

A Bibliometric Analysis of Email Marketing

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ABSTRACT

In this study, we conduct the bibliometric analysis of email marketing research in order to examine its intellectual structure, theme development, and patterns of global collaboration. The database for data collection is a scientific database while the methods of bibliometric analysis include co-occurrence, co-authorship, co-citation analysis, and visualization with the help of VOSviewer software. The results indicate that email marketing research is firmly rooted in the field of marketing as there are prevailing keywords like "marketing," "electronic mail," "digital marketing," and "social media." In terms of themes, the research stream can be divided into four streams: strategic digital marketing and e-commerce performance, consumer behavior and communication channels, technology and computational methods which include machine learning and artificial intelligence, as well as security issues like spam and phishing detection. As for temporal trends, the research moved from the basic research on the internet to the data driven and personalized marketing. The collaboration analysis identifies a fragmented but nevertheless connected global research network with USA and India being the centers of international collaboration.

Keywords: *Email Marketing, Bibliometric Analysis, Digital Marketing, Vosviewer, Digital Marketing*

1. INTRODUCTION

Email marketing has continued to be one of the most popular approaches to digital marketing even in the face of the fast rise of social media channels, influencer marketing, mobile applications, and artificial intelligence-enabled communication channels. It is defined as the act of using email to market products or services, brands or business-client relations [1], [2]. Email marketing continues to offer businesses a convenient means of communicating directly with their clients and at a relatively affordable price. While other forms of digital marketing depend significantly on third parties to deliver their messages, email marketing allows companies to communicate with their clients without relying on third parties and through personalized content as per client preference and behavior [3], [4].

The importance of email marketing has grown in parallel with the growth in e-commerce and data-driven marketing approaches. With the use of internet technologies and mobile phones becoming ubiquitous, personalized and targeted forms of communications have become vital. Email marketing allows companies to utilize their customers' information for segmentation and automation, thus enhancing relevancy of messages [5]. Moreover, innovations in the area of marketing automation have allowed companies to create complex email workflows tailored for different stages of the consumer journey. Email marketing is an integral part of digital marketing approaches for companies aiming at more effective nurturing of customer relationships [6].

There has been an extensive research conducted in the field of email marketing over the last two decades. Several areas related to email marketing have been explored in previous studies, such as customer attitudes towards email messages, personalization issues, design features of emails, open and click-through rate, customer involvement, trust, purchase intention, and customer relationship management. It was found that such aspects as content relevancy, personalization, time, subject line, and value perception have a major impact on the efficiency of email marketing

campaigns [7]–[9]. Moreover, the researchers have also paid attention to the integration of email marketing with the digital marketing environment.

In recent times, the advent of technologies such as artificial intelligence, machine learning, big data analytics, and predictive marketing has added new dimensions to the study of email marketing. Organizations use intelligent recommender systems, automation of content creation, behavior prediction of customers, and personalization for better results through emails. In addition to this, the rising concerns related to issues such as privacy, security, and compliance have opened up new avenues for research. Legislations such as the GDPR in Europe and various other privacy legislations around the world have greatly impacted the way customer information is collected, processed, and utilized by organizations during their email marketing activities [10].

Even though the number of papers is increasing, the knowledge about the intellectual structure and development path of the email marketing research still is not quite clear. At the same time, most of the published papers are concentrated on the empirical study of the email marketing practices, technologies or customer reaction. While these works significantly increased theoretical and practical knowledge, there is still no clear information on how the area was developing, what main areas are covered in the literature, what kind of connections exist between the topics of the research and what new trends emerge. The method of bibliometrics allows to address all these problems by quantitative analysis of the publication trends, citation network, keywords network and topic evolution in the research area [11].

Despite the extensive attention that email marketing received as a research area in digital marketing and electronic commerce, current literature has been spread across many themes such as consumer behavior, personalization, automation, customer relationship management, analytics, and privacy. Most of the previous research has focused on particular empirical settings without addressing the general progression of the research area. This leads to the scarcity of the complete evidence about the research framework, key thematic clusters, leading authors, publication patterns, and upcoming themes in email marketing literature. Due to the lack of the systematic bibliometric review, researchers face the challenge of understanding the body of knowledge and identifying the future research opportunities in the field. For these reasons, bibliometric analysis should be conducted in order to map the advancement of email marketing research and reveal its intellectual foundation. This research paper is intended to conduct bibliometric analysis of the development and intellectual structure of email marketing research.

