

APPLICATION OF ELECTRONIC MARKETING TOOLS IN STUDENT MANAGEMENT AT UNIVERSITIES IN VIETNAM – A METHODOLOGICAL APPROACH

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Summary:

Electronic marketing tools such as websites, SEO, social media platforms, as well as CRM systems have not only helped educational institutions attract potential students but have also assisted higher education institutions in improving the quality of education and satisfying current students. These tools have also facilitated connections and engagement with alumni. However, there are still a lot of limitations on how these institutions may utilize electronic marketing tools, such as a shortage of diversity in marketing tools, limitations on the availability of information, an abundance of a focus on potential or current students with little participation from alumni, or a shortage of clear marketing approaches.

Keywords: electronic marketing, universities, Vietnam, electronic marketing strategy.

1. Introduction:

According to data from the Ministry of Education and Training, there are currently 248 higher education institutions in the country, with 181 of them being public institutions, accounting for 72.98% (excluding colleges and research institutes). There are also 62 private and semi-private institutions. As of 2023, according to the list of universities provided by the Ministry of Education and Training, there are 5 international universities (foreign universities) operating in Vietnam, accounting for approximately 2% of the total number of higher education institutions in Vietnam (excluding research institutes). These include the British University Vietnam (BUV), Fulbright University Vietnam (FUV), American University in Vietnam (AUV), RMIT University Vietnam (RMU), and Tokyo Medical and Dental University Vietnam (THU).

Industry 4.0 is making the use of digital and electronic tools in higher education more common. The younger generation is becoming more proficient in using the internet, social media, and tools like mobile phones to access, connect, share information, and conduct electronic transactions. Therefore, to effectively reach and manage customers, implementing electronic marketing activities is an essential trend for every university in Vietnam today (Ngo Thanh Hien, 2018). To emphasize the importance of applying information technology in education, in 2022, the "Enhancing the Application of Information Technology and Digital Transformation in Education and Training for the 2022-2025 period, oriented to 2030" project was approved by the Prime Minister. Based on this, the Ministry of Education and Training has issued a set of criteria to assess digital transformation in higher education institutions. This is also the foundation for higher education institutions to apply technology in their marketing activities. However, the application of electronic tools in marketing activities at universities still faces many limitations. Most universities focus only on potential students and have not

paid enough attention to marketing for current students and alumni. This requires Vietnamese universities to innovate their approaches to enhance the effectiveness of marketing activities.

2. Literature Reviews:

Electronic marketing has been and continues to revolutionize the way universities implement their marketing strategies. This transformation occurs in all aspects of student management, from the initial enrollment phase to graduation. More and more universities are incorporating digital technologies and artificial intelligence into their marketing efforts to expand the reach of education (Patrutiu Baltas, 2015). Electronic marketing tools also enhance student satisfaction and add value, increasing the visibility and modernity of universities' brands. Universities can reach a larger market, both locally and globally, by using electronic marketing techniques. Big data, artificial intelligence (AI), and other capabilities from Industry 4.0 can help institutions store a lot of data, offer individualized services to each student, and efficiently connect with alumni long after they graduate.

Most research worldwide suggests that digital marketing or online marketing, E-marketing, has a positive impact on the field of education and is the best choice for universities when targeting potential students and their parents. Studies also indicate that applying digital marketing helps universities solve the problem of advertising and marketing costs, increases brand awareness, allows continuous online brand management, enhances response rates in university surveys, and provides a means to measure and track the overall effectiveness of university marketing campaigns. Electronic marketing has also expanded the boundaries of education, offering opportunities for students not only domestically but also on the global market (Patrutiu Baltas, 2015).

Many studies in higher education have focused on implementing marketing strategies and recruiting international students. Naidoo and Wu (2011) studied the implementation of marketing strategies from the perspective of university administrators to attract international students. Bolan and Robinson (2013) focused on the role of marketing concepts, segmentation, and targeting in Ontario universities. Page (2000) studied the role of university rankings in attracting students. Chen (2008) investigated the integration of Canadian higher education in the international environment and what international marketing activities could enhance awareness. Additionally, there are several studies on the role of brand building and communication in higher education. Belanger et al. (2014) focused on the relationship between social media marketing and student recruitment. Lavigne (2005) studied the preferred communication tools of higher education administrators.

The studies have concentrated on the use of electronic marketing as a means to influence the choice of university by potential students (Ilouga et al., 2014; Daghbashyan and Harsman, 2014) or to build alumni networks (Ebert et al., 2015) and collaboration between universities, industries, and governments (Ozols et al., 2012a, b).

