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# Use of social media in higher education marketing activities: a systematic literature review

#### **A**BSTRACT

The main aim of this article is to present a systematic literature review of the use of social media in higher education marketing activities. A Systematic Literature Review methodology has been used to identify, select and evaluate the published research. A set of 78 papers deduced from Scopus has been analyzed and synthesized. Based on the survey, the following questions were answered: (1) In which publications has information on the use of social media in higher education marketing activities appeared? (2) Which publications on the use of social media in higher education marketing activities were cited most frequently? (3) Which countries have contributed most to the development of the use of social media in higher education marketing activities through publication activities? (4) To which subject areas are articles on the use of social media in higher education marketing activities assigned? (5) Which social media have been used in higher education marketing activities? The paper discusses the gap in the literature and proposes new opportunities for future research.

**Keywords:** social media, higher education institution, HEIs, marketing, systematic literature review, PRISMA

JEL Classification: I21, I23, M31

## Introduction

The rapid expansion of higher education, because of the increase in the number of public and non-public higher education institutions (HEIs), has resulted in qualitative changes in the education system [Sztanderska, 2005]. The role of higher education has undergone a radical metamorphosis. From the previously dominant model of elite education (only a narrow range of students benefited from education), there was a turn towards mass education [Pietrzak, Gołaś, 2018]. In addition, among the current problems facing the higher education system in many countries (both developed and developing), the following are identified [Sułkowski, 2016]: low levels of public funding, bureaucratization, and the development of competitive, market-based educational institutions. Meeting the problems highlighted requires HEIs to reach out to methods used in commercial entities. As Urbanek [2016] states, HEIs should be treated as a kind of 'enterprise', and managed using business logic. This is one of the principles of the New Public Management [more on this paradigm has been written by, among others, Bryson et al., 2014, Gruening, 2001; Hood, 1995; O'Flynn, 2007].

In recent years universities, following the example of business, have increasingly embraced social media (SM). HEIs have turned to platforms like Facebook, Twitter, Instagram, LinkedIn, and YouTube to engage with students, faculty, alumni, and the broader community. By fostering a bidirectional conversation, universities may understand better their audience's preferences, allowing them to fine-tune their marketing initiatives for a greater effect. Over the past decade, scientists have written a remarkable number of articles about the use of SM in higher education marketing activities. It is worth noting that most of them were case studies and pointed out the positive and negative effects of the use of SM [e.g. Peruta, Shields, 2017; Vural, 2015; Willems et al., 2018]. Future research should focus more on systematizing knowledge in this area (theoretical as well as practical). Therefore, the main aim of this article is to present a systematic literature review (SLR) of the use of SM in higher education marketing activities. The following research tasks were undertaken to achieve the main objective: (1) presentation of the distribution of articles by year, including both journal and conference papers on the use of SM in higher education marketing activities; (2) identification of the most frequently cited articles in this area; (3) identification of the countries that have contributed most to the development of the use of SM in higher education marketing activities; (4) demonstration of the subject areas most frequently associated with this issue; (5) identification of various practical aspects of the use of SM in higher education marketing activities, and (6) presentation of future research directions in this field of knowledge. It is important to note that the research tasks conducted include both quantitative and qualitative approaches.

This study offers a twofold contribution. Firstly, it presents a clear overview of the current state of knowledge on the use of SM in higher education marketing activities. While some articles in this field exist, there is, to the best of the authors' knowledge, a lack of comprehensive reviews (SLRs) on the subject. To address this gap, the study provides an up-to-date, comprehensive SLR of 78 journal and conference articles indexed in Scopus. Secondly, it demonstrates the existing practical possibilities of using various SM tools in different HEIs.

This study follows the IMRAD (*Introduction*, *Methods*, *Results*, and *Discussion*) format, providing a coherent structure to present the research. This approach facilitates a logical flow of information from the initial research questions and objectives to the detailed description of the methodology, the presentation of findings, and their interpretation in the context of existing literature.

# Methodology

A literature review can be performed using different methods; Grant and Booth [2009] describe in detail 14 types of such. In this regard, researchers can use for example a traditional or narrative review, SLR, and meta-analysis. The meta-analysis method, in particular, involves a statistical approach that examines and combines the results of multiple independent studies focused on a specific research question or topic. This method aims to identify patterns, relationships, and overall effects by aggregating data from various sources, providing a more comprehensive and reliable understanding of the subject matter than any single study could offer. When there is not enough empirical evidence (as is the case of the use of SM in higher education marketing activities), it may be preferable to avoid conducting a meta-analysis. That is why the authors have chosen to use the systematic literature review (SLR), which differs from traditional reviews by "adopting a replicable, scientific and transparent process" [Tranfield et al., 2003, p. 209].

It should be mentioned that SLR is a comprehensive and structured approach to reviewing and synthesizing existing research on a particular topic. It adheres to a clearly defined protocol to locate, assess, and consolidate the results of all pertinent studies, providing a comprehensive and impartial summary of the available evidence. This approach is widely applied across various fields of scientific research. This method is "the best-known type of review" [Grant, Booth, 2009, p. 102] and so far has been used in: medicine [e.g. Chaitani et al., 2024; Chatfield et al., 2005]; computer science [e.g. Mikalef et al., 2018; Sharma et al., 2020]; social sciences [Hamilton et al., 2021; Singh, Thurman, 2019].

