

Adoption of Digital Marketing in Educational Institutions: A Critical Literature Review

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Abstract

Digitalization has a positive impact marketing on how business interact with customers. The aim of this paper is to critically examine the adoption of digital marketing, digital media channels and strategies in educational institutions particularly in the context of higher education. To achieve this purpose, previous studies conducted over a period of 6 years i.e., 2016 to 2021 have selected from the EBSCO, Web of Sciences, Wiley online and Google scholar databases. A total of 28 articles focusing only on digital marketing particularly in the context of higher education sector have selected for the review. This study is the first to explicitly consider digital marketing for enhancing digital customer particularly students with a comprehensive analysis of student's attributes in the context of education sector. Results of this review revealed that majority of existing studies focused only on the usage of social media marketing and websites. Email marketing, content marketing, affiliated marketing, search engine marketing and marketing automation are not considered by the scholars. This paper will be useful to researchers, academicians and those working in the area of digital marketing and in their understanding about the social media marketing adoption in educational institutions. This review will also help universities to assess the avenues of students' acquisition and retention in various programs.

Keywords:

Digital Marketing, Digital Marketing Channels, Digital Services, Students Engagement

1. Introduction

Digital marketing is growing rapidly and research on it has important theoretical and practical significance. Researchers referred digital marketing as 'online marketing', 'internet marketing' or 'web marketing'. Digital marketing is a strategy for marketing the product(s) or service(s) on mobile apps, websites, computer and interactive devices using Internet. In other words, digital marketing is putting all marketing efforts on mobile apps, computer, tablets and other mobile devices using internet to attract potential customers. The notion of digital marketing is defined as the "use of electronic data and applications for planning and executing the conception, distribution and pricing of ideas, goods and services to create exchanges that satisfy individual and organizational goals" (Strauss and Frost, 2001). It advances business development and brand value ensuring growth and better visibility. Digital marketing not only uses all digital media to develop communication and

exchanges with customers (Pride and Ferrel, 2016) but also helps to create consumer demand by using the power of internet and thus satisfying this demand in new and innovative ways (Stokes, 2013). In fact, Busca and Bertrandias (2020) identified three potential evolution of digital marketing: decentralized marketing system, collaborative market system, and democratic market system.

Generally, the term digital marketing has become important tool to connect with prospective customers and promote the brands of organizations. It has also become a key tool for international educational (Kannan, 2017) institutions to connect with prospective students and increase students' enrolment in various programs through digital media channels such as Email Marketing, Search Engine Optimization (SEO), Social Media Marketing (SMM), Content Marketing, Affiliate Marketing, and Online Public Relations. Digital marketing helps educational institutions to attract and engage potential students and build credibility, satisfaction and loyalty among the students and parents. In addition, digital marketing builds students' satisfaction as well as improves ranking, increase profit, easy access to millennial and parents and gain instant feedbacks. Furthermore, researchers noted that Pandemic 2019 compelled most of the educational institutions to use digital marketing tools for teaching and learning and achieving marketing objectives through applying digital technologies (Smith and Chaffey, 2005).

Furthermore, Pandemic 2019 has transformed educational institutions to adopt digital marketing from traditional marketing. Digital marketing can help educational institutions to target prospective students, enroll students' engage students, provide placements, design curriculum, communicate students, offer career counseling, develop alumni contacts, and professional students' networks. Therefore, this study reviews the previous studies to examine the trends and concepts of digital marketing, its digital media channels, strategies adopted by educational institutions across the globe. This study will create opportunities to research scholars and

practitioners to bridge the gap between digital marketing and educational institutions particularly higher education.

This review paper is organized into several parts. The following section contains a literature review followed by the research methodology. The next section includes results, discussion and conclusions of the articles published in various databases between 2016 and 2021. The final part includes the limitations and future research directions.

2. Literature Review

This paper reviews the existing studies conducted by the various research scholars in the field of digital marketing in educational institutions context to understand the trends of digital marketing, its channels and strategies.