Table 1.3. Summary of Research Results on Electronic Marketing in Higher Education

| No. | Content | Research Findings | Author |
|-----|-----------|--|--|
| 1 | Objective | Attracting students, increasing the intake | Naidoo and Wu (2011), Page (2000), Ilouga at al., (2014); Daghbashyan and Harsman (2014) |

| No. | Content | Research Findings | Author |
|-----|-------------------|---|---|
| 2 | | Increasing awareness of university brands and reputation | Shanka, Quintal & Taylor, (2006); Švandová, 2013), Róbert Štefko et al., (2015), Chapleo (2011); Keller (1993), Chauhan and Pillai (2013); Hemsley Brown and Goonawardana (2007); Lowrie (2007) |
| 3 | | Increasing student loyalty, retaining students | Fransen & Van Rompay (2011) , Anderson and Sullivan (1993), Angulo-Ruiz and Pergelova (2013) |
| 4 | | Expanding the scope of education beyond national borders | Patrutiu Baltas, 2015), Naidoo and Wu (2011), Chen (2008) |
| 5 | | Building alumni networks | Ebert et al., 2015 |
| 6 | | Linking and collaborating between universities, industries, and government | Ozols et al. 2012 |
| 7 | Methods/ Tools | Building alumni networks, alumni WOM | Page (2000), Waleska Schlesinger et al. (2021) |
| 8 | | Increasing recruitment through branding and communication in higher education | Belanger et al. (2014) |
| 9 | | Enhancing the use of communication tools for university administrators | Lavigne (2005) |
| 10 | | Using online customer management and online brand management tools | Isidro Fierro et al., 2017 |
| 11 | | Enhancing website usage and improving the quality of websites | Bauer & Scharl (2002); Nielsen (2000); Rovňák (2010); Castro, Marcos & Caceres (2004); Kaplan & Haenlein (2010); Dekker (2007), Durkasree & Ramesh (2011); Huttmanová & Synčáková (2009); Otim & Grover (2006); Parasaruman & Zinkhan (2002); Rajnoha et al. (2013), Róbert Štefko et al. (2015). |

| No. | Content | Research Findings | Author |
|-----|---------|--|--|
| 12 | | A well-respected university with high-quality mainly stems from good management; making students increasingly positive about an educational institution's website | Štefko (2003) |
| 13 | | Using online social networks as a cost-effective promotional tool (YouTube, Twitter, Facebook) | Róbert Štefko et al. (2015), Moogan 2011; Opoku et al., 2006, Duggan and Brenner (2012), Ivala & Gachago (2012) |
| 14 | | Through blogs or social media platforms; public relations, or other initiatives designed to have marketing impact | Maringe 2006; Simoes and Soares 2010; Sojkin et al. 2012; Rust et al. (2004); Wilkins and Huisman (2011); Willis and Kennedy 2004) |
| 15 | | Relationship marketing to increase student engagement, address student information needs, quality issues, and student expectations, increasing student loyalty | (Arnett et al. 2003; Hemsley-Brown and Oplatka 2006; Moogan 2011, Klassen (2002) |
| 16 | | Web/mobile marketing; SEO; social media and CRM | Bruyn (2008) |
| 17 | | SEO | Rutz & Bucklin, (2011), Dixon & Duncan, (2013) |
| | | CRM | Werner J. Reinartz & Rajkumar Venkatesan, 2008 |

Source: Compiled by the author, 2022.

Academic research worldwide has paid significant attention to higher education marketing activities. Specialized conferences on higher education marketing have been organized since 2006, and various scientific publications presenting research findings have been published in internationally recognized scientific journals (such as the Journal of Higher Education Marketing, Journal of Higher Education Research, Journal of applied research in Higher-Education, Post-graduate Education Research Journal, International Journal of Educational Management, Marketing Intelligence and Planning), contributing to robust academic databases. The reason behind the interest of researchers and educational administrators is explained by the increasing competition among higher education programs as the annual supply grows while the number of students decreases. Some aspects of marketing by higher education institutions and research programs being studied include aspects related to information and market preferences of students in higher education, student recruitment strategies in higher

education, strategies in direct marketing communication and guidance, and improving the marketing strategy fit for students of higher education institutions.

In Vietnamese universities, the use of electronic tools in managing students throughout their journey at universities is becoming more prevalent.