The systematic literature review employed the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure a methodical and transparent approach. This framework establishes a clear structure that enhances the rigour and reproducibility of the review process. PRISMA supports the systematic identification, evaluation, and

inclusion of relevant studies, reducing the risk of bias and strengthening the reliability of the outcomes. Following PRISMA guidelines allows for a well-organized and thorough process, enabling a detailed and transparent presentation of both the methodology and results. This approach has been utilized by many researchers, including Abelha et al. [2020]; Chlomoudis et al. [2022]; Harie, Gautam, and Wasaki [2023]; Zahari and Kaliannan [2023].

The SLR began with the formulation of five research questions (RQs), which the authors seek to answer in its course:

RQ1. In which publications (journal/conference papers) has information on the use of SM in higher education marketing activities appeared?

RQ2. Which publications on the use of SM in higher education marketing activities were cited most frequently?

RQ3. Which countries have contributed most to the development of the use of SM in higher education marketing activities through publication activities?

RQ4. To which subject areas are articles on the use of SM in higher education marketing activities assigned?

RQ5. Which SM have been used in higher education marketing activities?

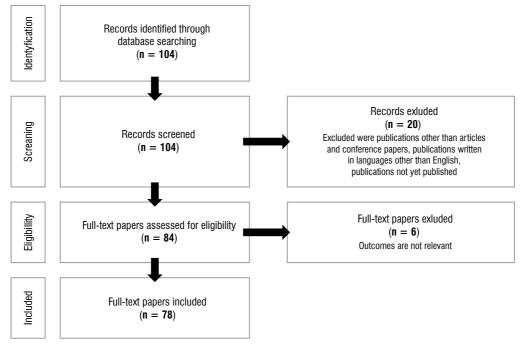
The data search was carried out on 31 July 2024, and the selected peer-reviewed database was Scopus. The selection of the repository was primarily influenced by its ease of access. In contemporary scientific research, online platforms are increasingly becoming the dominant source of information. Scopus was chosen due to its extensive collection of high-impact studies pertinent to the objectives of this research. Although alternative databases, such as Web of Science or Google Scholar, may contain unique records, Scopus was preferred to maintain a streamlined dataset and avoid issues such as duplication or inconsistencies in indexing practices across different platforms. This choice facilitated a more efficient review process, ensuring a thorough analysis within the limitations of time and available resources. It was also used by other authors in favour of SLR [e.g. Kishore et al., 2024].

The authors started with the inclusion criteria by using the terms *social media*, and *higher education institution*, and *marketing* in the topic (title, abstract, or keywords): (TITLE-ABS-KEY ("social media") AND TITLE-ABS-KEY ("higher education institution") AND TITLE-ABS-KEY ("marketing")). The 'topic' category was selected above the 'text' category to restrict the search results to publications specifically focused on using different types of social media in the marketing activities of HEIs.

Similar to other studies utilizing SLR, the search for articles in this research was carried out without any time restrictions; however, it was confined to conference and journal papers. The authors included only articles that were published and written in English to avoid any potential misunderstandings. Therefore, the final formula on the basis of which the publications were included in the analysis was as follows: (TITLE-ABS-KEY ("social media") AND TITLE-ABS-KEY ("higher education institution") AND TITLE-ABS-KEY ("marketing")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (LANGUAGE, "English")).

The exclusion process yielded a total of 78 journal and conference papers from the Scopus repository. Using these articles, the authors aimed to address the five research questions (RQ1, RQ2, RQ3, RQ4, RQ5) outlined earlier. The outcomes of the applied procedure are illustrated in Figure 1.

Figure 1. PRISMA flow diagram



Source: own study.

## Research results

#### **Quantitative results**

In this part of the article, quantitative results are introduced. The first four RQs will be answered: (RQ1) In which publications (journal/conference papers) has information on the use of SM in higher education marketing activities appeared? (RQ2) Which publications on the use of SM in higher education marketing activities were cited most frequently? (RQ3) Which countries have contributed most to the development of the use of SM in higher education marketing activities through publication activities? (RQ4) To which subject areas are articles on the use of SM in higher education marketing activities assigned?

Articles on the use of SM in higher education marketing activities first appeared in the Scopus repository in 2011. In that year, two journal papers and two conference papers were published [Alexa et al., 2011; Almadhoun et al., 2011; Carey, Matlay, 2011; Constantinides,

Stagno, 2011]. By 2016, there had been comparatively few publications on the topic in discussion, while in 2017 there was a major increase in the number of publications, primarily reaching more than 9. During the period under review, there were by far more articles in scientific journals than published conference papers. As Figure 2 illustrates, on average, twice as many journal papers were published as conference papers over the entire 14-year period. The majority of papers were published in the following journals: *Journal of Marketing for Higher Education* (12 articles), *International Journal of Educational Management* (3 articles), *Smart Innovation Systems and Technologies* (3 articles), *International Journal of Management in Education* (2 articles), *Communications in Computer and Information Science* (2 articles).

Number of articles Years Journal papers Conference papers

Figure 2. Distribution of articles by year

Source: own study based on Scopus, 2024.

Table 1 shows the articles with the highest number of citations. The most cited article (152 times) was Constantinides and Stagno's [2011] publication entitled *Potential of the social media as instruments of higher education marketing: A segmentation study*, which appeared in the *Journal of Marketing for Higher Education*. The authors pointed out that SM still play a secondary role in the students' choices (compared to traditional communication channels). "While penetration of social media is extremely high among future students, the impact of these in the choice of study and institution is relatively low compared to more traditional forms of university marketing" [Constantinides, Stagno, 2011, p. 7].