2. METHODS

The study adopted a bibliometric approach in analyzing the development, intellectual structure, and research trends of email marketing literature. The bibliographic information was obtained from the Scopus database, which has been acknowledged as one of the largest and most comprehensive abstract and citation databases for academic journals and proceedings. Scopus was chosen due to its wide range of quality academic journal publications in fields like business, marketing, information systems, among others. The data was retrieved through the use of the keyword “email marketing” in the title, abstract, and keywords of the articles. Publications included in the analysis included journal articles, conferences papers, reviews, among other types of scholarly publications in Scopus. The information retrieved was then exported in CSV format with the following bibliographic details: authors, titles, abstracts, keywords, year of publication, affiliations, citations, and source title.

The bibliometric analysis was performed through the use of the VOSviewer software, a commonly used software application in building bibliometric networks [12]. VOSviewer was used to conduct the keyword co-occurrence analysis in order to establish research themes and connections in the email marketing body of knowledge. Through the use of VOSviewer software, network visualization maps were produced to show thematic clusters, while overlay visualization maps were produced to show how research themes evolved over time, and density visualization maps were produced to determine the high and new research areas.

3. RESULT AND DISCUSSION

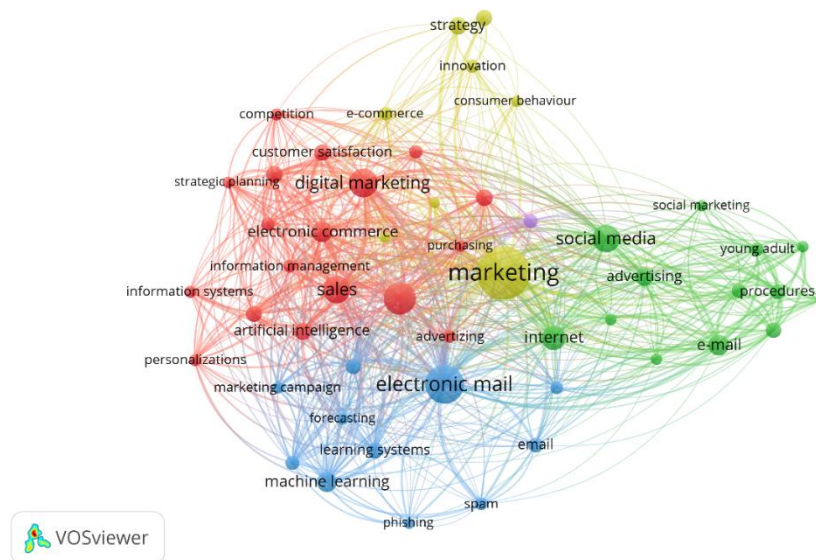


Figure 1. Network Visualization

Source: Data Analysis Result, 2026

Figure 1 shows the intellectual structure of the research on email marketing in the wider context of marketing and digital communications. The concept of “marketing” is used as the dominating central node, which demonstrates that email marketing research is not conducted in isolation, but rather as an integral part of the wider marketing discipline. Its numerous linkages with other clusters reveal that email marketing acts as a bridging concept connecting various lines of research. Red cluster is mainly associated with the strategic and commercial aspect of digital marketing. Words like “digital marketing,” “sales,” “electronic commerce,” “satisfaction of the customer,” and “strategic planning” show that there is a greater emphasis on results and business considerations. Such cluster means that quite a lot of research in the area views the concept of email marketing as the method that helps improve conversions, retention of customers, and competitive advantage in electronic commerce contexts.

The green cluster denotes the social and communicative environment within which email marketing occurs and contains significant ties to “social media,” “internet,” “advertising,” and “e-mail.” Such a clustering of words implies that email marketing is usually considered in relation to a wider context of digital communication means and not as a standalone tool. “Young adult” and “social marketing” denote the focus on behavior and demographics; specifically, research explores the interactions of various demographic groups with digital promotion material. Blue group is more of an engineering and analytic one which is concentrated on the issues like “electronic mail,” “machine learning,” “spam,” “phishing,” and “forecasting.” This means that there is another research stream that deals with the problems connected with the technical aspects, cybersecurity issues, and optimizing algorithms of emails. The mention of the issues like spam and phishing shows

that there is a link between email marketing research and the questions of digital trust, security, and reliability of the system. The cluster with the color yellow, including keywords like “strategy,” “innovation,” “consumer behavior,” and “e-commerce,” is a concept that connects other clusters. This is because the yellow cluster corresponds to the theoretical aspect of the research related to the investigation of email marketing through the behavioral and strategic innovations theory.

