

Digital Marketing Applications in the Retail Sector: A Systematic Mapping Study

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ABSTRACT: This study investigates the trends, methods, research types, and focus areas of digital marketing applications in retail from 2018 to 2022. Through a systematic mapping of fifty articles, the study aims to identify key contributions by country, prevalent research methods, types, and focal areas. The analysis reveals an overall increase in publications over the period, with a notable decline in 2022. In 2021, the United States and the United Kingdom emerged as the leading contributors to research in this field. Quantitative methods and Validation Research were found to be predominant, with Solution Papers following. A significant focus of recent research has been on Social Media Marketing and Emerging Technologies. The study provides a thorough review of recent developments in digital retail marketing, laying the groundwork for future research advancements.

Keywords: Systematic Mapping Study, Digital Marketing, Retail Sectors, Analysis.



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INTRODUCTION

Digital marketing has emerged as a crucial component in corporate strategy across multiple sectors, with particular emphasis on its significance within the retail industry. The advent of digital technology has had a profound impact on how corporations engage with customers and promote their products. The adoption of digital marketing has become imperative for retail enterprises aiming to sustain competitiveness within a dynamic business landscape (Strauss & Frost, 2016). Therefore, there is a growing significance to conducting a methodical examination of the implementation of digital marketing within the retail industry. This is necessary to offer a thorough and profound understanding of the patterns, effects, and obstacles that organizations encounter when utilizing digital marketing strategies (Hänninen, 2020).

It is imperative to conduct a methodical examination of the implementation of digital marketing within the retail industry to gain a thorough and profound understanding of the prevailing trends, effects, and obstacles encountered by organizations as they harness digital marketing strategies. This phenomenon encompasses a change in customer behaviour characterized by a growing inclination

towards online shopping, price comparison, product review reading, and brand engagement via social media platforms ([Verhoef et al., 2015](#)). These advancements present novel prospects and complexities for retail organizations of various forms and scales.

Despite the existence of this situation, there remains a necessity for a more methodical and comprehensive examination of the utilization of digital marketing within the retail industry. Previous research has exhibited a fragmented nature, mostly concentrating on various facets within the realm of digital marketing. There remains a dearth of comprehensive research on the holistic integration of digital marketing tactics within retail companies. As a result, there is a knowledge gap regarding the influence of digital marketing on the operational outcomes of retail enterprises, the methods retail companies use to implement digital strategies and any potential difficulties encountered during this process.

The study aims to employ a systematic technique, namely a systematic mapping study, to examine the utilization of digital marketing within the retail industry. Systematic mapping studies have garnered considerable interest within the academic community as research methodologies. This approach functions as a fundamental framework for constructing a holistic comprehension of a certain domain of scholarly investigation. Currently, systematic mapping investigations are employed not only within the realm of computer science but also across a diverse range of academic disciplines. This study aims to present a thorough analysis of the conducted research, pinpoint any deficiencies in the existing body of literature, and guide future investigations.

The objective of this study is to provide a comprehensive overview and examination of several facets of digital marketing, encompassing website optimization, online advertising campaigns, social media marketing, customer-centric personalization and other related elements. The research conducted in this study is distinguished by its emphasis on identifying the primary aspects contributing to success and hindrances encountered during the implementation of digital marketing strategies within the retail industry.

The primary aim of this study is to offer extensive counsel to retail organizations, stakeholders in the domain of digital marketing, and scholars with an interest in this particular sector. Moreover, the objective of this study is to provide a comprehensive analysis of the diverse digital marketing techniques implemented by retail companies, assess the favourable outcomes provided by these strategies, and identify potential challenges that may arise during their implementation. This study aims to offer a comprehensive analysis regarding the utilization of digital marketing within the retail industry, to provide valuable recommendations to companies seeking to enhance their digital marketing strategy.

Digital marketing is a marketing discipline that uses digital platforms and technologies to connect brands with consumers through various channels such as search engines, social media, emails, and websites. Digital marketing aims to increase brand visibility, enhance consumer interaction, and drive online conversions. ([Kannan & Li, 2017](#)). Along with technological advances, changing consumer behaviour, and information growth, digital marketing has become an important pillar in business

marketing strategies. This includes the use of consumer data for personalization, the usage of paid advertising in online media, as well as relevant marketing content ([Chaffey & Ellis-Chadwick, 2021](#)).

According to [Verhoef et al., \(2015\)](#) retail is a business sector that plays an important role in the global economy, as it involves the sale of goods or services to the end consumer, covering a wide range of areas such as physical stores, e-commerce, supermarkets, malls, restaurants, etc. Retail e-commerce today is changing the way retailers operate, as consumers are already comfortable shopping from home. Then, because of that, many retailers have adopted an omni-channel business model that combines physical stores with online sales ([Smith, 2018](#)). Current trends show increased e-commerce penetration in various sectors, thus affecting the way companies interact with consumers. The advent of digitalization has presented distinct obstacles and opportunities for various types of retail establishments. The application of digital marketing within the retail industry has significantly transformed business operations and customer shopping behaviors ([Hänninen et al., 2018](#)).