Educational institutions are looking for different tactics and strategies to offer their programs to engage potential students. Kusumawati (2019) explored the impact of higher education institutions' digital marketing on students' decision making process and found that students engage social media to seek information about university before choosing the right one. The researchers Krishnamoorthy and Srimathi (2019) identified that educational institutions engage professional team in content validation, video marketing and analytics as the in-house team has limited expertise with the advanced technology. In a study, Bateman (2021) concluded that academic social networks provide a collaborative medium for communication across time and space

In addition, digital marketing allows the educational institutions to use different channels for different programs. María et al. (2020) evaluated Instagram as a digital communication channel between higher educational institutions and its users or stakeholders to improve greater engagement. The results of Instagram post format, contents and strategies for 'Comments and Likes' occurred as providing information on organizations, competitions, establishing an interactive channel of communication and providing opportunity for feedback. Promotions/marketing, providing information on organizations, other places/posters and events/sports are associated with fewer engagements.

On the other hand, Karen et al. (2020) conducted a study on the usage of social media by academics in their teachings in higher education. The survey of 53 academics from an Australian university found that 49% used social media in their teachings and did so due to its speed and accessibility in communicating with students. Yet, this communication was largely to broadcast information, neglecting social media's two-way functionality. Concerns

regarding privacy, bullying, and time scarcity in relation to social media were key themes present in the data. In addition, Spackman and Larsen (2017) assessed the impact of social media marketing on enrollments in continuing higher education online course. They identified social media marketing such as Facebook marketing perceived as highly entertaining, very interactive and highly shareable. The results showed that social media marketing improves students' equity, value equity, relationship equity and brand equity. Social media marketing increases students' enrollments, university reputation and prestige, studying more courses from the same institutions. Moreover, Peruta and Shields (2018) studied how social media message content and format in higher education can impact engagement between universities and its users. The results showed that content types such as athletics, news related, school spirit, admission and promotions significantly increase engagement. Media such as photos also increase engagement. On the other hand, campus events, academic events, performance and exhibits, overall informative and administrative and staff shown lower engagement.

Educational institutions either public or private represent themselves to the prospective students and parents on the websites. Anamika Srivastava (2019) studied how public and private universities represent themselves on their websites. Findings revealed that private university loaded multimodal messages (high resolution pictures, videos, images of 360 degree view). On the other hand, public universities websites emphasized on texts and pictures only. In another study, Thi Van Yen Hoang and Isolda Rojas-Lizana (2015) investigated how two Australian universities represent themselves in response to social changes through the use of language on their institutional websites. The results of discourse analysis revealed that universities websites show a promotional discourse impacting globalization and the trend of academic marketing on higher education. In a similar study, Kenneth Henderson and Barbara Lyons (2017) studied pedagogical impact of daily games playing in online course that affects students' participations and learning outcomes. Findings revealed that students get attracted to the website to play games and stay longer to other activities such as discussions board conversation. Moreover, strong relationships between students participation in the games and learning outcomes and course engagement.

Furthermore, content marketing is one of the tool of digital marketing that are mainly used to provide information about the programs offered by the educational institutions. Loredana (2015) defined the concept of content marketing as to 'what a company creates and shares to tell its story'. In other words, content is created "to provide consumers with the information they seek" (Gupta, 2015).

To conclude, the existing studies conducted by several researchers showed that educational institutions adopted digital marketing using its channels including social media marketing and websites to enroll and engage students to their various programs. This review noticed that existing studies neglected email marketing, affiliate marketing, content marketing, and search engine optimizations.

3. Research Methodology

This study exhibits the adoption of digital marketing in the field of higher education. In order to achieve this stated purpose, a search was conducted using electronic databases (EBSCO, Scopus, Web of Science, springer’s, Taylor and Frances and Google scholars). The search criterion was based on the word “Digital Marketing” AND Higher Education in the article titles. Then the researchers applied several filters to exclude irrelevant papers and save valuable time. The search mainly focused on the mapping existing literature on digital marketing in the field of higher education. Table 1 presents the details of searched articles and databases.

A total of 28 research articles were included from the electronic databases for a period of 6 six years starting from 2016 to 2021. The published articles that focus on digital marketing in higher education were selected and articles which were not written in English language were deleted. Finally, the research articles were thoroughly screened to attend the purpose of the study.

