 2014)	TAM	Quantitative	United States
(Maity & Dass, 2014a, 2014b, 2014c)	Task-Media-Fit	Quantitative	United States
(Lin et al., 2014)	Valence Theory	Quantitative	United States
(Lai & Lai, 2014)	UTAUT	Quantitative	Hong Kong
(Mishra, 2014)	TPB	Quantitative	India
(Faqih & Jaradat, 2015)	TAM	Quantitative	Jordan
(San-Martín et al., 2015)	New Construction	Quantitative	Spain
(Khan et al., 2015)	TAM	Quantitative	Qatar
(Cao et al., 2015)	New Construction	Quantitative	China
(Pousttchi et al., 2015)	Delphi	Qualitative	Germany
(Hu et al., 2015)	Fuzzy MADM	Quantitative	Taiwan
(J.-E. Pepellet & Papadopoulou, 2015)	New Construction	Qualitative	France
(San-Martín & Jiménez, 2017)	TOE	Quantitative	Spain
(Yadav et al., 2016)	IT/IS	Quantitative	India
(Kalinic & Marinkovic, 2016)	TAM	Quantitative	Germany
(Parker & Wang, 2016)	New Construction	Qualitative	UK
(Cozzarin & Dimitrov, 2016)	Transaction Cost	Quantitative	Canada
(Liébana-Cabanillas et al., 2017b, 2017c, 2017a)	TAM	Quantitative	Spain
(Chhonker et al., 2017b, 2017c, 2017a)	TAM and UTAUT	Quantitative	UK
(Verkijika, 2018)	UTAUT	Quantitative	South Africa
(Hsu & Yeh, 2018)	TAM	Quantitative	Taiwan
(Tarhini et al., 2019)	UTAUT	Quantitative	Oman

Author	Theory	Method	Country
(Pipitwanichakarn & Wongtada, 2019)	TAM	Quantitative	Thailand
(Chopdar & Balakrishnan, 2020)	S-O-R	Quantitative	India
(Cui et al., 2020)	Commitment-Trust Theory	Quantitative	China
(Kalinić et al., 2020)	UTAUT	Quantitative	Spain
(Kalinić et al., 2021)	UTAUT	Quantitative	Spain
(Justino et al., 2022)	TOE	Quantitative	South Africa
(Enaizan et al., 2022)	UTAUT	Quantitative	Saudi Arabia

## 5. Conclusion

This bibliometric analysis summarized research productivity and explored trends in m-commerce adoption literature published over the past decade. The findings reveal steady growth in publications, with key contributions from Asian countries like India and China. TAM and UTAUT remain dominant theoretical frameworks, though some studies are applying extended models. Core themes in current research include technology and organizational factors influencing adoption, and user demographics. This review contributes a big-picture perspective on the landscape of m-commerce adoption research. Limitations include potential biases in the source database and size restrictions. Further reviews could examine changing research foci over time or compare findings across disciplines. As m-commerce continues evolving, ongoing bibliometric assessment will be valuable for identifying emerging topics and knowledge gaps.

The significance of this bibliometric analysis lies in its ability to offer a big-picture perspective on the landscape of m-commerce adoption research. It serves as a valuable resource for researchers, policymakers, and industry professionals seeking to understand the current state of knowledge in this field. The emphasis on limitations, such as potential biases in the source database and size restrictions, adds transparency to the analysis, encouraging readers to interpret the findings with a critical lens. Looking forward, the call for further reviews that examine changing research foci over time or compare findings across disciplines highlights the dynamic nature of m-commerce research. As m-commerce continues to evolve, ongoing bibliometric assessments will be crucial for identifying emerging topics and knowledge gaps, contributing to the continued advancement of this field. Researchers can leverage this analysis to guide future investigations and ensure that the literature remains responsive to the evolving landscape of m-commerce adoption.

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