The second most-cited journal paper is titled *Social media in higher education: understanding how colleges and universities use Facebook* by Peruta and Shields [2017]. This paper was also published in the *Journal of Marketing for Higher Education*. The authors used "content analysis to examine Facebook posts from 66 top United States (US) colleges and universities and engagement from their constituents on these posts". Results showed "that there were significant differences in engagement received on posts across institution type. Additionally, media type and posting frequency were factors that contribute to engagement" [Peruta, Shields, 2017, p. 131].

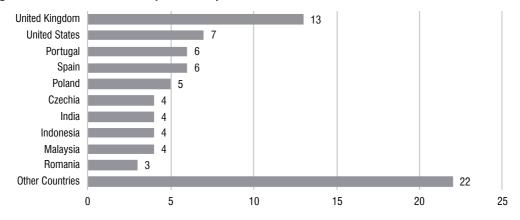
Table 1. Most frequently cited publications

Citation Count	Publication Year	Authors	Document Title	Source (Volume, Pages)
152	2011	Constantinides, Stagno	Potential of the social media as instruments of higher education marketing: A segmentation study	Journal of Marketing for Higher Education (21, pp. 7–24)
134	2017	Peruta, Shields	Social media in higher education: understanding how colleges and universities use Facebook	Journal of Marketing for Higher Education (27, pp. 131–143)
115	2013	Chauhan, Pillai	Role of content strategy in social media brand communities: A case of higher education institutes in India	Journal of Product and Brand Management (22, pp. 40–51)
98	2017	Clark et al.	Relationship quality in higher education marketing: the role of social media engagement	Journal of Marketing for Higher Education (27, pp. 40–58)
75	2017	Rutter et al.	Brand personality in higher education: anthropomorphized university marketing communications	Journal of Marketing for Higher Education (27, pp. 19–39)
60	2017	Assimakopoulos et al.	Effective social media marketing strategy: Facebook as an opportunity for universities	International Journal of Retail and Distribution Management (45, pp. 532–549)
59	2019	Pringle, Fritz	The university brand and social media: Using data analytics to assess brand authenticity	Journal of Marketing for Higher Education (29, pp. 19–44)

Source: own study based on Scopus, 2024.

Importantly, the article by Chauhan and Pillai [2013] ranks as the third most cited. It is titled *Role of content strategy in social media brand communities: A case of higher education institutes in India* and was cited 115 times. The aim of the study was "to attempt to understand the role of content strategy followed by leading higher education institutes in India which have created brand community on social media web sites to initiate and enhance customer engagement" [Chauhan, Pillai, 2013, p. 40].

Figure 3. Number of articles per country



Source: own study based on Scopus, 2024.

When considering the criterion of publication activity related to the use of SM in higher education marketing by country, the United Kingdom (UK) has the highest number of relevant publications, with 13 articles analyzed, as shown in Figure 3. The key UK institutions in this field include the University of East Anglia, the University of Leicester, the University of Essex, and Bournemouth University. Following the UK, the United States has 7 publications, with major research centres such as Syracuse University, Coastal Carolina University, Metropolitan State University of Denver, and Eastern Washington University contributing to this topic. Portugal and Spain are also among the leading countries in this area of research.

Table 2. Number of articles per research area

Research area	Number of articles	Example
Business, Management, and Accounting	45	Song et al. [2023]
Social Sciences	39	Vrontis et al. [2018]
Computer Science	26	Kumar, Raman [2019]
Decision Sciences	8	Juhaidi [2024]
Economics, Econometrics & Finance	5	Mazurek et al. [2019]
Mathematics	3	Figueira, Nascimento [2023]
Engineering	3	Zailskaite-Jakste, Kuvykaite [2012]
Medicine	1	Bardus et al. [2023]
Materials Science	1	Karapetyan [2024]
Neuroscience	1	Ramhap et al. [2016]
Pharmacology, Toxicology & Pharmaceutics	1	Bardus et al. [2023]
Physics and Astronomy	1	Karapetyan [2024]
Immunology & Microbiology	1	Bardus et al. [2023]

Note: Publications may have been assigned to more than one research area.

Source: own study based on Scopus, 2024.

Another criterion of the research focuses on the subject areas of the publications. The topics of the articles in the Scopus database were interdisciplinary, diverse, and multifaceted. As shown in Table 2, 13 distinct research areas were identified based on this criterion, including: (1) Business, Management and Accounting (45 papers), (2) Social Sciences (39 papers), (3) Computer Science (26 papers), (4) Decision Sciences (8 papers), (5) Economics, Econometrics and Finance (5 papers), (6) Mathematics (3 papers), (7) Engineering (3 papers), (8) Medicine (1 paper), (9) "Materials Science (1 paper), (10) Neuroscience (1 paper), (11) Pharmacology, Toxicology & Pharmaceutics (1 paper), (12) Physics and Astronomy (1 paper), and (13) Immunology & Microbiology (1 paper). The publication prepared by Ramhap et al. [2016] was assigned to the latter research area. The article examined the evolution of communication channels, online communication, and SM, aiming to highlight the rapidly expanding role of SM as a tool among Hungarian HEIs. It is important to note that the papers analyzed could have belonged to multiple research areas.