The retail sector has experienced significant impact from the technological revolution in the current era of digital advancement. In this context, the incorporation of digital marketing has become imperative for retail enterprises in order to endure intensifying rivalry and fulfill escalating consumer demands ([Bijmolt et al., 2021](#)). One of the primary discoveries is that the use of digital marketing platforms, including social media, online advertising, and email marketing, has become imperative in the realm of consumer communication ([Wohllebe et al., 2021](#)). According to [Smith \(2019\)](#), effective digital marketing techniques in the retail industry necessitate a comprehensive comprehension of online consumer behavior, encompassing preferences in purchasing, search patterns, and determinants that impact the decision-making process. The evidence suggests that retail organizations that effectively integrate data are the ones that can develop pertinent and focused marketing efforts. Additionally, it is crucial to acknowledge the significant role that website SEO plays ([Miell et al., 2018](#)), a responsive and easy-to-navigate website can improve the user experience and sales conversions ([Chaffey & Ellis-Chadwick, 2021](#)). Previous research has emphasized that factors such as web page loading speed, attractive design, and integration with e-commerce platforms have a significant impact ([Gielens & Steenkamp, 2019](#)).

Some obstacles must be surmounted in the execution of digital marketing in the retail sector. [Johnson & Smith \(2020\)](#), identify issues related to privacy and ethics in the collection of consumer data, as well as growing competition from large corporations and third-party platforms. Previous research suggests that retail companies need to consider these issues while continuing to develop their digital marketing strategies ([Aiolfi et al., 2021](#)). Overall, this systematic mapping study (SMS) provides valuable insights into the application of digital marketing in the retail sector. This research provides a solid foundation for understanding challenges and opportunities in a dynamic digital environment. Systematic mapping studies have structured stages, including the identification of research questions, the search for relevant literature, data extraction, and analysis. In addition, considerations of methodological limitations (databases, keywords, and inclusion or exclusion criteria) are important set out in the SMS.

METHOD

The systematic mapping study (SMS) methodology will be employed to generate mappings about the implementation of digital marketing in the retail sector. SMS are typically used to evaluate the results and productivity of previous research quantitatively (Arifianti et al., 2021), As well as finding out and understanding whether previous studies have been updated, the benefit of a systematic mapping study. A systematic mapping study requires an electronic database, the Scopus is one of them. The Scopus database is a comprehensive compilation of prominent research papers (Arifianti et al., 2021), and it's also an extensive database covering a wide range of scientific fields (Thaha et al., 2021). This research will take the data source of the Scopus database, which then performs the filtration process with several stages presented in Table 1.

Table 1: Filtering Process from Database Scopus

No	Filtering Process	Result
1	String Keyword	“Digital” AND “Marketing” AND “Retail*”
2	Year Range	2018-2022
3	Subject Area	Business, Management and Accounting
4	Document Type	Article
5	Publication Stage	Final
6	Source Type	Journal
7	Language	English

Source: Data Proceed

The process of article discovery in a systematic mapping study is a process that reflects the results of structured research maps. The stages used in the discovery process of research articles are based on ideas of (Arifianti et al., 2021), which is combined with the research needs and results of the discovery process of the article studied in Figure 1. After that, the method of classifying the findings of the article is used to determine the indicator that will be chosen for further analysis. Furthermore, the article's conclusions have to align with the research themes under discussion, particularly about the application of digital marketing in the retail sector. The article classification process aims to facilitate the mapping and analysis of publication trends, focus, methods, and types of research present in the findings article. Figure 2 describes the process of classifying the articles, whereas Table 2 and Table 3 describe the inclusion steps for the classification of articles based on methods and types of research.