Table 1: Systematic Review Process

Databases	EBSCO, Web of Science, Taylor and Frances, Springer’s and Google Scholars
Search term	“Digital Marketing” AND Higher Education
Language	English
Source type	Journals
Document type	Articles
Major Subject Area	Digital Marketing

4. Results

The aim of this study is to understand the trends of digital marketing, its channels and strategies adoption in the educational institutions’ context. To achieve this aim, research studies conducted during the period of 6 years starting from 2016 to 2021 were considered for analysis.

4.1 Descriptive Analysis

Manuscripts that were written in English language is considered for the analysis. The number of articles published related to digital marketing in educational institutions is showing an increasing pattern starting from the year 2016 to 2021. However, the research studies decreases in the year 2020 and 2019. It is noticed that majority of the research studies are published as a journal article. It is interesting to note that 85 per cent of studies are quantitative while 15 per cent are qualitative. It is also noticed that research scholars did not consider the mixed analysis. Table 2 shows the year-wise distribution of manuscript and their analysis.

Table 2: Distribution of Year-Wise Research Approaches

Year	Number of Articles	Research Approaches	
		Quantitative	Qualitative
2021	7	5	2
2020	4	4	0
2019	5	5	0
2018	6	3	3
2017	4	4	0
2016	2	2	0
Total	28	23	5

4.2 Summary of Digital Marketing

Digital marketing has been defined by various research scholars. This review noticed the following definitions of digital marketing (See Table 3).

Table 3: Definitions of Digital Marketing

Authors	Year	Definitions
Nurtirtawaty, I. Gusti Ayu Suci, Ni Gst Nym Suci Murni, Ni Ketut Bagiasuti, and Made Ruki.	2021	An innovation from conventional transactions to modern transactions that applies “digital distribution” channels to reach consumers in an effective, personalized and cost effective way.
Forghani, Ebrahim, Reza Sheikh, Seyed Mohammad Hassan Hosseini, and Shib Sankar Sana.	2021	Digital marketing concept emanated from the internet and search engines but it is now more than just term internet marketing or E-marketing. It is known as a modern marketing activity which includes the use of different web based media such as emails, web sites, blogs, or social networking.
Mirela Müller, Melita Aleksa Varga.	2019	The process of adopting internet based promotional activities by the marketers, by utilizing electronic media to sell their goods and services.

Ghazie, Diyana Ahmed, and Jasni Dolah.	2018	A goods or services that uses digital channels to contact consumers with the goal of promoting companies through various types of digital medium.
Pradhan, Priyanka, Devesh Nigam, and Tiwari Ck.	2018	Outlining the use of technologies in marketing efforts and business practices with the marketing of goods, services, information and ideas via internet, mobile phones, display advertising and other e mediums.
Chaffey, Dave.	2018	The use of <i>devices</i> such as personal computers, tablets, and mobile phones to access consumers through <i>platforms</i> .
Chaffey, Dave, and Paul Russell Smith	2017	It is reliant on digital platforms and technologies to promote modern marketing strategies to attract potential customers.
Kannan, P. K.	2017	A technology-based adaptive and process by companies to creating collaboration with all partners to achieve value for all stakeholders.
Mandal, Pinaki, and Nitin Joshi	2017	An approach, a strategy, or a branding and marketing exercise, by the use of digital platforms, as the name suggests. It is the development of brand, product or service online.
Piñeiro-Otero, Teresa, and Xabier Martínez-Rolán	2016	A projection of conventional marketing, tools and strategies, on the Internet. The digital world and its application to marketing have driven the development of channels, formats and languages that lead to marketing tools and strategies.
Lovett, Mitchell J., and Richard Staelin.	2016	Digital marketing leverages <i>digital media</i> , which may be characterized as owned, paid, and earned media.
Avery, Jill, Thomas J. Steenburgh, John Deighton, and Mary Caravella.	2012	A set of techniques developed on the Inter-net with to persuade users to buy a product or service.
Wymbs, Cliff	2011	The use of digital technologies to create an integrated, targeted and measurable communication which helps to acquire and retain customers while building deeper relationships with them.
Kotler and Armstrong	2009	A form of direct marketing that connects consumers with sellers electronically using interactive technologies such as email, websites, online forums and newsgroups, interactive television, cellular communications and so on.