## **Qualitative results**

This section of the article answers the fifth research question (RQ5), namely: Which SM have been used in higher education marketing activities?

In recent years, competition among HEIs has intensified considerably [Mishina, Pace, 2021]. As a result, universities need to refine and strengthen their marketing strategies. This implies that HEIs are increasingly compelled to adopt practices commonly used in the business sector. Many authors [e.g. Dhote et al., 2015; Sawlani, Susilo, 2020] notice that the key tools used by universities today in creating their image are SM. They are generally defined as "Internet-based, disentrained, and persistent channels of masspersonal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content" [Carr, Hayes, 2015, p. 49]. SM is a powerful phenomenon that can significantly impact the reputation and image of an educational institution, thereby affecting student recruitment [Rutter et al., 2016]. Currently, the range of SM platforms accessible to HEIs is highly diverse. It includes [Mazurek et al., 2019, p. 120]: "social networking services, such as Facebook; online video-publishing/viewing/sharing services, such as YouTube; photo-sharing services, such as Instagram, Pinterest, Flickr; services/applications designed for online publishing and quick viewing of video content, such as Snapchat; blogging/microblogging services, such as Twitter; professional-business networking services, such as LinkedIn, and online Internet forums (message boards) and discussion groups".

Each of these previously mentioned services and platforms can be utilized to communicate with different stakeholder groups, such as prospective students, current students, alumni, academic and administrative staff, media, and public authorities. For instance, Rekhter and Hossler [2020] noted that individuals deciding on their studies often rely on the university's official Facebook accounts, while business representatives seeking information about a specific HEI typically turn to Twitter. At the most general level, it can be concluded that 'traditional' SM significantly dominate the new solutions in the marketing activities of universities. Within this group of platforms and services, the leading position is invariably held by Facebook [Eger et al., 2019; Eger et al., 2021; Peruta, Shields, 2017]. This is a comprehensive SM platform that has fundamentally changed how people interact and share information. Its vast array of features facilitates social connectivity, information dissemination, and digital marketing, making it an integral part of the contemporary digital landscape. The fundamental element of communication on Facebook is the individual post. Each post serves as the basic unit of communication on the platform [Eger et al., 2021]. Every post generates a certain level of engagement from the Facebook page (profile) of an organization, such as an HEI. An open question remains: what types of posts are most popular with the target audience of higher education? Eger et al. [2021] pointed out that "the best practice is to publish posts about important persons who are connected with the university and briefly describe their stories". However, they notice that "entertainment and jokes also have an important role in

communication via social media". In turn, Taecharungroj [2017] indicated that the most common post type by US universities was research, whereas the most common post types by Thai universities were events and announcements. Soares et al. [2019] showed that posts with high interactivity (message intensity to enable and stimulate user participation in a real-time mediated environment) have an inverse influence on the number of users' likes and comments. Posts with high vividness (the degree to which the content engages the senses and evokes a strong emotional response from the audience) yield a higher quantity of likes, but a lower number of user comments and shares.

When selecting SM platforms, universities should take into account the geographic location of their target audiences, such as international students. Zhu [2019, p. 174] highlighted that "China is now the world's largest source of foreign students" in the higher education market. It is important to note that platforms like YouTube, Twitter, Facebook, and Instagram are inaccessible in China due to censorship". Therefore, it is advisable for institutions to use SM platforms like Sina Weibo and WeChat, which are popular among prospective Chinese students, to build their brand and establish trust [Zhu, 2019]. A summary of the results of other authors' research in the respect under consideration is included in Table 3.

The results demonstrate two things. Firstly, understanding the impact of SM activity on market positioning is crucial for several reasons: (1) enhancing brand awareness and visibility (e.g. SM platforms provide HEIs with a global audience, allowing them to extend their reach beyond traditional geographic boundaries); (2) engaging with stakeholders (e.g. regular interactions through comments, messages, and shared content help build a sense of community and loyalty among students, alumni, and supporters); (3) influencing recruitment and enrolment (e.g. positive testimonials, student stories, and interactive content can influence their decision-making process, positioning the institution favourably in their minds); (4) enhancing reputation and credibility (e.g. HEIs can use SM to publicize their academic and research accomplishments, faculty expertise, and student successes); (5) monitoring and adapting strategies (e.g. SM platforms offer analytics tools that provide insights into audience behaviour, engagement metrics, and content performance).

Table 3. Selected research results regarding the area under consideration

Authors (year, pages)	Key findings	
Sarquis et al. [2016, p. 11]	Facebook is the most used SM (among Brazilian HEIs) and with better outcomes.     The HEIs surveyed had low user interaction but were monitoring SM and investing in improving their SM management.	
Clark et al. [2017, pp. 40–58]	There is a positive association between students following a university via SM and the perception of having a high-quality relationship with their university.  Universities on multiple SM sites lead to an even higher perception of relationship quality.	
Mazurek et al. [2019, pp. 117–133]	SM are "youth" media expressed in the target audience and content of the message.     SM are not used by Polish universities to promote research and academia.     Researchers and administration are perceived as stakeholders not understanding the potential of social media for building a school's image and reputation.	