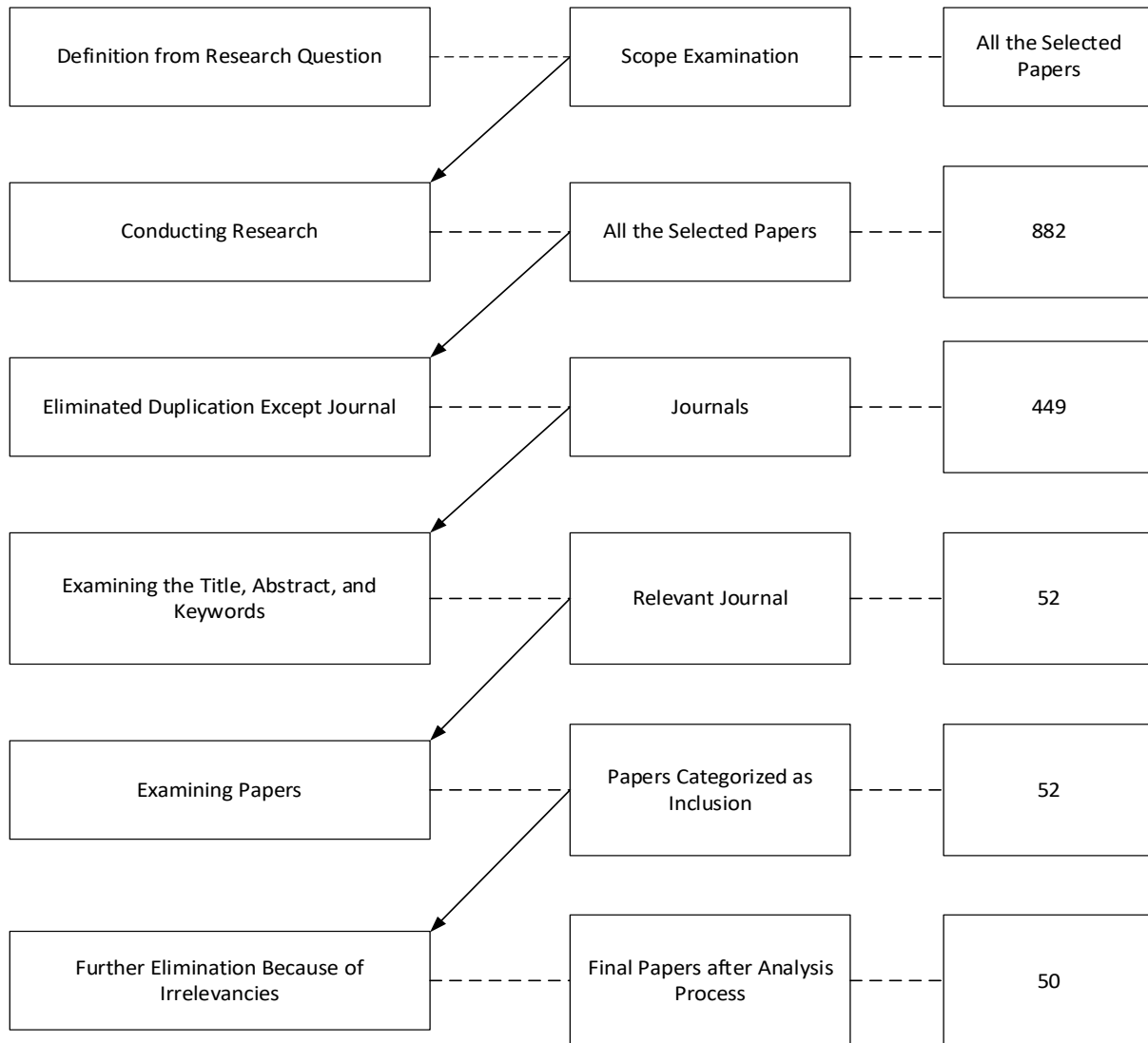


Figure 1: Steps of Findings

Source: Data Proceed

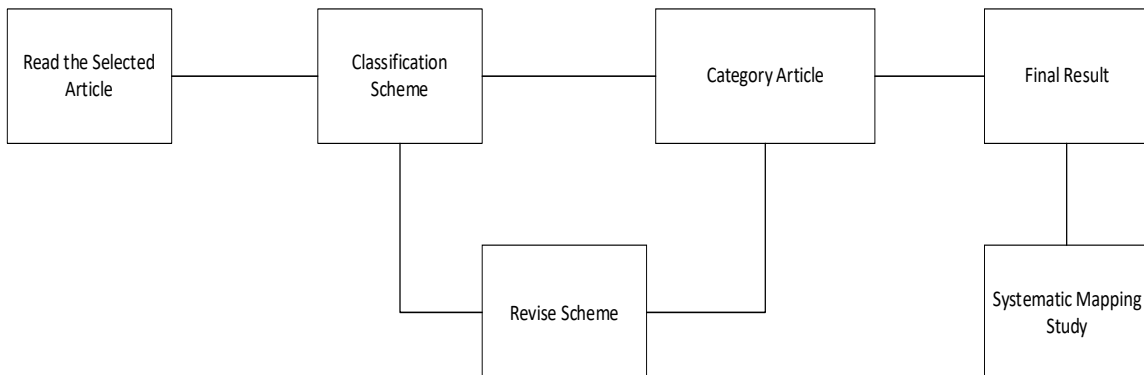


Figure 2: Classifications Steps

Source: Banaeianjahromi & Smolander, (2016)

Table 2: Category Classification of Research Methods

No	Research Method	Description
1	Qualitative Method	An approach that seeks to understand social phenomena in depth. In this study, data is collected through interviews, observations, or content analysis. Qualitative research is used to explore individual views, attitudes, or experiences, as well as to explain "how" and "why" an event occurs.
2	Quantitative Method	An approach that emphasizes the collection of numerically measurable data. It uses tools like surveys, questionnaires, experiments, or secondary data analysis. Statistics are used to analyze data and identify significant patterns or relationships. This method is often used to measure the influence of variables or the relationship between variables. It involves sample design, making hypotheses, and statistical testing.
3	Mix Method	An approach that combines quantitative and qualitative methods in one study provides a more comprehensive insight. It could start with quantitative data to identify patterns, then qualitative data to explain "why." Or, on the contrary, start with qualitative research followed by quantitative surveys to confirm the findings.

Source: Creswell & Creswell (2017)

Table 3: Category Classification of Research Type Paper

No	Research Method	Description
1	Evaluation Research	A type of research aimed at evaluating the success and impact of a program or policy using methods that include qualitative and quantitative data analysis as well as the use of interviews, surveys, and monitoring.
2	Validation Research	A type of research that focuses on measuring tools to develop and evaluate the reliability and validity of measuring instruments, such as tests, questionnaires, and other assessments.
3	Philosophical Paper	A type of research that attempts to explain and analyze philosophical concepts and arguments in a discipline
4	Solution Proposal	A type of research that focuses on the development of action plans and the justification of solutions in various fields such as business, public policy, and technology.

Source: Banaeianjahromi & Smolander (2016)

Research with this systematic mapping study will adopt and develop some research questions from [Banaeianjahromi & Smolander \(2016\)](#). The research questions included: i) how has the publication trend evolved over the last 5 years? ii) What methods of research are used in the papers that have been identified? iii) what types of research methodologies were used in the papers identified? and iv) How is the emphasis on research focused in the articles that have been found?

RESULT AND DISCUSSION

The first result is to discuss the process of discovery and classification of articles in the Scopus database, following the steps shown in Figure 3 above. Figure 1, shows the results obtained from the Scopus database, there are 882 articles dealing with the application of digital marketing in the retail sector. After that, the findings were classified as part of the elimination process, and the results were reduced to 449 articles. Further, a manual examination was carried out to determine how many articles were relevant to the context of the research being discussed, resulting in 52 articles relevant for re-analysis. In total until the final process of classification, 50 articles will be carried out systematic mapping studies according to research questions. The results of the first research question are the publication trends presented in Table 4 and Figure 3.

