# THE IMPORTANCE OF DIGITAL MARKETING FOR HIGHER EDUCATION IN IMPROVING THE EDUCATIONAL VALUE CHAIN

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## **Abstract**

In the fast-changing digital landscape of higher education, the adoption of digital marketing strategies has become essential for higher education institutions aiming at global relevance and effective student engagement. The article dives into the transformative impact of digital marketing on higher education, focusing on six key aspects. Firstly, we explore the global reach and accessibility facilitated by digital channels, using strategies such as social media advertising and relevant digital content. Secondly, personalized communication takes center stage, emphasizing targeted email campaigns, social media posts, and customized landing pages. The power of content marketing and storytelling is examined as the third aspect, utilizing mediums like blog posts, videos, and well-planned social media campaigns. Social media engagement, the fourth dimension, is analyzed across platforms like Instagram, Twitter, and LinkedIn, offering insights into effective strategies. The fifth dimension explores the role of Search Engine Optimization (SEO) in enhancing online visibility and engagement. Finally, the article highlights data-driven decision-making as higher education institutions leverage metrics such as website traffic analysis, social media analytics, and conversion rate monitoring. Through these comprehensive strategies, higher education institutions can successfully navigate the fast-changing digital landscape, connecting with a global audience and fostering engagement. Digital marketing holds the capability to significantly enhance various aspects of the educational value chain, facilitating successful outreach, engagement, and support for students. The article also underlines the role of the synergistic relationship generated by the CMO – CIO partnership that gives a particular form to the digital transformation vision of the Higher Education institution, the movement from vision to reality on the path to digital maturity being impacted by a digital marketing considering CX improvement and the 7Ds.

**Keywords:** Digital Marketing, Higher Education, Educational Value Chain, CMO – CIO partnership, CX

**JEL Classification**: D83, I23, L86, M31, O31, O33

#### 1. Introduction

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Ten years ago, Edelman (2013) brought to our attention his expectation for marketing expansion based on its giving role (providing relevant insights, creating valuable connections, and delivering performance excellence), highlighting, for instance, the impressive insights (derived from data) about customers ensured by marketing with the help of Big Data and analytics, as well as Chief Marketing Officers' need (in order to drive both personalization, and new experiences) to more and more guide information technology (IT) regarding priorities in new technologies' investment. At the beginning of the next year, Ariker and Perrey (2014) underlined the need of Chief Marketing Officers and Chief Information Officers (they are natural partners) to have a successful partnership (based on clearly defined goals and empathy, as well as a shared vocabulary and complete transparency) so as to turn Big Data (precisely understood) into big profits.

Just some months later, Jauchius (2014) described the role of Customer Information Management (CIM) built as a result of the closed working relationship between the Chief Marketing Officer (CMO) and Chief Information Officer (CIO), considering that: the central part of the technology and marketing overlap is the building of CIM database, and that the greater part of digital is within marketing; the CMO – CIO partnership is driven by marketing need to produce this move in digital technology and digital knowledge in accordance with customer-driven requirements' solving. While approaching the challenge of digital maturity, Purcarea and Negricea (2014) showed how in today omnichannel world digital customer engagement became a top strategic priority, customers expecting seamless integration of digital and analog channels, and seamless organizational internal integration (within the context of a more company's interactivity with more empowered customers) should be the end goal, answering accordingly to the new requirements of the supply chain management.

Horrigan (a, 2016; b, 2016; c, 2016), who gave attention to digital readiness, underlined that for using next-generation technologies it is necessary to see the different levels of both preparedness (of both people and institutions), and of new technologies' usage as these technologies diffuse in society. With regard to *the spectrum of digital readiness for e-learning* (digitally ready, cautious clickers, the reluctant, traditional learners, and the unprepared), he made reference to the comparison of key measures of digital readiness (use, trust and skills) across the above-mentioned groups. And on the basis of research conducted by the nonpartisan fact tank Pew Research Center (Washington, D.C.), he concluded that *greater digital readiness translates into higher level of use of technology in learning*.

Negricea and Purcarea (2017) highlighted how digital customer experience (DCX) is evolving step by step, digital marketers being increasingly aware of both the role of CX as the top digital transformation priority, and of the rising consumers' technology hyper adoption powered by emotion. They showed marketers' struggling to create more cohesive cross-channel customer engagement, by offering relevant content and messaging within the evolving customer journey. At the same time, they made reference to significant research

findings about recommendations regarding both where to focus resources to successfully implement digital transformation, and the need to better understand that CX improvement (CX and brand working together) is a very important benefit of digital transformation.