3.1 Overlay Visualization

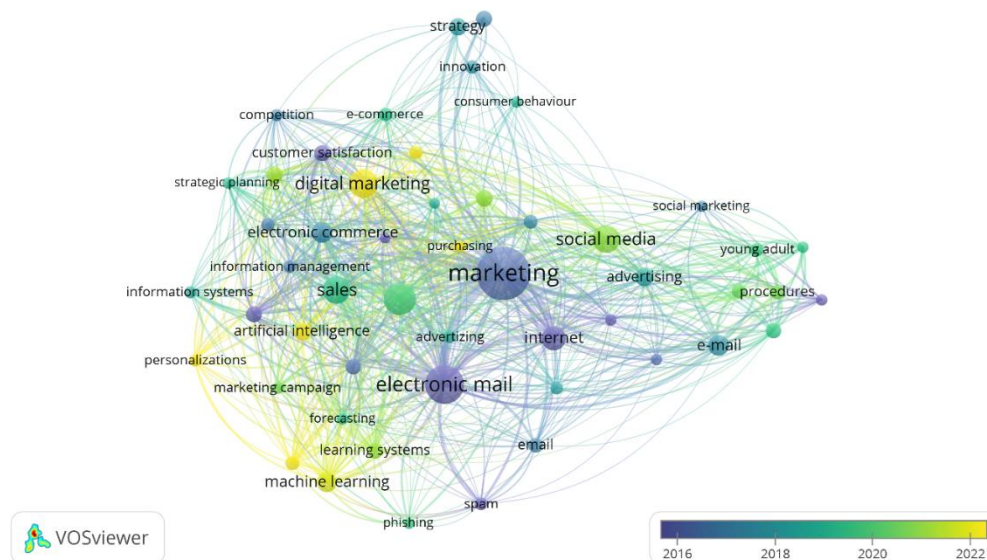


Figure 2. Overlay Visualization

Source: Data Analysis Result, 2026

In Figure 2, a co-occurrence network graph of literature on email marketing, with “marketing” being the most prominent central node, implies that the study of email marketing is deeply rooted within the marketing science as a whole rather than being an independent subject area. The presence of related nodes such as “electronic mail,” “social media,” “digital marketing,” and “internet” points to a strong structural multidisciplinary of the topic by combining the research on communication technologies with the business and behavior aspects of marketing science.

From a thematic point of view, the network comprises a few clusters of different but interrelated themes. First, there is a “commercial-strategic” cluster represented by such keywords as “digital marketing,” “sales,” “electronic commerce,” and “customer satisfaction,” which suggests its focus on results and business aspects. The second cluster relates to communication and consists of “social media,” “advertising,” and “e-mail.” In addition, there is also a “technical-analytical” cluster consisting of such themes as “machine learning,” “spam,” “phishing,” and “forecasting.” Finally, conceptual linking terms such as “strategy,” “innovation,” and “consumer behavior” imply that the research of email marketing is conducted from three angles – strategic, behavioral, and technical.

The color gradient of the overlay (2016–2022) provides an evident temporal trend in the development of the subject matter. The earlier papers (dark tones) tend to be focused on the issues like “electronic mail,” “spam,” and “internet,” which implies the attention paid to the functionality of the system and communication network. Later publications (green–yellow tones) are more interested in such notions as “machine learning,” “artificial intelligence,” “personalization,” and “social marketing.”

3.2 Citation Analysis

Table 1. The Most Impactful Literatures

| Citations | Authors and year | Title |
|-----------|------------------|---|
| 1319 | [13] | Two case studies of open source software development: Apache and Mozilla |
| 650 | [14] | Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email |
| 402 | [15] | Online surveys in marketing research: Pros and cons |
| 380 | [16] | Tolerance and short term efficacy of rituximab in 43 patients with systemic autoimmune diseases |
| 327 | [17] | Understanding the intention to use mobile shopping applications and its influence on price sensitivity |
| 282 | [6] | The 3G IP Multimedia Subsystem (IMS): Merging the Internet and the Cellular Worlds: Third Edition |
| 240 | [18] | Spamalytics: An empirical analysis of spam marketing conversion |
| 228 | [19] | The impact of generational cohorts on status consumption: An exploratory look at generational cohort and demographics on status consumption |
| 190 | [20] | The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector |
| 186 | [21] | Phishing web site detection using diverse machine learning algorithms |