Table 4: Article Screening Process in Digital Marketing Studies in the Retail Sector

Stage	Keyword Strings	Number of Articles	Explanation
Beginning	“Digital” AND “Marketing” AND “Retail*”	882	Articles were identified using keywords related to digital marketing in the retail sector.
Filtering	“Digital” AND “Marketing” AND “Retail*”	442	Articles are filtered based on relevance, eliminating duplicates and irrelevant articles.
Finals	“Digital” AND “Marketing” AND “Retail*”	50	The remaining articles were further analyzed to ensure quality and suitability for the study aims.

Source : Data Proceed

This table illustrates a systematic, step-by-step process in selecting research articles related to digital marketing in the retail sector. In the initial stage, a total of 882 articles were identified using the keywords "Digital", "Marketing", and "Retail*", ensuring that the research focus remained consistent with the main topic of the study. This initial screening ensured broad coverage of the relevant literature.

The next step was to carry out a filtering process to reduce the number of articles from 882 to 442. This filtering was carried out to eliminate duplicate articles and those that were not relevant to the research topic. This significant reduction shows the effectiveness of the filtering criteria used to filter out unnecessary content.

In the final stage, of the remaining 442 articles, only 50 articles were selected for in-depth analysis. This rigorous selection emphasizes the importance of ensuring that only the most relevant and high-quality articles are included in the study. This ensures that the final analysis is based on valid and reliable research.

This rigorous and thorough screening process provides a solid foundation for further research, this study not only provides specific and in-depth insights into digital marketing applications in the retail sector, but also provides a methodology that can be replicated by other researchers in different research contexts with focus on the most relevant and quality articles. This filtering method ensures that only accurate and relevant information is used, providing a solid basis for the analysis and resulting conclusions.

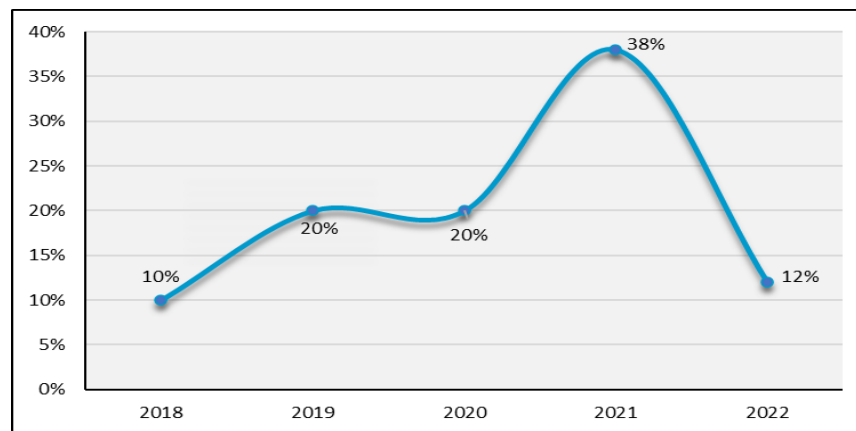


Figure 3: Result of Publication Trend by Year

Source: Data Proceed

Based on Figure 3, the overall data shows a significant rise in the number of research publications over the period from 2018 to 2021. The peak of the increase in 2021 was 38%, indicating a substantial increase in interest in the topic being discussed, namely the implementation of digital marketing in the retail sector. The startling increase in 2021 might also be the result of changes in the retail industry, such as the COVID-19 pandemic's effects, which led retail businesses to place more emphasis on digital marketing strategies.

Although 2021 showed strong growth, 2022 recorded a drastic decline to 12%. This decline may be a point that requires further exploration to understand the factors behind the fluctuations after previous growth periods. In addition, the trend in 2019 and 2020 remained stable at 20%. It shows consistency in research interest in the area being discussed over the past two years. In general, the trends surveyed

in Figure 3 show that the systematic mapping study research into the field of digital marketing applications in the retail sector has a strong basis for further exploration. Furthermore, an examination will be conducted on the publishing patterns of countries involved in research related to the implementation of digital marketing in the retail sector, as shown in Figure 4.

