



Examining The Impact Of Sustainable Social Media Strategies On Student Enrollment Increase In Higher Education: A Bibliometric Analysis

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Abstract

This research explores the impact of sustainable social media techniques on higher education student enrolment growth using bibliometric analysis. This research examines how sustainable social media techniques might attract and engage prospective students. The analysis involves reviewing the literature, counting articles, and finding themes and trends. The results show that sustainable social media tactics may help higher education institutions sell and recruit. Targeted advertising, content production, social media campaigns, and influencer and ambassador involvement may help universities express their value propositions, engage potential students, and build community. These tactics regularly and systematically increase student enrolment. Bibliometric analysis gives a complete picture of research, but it has limits. Qualitative research should be included to this study to further understand students' and institutions' perspectives. Surveys and interviews may illuminate how sustainable social media initiatives affect student enrolment and their effectiveness. This research focuses sustainable social media techniques for higher education marketing and recruiting. These techniques and adapting to the ever-changing social media environment can help universities raise student enrolment, brand recognition, and sustainability practises. Higher education institutions may stay competitive and recruit like-minded students by constantly analysing and modifying their social media tactics.

Keywords: Sustainable, social media, student enrollment, higher education, bibliometrics.

Introduction

In recent years, the field of higher education has seen a growing interest in examining the effect that sustainable social media efforts have on student enrollment. The proliferation of social media platforms such as Facebook and Twitter have helped to stoke the fires of interest in this topic. Educational institutions have identified the potential of social media platforms to boost their visibility, engage with prospective students, and ultimately raise enrollment numbers as a consequence of the widespread use of these platforms (Kaplan and Haenlein, 2016). This potential has led to the adoption of social media platforms by educational institutions. The term "sustainable social media strategies" refers to the use of social media platforms in a way that is both intentional and accountable, with the ultimate goal of attaining long-term goals while

taking into consideration the influence on the environment, society, and economy (Steinnes, D., 2013).

The purpose of this study is to carry out a comprehensive bibliometric analysis in order to evaluate the impact that long-term social media strategies may have on the number of students who enrol in higher education courses. This will be done by determining the effect that these strategies may have on the number of students who enrol. In order to look for the patterns, trends, and essential concepts that may be discovered in the existing body of literature that is related with this topic; we are going to make use of an approach that is called bibliometrics. This study will contribute to a better understanding of the research environment that exists now and provide insights into the potential benefits and challenges associated with implementing sustainable social media tactics in higher education. These enlightening observations are going to be presented as part of this investigation (Kahle et al., 2018).

Platforms for social media such as Facebook, Instagram, Twitter, and YouTube have developed to become essential components of people's day-to-day lives, particularly among those in the younger generation. This is especially true for those who are now under the age of 30. Because these platforms have such a wide array of communication tools and interactive features, educational institutions are now able to engage with prospective students in a manner that is both more individualised and participative. By making strategic use of social media, higher education institutions are able to effectively articulate their one-of-a-kind value propositions, promote their academic programmes and campus culture, and cultivate a sense of community among prospective students (Alfred, R.L., 2005).

In addition, sustainable social media strategies are compatible with the growing emphasis that is being put on sustainability and corporate social responsibility in a wide range of businesses, including higher education. The demonstration of an educational institution's dedication to the implementation of environmentally friendly policies and procedures is becoming an increasingly obligatory requirement. It is possible for educational institutions to show their attention to environmental and social responsibility by integrating environmentally responsible social media strategies into their enrollment efforts. This is one way that educational institutions may demonstrate their commitment to environmental and social responsibility. If organisations adopt and put into effect the aforementioned methodologies, they may be able to reduce their overall carbon footprint, cut down on the amount of paper they consume, and engage in more responsible data management practises (Markley Rountree, M. and Koernig, S.K., 2015).

Despite the fact that prior studies have explored the influence that social media has on the number of students who register in schools, there is a paucity of research that focuses specifically on the function of long-term social media tactics in higher education. This is despite the fact that there is a shortage of research that focuses specifically on the function of long-term social media tactics in higher education. It is required to undertake a comprehensive analysis of the published research that is presently accessible in order to establish the current level of knowledge, research gaps, and possible topics for more inquiry. This may be accomplished by reading through all of the existing research.