Table 2 indicates the definitions of digital marketing in the context of business not education. However, the digital marketing can be defined as the communicating potential students or parents by the universities or colleges through the use of digital channels such as content marketing, affiliate marketing, email marketing, mobile marketing, social media marketing, search engine optimization,

marketing analytics, pay-per click and marketing automation (See figure 1) to persuade potential students or parents to enroll in various programs and achieve the higher values and goals. Furthermore, it has noticed that digital marketing channels can also be termed as digital media, interactive channels, digital platform, digital medium, electronic media, web-based channels and so on.



Figure 1: Digital Marketing Channels

4.3 Summary of Selected Research Articles

The summary of data were first prepared to analyze gathered data from the selected previous studies to have better overview on the digital marketing adoption in the educational institutions’ context. Table 4 presents the

summary of selected research articles. This review revealed that existing studies neglected email marketing, affiliate marketing, content marketing, and search engine optimizations for enrolling and engaging students and prospects in various programs. Several studies focused only on social media marketing and websites to offer universities’ programs.

Table 4: Summary of Selected Research Articles

Authors	Year	Study	Analysis	Findings
Sofia and Wagner	2021	Measuring impact of Digital marketing on CRM in educational institutions	Quantitative	Digital Marketing, for example, content marketing and analytical management have a great impact on the operations of customer relationship management (CRM) in the educational sector
Rajkumar, Samuel Joseph, Sudhakar	2021	Measuring impact of Digital Marketing Communication Strategies in leveraging the Student Admission Decision Making Process	Quantitative	Higher education institutions need to make use of digital media to reach out to prospective students for admission and enrolment by feeding in continuous and engaging user-generated content through text, images, info graphics, videos, and podcasts.
Bateman, S. Tiffani	2021	Understanding the online student experience in academic social networks.	Qualitative	Three core themes (a) acceptance and belonging; (b) self-validation; and (c) drawing from multiple perspectives describes how academic social networking communities are formed, why students are using them, and what this means to online higher education
Oliveira et al.	2021	Analyzing the use of mobile applications by students at the University of Aveiro	Quantitative	Mobile application usage is quite significant and there is a huge tendency for the use of social media during classes.
Grothaus, Christin et al.	2021	Assessing student’s perceptions and use of digital media and services for their studies across two countries (Thai and German) differing noticeably in cultural value orientations	Quantitative	Stronger preference for and more frequent use of entertainment media and collaborative tools among Thai learners while higher acceptance of office tools and performed fewer study related tasks via social media among German students
Figueras-Maz et al.	2021	Exploring Spanish university students’ perceptions of the	Quantitative	Equivocal students’ perception as they are both critical and approving of using mobile devices in university