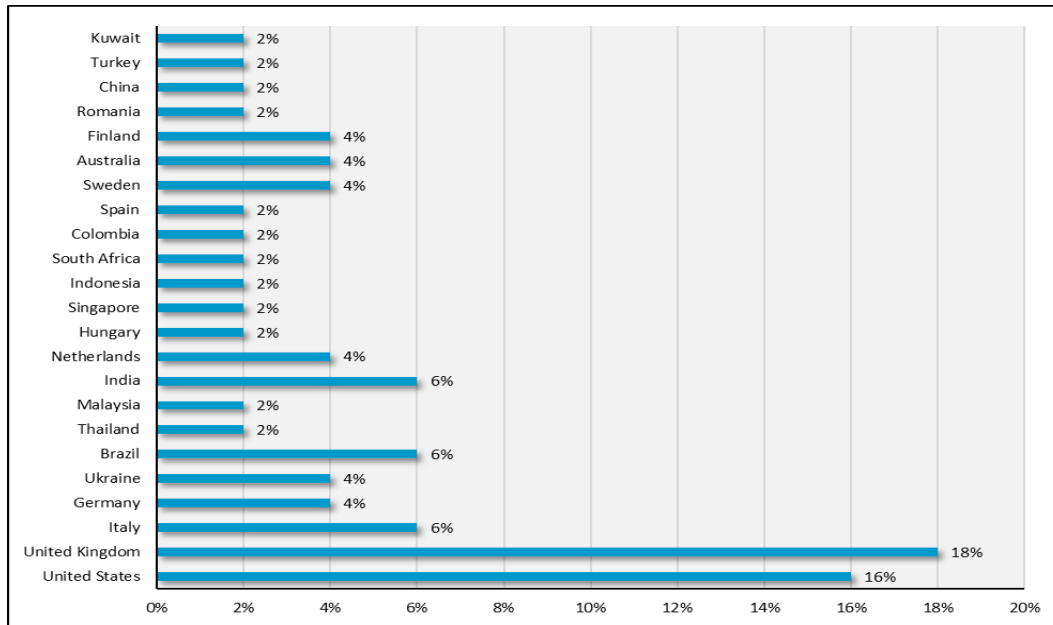


Figure 4: Result of Publication Trend by Country

Source: Data Proceed

In a systematic mapping of research into digital marketing applications in the retail sector from 2018 to 2022, the data showed the contributions of different countries to this research. The United States and the United Kingdom are the two most active contributors, with 16% and 18%, respectively. This indicates the high interest of both countries in research on the application of digital marketing in the retail sector. Furthermore, countries such as Italy, Brazil, the Netherlands, Sweden, Australia, and Finland have relatively balanced contributions, with each ranging from 4–6%. These countries also have a fairly strong interest in this research. Some countries such as Germany, Ukraine, Hungary, Singapore, Indonesia, South Africa, Colombia, Spain, Romania, China, Turkey, and Kuwait have lower contributions, about 2%, respectively.

The findings may indicate that there is a potential for a continued increase in research interest in the application of digital marketing in the retail sector in these countries. Publication trends from each country show that research on the application of digital marketing in the retail sector is an interesting topic for several countries, especially the United States and the United Kingdom, which have the highest contribution. There is also a huge opportunity for increased contributions from several other countries in this research, which can provide a more comprehensive insight into understanding trends

and their impact on the application of digital marketing in the retail sector. Next, Figure 5 presents the results of the research questions and the methods applied to the findings.

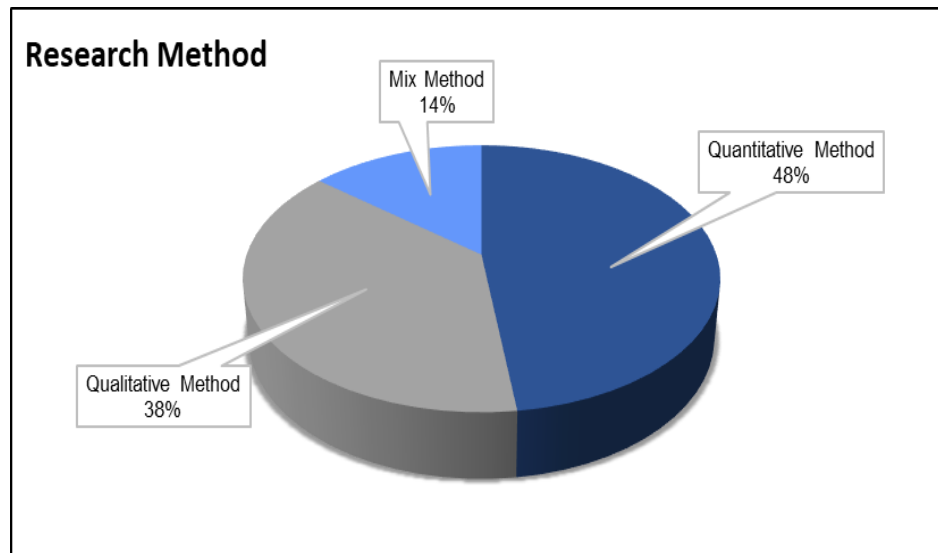


Figure 5: Result of Research Method

Source: Data Proceed

In the analysis of the results of a systematic mapping study of digital marketing applications in the retail sector between 2018 and 2022, the data showed that various research methods have been used in 50 articles studied. There are three main types of research methods identified: quantitative, qualitative, and mixed methods. The quantitative method is the most widely used method in the findings article, with a 48% contribution. The findings indicate that research into digital marketing applications in the retail sector is often done using statistical data, statistics, and quantitative analysis. This method can provide strong results in terms of statistical validity and generalization. Meanwhile, the qualitative method contributes 38% and also has a fairly significant proportion.

Based on findings, qualitative methods are used to provide more in-depth and contextual insights through individual views, perceptions, and experiences in the context of digital marketing applications in the retail sector. Besides, the mixed method contributes 14%, which combines quantitative and qualitative method elements. This approach allows for more holistic research by combining the strengths of the two methods. Based on Figure 5, it can be concluded that the findings reflect the diversity of research approaches in the application of digital marketing in the retail sector. The selection of research methods depends on the research objectives, research questions, and available resources. The presence of these different methods creates a diversity of perspectives, and research findings can provide a more comprehensive insight into the topics being studied. In this regard, this systematic mapping study provides a basis for further research into the trends and impact of digital marketing applications in the retail sector. Next, the results of research questions on the type of research from the articles found in Figure 6 are presented.