3.1. Student Recruitment

Some universities carry out recruitment activities through channels like fan pages, websites, or through search engines like Google or via recruitment links.

(i) Social Media:



Figure 1. Information Channels to Attract New Students at the Foreign Trade University

Source: The university's fanpage: <https://www.facebook.com/groups/weareftuerrrr/>

At Foreign Trade University and several other public universities, fanpages dedicated to new students are very popular because the current young demographic tends to use Facebook as a means of communication and information exchange. At this time, the membership count for the K62 New Student Information channel at Foreign Trade University has reached 77.2 thousand members. This channel is updated annually and renamed according to the new incoming class, which attracts both members from previous years and newly enrolled members. This also adds credibility to promotional information about the university.

The New Student channel on Facebook for Nguyen Tat Thanh University in 2023, at <https://www.facebook.com/groups/412451576144447/>, has 32.1 million members.

For RMIT University Vietnam, Facebook is a primary channel for attracting future students. The RMIT Facebook channel for future students (located at https://www.facebook.com/RMITsinhvientuonglai/?locale=vi_VN) has approximately 227 thousand likes and 236 thousand followers. Compared to other universities, RMIT university's Facebook channel is used to promote information to future students without dividing them into separate groups for each class or year. Therefore, looking at the number of followers and likes on RMIT's Facebook page, it is evident that the followers are concentrated and greater in number compared to other public and private universities. In addition to students at the two campuses in Vietnam, RMIT students from around the world can join and follow this Facebook page.

(ii) Website:

Websites remain the primary and official information channel to provide information about admissions for universities, whether they are public or private, domestic or international. Although website designs may vary, they all share the common purpose of introducing basic

information about the university to the public, prospective students, current students, parents, and other relevant parties. Websites typically provide detailed information about admission methods, admission criteria, cutoff scores for each program, annual admission targets, frequently asked questions, admission confirmation procedures, and essential information for studying at the university.



Figure 2. Admission Information Channel of Hanoi National University

Source: website of Hanoi National University - <http://tuyensinh.vnu.edu.vn/>

(iii) Search Engine Optimization (SEO):

To drive traffic to admissions information pages or university websites, each university typically uses search engine optimization (SEO) tools to increase brand recognition and website visits. Search keywords often relate to the names of the universities. For example, Google searches for keywords like "Đại học Quốc gia Hà Nội" return 164 million results (with "VNU" being 7.46 million), "Đại học Kinh tế quốc dân" returns 81.4 million results (while "NEU" reaches 2.1 billion results), and "Đại học Ngoại thương" returns 101 million results (compared to "FTU" with 14.7 million).

In the private sector, some universities have high search results, such as Nguyen Tat Thanh University (Ho Chi Minh City) with 101 million results for the keyword "đại học Nguyễn Tất Thành," Ho Chi Minh City University of Technology (Ho Chi Minh City) with 79.7 million results for "đại học Công nghệ TP HCM," Duy Tan University (Da Nang) with 44.7 million results for "đại học Duy Tân," and Thang Long University (Hanoi) with 22.8 million results for "đại học Thăng Long."

Foreign universities in Vietnam, such as RMIT University Vietnam, only reach 2.85 million search results for the keyword "RMIT Việt Nam," while British University Vietnam (BUV) reaches 6.57 million results for "BUV." However, BUV achieves 158 million results for "trường đại học Anh quốc Việt Nam," and American University in Vietnam (AUV) gets 136 million results for "đại học Mỹ tại Việt Nam" and 12.3 million results for "AUV."

So, the use of keywords in search engines is closely related to the use of brand names in official texts and word-of-mouth languages to increase the brand recognition of universities. Many universities with long-standing reputations and traditions, as well as extensive articles and shares related to their activities, have high search results. Using SEO techniques to boost the university's visibility during admissions seasons is crucial for some universities, especially private and newly created universities, in order to ensure they attract potential students.

(iv) Electronic Word of Mouth (eWOM):

In addition, several information portals or websites dedicated to admissions have been established to compile, summarize, review, and provide information about universities in

Vietnam. These portals include tuyensinhso.vn, thongtintuyensinh.vn, reviewedu.net, and others.

These information portals provide comprehensive details about universities, admission criteria, exam combinations, cutoff scores from previous years, some images and videos introducing the university, and they often include comment sections for information exchange or to provide reviews about the university. These portals can be considered as electronic word-of-mouth (eWOM) tools that universities can leverage to lead or guide information.