		use of social networks for educational purposes in the classroom		teaching. WhatsApp is the most used internal tool, followed far behind by Facebook and Instagram. Students were concerned about their distracting influence in the classroom and the possibility that teachers could invade their privacy
Viktor Shestak et al.	2021	Determining students and teachers attitude to the use of social networks in education	Quantitative	Students and teachers attitude to the use of social networks in education are found positive.
Sanjib Biswas	2020	Identifying the critical implications of digital marketing (DM) for the higher education sector	Quantitative	Identification of the needs, building of long term relationships and engagement, and transparent communication have critical implications for DM in the context of higher education.
Karen Sutherland et al.	2020	Exploring the methods, attitudes, and perceptions of academics regarding social media use in their teaching	Quantitative	49% academics used social media in their teaching
María del Rocío Bonilla et al.	2020	Evaluating Instagram as a digital communication channel between higher educational institutions and its users or stakeholders to improve greater engagement	Quantitative	Instagram post format, contents and strategies for 'Comments and Likes' occurred as providing information on organizations, competitions, establishing an interactive channel of communication and providing opportunity for feedback
Petra Maresova et al.	2020	Analyzing and comparing Facebook activity and content created by the world's top ten universities	Quantitative	Selected universities have their accounts on Facebook, Instagram, Twitter, and YouTube.
Krishnamoorthy and Srimathi	2019	Influencing of digital and social media marketing in higher education	Quantitative	Digital marketing applied in-bound method, students prefer social media like WhatsApp, Facebook, twitter enquire the details, the parents preferred to connect with email and call-center services
Mirela Müller and Melita Aleksa Varga	2019	Examining the level of teachers' digital competence, the frequency and the method of using modern technologies in teaching	Quantitative	Teachers were more competent in conducting their research scientific work and use the modern technologies. 70% of teachers and associates are assessing themselves as being digitally competent in the use of computers and new technologies, and over 60% of them regularly use media in their teaching practice.
Afzal Basha	2019	Studying the digital marketing impact on education sector	Quantitative	Digital marketing had an impact on selecting the education institution (62% of the respondents)
Brady Lund	2019	Investigating the quantitative relationships between universities' Facebook pages and interactions	Quantitative	moderate-to-strong correlations with Facebook followers and interactions
Grzegorz Mazurek et al.	2019	Investigating how higher education institutions (HEIs) in Poland take advantage of social media marketing activities	Quantitative	Social Media are not used for promoting research and academia. Researchers and Administration are perceived as stakeholders not understanding the potential of Social Media for building school's image and reputation. Universities in Poland operate with little support from external entities.
Joana Motta and Maria Barbosa	2018	Examining the approach to social media of European and North American higher education institutions	Quantitative	European and North American universities and colleges invest in marketing activities in social media. The most popular social media used are Facebook and Twitter ex-aequo, followed by YouTube, Instagram & LinkedIn.
Peruta and Shields	2018	Identifying Post types, contents, structure and Format used in Facebook for marketing universities. Measure engagement impact on Likes, Comments and shares of Facebook.	Qualitative	Content types such as athletics, news related, school spirit, admission and promotions significantly increase engagement. Campus events, academic events, performance and exhibits, overall informative and administrative and staff shown lower engagement.
Parusheva et al.	2018	Studying students' attitudes towards the social media learning in higher educational institutions	Quantitative	50 per cent students have accounts in four media: Facebook, YouTube, Google+ and Instagram.
Corcoran, Niall and Duane, Aidan	2018	Improving staff communication, collaboration and knowledge sharing, this study sets about	Qualitative	Organizational culture and structure are major barriers to staff knowledge sharing. The study showed collaboration between staff and faculty. The links between CoP and

		exploring the links between Enterprise Social Networking (ESN) and Communities of Practice (CoP), and how they can be used to create a virtual knowledge sharing environment for staff.		ESN are essential to build a successful knowledge sharing environment.
Kusumawati, Andriani	2018	Investigating the importance of digital marketing for both university marketers and students.	Qualitative	students were more rely on internet and they search and browse university before either through digital media such as Facebook, Twitter, Instagram or university website
Savita GUPTA and Liyaqat BASHIR	2018	Measuring social networking usage in higher education universities	Quantitative	Social networking usage decomposed into academic; socialization; entertainment and informativeness
Isidro Fierro et al.	2017	Measuring impact of digital marketing on international education	Quantitative	Digital innovation improves the international education system resulting better interactions with students worldwide by using various digital touch points.
Spackman S. Jonathan and Larsen, Ross	2017	Evaluating the effectiveness of Facebook marketing activities on increasing enrollments in continuing higher education online courses	Quantitative	Facebook marketing perceived as highly entertaining, very interactive and highly shareable.
Kenneth Henderson and Barbara Lyons	2017	Describing a practical teaching heuristic that overcomes the psychological and communication gaps created by the transactional distance of online learning	Quantitative	students get attracted to the website to play games and stay longer to other activities such as discussions board conversation
Nazia Akhtar	2017	Ascertaining how social networking sites impact the life of the modern-day teenagers	Quantitative	A substantial impact of social Networking Sites on the teenagers in terms of use, interaction, education and hazards
Rennie, Frank	2016	Examining the use of social media services by staff, students and general public	Quantitative	Most of the universities do not have policy and guidelines for the use of social media services for staff, students and general public.
Serena Carpenter et al.	2016	Investigating the perceived functions of social media held by the top sustainable universities to engage stakeholders in sustainability matters using social media.	Qualitative	Sustainable universities and leaders do rely on social media channels to reach large audiences but do not fully understand how to effectively use them. Sustainability leaders primarily perceive social media platforms as useful for encouraging action and disseminating information, but they rarely use it to build community around causes and groups