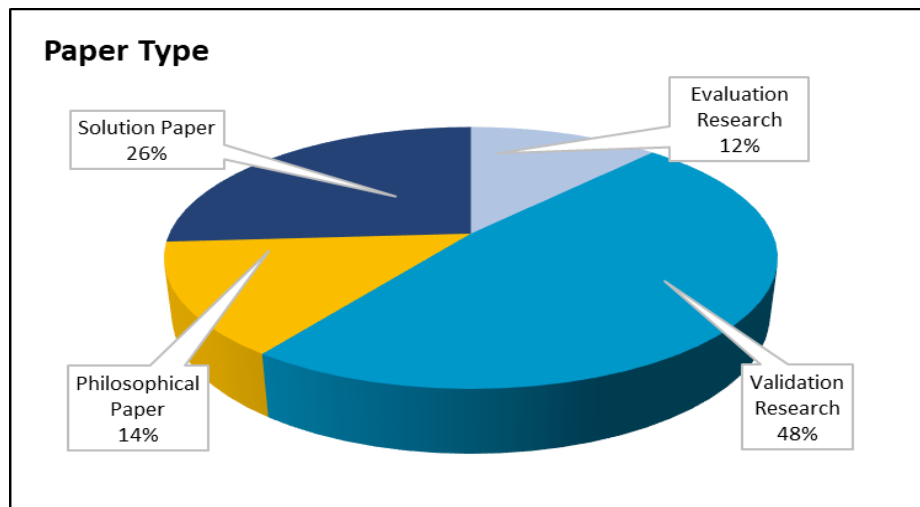


Figure 6: Result of Paper Types

Source: Data Proceed

The results of a systematic mapping study of research types in digital marketing application research in the retail sector between 2018 and 2022 provide important insights into the variety of research approaches used in this domain. Data in Figure 6 shows that four paper types appear in 50 papers that have been studied, namely evaluation research, validation research, philosophical papers, and solution papers. First, only 12% is included in paper-type evaluation research. Based on the findings in this article, the type of research focuses on evaluating the effectiveness, efficiency, and impact of a retail company's program, initiative, or strategy ([Aldousari & Elsayed, 2018](#); [Goldman et al., 2021](#); [Kim et al., 2021](#)). In the context of the application of digital marketing in the retail sector, the paper-type evaluation research found in the articles provides a deeper understanding of the extent to which digital marketing strategies contribute to business results ([Hänninen et al., 2018](#); [Sharma et al., 2021](#); [Tupikovskaja-Omovie & Tyler, 2020](#)).

Second, paper-type validation research dominates with 48%. Based on the findings in the articles, validation research is mostly used to verify and test the validity of a concept ([Chaveesuk et al., 2021](#); [Lim et al., 2022](#); [Utami et al., 2021](#)), methods ([Cowan et al., 2021](#); [Gatter et al., 2022](#); [Mulcahy & Riedel, 2020](#)), or theory ([Pessanha & Soares, 2021](#); [Wang & McCarthy, 2021](#); [Wohllebe et al., 2021](#)). This paper type is also from an article that tries to test existing digital marketing frameworks or models or to test the theories used in the retail context ([Groß, 2020](#); [Hickman et al., 2020](#); [Liu et al., 2019](#)).

Third, the philosophical paper type dominates with 14%. Based on the findings in articles with paper-type philosophical papers, generally, many develop or dig into theoretical or philosophical aspects ([Hänninen et al., 2021](#); [Nash, 2019](#); [Vieira & Claro, 2020](#)). The research found in the article can provide a conceptual basis for further research and in-depth insight into the principles behind the application of digital marketing in the retail sector in particular ([Gielens & Steenkamp, 2019](#); [Grewal et al., 2022](#); [Guercini et al., 2018](#)).

Fourth, the paper-type solution proposal dominates with 26%. Based on the findings in the article, the paper-type solution proposal is often focused on recommending practical solutions to address the challenges or problems that arise in the implementation of digital marketing in the retail sector (Bijmolt et al., 2021; Gustavo et al., 2021; Villanova et al., 2021). The research found can provide practical insights that are beneficial to practitioners and stakeholders in the retail sector (Fischbach & Guerrero, 2018; Miell et al., 2018; Yasynska et al., 2019).

The results of the systematic mapping study for paper types reflect the diversity in the type of research carried out on the articles found. Validation research becomes the dominant paper type as many researchers try to test and verify existing theories. Meanwhile, the paper-type solution proposal provides practical insights that can help address the real challenges in the application of digital marketing in the retail sector. That is, there is a combination of theoretical and more practical research to understand the dynamics of digital marketing in a retail context. Further, the relationship between the research method and the paper type of the findings article will be explained through the distribution presented in Figure 7.