Source: Scopus, 2026

In Table 1, the literature cited the most times and influencing email marketing and digital marketing research area is provided. The literature most cited is [13] with 1,319 citations related to open-source software development, but despite being not directly associated with email marketing, the article provides fundamental methodological knowledge about online collaboration and the underlying principles of online communications research. [14] (650 citations) relates more directly to the problem at hand as it is devoted to viral marketing and electronic word-of-mouth by means of email and, thus, is an essential conceptual foundation to investigate consumers' motivation to exchange email-based information. The article by [15] (402 citations) contributes to digital marketing methodology through the study of online surveys. Other significant works include [18] (240 citations) and [22] (186 citations), both of which deal with spam analysis and phishing detection via machine learning from the cybersecurity perspective. [17] and [23] show a trend towards mobile applications and digital marketing capabilities.

3.4 Co-Authorship Analysis

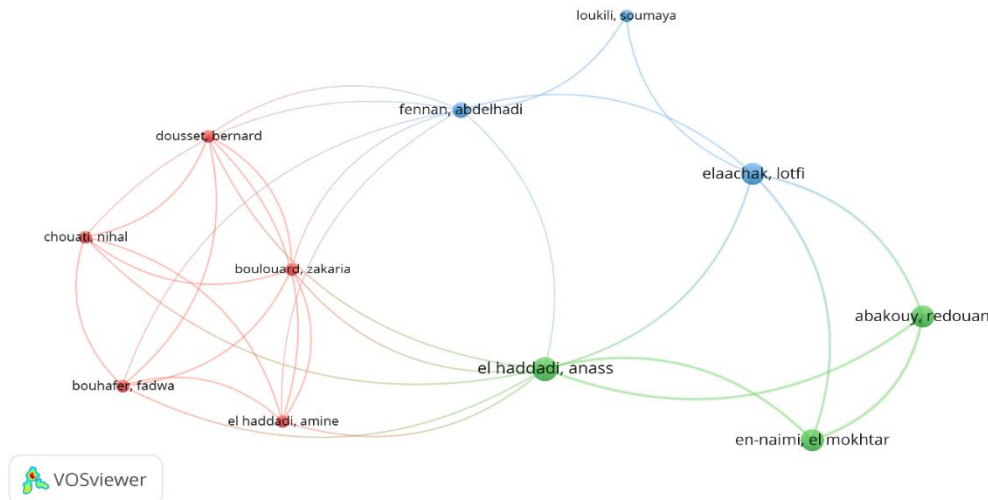


Figure 4. Author Visualization
 Source: Data Analysis Result, 2026

Figure 4 reveals a clearly structured collaboration pattern divided into three main clusters. The red cluster (left) shows a tightly connected group led by authors such as Dousset Bernard, Chouati Nihal, Bouhafier Fadwa, Boulouard Zakaria, and El Haddadi Amine, indicating strong intra-group collaboration but limited external linkage. The green cluster (right-bottom), including Abakouy Redouan and En-Naima El Mokhtar, forms another cohesive subgroup with relatively strong internal ties and moderate connections to the broader network. The blue cluster (top-right), consisting of Fennan Abdelhadi, Elaachak Lotfi, and Loukili Soumaya, appears more dispersed but serves as an important intermediary layer connecting different groups. At the center, El Haddadi Anass occupies a bridging position across clusters, indicating a high level of betweenness centrality and suggesting a key role in connecting otherwise separated research groups.