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In order to perform this bibliometric analysis, a systematic search technique is going to be used in order to identify pertinent academic publications that have been derived from reputable databases. After the articles have been recovered, they will be put through a rigorous evaluation that will involve citation analysis, co-citation analysis, and keyword analysis. This examination will take place after the articles have been obtained. This will be done in order to create a map of the intellectual structure of the field and to determine which research, authors, and concepts have had the most significant influence. In addition, content analysis will be performed in order to recognise the most significant recurring themes and patterns in the existing research. This will give valuable insights into the effect that sustainable social media campaigns have on the number of students who register in the programme.

Literature Review

The research on the effect that using sustainable social media techniques may have on the number of students who register in higher education institutions is still in its early stages but is expanding at a fast pace. This section includes a complete assessment of the available research that have studied the link between sustainable social media techniques and student enrolment in higher education. These studies have been conducted both in the United States and in other countries. This analysis takes into account contemporary research publications, as well as systematic literature reviews and empirical investigations, all of which shed light on different aspects of this issue.

Social Media Strategies and Higher Education Enrollment: Recent research has focused on a variety of different approaches, each of which has shed light on the significance of social media technologies, with the overarching goal of increasing student involvement in higher education. For instance, (Urip, S., 2010.) conducted a comprehensive literature review and came to the conclusion that effective utilisation of social media platforms such as Facebook, Instagram, and Twitter had a positive influence on student enrolling. This was one of the findings of his study. The ability of an educational institution to connect effectively with prospective students, disseminate information that is interesting and engaging, and cultivate a sense of community among its already enrolled students is typically correlated with that school's ability to attract a greater number of students.

In a method that is comparable, (Li and Peng, 2019) conducted an exploratory study and stressed the value of enduring social media strategies within the framework of higher-level educational institutions. This research was carried out in the same manner as the previous example. They suggested that sustainable practises in the utilisation of social media, such as minimising energy consumption, pushing campaigns that are beneficial to the environment, and participating in responsible data management, may boost the image of an institution and attract prospective students who are environmentally conscious.

Impact of Sustainable Social Media Strategies on Enrollment: According to research, using social media methods that can be maintained over time may have a beneficial effect on the number of students who register in colleges and universities. (Abbas et al., 2019) did a bibliometric study in order to locate important topics that were discussed in previous research.

According to what they discovered, educational institutions that effectively communicate their sustainability initiatives, showcase their green campuses, and highlight their environmental responsibility through social media platforms tend to attract more environmentally conscious students, which in turn has a positive impact on enrollment.

In addition, (D. Cox and McLeod, 2014) conducted research in which they investigated the impact that long-term social media marketing had on the number of students enrolling at a big public institution. The researchers came up with a creative initiative that was focused on environmentally responsible behaviours, and then distributed it through a variety of social media channels. According to the findings, there has been a discernible rise in the total number of enquiries, applications, and eventually enrollments. This research demonstrates the potential of social media methods that may be maintained over time to increase student interest and enrolment.

Challenges and Opportunities: Although there is a consensus in the academic literature that sustainable social media initiatives have a beneficial influence on student enrolment, there are a number of difficulties and possibilities that should be taken into consideration. For instance, (Trachtenberg, B., 2019) conducted research that investigated the ethical consequences of using social media to enrol in higher education institutions. They said that educational institutions should make protecting data privacy a top priority and should make certain that their methods for sustainable use of social media comply to ethical norms. The failure to address these issues may result in unfavourable outcomes as well as a loss of confidence on the part of potential pupils.

In addition, the research carried out by (Constantinides and Stagno, 2012) investigated the function that social media influencers have in the development of long-term social media strategies for use in higher education. They discovered that working together with important people who are proponents of environmental responsibility may considerably increase the reach of social media campaigns and their overall efficacy. A larger audience may be attracted to an institution, which can eventually lead to an increase in the number of students who register there, if the institution uses the power of social media influencers to promote its sustainable efforts.