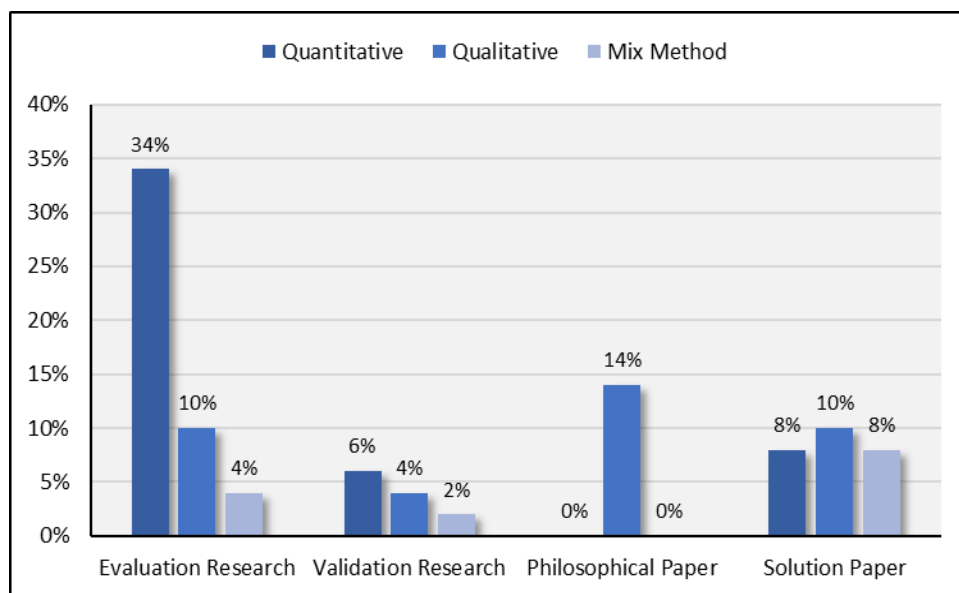


Figure 7: Distribution of Research Method and Paper Types

Source: Data Proceed

The results of a systematic mapping study that lists the distribution of research methods and paper types for research on digital marketing applications in the retail sector between 2018 and 2022 provide an in-depth understanding of the research approaches used in this domain. Based on Figure 7, diversity in research methods is very visible to explore various aspects of digital marketing applications in the retail sector. First, in paper-type evaluation research, the quantitative method dominates with 34%, while the qualitative method is used with 10%. The findings suggest that evaluation research often uses a quantitative approach to measure the effectiveness or impact of digital marketing strategies in

the retail sector. Quantitative methods can provide concrete figures and statistics to support these evaluation findings.

Second, in paper-type validation research, it's dominated by a quantitative method with a contribution of 6%, a qualitative method of 4%, and a mixed method of 2%. The findings suggest that validation research often tries to test and validate existing theories or models with a quantitative approach that can provide strong empirical data.

Third, in the philosophical paper, is dominated by a qualitative method of 14%. Philosophical papers often focus on understanding the theoretical and philosophical aspects of the application of digital marketing. The qualitative approach allows for future research to explore these concepts in greater depth.

Fourth, the paper-type solution proposal uses both quantitative and qualitative methods in a balanced manner, with a percentage contribution in the range of 8–10%. Based on the findings in the article, most endeavour to provide practical solutions in the face of the challenges in the implementation of digital marketing. A combination of quantitative and qualitative methods can provide a more comprehensive insight into formulating solutions in future research.

Figure 7 also shows that the research methods used in the context of the application of digital marketing in the retail sector vary greatly, with certain preferences for certain types of research. There is a strong use of quantitative methods in evaluation research and validation research, while philosophical papers tend to rely on qualitative methods. The solution proposal finds a balance between quantitative and qualitative methods to provide practical insights. In essence, diversity is reflected in the research approach needed to understand more complex phenomena.

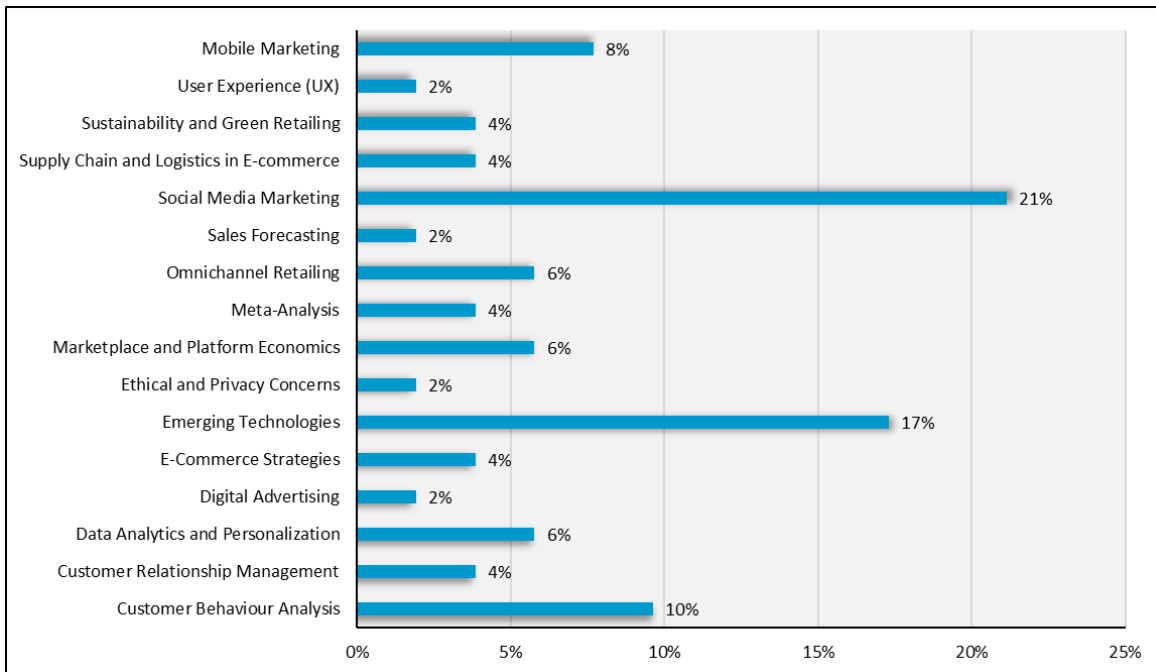


Figure 8: Result of Research Focus

Source: Data Proceed

Based on Figure 8, developments can be seen through research focused on the application of digital marketing in the retail sector in the period 2018–2022. The focus of research on mobile marketing is pretty dominant, with an 8% contribution. The main focus is on marketing strategies that emphasize mobile devices among retail companies, such as mobile apps, mobile advertising, and location-based marketing ([Lim et al., 2022](#); [Luceri et al., 2022](#); [Mulcahy & Riedel, 2020](#); [Wohllebe et al., 2021](#)). Next, the focus of customer behaviour analysis research dominates with a 10% contribution. It was found that customer behaviour analysis helps to understand purchasing preferences, search habits, and factors that influence customer purchasing decisions ([Chaveesuk et al., 2021](#); [Kim et al., 2021](#); [Tupikovskaja-Omovic & Tyler, 2020](#)). Although not very dominant, the focus of this research remains important in the context of digital marketing, to help companies better understand the audience and market of retail companies when applying digital marketing ([Aldousari & Elsayed, 2018](#); [Groß, 2020](#)).