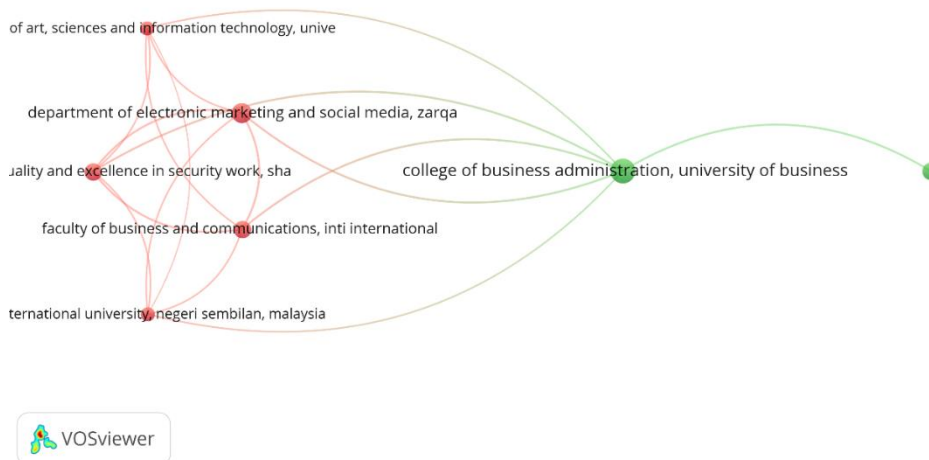


Figure 5. Institution Visualization
 Source: Data Analysis Result, 2026

Figure 5 shows an inter-institutional collaboration network in the field of electronic marketing and associated fields having a moderately centralized yet fragmented network. The red cluster on the left consists of various institutions like “Department of Electronic Marketing and Social Media (Zarqa)”, “Faculty of Business and Communications (INTI International)” and “International University Negeri Sembilan (Malaysia)”. This shows that there exists a regional collaboration group among these institutions, which have high internal cohesion but low external cohesion. In the green cluster, the central organization is the “College of Business Administration, University of Business”, which serves as the major structural node in this network due to the existence of many cross-cluster ties of this organization including one tie with a peripheral green cluster to the far right.

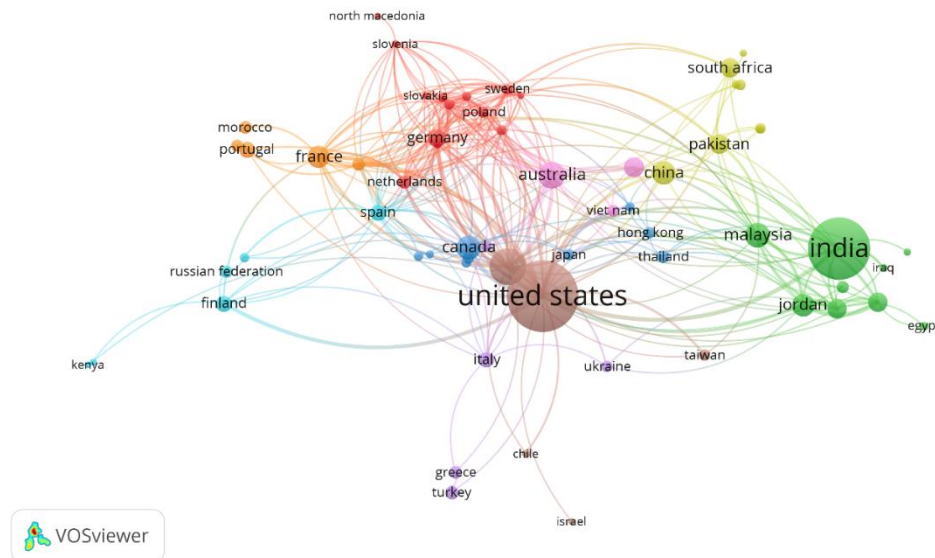


Figure 6. Country Visualization

Source: Data Analysis Result, 2026

Figure 6 indicates a highly centralized global research structure dominated by the United States, which serves as the primary hub with the largest node size and the highest number of cross-country connections. It acts as the principal intermediary linking multiple regional clusters, particularly Europe, Asia, and parts of Africa. On the right side, India emerges as another major hub with strong regional connectivity to Malaysia, Jordan, Pakistan, China, and neighboring Asian and Middle Eastern countries, forming a dense South–South collaboration network. European countries such as Germany, France, the Netherlands, Sweden, Poland, and Spain form a tightly interconnected cluster with strong intra-regional collaboration and multiple links to the United States, indicating strong transatlantic research integration. Smaller but distinct peripheral contributors such as Kenya, Finland, Chile, and Israel show limited connectivity, suggesting more isolated participation in the global knowledge network.

CONCLUSION

The bibliometric mapping of email marketing literature conducted in this paper represents a detailed mapping of the intellectual, conceptual, and collaborative architecture of this discipline. It can be concluded that the area of email marketing is deeply entrenched in the wider environment of marketing and digital communication, as “marketing,” “electronic mail,” “social media,” and “digital marketing” comprise the conceptual core of this domain. Thematic analysis shows that the development of the field is multidimensional, and includes not only application of marketing techniques but also consumer behavior, technology (machine learning and artificial intelligence), and security issues (spam and phishing). Temporal analysis, in turn, confirms the transition from

the focus on internet communication systems to the new themes such as personalization, automation, and intelligent marketing systems. Meanwhile, the co-authorship and country-level analysis shows a rather disjointed yet connected collaboration network, where a small number of authors, organizations, and countries (in particular, the United States and India) act as bridge nodes.

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