Research Gaps and Future Directions: There are still a number of gaps in research that need to be addressed, despite the fact that more and more data is being released on the subject of sustainable social media strategies and student enrollment in higher education. To get things started, there is an urgent need for a greater number of empirical studies that quantify the direct influence that scalable social media strategies have on enrollment outcomes. Existing research provides anecdotal evidence and case studies, but quantitative studies that evaluate enrollment data before and after using sustainable social media methods are required for showing causal relationships. This is because existing research focuses mostly on correlations, not causality. The enrollment data from this research need to be compared both before and after the deployment of sustainable social media tactics.

Second, there is a need for more study on the role that the different social media platforms and the aspects that are specific to each platform play in deciding enrollment outcomes. This is because there is now a gap in this area of knowledge. For instance, (Shields, and Peruta, 2019) performed study to explore the efficacy of Instagram as a medium for promoting environmentally responsible practises in the field of higher education. Specifically, they wanted to know how effective Instagram is at reaching its target audience. It is feasible that future research may analyse the various platforms and the unique benefits that they provide in terms of engaging prospective students and increasing enrollment numbers.

Data Collection

In order to carry out comprehensive bibliometric research on the impact that long-term social media strategies have on the number of students who enrol in educational institutions of higher learning, a methodical approach will be employed for the collection of data. This strategy will be designed to gather information in a systematic manner. The following stages make up the method that has to be followed:

Identification of Databases: The databases will be identified, and for the purpose of obtaining pertinent scholarly publications, reputable academic resources will be chosen. Databases such as Scopus, Web of Science, and Google Scholar are often used in the research process within higher education. These databases provide broad coverage of academic literature across a wide range of fields (Bramer, W. M., et al, 2016).

Strategy for Searching: In order to guarantee the successful retrieval of relevant articles, a comprehensive search strategy will be created. The search phrases will consist of a mix of keywords relating to student enrolment in higher education, sustainable social media techniques, and other similar themes. In order to narrow the search and make sure that it is comprehensive, we will make use of Boolean operators like AND, OR, and NOT (Moher, et al ,2009).

Inclusion and Exclusion Criteria: In order to ascertain whether or not a certain article is qualified for inclusion in the bibliometric study, distinct inclusion and exclusion criteria will be developed. Articles written in English and especially concentrating on sustainable social media techniques and student enrolment in higher education may be two of the inclusion requirements. Articles must be written in English and must have been published within a certain period (for example, during the previous years). Articles that have not been examined by a peer group, conference abstracts, and those that are not linked to the subject of the study might all be excluded as criterion (Nederhof, A. J. 2006).

Screening and Selection: The preliminary search results are going to be put through a screening and selection procedure that consists of two stages. The first thing that will be done is to go through the titles and abstracts of different publications and see if any of them are relevant to the subject of the study. In the second phase of the process, the whole texts of possibly relevant articles will be examined in order to determine whether or not they meet the inclusion and exclusion criteria. During the process of screening, any conflicts that may arise will be settled by debate and coming to a consensus among the researchers (Jung et al., 2008).

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Extraction of Data: A standardised data extraction form will be used in order to extract pertinent data from the publications that have been chosen. The information that is extracted may contain things like the names of the authors, the publication year, the journal, the study aims, the methodology, the most important results, and keywords. This stage ensures that all pertinent information required for the bibliometric analysis is collected and organised.

The bibliometric study will offer a full review of the available research on the influence of sustainable social media initiatives on student enrolment in higher education if this methodical data gathering methodology is followed. It will make it possible for academics to recognise patterns, trends, and study gaps in the area, which will, in the long run, contribute to a deeper knowledge of the subject matter.

Results

Time Span information

Data from 1990 to 2020 was collected from a variety of sources to perform a complete bibliometric study on the influence of sustainable social media initiatives on higher education student enrolment. The database search showed a steady yearly growth rate of 7.54 percent in papers published on this topic, showing increased interest. The data was gathered from 108 scientific articles and books. These publications provide varied opinions on how sustainable social media methods affect higher education student enrolment. Each analytical article was thoroughly cited. The gathered papers' mean quality grade was 5.32, indicating the field's academic rigour. During data collecting, keywords and important themes were thoroughly analysed. "Sustainable social media strategies" featured 755 times in the collected publications, demonstrating its academic importance. "Student enrollment increase" was cited 679 times, proving its significance to the study show in Table 1.