Figure 3. Digital Admission Information Portal - Search for Hanoi Foreign Trade University (Hanoi Campus)

Source: Digital Admission Information Portal- <https://tuyensinhso.vn/school/dai-hoc-bach-khoa-ha-noi.html>

The Fulbright University Vietnam uses the founding story as well as the images of leaders from both Vietnam and the United States to demonstrate to the community the necessity of establishing a university based on the philosophy of liberal education. Government sponsorship ensures the credibility of the school's educational quality for students.



Figure 4. President Barack Obama came to speak at Fulbright University Vietnam in 2016.

Source: Fulbright University Vietnam website <https://fulbright.edu.vn/vi/khoi-nguon-fuv/>

Expressions of feelings or reviews from former students, current students, or famous individuals are often used by many institutions in their communication campaigns. These tools have also contributed to increasing the effectiveness of admissions at higher education institutions in Vietnam.

(v) Education ranking tools

At private higher education institutions like Duy Tan University, education ranking tools are employed in the school's admissions communication efforts.

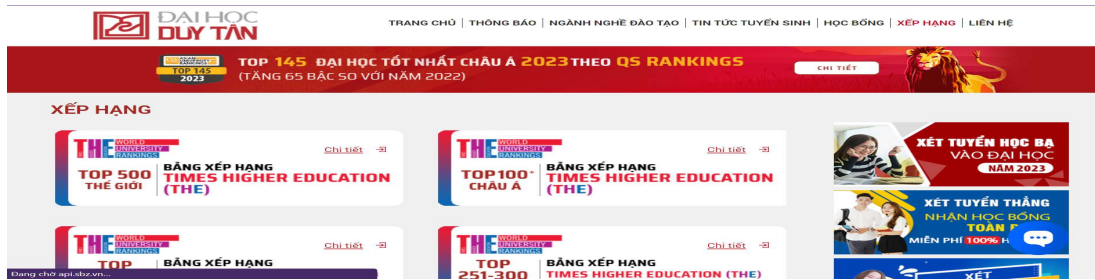


Figure 5. Rating of Duy Tan university

Source: Duy Tan university (Da nang) - <https://duytan.edu.vn/tuyen-sinh/Page/Ranking.aspx>

Accordingly, it can be observed that the majority of universities use website tools in their university admissions, along with social media platforms and SEO. Reputable public universities in Vietnam also utilize electronic Word-of-Mouth (eWOM) tools, but private and foreign higher education institutions tend to employ these tools more vigorously in their communication with prospective students.

3.2. Customer Service Delivery



Figure 6. The training information portal of Foreign Trade University.

Source: FTU's portal – Foreign Trade univeristy <http://ftugate.ftu.edu.vn/#/home>

Students, or learners, are the direct customers of higher education institutions. Therefore, providing customer service is essentially catering to the needs of students at universities.

The majority of colleges have their own administration programs in place to provide services, particularly in the area of education management to assist students in organizing their study schedules.

On their websites, universities also include links to various communication channels, such as social media platforms, to make it convenient for users to access information.

- In private and foreign higher education institutions: most schools establish internal learning management systems, which provide various services for learners, such as course registration, announcements, personal schedules, study materials, electronic library services, and student forums. These services are essential for the core educational activities of the institution.

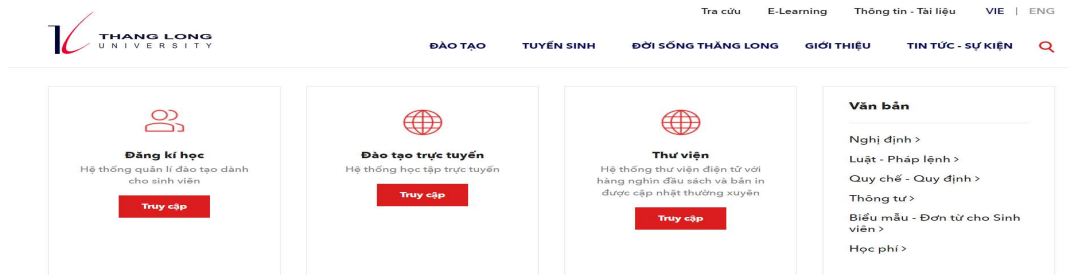


Figure 7. The training information portal of the Foreign Trade University

Source: Training information portal - Foreign Trade University

<http://ftugate.ftu.edu.vn/#/home>

At RMIT Vietnam, student management is facilitated through tools like Student Timetabling, the online support system RMIT Student Connect, and career guidance services. These systems offer additional services that benefit learners when they engage in their studies at the university.