Authors (year, pages)	Key findings	
Huebner [2021, pp. 321–331]	<ul> <li>Students are open to and expect SM advertising and assume that HEIs will engage in business-like activities.</li> <li>Students evaluate a university's brand based on the quality and relevance of their SM advertising.</li> </ul>	
Kisiołek et al. [2021, pp. 164–182]	<ul> <li>Marketing service managers of HEIs from Poland and Ukraine understand the important role of SM.</li> <li>Marketing managers of HEIs from Poland and Ukraine use the same set of tools to promote universities on social networks.</li> </ul>	
Kefalaki [2024, pp. 303–311]	There is little or no use of social networks for educational and creative purposes in Greek HEIs, although students believe that media and technology in general can help the education process.	
Utami et al. [2024, pp. 227–240]	Islamic universities need to continue to manage SM to communicate policies and campus activities to their audiences.	

Source: own study.

Secondly, there is an empirical gap in the research area. None of the analyzed articles or conference materials examined the impact of HEIs' SM activity on their market positioning. Moreover, a number of questions regarding the impact of various organizational factors, such as the type, profile, age, and size of higher education institutions on the extent of their use of SM remain to be addressed.

### **Discussion**

This section of the article outlines the limitations of the conducted study, identifies future research directions, and presents the paper's contribution to the development of theory and practice in the use of SM in higher education marketing activities.

#### Limitations

It is important to acknowledge that, despite the thorough literature review involving both quantitative and qualitative analysis, this study has certain limitations. One notable limitation is that the SLR was conducted exclusively using the Scopus database, leaving out other sources such as Web of Science – Institute for Scientific Information (ISI) or Google Scholar. Some studies [e.g. Duroha, Macht, 2023; Mariani et al., 2018; Merli et al., 2018] used several repositories simultaneously, making research more time-consuming. Another limitation was the search terms: *social media*, *higher education institution*, and *marketing*. This affected the selection of the papers to be included in the research. This means that publications in which the authors deal with this topic but use synonyms or acronyms of these terms have been excluded. Also, probably some valuable publications which undertook, for example, the use of SM in teaching activities, could not be the subject of this analysis due to the absence of the phrases *social media*, *higher education institution*, and *marketing* in the title, abstract, or keywords. The research has limitations due to the nature of SLR. One such limitation is the

reliance on existing published research, which may introduce publication bias, as studies with positive or significant results are more likely to be published. Another limitation of the study was the focus on completed journal articles and conference papers, which meant that books, monograph chapters, and reports were not included in the analysis. Additionally, the study only considered works published in English, excluding publications in other languages such as Chinese, German, or Spanish.

#### **Future research directions**

Based on the presented limitations, the authors recommend the following future research directions:

- conduct SLRs using a broader range of databases, including Web of Science Institute for Scientific Information (ISI) and Google Scholar, to ensure a more comprehensive analysis;
- include books, chapters in monographs, and reports alongside journal articles and conference papers to provide a more complete overview of the research landscape;
- utilize a broader set of search terms and synonyms related to *social media*, *higher education institution*, and *marketing* to capture a wider range of relevant publications. This includes exploring alternative terms, acronyms, and related concepts, like: *HEIs*, *university*, *tertiary education*, *marketing activities*, *social networks*;
- consider including research published in various languages, such as Chinese, German, and Spanish, to avoid language bias and uncover valuable insights from non-English sources;
- replicate the study in the future conducting further analysis of the topic enables tracking trends;
- analyze relationships between variables such as the type, profile, age, and size of HEIs
  versus the degree of SM use, with their position in the teaching, research, and expert-consulting market.

By addressing these areas, future research can provide a more nuanced and inclusive understanding of the role of SM in higher education marketing and beyond.

#### **Contributions**

This study filled a knowledge gap (theoretical gap, but also a practical one) in several dimensions. The SLR was undertaken, based on which the following research tasks were accomplished: (1) presentation of the distribution of articles by year, including both journal and conference papers on the use of SM in higher education marketing activities; (2) identification of the most frequently cited articles on this area; (3) identification of the countries that have contributed most to the development of the use of SM in higher education marketing activities; (4) demonstration of the subject areas most frequently associated with this issue; (5) identification of various practical aspects of the use of SM in higher education marketing activities and (6) presentation of future research directions in this field of knowledge. Therefore,

the answers to all research questions were found: In which publications (journal/conference papers) has information on the use of SM in higher education marketing activities appeared? (RQ1); Which publications on the use of SM in higher education marketing activities were cited most frequently? (RQ2); Which countries have contributed most to the development of the use of SM in higher education marketing activities through publication activities? (RQ3); To which subject areas are articles on the use of SM in higher education marketing activities assigned? (RQ4); Which SM have been used in higher education marketing activities? (RQ5).

# Summary

This study provides a comprehensive SLR of the use of SM in higher education marketing activities, addressing a critical gap in the field. By analyzing 78 journal and conference papers from the Scopus repository, the review sheds light on key trends, such as the increasing use of popular platforms for engaging with students, faculty, and broader communities. It highlights significant contributions from countries like the UK and the US and underscores the interdisciplinary nature of this research area.

The findings emphasize that while SM has become integral to the marketing strategies of HEIs, there is a lack of research on how these activities affect institutional positioning in education and research markets. Researching the use of SM by HEIs in marketing activities is vital for understanding and leveraging the potential of these platforms. As SM continues to shape the ways in which information is disseminated and consumed, HEIs must develop and refine strategies that align with digital trends and stakeholder expectations. Several studies have been carried out in this regard. At the same time, it is an issue that calls for the implementation of further research, especially of an empirical nature. Furthermore, the study limitations, such as the reliance on a single database and the exclusion of non-English publications, point to opportunities for future research. Expanding the scope of the analysis, integrating other repositories, and investigating the impact of SM strategies on HEIs' market positioning are important next steps. Ultimately, this review serves as a foundation for deeper exploration into how SM can be strategically leveraged to enhance visibility, engagement, and competitiveness within higher education.