Tree Map

This map investigates the terms that occur often in works that investigate the effect that sustainable social media techniques have on promoting student enrolment in higher education. The relevance of these keywords is shown in Figure 2 by a Word Tree Map, with the size of the text indicating the frequency with which each of the keywords appears. These discovered keywords are useful markers of relevant subjects and areas of concentration within the current literature on this subject, and they may be found by looking through the aforementioned material. Further examination and research into these ideas may help to the growth of knowledge and comprehension in this area, hence laying the groundwork for additional in-depth studies and discoveries (George et al., 2020).

Lotka's Law

Lotka's Law states that a few highly influential sustainable social media strategies will have a significant impact on higher education student enrollment, while the majority will have little effect. This implies that a few sustainable social media methods may attract and enrol students in higher education. Higher education institutions may boost enrollment and promote environmental, social, and economic sustainability by implementing sustainable social media

methods shown in figure 3. These strategies may include using social media to promote eco-friendly initiatives, showcasing sustainable campus practises, promoting sustainability-related scholarships, and engaging prospective students with interactive and educational content (Ahmed et al, 2009).

Reference publication year Spectroscopy

RPYS, which is an acronym that stands for "Reference publication year Spectroscopy," is a bibliometric technique that was originally proposed by (Moral-Muñoz et al., 2020). Its objective is to illustrate the importance of prior publications as well as the historical origins of a certain research subject. This approach, as stated by (Leydesdorff et al. 2016), investigates a publication set's cited references (CR), giving special emphasis to the referenced publication years. In this method, the papers that have received the most citations are not picked out for special consideration. It does, however, display the publications that are referred to the most often within a certain reference publication year (Aksnes, et al., 2019). In a nutshell, the collection is comprised of sixty separate pieces of literature that, when taken as a whole, make reference to eight hundred and eighty-one distinct sources. In light of these results, the figure in question is provided below.

Conclusion

A bibliometric study was used to investigate the effect that sustainable social media techniques had on the growth of student enrolment in higher education institutions. The findings of this study revealed important new insights. The research investigated how sustainable social media tactics relate to increases in student enrollment, offering insight on the potential of these techniques to successfully attract and engage prospective students. The study also examined the link between sustainable social media strategies and the development of student enrollment. According to the findings of the study, effective marketing and recruiting methods on sustainable social media platforms have recently emerged as important tools for use by higher education institutions. Universities are in a better position to successfully express their one-of-a-kind value propositions, interact with potential students, and cultivate a feeling of community and belonging when they make use of a variety of platforms and methods. These methods include a wide variety of actions, such as targeted advertising, content production, social media campaigns, and interaction with brand ambassadors and influencers. The data suggest that effective student recruitment tactics for social media have a beneficial impact on student enrolment in higher education. It is more probable that an institution will see a rise in the number of students enrolling in its programmes if it applies these methods in a methodical and consistent manner. Universities are able to align their social media efforts with larger sustainability goals by utilising sustainable practises such as minimising their carbon footprint, promoting diversity and inclusion, and encouraging ethical digital engagement. This allows the universities to improve their brand image and attract students who are environmentally conscious. It is essential to recognise that the bibliometric study has certain inherent limitations. The emphasis of the study was on analysing the current literature and determining the total number of publications in this field. Although this gives a comprehensive overview of the research landscape, it is possible that not all-important studies were included in the analysis.

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In the future, bibliometric research should be supplemented by qualitative research techniques, including as surveys and interviews, in order to collect more in-depth insights into the experiences and perspectives of students and universities about the influence of sustainable social media tactics on enrolment. These approaches may be found in both quantitative and qualitative research methodologies. The study, taken as a whole, highlights how important it is for marketing and recruiting efforts in higher education to make use of social media tactics that are sustainable. It is expected that educational institutions who adopt these techniques and adjust to the ever-shifting terrain of social media will enjoy the advantages of increased student enrolment, higher brand recognition, and enhanced sustainability practises. Higher education institutions may maintain their competitive edge and recruit a diverse student body whose beliefs and objectives are congruent with their own by continually analysing and developing their approaches to social media fig 4.