3.3. Alumni graduation

- At public higher education institutions: In the midst of the Covid-19 pandemic in 2021, the Foreign Trade University organized online graduation ceremonies. These ceremonies took place simultaneously at all three campuses of the university, covering various academic levels and programs (from bachelor's to master's and doctoral degrees). The event was conducted using the Zoom platform and livestreamed on the university's FTU Times fanpage.

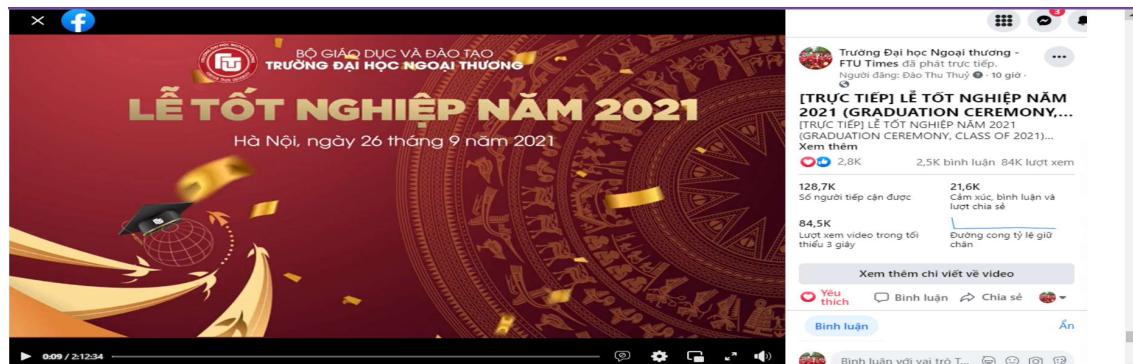


Figure 8. Foreign Trade University's graduation livestream year 2021

Source: FTU's fanpage

The fanpage has attracted over 84,000 followers, reached 128,700 users, received over 2,800 interactions, garnered more than 2,500 comments, and nearly 1,000 shares. For the first time, friends and family of the graduates were able to directly participate in their graduation ceremony. Many comments and well-wishes were sent through the fanpage, creating a positive effect in conveying the messages of the Foreign Trade University.

Regarding alumni, most universities value their former students and consider them as brand ambassadors for the institution. Alumni are seen as valuable assets for the university's image. Therefore, many higher education institutions like the National University and the National Economics University have established dedicated tabs for alumni to record their activities and promote their achievements externally.

The activities of alumni also serve as a useful information channel to enhance the recognition of the university's brand and as a sponsorship channel for the institution's activities.



Figure 9. Scholarship information for Alumni of Hanoi National University

Source: <https://alumni.vnu.edu.vn/>

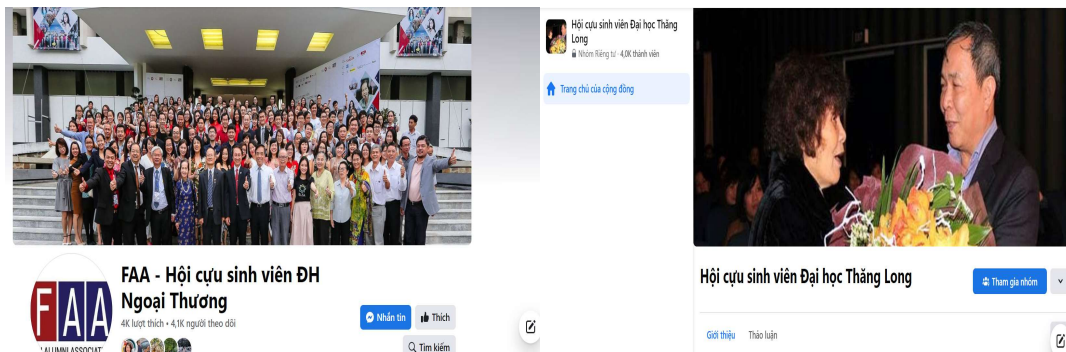


Figure 10. The alumni network of Foreign Trade University and Thang Long university

Source: Fanpage's Foreign trade university and Thang Long university - <https://www.facebook.com/groups/faa.vn/> and <https://www.facebook.com/groups/TLUAlumni/>

However, many universities, including even the Foreign Trade University, do not really have a dedicated section for alumni on their official websites. The Foreign Trade University, like some other universities such as Thang Long University, often uses social media tools, primarily Facebook, to connect with alumni. The management of alumni activities is usually carried out by proactive alumni themselves.