## References

- 1. Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., Ferreira-Oliveira, A.T. (2020). Graduate employability and competence development in higher education A systematic literature review using PRISMA. *Sustainability*, *12*(15), p. 5900, https://doi.org/10.3390/su12155900
- 2. Alexa, E.L., Alexa, M., Stoica, C.M. (2011). The use of online marketing and social media in higher education institutions in Romania. *Proceedings of the 17th International Business Information Management Association Conference*, 4, pp. 350–359, https://doi.org/10.5171/2012.721221

- 3. Almadhoun, N.M., Dominic, P.D.D., Woon, L.F. (2011). Social media as a promotional tool in higher education in Malaysia. *Postgraduate Conference Energy and Sustainability: Exploring the Innovative Minds*, p. 6136267, https://doi.org/10.1109/NATPC.2011.6136267
- Assimakopoulos, C., Antoniadis, I., Kayas, O.G., Dvizac, D. (2017). Effective Social Media Marketing Strategy: Facebook as an Opportunity for Universities. *International Journal of Retail and Distribution Management*, 45(5), pp. 532–549, https://doi.org/10.1108/IJRDM-11-2016-0211
- 5. Bardus, M., Assaf, S.A., Sakr, C.J. (2023). Using Social Marketing to Promote COVID-19 Vaccination Uptake: A Case Study from the "AUBe Vaccinated" Campaign. *Vaccines*, *11*(2), p. 459, https://doi.org/10.3390/vaccines11020459
- 6. Bryson, J.M., Crosby, B.C., Bloomberg, L. (2014). Public value governance: Moving beyond traditional public administration and the new public management. *Public Administration Review*, 74(4), pp. 445–456, https://doi.org/10.1111/puar.12238
- 7. Carey, C., Matlay, H. (2011). Emergent Issues in Enterprise Education: The Educator's Perspective. *Industry and Higher Education*, 25(6), pp. 441–450, https://doi.org/10.5367/ihe.2011.0067
- 8. Carr, C.T., Hayes, R.A. (2015). Social media: Defining, developing, and divining. *Atlantic Journal of Communication*, 23, pp. 46–65, https://doi.org/10.1080/15456870.2015.972282
- 9. Chaitani, H., Fabeck, L., Koulischer, S. (2024). Heterotopic ossification following COVID-19 infections: systematic literature review of case reports and case series. *BMC Musculoskeletal Disorders*, 25(1), p. 421, https://doi.org/10.1186/s12891-024-07537-4
- 10. Chatfield, M.D., Brayne, C.E., Matthews, F.E. (2005). A systematic literature review of attrition between waves in longitudinal studies in the elderly shows a consistent pattern of dropout between differing studies. *Journal of Clinical Epidemiology*, 58(1), pp. 13–19, https://doi.org/10.1016/j.jclinepi.2004.05.006
- 11. Chauhan, K., Pillai, A. (2013). Role of content strategy in social media brand communities: A case of higher education institutes in India. *Journal of Product and Brand Management*, 22(1), pp. 40–51, https://doi.org/10.1108/10610421311298687
- 12. Chlomoudis, C., Konstantinou, A., Kostagiolas, P., Pallis, P. (2022). Information needs and information-seeking behaviour of maritime students: a systematic literature review using the PRISMA method. *Library Management*, 43(5), pp. 353–369, https://doi.org/10.1108/LM-11-2021-0105
- 13. Clark, M., Fine, M.B., &Scheuer, C.-L. (2017). Relationship quality in higher education marketing: the role of social media engagement. *Journal of Marketing for Higher Education*, *27*(1), pp. 40–58, https://doi.org/10.1080/08841241.2016.1269036
- 14. Constantinides, E., Stagno, M.C.Z. (2011). Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of Marketing for Higher Education*, *21*(1), pp. 7–24, https://doi.org/10.1080/08841241.2011.573593
- 15. Dhote, T., Jog, Y., Gavade, N., Shrivastava, G. (2015). Effectiveness of digital marketing in education: An insight into consumer perceptions. *Indian Journal of Science and Technology*, 8 (S4), pp. 200–205, https://doi.org/10.17485/ijst/2015/v8iS4/70300
- 16. Duroha, J.C., Macht, G.A. (2023). Solar installation occupational risks: A systematic review. *Safety Science*, *160*, p. 106048, https://doi.org/10.1016/j.ssci.2022.106048