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Annexure

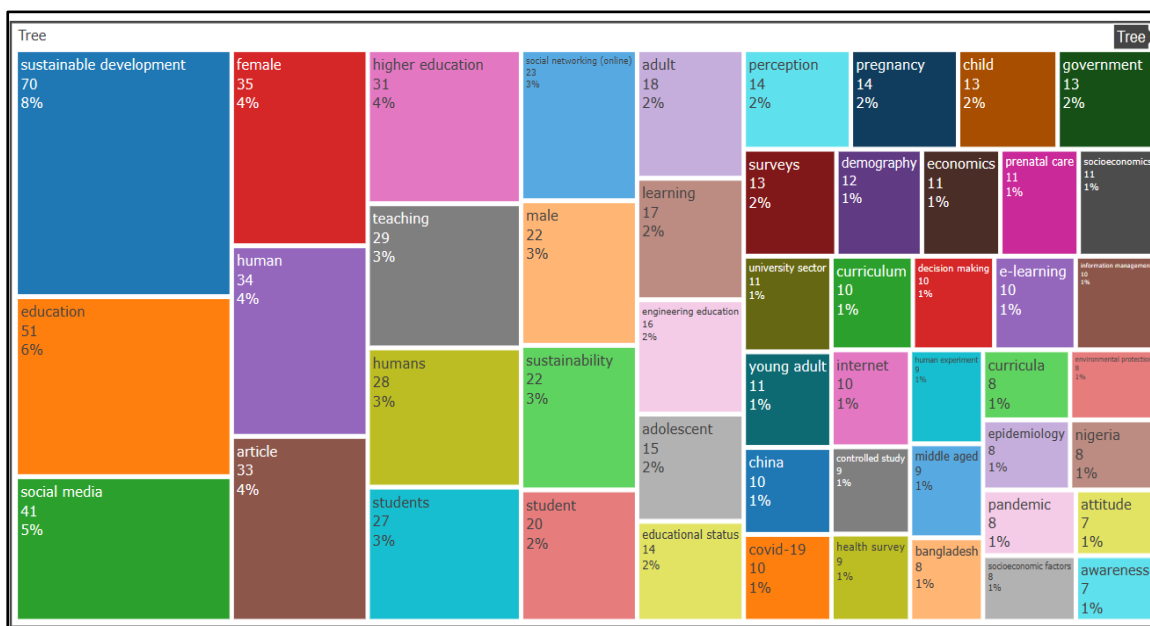
Table 1: Time Span Information

Metric	Value
Timespan	1990-2020
Sources	162
Documents	227
Annual Growth Rate	7.54%
Authors	679
Authors of Single-Authored Docs	43
International Co-Authorship	18.06%
Co-Authors per Doc	3.07
Author's Keywords (DE)	755
References	9605
Document Average Age	5.32
Average Citations per Doc	15.7

Table 2: Lotka's Law

Documents written	N. of Authors	Proportion of Authors
1	665	0.979
2	10	0.015
3	4	0.006