The research focused on emerging technologies with 17%. The findings can be said to be dominant, as many analyze developments in technologies such as augmented reality, virtual reality, and artificial intelligence that play an important role in innovation in the retail sector ([Cowan et al., 2021](#); [Gatter et al., 2022](#); [Lee & Trim, 2022](#)). Using new technology as a marketing strategy can help retail companies evaluate the level of business readiness for the digitization of the economy. In addition, the role of technology also promotes the integration of business ideas that move alongside involving corporate resources in marketing learning ([Fischbach & Guerrero, 2018](#); [Yasynska et al., 2019](#)).

The highly dominant research focus findings are social media marketing (21%). The findings reflect the key role of social media platforms, which are very useful in networking with customers and

building the brand of retail companies ([Arango-Botero et al., 2021](#); [Pessanha & Soares, 2021](#); [Zhan et al., 2021](#)). Social media marketing is a tool for establishing relevant communication with customers as well as understanding attitudes that are motivating companies and can influence customer behaviour and perceptions of retail ([Aydin, 2019](#); [Grewal et al., 2022](#); [Nash, 2019](#)).

The rest focused on findings on omnichannel retailing, marketplaces, and platform economics, as well as data analytics and personalization, which contributed 6%. In the focus on omnichannel retailing, the findings explain the integration and coordination of different sales channels, such as physical and online stores, in understanding the smooth shopping experience of customers ([Hickman et al., 2020](#); [Nöjd et al., 2020](#)). The focus of Marketplace and Platforms Economics mainly involves studying third-party platforms as well as analyzing sellers' strategies on third-party platforms for adoption by retailers ([Gielens & Steenkamp, 2019](#); [Goldman et al., 2021](#)).

Data analytics and personalization focus on research findings rather than explaining that, in the digital age, data is a valuable asset and using this data to understand customer behaviour as well as provide personalized experiences that are increasingly important to customers ([Villanova et al., 2021](#)). Other research focuses such as sustainability and green retailing, supply chain and logistics in e-commerce, meta-analysis, customer relationship management, and e-commerce strategies each dominated with 4%.

Focused on sustainability and green retailing, the research findings include a study of retailers' efforts to be more sustainable and how digital marketing supports such initiatives ([Gustavo et al., 2021](#); [Utami et al., 2021](#)). Focusing on supply chain and logistics in e-commerce, the main consensus of findings deals with the process of delivery and return of goods in the operational online retail business ([Korneyev et al., 2022](#)). The focus of meta-analysis is also important to enrich the theoretical framework regarding the development and proposition of the application of digital marketing in the retail sector ([Hänninen et al., 2021](#)). Customer relationship management becomes a challenging focus for retail companies. Delivering messages, timing, and the right way, as well as how companies can manage the right long-term relationship with customers, is a key consensus in digital marketing implementation ([Conlin & Labban, 2019](#); [Villanova et al., 2021](#)). The research focus of E-Commerce Strategies is an effort to play efficient prices, stock management, and payment methods in the context of online retail ([Erdmann & Ponzoa, 2021](#); [Rashid et al., 2021](#)).

The remainder focused research on user experience (UX), sales forecasting, ethical and privacy concerns, and digital advertising dominated with 2%. UX can be used as an evaluation concept for a retail company in terms of the quality and effectiveness of the user experience on a website or application in digging customer experience to influence sales conversions ([Miell et al., 2018](#)). Digital marketing can also be used as a sales forecasting strategy for retail companies and help them with stock planning ([Vieira & Claro, 2020](#)). The focus on ethical and privacy concerns is an important element, which includes attention to the ethical aspects of collecting consumer data and the use of personal information as a basis for providing advertising that matches consumer preferences ([Aiolfi et al., 2021](#)). Finally, on the focus of digital advertising, the main consensus is the impact of the use of

online marketing tools in the development and implementation of marketing strategies, which covers aspects of online advertising and metrics of its success in the retail context ([Orzan et al., 2020](#)).

CONCLUSION

A systematic mapping study of digital marketing in the retail sector from 2018 to 2022 reveals several significant trends and insights. There was a notable increase in research publications in 2021, largely influenced by the COVID-19 pandemic's impact on retail. Quantitative methods were most common, representing 48% of the studies, indicating the importance of data-driven approaches in this field. Qualitative methods followed at 38%, with mixed methods at 14%. The study categorized research into various types: validation research (48%) was most prevalent, followed by solution proposals (26%), evaluation research (12%), and philosophical papers (14%). This diversity highlights the range of methodologies used to address different research questions. Key areas of focus included social media marketing (21%) and emerging technologies (17%), underscoring the critical role of social media in modern retail marketing and the influence of technological advancements on the sector.

Recommendations for advanced research can analyze a significant decline in research publications by 2022 by identifying factors that influence current trend changes. Factors like the COVID-19 pandemic, changes in consumer behaviour, or technological innovations need to be explored further and deeper. In addition, research focuses such as user experience, sales forecasting, ethical and privacy concerns, and digital advertising can also be deepened to broaden readers' insight into the context of its application in the retail sector. Other recommendations could also be made to extend the research to other regions and verify it through qualitative methods.

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