- 17. Eger, L., Egerová, D., Krystoň, M. (2019). Facebook and Public Relations in higher education. A case study of selected faculties from the Czech Republic and Slovakia. *Romanian Journal of Communication and Public Relations*, 21(1), pp. 7–30, https://doi.org/10.21018/rjcpr.2019.1.268
- 18. Eger, L., Egerová, D., Tomczyk, Ł., Krystoň, M. (2021). How universities communicate with public using Facebook page. *International Journal of Media and Information Literacy*, 6(1), pp. 88–99, http://doi.org/10.13187/ijmil.2021.1.88
- 19. Figueira, A., Nascimento, L. (2023). An NLP Approach to Understand the Top Ranked Higher Education Institutions' Social Media Communication Strategy. *Lecture Notes in Business Information Processing*, 494, pp. 166–185, http://doi.org/10.1007/978-3-031-43088-6\_9
- 20. Grant, M.J., Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health information & libraries journal*, 26(2), pp. 91–108, https://doi.org/10.1111/j.1471-1842.2009.00848.x
- 21. Gruening, G. (2001). Origin and theoretical basis of new public management. *International Public Management Journal*, 4(1), pp. 1–25, http://doi.org/10.1016/S1096-7494(01)00041-1
- 22. Hamilton, D., McKechnie, J., Edgerton, E., Wilson, C. (2021). Immersive virtual reality as a pedagogical tool in education: a systematic literature review of quantitative learning outcomes and experimental design. *Journal of Computers in Education*, 8(1), pp. 1–32, https://doi.org/10.1007/s40692-020-00169-2
- 23. Harie, Y., Gautam, B.P., Wasaki, K. (2023). Computer Vision Techniques for Growth Prediction: A Prisma-Based Systematic Literature Review. *Applied Sciences*, *13*(9), p. 5335, https://doi.org/10.3390/app13095335
- 24. Hood, C. (1995). The new public management in the 1980 s: Variations on a theme. *Accounting, Organizations and Society*, 20(2–3), 93–109.
- 25. Huebner, C. (2021). Admissions and advertising: Students' perception of social media advertising as a recruiting tool. *Journal of Digital and Social Media Marketing*, 8(4), pp. 321–331, https://doi.org/10.69554/LARO4682
- 26. Juhaidi, A. (2024). Social media marketing of Islamic higher education institution in Indonesia: a marketing mix perspective. *Cogent Business and Management*, 11(1), p. 2374864, https://doi.org/10.1080/23311975.2024.2374864
- 27. Karapetyan, Y. (2024). Social networks as an effective higher education institution promotion tool in the Republic of Armenia. *Scientific Herald of Uzhhorod University. Series Physics*, 55, pp. 373–382, https://doi.org/10.54919/physics/55.2024.37lw3
- 28. Kefalaki, M. (2024). The Use of Social Media in Higher Education. The Case of Greek Universities. *Springer Proceedings in Business and Economics*, pp. 303–311, https://doi.org/10.1007/978-3-031-51038-0\_34
- 29. Kishore, L., Pai, Y.P., Ghosh, B.K., Pakkan, S. (2024). Maritime shipping ports performance: a systematic literature review. *Discover Sustainability*, *5*(1), p. 108, https://doi.org/10.1007/s43621-024-00299-y
- 30. Kisiołek, A., Karyy, O., Halkiv, L. (2021). Social media in marketing management of higher education institutions in the context of Poland and Ukraine. *Polish Journal of Management Studies*, 24(1), pp. 164–182, http://doi.org/10.17512/pjms.2021.24.1.10

- 31. Kumar, V., Raman, R. (2019). Marketing your business school on social media: Analyzing social media content for adopting the right strategies. *Journal of Computer Science*, 7(12), pp. 1256–1282, http://doi.org/10.3844/jcssp.2019.1256.1282
- 32. Mariani, M., Baggio, R., Fuchs, M., Höepken, W. (2018). Business intelligence and big data in hospitality and tourism: a systematic literature review. *International Journal of Contemporary Hospitality Management*, 30(12), pp. 3514–3554, http://doi.org/10.1108/IJCHM-07-2017-0461
- 33. Mazurek, G., Korzyński, P., Górska, A. (2019). Social media in the marketing of higher education institutions in Poland: Preliminary empirical studies. *Entrepreneurial Business and Economics Review*, 7(1), pp. 117–133, http://doi.org/10.15678/EBER.2019.070107
- 34. Merli, R., Preziosi, M., Acampora, A. (2018). How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production*, *178*, pp. 703–722, http://doi.org/10.1016/j.jclepro.2017.12.112
- 35. Mikalef, P., Pappas, I.O., Krogstie, J., Giannakos, M. (2018). Big data analytics capabilities: a systematic literature review and research agenda. *Information Systems and e-Business Management*, 16(3), pp. 547–578, https://link.springer.com/article/10.1007/s10257-017-0362-y
- 36. Mishina, V., Pace, B. (2021). What digital marketing strategies: Promoting international higher education? *Rere Āwhio Journal of Applied Research & Practice*, 1, pp. 42–49, https://doi.org/10.34074/rere.00105
- 37. O'Flynn, J. (2007). From new public management to public value: Paradigmatic change and managerial implications. *Australian Journal of Public Administration*, 66(3), pp. 353–366, http://doi.org/10.1111/j.1467-8500.2007.00545.x
- 38. Peruta, A., Shields, A.B. (2017). Social media in higher education: understanding how colleges and universities use Facebook. *Journal of Marketing for Higher Education*, *27*(1), pp. 131–143, http://doi.org/10.1080/08841241.2016.1212451
- 39. Pietrzak, P., Gołaś, M. (2018). *Strategie uczelni publicznych w Polsce istota i uwarunkowania*. Warszawa: Wydawnictwo Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie.
- 40. Pringle, J., Fritz, S. (2019). The university brand and social media: Using data analytics to assess brand authenticity. *Journal of Marketing for Higher Education*, 29(1), pp. 19–44, http://doi.org/10.1080/08841241.2018.1486345
- 41. Ramhap, S., Szombathelyi, M.K., Majer, E.P. (2016). Special coginfo application by non-business organizations: Case study on marketing communication of a higher education institution. 6th IEEE Conference on Cognitive Infocommunications Proceedings, pp. 483–488. http://doi.org/10.1109/CogInfoCom.2015.7390641
- 42. Rekhter, N., Hossler, D. (2020). Russian Students' Use of Social Network Sites for Selecting University Abroad: Case Study at the Russian State University for Humanities. *Journal of International Students*, 10(3), pp. 724–740, https://doi.org/10.32674/jis.v10i3.778
- 43. Rutter, R., Roper, S., Lettice, F. (2016). Social media interaction, the university brand and recruitment performance. *Journal of Business Research*, 69, pp. 3096–3104, http://doi.org/10.1016/j. jbusres.2016.01.025
- 44. Rutter, R., Lettice, F., Nadeau, J. (2017). Brand personality in higher education: anthropomorphized university marketing communications. *Journal of Marketing for Higher Education*, 27(1), pp. 19–39, https://doi.org/10.1080/08841241.2016.1213346