Figure 2: Tree Map



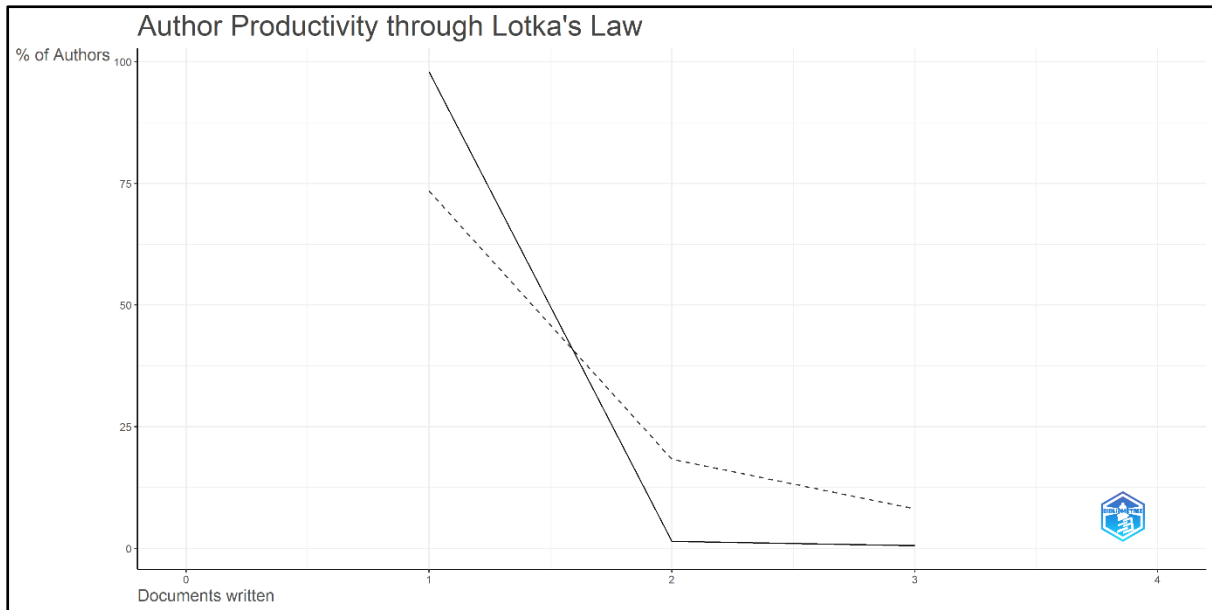


Figure 3: Lotka's Law

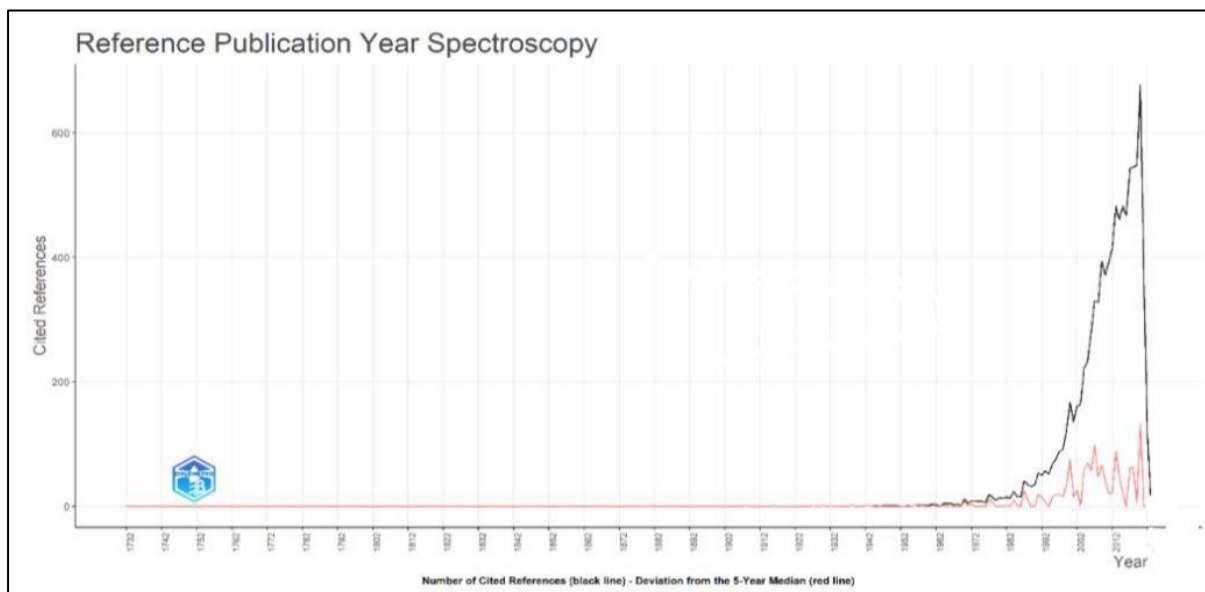


Figure 4: Reference publication year Spectroscopy