At RMIT University Vietnam, they have a separate menu on their website specifically for alumni. According to the information on the university's website, the student community at the university in Vietnam numbers around 20,000 people. This number reflects RMIT's pride in its generations of alumni as well as its success in connecting the university with its former students.



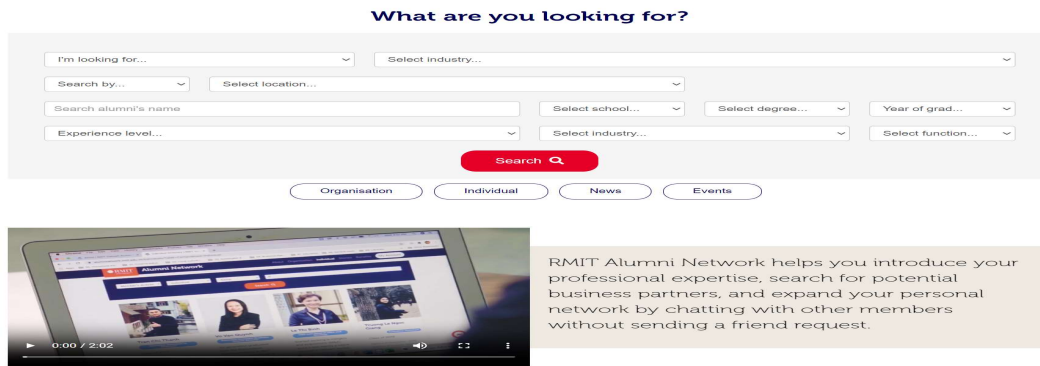


Figure 11. The alumni network of RMIT University Vietnam

Source: RMIT's website in Vietnam- <https://alumninetwork.rmit.edu.vn/>

To attract alumni, RMIT Vietnam has also emphasized the benefits that alumni enjoy when participating in the network, such as access to the university campus and the provision of electronic cards for alumni, career-related benefits, on-campus privileges, and other collaborative opportunities.

1. Evaluation of Electronic Marketing Tools in Some Vietnamese Universities **Electronic marketing activities have become a growing concern for many universities in Vietnam.**

Electronic marketing tools allow universities to attract the attention of potential students while also meeting the increasingly diverse needs of current students and paying more attention to alumni.

The tools used are quite diverse and comprehensive, providing many services and useful information for learners and relevant parties.

Most Vietnamese universities use websites as essential tools to provide information to various customer segments, including potential students, current students, alumni, and others. These university websites are designed to be visually appealing and offer valuable information to learners and the wider community about ongoing activities at the university.

In addition to websites, social media platforms have been heavily promoted to establish connections and support the attraction of potential students and other target audiences. These tools are also linked to the primary information channel, which is the university's website. Most websites incorporate feedback through messenger chat windows directly on the homepage and provide links to social media platforms such as Facebook, Instagram, YouTube, Twitter, and Google+.

In addition, the development of technology in education helps schools create various tools to support learners. Internal management systems personalize the needs of learners, providing a wide range of online services quickly, contributing to higher learner satisfaction. Investing in the development of educational technology infrastructure allows educational institutions to better serve learners and expand their target audience. Educational services are not only provided domestically but can also reach customers worldwide. Many international collaboration programs provide opportunities for domestic students to access and study abroad,

as well as for international students to interact with educational institutions in Vietnam. Through these initiatives, higher education institutions in Vietnam can integrate into the international education environment.

Marketing activities are applied to most stakeholders related to higher education institutions, including potential learners, current learners, alumni, and even parents and society as a whole.

Despite progress in digital marketing activities at higher education institutions in Vietnam, there are still many limitations.

First, there is a lack of diversity in marketing tools. The application of marketing tools primarily involves providing information through websites. The emphasis on social media marketing has only recently gained momentum under the influence of the COVID-19 pandemic. Other tools such as video marketing or influencer marketing have also begun to emerge but remain relatively underdeveloped. Many new technologies that could be applied in educational marketing, such as virtual reality (VR), augmented reality (AR), mixed reality (MR), or the use of Artificial Intelligence (AI) and automation in identifying learner needs, have not been widely adopted due to funding constraints.