5. Discussions and Conclusions

Today, digital marketing have become ubiquitous and is perfectly reshaping almost every facet of human life in an unprecedented manner and education sector is no exception. This review carried out to examine the trends, concepts of digital marketing and its channels in the higher education context. This literature reviews manuscripts on the adoption of digital marketing has reported number of empirical evidences with quantitative and qualitative analysis in educational institutions, particularly in the higher education context across the world. Existing studies right from 2016 to 2021 shed lights on the usage of social media such as WhatsApp, Instagram, twitter, Facebook and YouTube in the educational institutions. In addition, majority of previous research studies focused on social media similarly few studies covered social networking

sites, mobile applications, marketing communication strategies and social media marketing. Nevertheless, on careful analysis of this study, it is noticed that manuscripts related to email marketing, SEO (Search Engine Optimization), SEM (Search Engine Marketing), Marketing Automation, Content Marketing, Affiliated Marketing, Landing pages, mobile marketing and so on are not represented in the context of educational institutions as much as in other context such as retailing, banking, finance and so on.

Additionally, this study has shown that students and parents connect with social media (WhatsApp, Instagram, twitter, Facebook and YouTube) to enquire the details about the universities programs (Krishnamoorthy and

Srimathi, 2019). Another important findings of this review is that universities have their accounts on Instagram, twitter, Facebook and YouTube (Petra Maresova et al., 2020).

Furthermore, in this review, our findings highlighted that digital marketing have a great impact on the operations of customer relationship management (CRM) in the education sector (Sofia and Wagner, 2021). It is also noticed that research on adoption of digital marketing in educational institutions is more limited and at the nascent stage. Therefore, more research is needed to explore how digital marketing and its channel influence the learning outcomes of universities program. Additionally, research is needed to determine the effect of digital marketing and its channel on students' performance or achievements and satisfaction. Thus, increasing the students' enrolment in various programs and engaging them to learn difficult activities.

To conclude this review, digital marketing is a digital communication channel (emails, mobile phones, social networking, etc.) that can be used for the promotion of a brand or business using internet to target to the right audience. Since the majority of population particularly students use internet to pursue various programs in the educational institutions, digital marketing can be the best tool to reach out to perspective students. Digital marketing not only promote the business but also strengthen the brands through digital channels (emails, mobile phones, social networking). In addition, educational institutions use the digital channels not only to target the audience but also strengthen the branding (Bose, 2016). In fact, Bruyn (2008) categorized digital marketing into four factors: Web/mobile marketing, Search Engine Optimization (SEO), social networks, and Customer Relationship Management (CRM).

Furthermore, the increased use of social media, search engine optimization, and mobile phones is a major influence in the field of education sector today. Universities and colleges must adopt digital marketing to reach out to the prospective students by increasing the usage of email marketing, affiliate marketing, content marketing, and search engine optimizations and marketing automation for enrolling and engaging students and prospects in various programs. Due to the expansion of educational boundaries, universities and colleges have the chance to scale up digital marketing to offer their programs and exhibit opportunities to students for better services and experiences.

6. Limitations and Future research

As discussed in this review, some limitations are similar to other previous manuscripts. For example, researchers of this study only reviewed articles that focused on digital marketing in the educational institutions, particularly in the higher education context. Another major limitation of this study is that major works indexed in Scopus, Springer, and other significant databases are not included. In addition, only one keyword "Digital Marketing" AND Higher Education were explored to interpret the analysis. Studies related to digital marketing in the context of retailing, banking, finance and so on are also not included in this review. Furthermore, findings of this review covers the usage of social media in higher education sectors. Therefore, there is a need to conduct studies related to email marketing, search engine marketing, content marketing, affiliated marketing, and marketing automation from the educational institution perspective. Further studies are recommended to perform test on the effect of digital marketing on students' performance or achievements and stimuli factors in higher education context.

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