- 45. Sarquis, A.B., Casagrande, J.L., de Morais, A.A., Ramos, M.M.G., Monken, S.F. (2016). Social Media as marketing strategy: Multi case study in higher education institutions in Brazil. *Espacios*, *37*(15), p. 11.
- 46. Sawlani, D.K., Susilo, D. (2020). How digital marketing helps higher education institution branding. *International Journal of Multidisciplinary Educational Research*, *5*(3), pp. 45–55.
- 47. Sharma, R., Kamble, S.S., Gunasekaran, A., Kumar, V., Kumar, A. (2020). A systematic literature review on machine learning applications for sustainable agriculture supply chain performance. *Computers and Operations Research*, 119, p. 104926, http://doi.org/10.1016/j.cor.2020.104926
- 48. Singh, V., Thurman, A. (2019). How Many Ways Can We Define Online Learning? A Systematic Literature Review of Definitions of Online Learning (1988-2018). *American Journal of Distance Education*, 33(4), pp. 289–306, http://doi.org/10.1080/08923647.2019.1663082
- 49. Song, B.L., Lee, K.L., Liew, C.Y., Subramaniam, M. (2023). The role of social media engagement in building relationship quality and brand performance in higher education marketing. *International Journal of Educational Management*, *37*(2), pp. 417–430, http://doi.org/10.1108/IJEM-08-2022-0315
- 50. Sułkowski, Ł. (2016). *Kultura akademicka. Koniec utopii?* Warszawa: Wydawnictwo Naukowe PWN.
- 51. Sztanderska, U. (2005). Kształcenie a wymagania rynku. Nowe Życie Gospodarcze, 5, pp. 15–16.
- 52. Taecharungroj, V. (2017). Higher education social media marketing: 12 content types universities post on Facebook. *International Journal of Management in Education*, *11*(2), pp. 111–127, http://doi.org/10.1504/IJMIE.2017.10002819
- 53. Tranfield, D., Denyer, D., Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, *14*, pp. 207–222, http://doi.org/10.1111/1467–8551.00375
- 54. Urbanek, P. (2016). Strategie uniwersytetów publicznych w Polsce próba oceny. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 442, pp. 500–509, https://doi.org/10.15611/pn.2016.442.48
- 55. Utami, N.W., Fahmi, R.A., Prastya, N.M. (2024). Social Media Marketing at Islamic Higher Education: Reactions, Posts, and Brand Post Contents. *Studies in Media and Communication*, 12(2), pp. 227–240, https://doi.org/10.11114/smc.v12i2.6687
- 56. Vrontis, D., El Nemar, S., Ouwaida, A., Shams, S.M.R. (2018). The impact of social media on international student recruitment: the case of Lebanon. *Journal of International Education in Business*, *11*(1), pp. 79–103, http://doi.org/10.1108/JIEB-05-2017-0020
- 57. Vural, O.F. (2015). Positive and negative aspects of using social networks in higher education: A focus group study. *Educational Research and Reviews*, *10*(8), pp. 1147–1166.
- 58. Willems, J., Adachi, C., Bussey, F., Doherty, I., Huijser, H. (2018). Debating the use of social media in higher education in Australasia: Where are we now? *Australasian Journal of Educational Technology*, *34*(5), pp. 135–149, http://doi.org/10.14742/ajet.3843
- 59. Zahari, N., Kaliannan, M. (2023). Antecedents of Work Engagement in the Public Sector: A Systematic Literature Review. *Review of Public Personnel Administration*, 43(3), pp. 557–582.

- 60. Zailskaite-Jakste, L., Kuvykaite, R. (2012). Implementation of Communication in Social Media by Promoting Studies at Higher Education Institutions. *Engineering Economics*, 23(2), pp. 174–188, http://doi.org/10.5755/j01.ee.23.2.1550
- 61. Zhu, Y. (2019). Social media engagement and Chinese international student recruitment: understanding how UK HEIs use Weibo and WeChat. *Journal of Marketing for Higher Education*, 29(2), pp. 173–190, http://doi.org/10.1080/08841241.2019.1633003

#### Internet materials:

1. Scopus (2024), https://www.scopus.com/search/form.uri?display=basic#basic [accessed o31.07.2024].