Second, limitations in information provision: Transparency of information is crucial for effective marketing, and public higher education institutions in Vietnam are gradually improving in this regard. However, the information provided is not sufficiently diverse. Simple yet practical information for learners, such as tuition fees, is not openly shared by many universities. Additionally, tools for reviewing and evaluating the quality of education as well as the strengths and weaknesses of institutions are not openly available on official channels like university websites. These pieces of information contribute to shaping perceptions and reducing or preventing misinformation.

Third, most marketing efforts focus on potential learners or current students and do not sufficiently engage with alumni. Alumni can serve as brand ambassadors and enhance the long-term brand value of universities. However, many universities seem to prioritize enrollment-related concerns and have not invested in cost-effective and widespread marketing strategies to engage with alumni.

Fourth, there is a lack of clearly defined marketing strategies. Essentially, marketing for educational institutions is similar to marketing in businesses, which means understanding and meeting the needs of customers. Many universities have not thoroughly researched the needs of learners (not just potential or current ones) and stakeholders, including employers in the context of higher education institutions. For example, for prospective or new students, sharing information about tuition fees, scholarships, and job opportunities should be a key focus. However, these aspects are often unclear or poorly presented in some higher education institutions. Information about business connections or employment opportunities is not regularly updated. Information should be segmented according to different target groups to meet personalized needs.

5. Enhancing Electronic Marketing tools at Universities in Vietnam

Universities can consider using trendy tools favored by young people, such as TikTok, blogs, and podcasts. Blogs are useful information channels to provide in-depth information on topics of interest to potential learners and can also improve search engine rankings for the

university's website. Blog content can address helpful tips, specific information about the institution's online courses, or provide information about student life services like transportation, research data searching, housing and accommodation information, scholarship opportunities, internship placements, handling classroom situations, etc. This information is especially valuable for students who are not located near the university.

There should be a particular admissions page on the university's website, which frequently serves as the official platform for distributing admission-related information. This website needs to provide precise admission details, such as admission requirements, admission procedures, helpful information for new students, and more. A number of colleges have formerly accomplished at this. However, in addition to creating flowcharts for guidance, there should be videos to guide learners on the enrollment process and necessary steps for online registration. This visual approach is more engaging and instills greater confidence in potential candidates. Many international universities have successfully used podcasts for admissions. Furthermore, there should be integration of automated features like payment processing, dormitory registration, shuttle service registration (if available), or other university services. Universities can also consider using AI technology to provide virtual admission counselors. AI-powered chatbots can offer real-time support to future students by answering their questions and providing personalized guidance. According to an IBM report, more than 60% of Gen Z students prefer interacting with chatbots over human representatives. These gadgets analyze data utilizing machine learning algorithms to give students specific recommendations based on their preferences, educational history, and other aspects. Educational institutions can also use the information gathered through these tools to forecast student behavior and identify the students who will be most likely to enroll, retain enrollment, or drop out. Organizations can use this information to personalize their marketing efforts and improve student retention rates. However, universities need to ensure they have control over the information that chatbots like GPT can provide to learners to ensure reliable information dissemination.

On various information portals, universities should provide comprehensive information about themselves, including admission criteria, exam subject combinations, previous years' admission cutoff scores, as well as images and introductory videos about the institution. These information portals should also have comment sections to facilitate information exchange and allow users to provide evaluations and feedback about the university. These portals can be considered as tools for electronic Word of Mouth (eWOM), which universities can leverage to guide or direct information.

Colleges and universities must establish communication with potential students to create conditions for them to understand the educational services offered. A website is a valuable tool for disseminating course materials to students. However, relying solely on the internet as a communication method may not be beneficial. A website can inform prospective students after their initial contact with the educational institution and serves as an effective tool for enrolling them. The website should provide students with basic and detailed information about the university's resources and expectations. The needs and potential of learning in this way should be interwoven.

Universities can also use advertising and email campaigns to effectively reach and persuade future students to enroll. Organizations can benefit from the support of alumni who can share their positive experiences with current and future students. In this way, they can share

their success as former students of the organization with future students and encourage them to participate.

Universities allocate funds for modern, aesthetically pleasing buildings and allocate more spending towards public-oriented activities such as fundraising events. Findings qualified researchers depends on the goals set by upper-level management. Universities also use public relations to build relationships. Typical interactions include engaging with individuals, famous politicians, domestic and international students to enhance the image and reputation of the institution.

Since the introduction of Information and Communication Technology (ICT) as a new educational service, students no longer need to be physically present at the university to access a wealth of necessary information. Educational institutions can establish data systems that grant students access to course materials and other resources. Various IT resources can be integrated into academic programs to provide suitable academic content for educational purposes. Universities can offer services through online systems integrated into their websites. Tools for interacting with current students may include email, video, and phone conferences. Fully online courses can also be provided to meet the needs of distance learners.

Additionally, educational institutions need to diversify their electronic marketing tools. On the foundation of their websites, universities should link to other platforms such as social media, leverage tools like big data and AI to enhance and develop websites, create attractive effects to engage viewers, and provide various utilities for learners and other audiences when accessing an official university website.

Enhancing the use of social media/social networks: This is a tool that is increasingly being used by many people, including students, school students' parents, teachers, and other individuals. Therefore, the reach of communication through these tools is extensive, creating opportunities for universities to implement online enrollment strategies and provide educational services or other activities such as webinars, online interactions, and more.

Enhancing the use of digital tools and artificial intelligence in marketing: In the context of the global and Vietnamese economy surrounded by the achievements of science and technology, which are transforming all aspects of economic and social life worldwide, artificial intelligence technologies are becoming increasingly integrated into the activities of universities, in areas ranging from teaching, learning, research, and academic management (Irina V. A., 2020). To reach customers, most electronic marketing tools have been used by educational institutions. However, whether to a lesser or greater extent, these tools have also integrated AI. Digitizing marketing processes or operational processes in educational institutions further enhances the use of AI. And if the ICT infrastructure is underdeveloped, it can reduce opportunities for digitization and AI deployment at universities. Therefore, educational institutions need to undergo digital transformation to align with the general trend of digitization in education in Vietnam and globally. In practice, all types of university activities – teaching and learning, scientific research, administration – have significance in marketing when they create experiences for customers or stakeholders (students, professors, staff, partners, and society), thus influencing the reputation and position of the university in the education and research market (Irina V. A., 2020).

Enhancing the application of AI in marketing allows for the rapid collection and processing of large, accurate, and cost-effective data, freeing up human resources to promote further innovation. Educational institutions can apply AI in enrollment counseling, administrative

procedure support for students, catering to individual student needs, and supporting teaching, learning, and scientific research activities at universities. However, implementing AI in universities requires a substantial budget and a large amount of information to effectively utilize AI features. Additionally, educational institutions need to consider the benefits and costs of AI deployment, depending on the specific conditions of each institution.

Using a synchronized student information system that provides services to students while seamlessly collecting and maintaining information about students in a profile during their time at the institution and for many years thereafter. This capability allows educational institutions to stay in touch with alumni even after they graduate. This is currently a challenge at many educational institutions. Contacting students becomes difficult because most graduates may change their phone numbers or personal emails, or they may not use or pay much attention to emails from the university. Establishing an information system that automatically sends useful information to alumni, such as advanced degree programs, job opportunities, or collaboration opportunities, and inviting them to participate in on-campus events can help. Providing useful information helps educational institutions maintain an active and professional alumni community. The system also allows for connections between alumni and current students studying at the institution, gathering introductions about alumni and suggesting them to graduating students. The system can also facilitate attracting sponsorship for certain projects of the institution to serve the community.

In addition, institutions can enhance the use of landing pages to carry out personalized marketing campaigns targeting different target audiences in each campaign. Landing pages can be applied to short-term courses within institutions. Landing pages can help collect information from potential learners, categorize them to assist the admissions department of the institution in proposing appropriate outreach strategies. Landing pages should also be designed to highlight the benefits of programs, courses, or the benefits they will bring to learners, the conditions for participating in the course, as well as the payment methods and evaluations from former learners or exemplary individuals, as well as evaluations from organizations or businesses to enhance the credibility of the courses. Discounts and incentives should also be emphasized to encourage learners to convert and become students of the institution.

6. Conclusion:

It can be observed that, currently, the majority of universities in Vietnam primarily use a few tools such as websites or social media for marketing activities. The focus of marketing efforts is largely on the enrollment process, while there are still significant limitations in managing and providing services to students and connecting with alumni. This necessitates that universities in Vietnam need solutions to enhance the application of electronic marketing tools to improve the institution's brand image, as well as to attract and retain students. Diversifying electronic tools and digitizing using achievements in AI, big data, and blockchain will provide universities with more useful and excellent tools to implement marketing strategies effectively.

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