There is no doubt about the importance of better understanding the level of digital readiness, taking into account the real need to integrate new technologies into universities operational frameworks and advance on the path to digital transformation (Iswahyudi, Hindarto, and Indrajit, 2023). It was also recently reconfirmed that as an intermediary between an organization's resources and digital transformation is the readiness for this digital transformation, an organization needs to reconfigure its resources in order to achieve the appropriate level of this transformation (Chwiłkowska-Kubala et al., 2023).

According to a Forbes Councils Member (Tippets, 2023), a CMO – CIO partnership that shapes a digital transformation vision, brainstorms potential risks, challenges and consequences, and builds a flexible digital road map is opening the way to successfully valorize the power of digital transformation by guiding the business on the basis of their clear communication, and mutual understanding of goals and objectives, as well as regular results reviews and measures of their collaboratively initiatives (identifying improvements' areas and adjusting strategies accordingly). Starting in their collaboratively working from expertise and insights' sharing, goals and objectives' identifying and ideas' exploring, the CMOs (who understand the implications of both customer data on sales, and CX) and CIOs (who understand data sources' collection, capturing and unifying, while protecting personally identifiable information) will make possible their needs' efficiently and cost-effectively meeting, leveraging their data predictive value.

In the opinion of Dr. Charles Brandon (2023), in order to achieve both a successful and sustainable digital transformation it is necessary to address some key factors (such as: clear strategy and vision, strong leadership commitment, customer-centric focus, agile and adaptive culture, effective change management, data-driven decision-making, crossfunctional collaboration, continuous learning and skill development, measurable goals and key performance indicators, technology alignment, flexibility and adaptability, continuous improvement, cybersecurity and risk management, vendor and partner management, usercentric design, cost management, legal and regulatory compliance) that differentiate successful digital transformation initiatives from failed efforts. Going on the right path presupposes to integrate the new technologies (like automation, cloud computing, big data analytics, the Internet of Things, blockchain, AI and generative AI) and create a holistic organizational ecosystem (in which front, mid, and back-office operations are coherently connected). With regard to the importance of a sustainable digital transformation it is also worth mentioning that – as highlighted by a Director of the Center for Universal Education at The Brookings Institution (Washington, D.C.), Rebecca Winthrop (2023), while commenting on the last United Nations General Assembly (UNGA) meetings in New York - to the list of forces the Sustainable Development Goals (SDGs, adopted in 2015 by the

United Nations) the generative AI has been added recently. And that within the context in which the well-known and much debated Chat GPT3 was released in November 2022 after the Transforming Education Summit (TES) during UNGA 2022.

On the other hand, Trend Hunter AI, recognized as the world's largest and most popular trend community (Jeremy Gutsche launched TrendHunter.com in 2005), highlighted in September 2023 three trend themes in AI Education: generative AI in education, sophisticated AI detectors (AI detection platforms like GPT Zero), and AI-assisted writing in education (like Turnitin). Trend Hunter also underlined three industry implications: language learning (introduction of Duolingo Max), writing and editing (the disruption generated by the sophisticated AI detectors), and academic integrity.

According to Grammarly for Education (a, n.d.; b, n.d.), to succeed in the workplace students need to test and learn the proper strategies provided by higher education institutions so as to be able to respond and innovate while facing the new technologies like Generative AI, Learning Management Systems, Internet of Things, Student Learning Analytics, Virtual Reality and Augmented Reality. As technology use is thrown learning with great force into the future, it has become an urgent strategic priority to accelerate the adoption of educational technology in higher education. As shown, for instance, by McKinsey Global Institute (2022), both current employees and candidates have to be evaluated first for their potential and capacity to learn (not only for their knowledge and skills).

# The obvious transformative impact of digital marketing on higher education

The American Marketing Association highlights in the article "Analyzing Effective Higher Education Marketing Strategies" the shift from traditional to digital marketing strategies, fueled by technological advancements, which has significantly impacted the effectiveness of marketing efforts. Unlike traditional one-way communications, digital marketing offers a two-way interaction, allowing organizations, including higher education institutions, to engage with their audience more effectively. The emergence of various digital marketing strategies provides higher education institutions with diverse tools to connect with potential students, enhance communication, and promote their brand. This highlights the evolving landscape of marketing in the digital era and the opportunities it presents for higher education institutions.

Deloitte suggests in its article entitled "Higher Education meets digital technology" the fact that one of the main factors behind the ongoing transformation in education is the necessity to provide personalized experiences for students throughout their entire academic journey, both within and outside the institution. Students have heightened expectations, desiring customized communication, tailored learning experiences, and support services that cater to their individual needs. The use of digital tools and platforms is highlighted as a key

strategy for higher education institutions to deliver personalized experiences, leading to increased student engagement and retention.

A recent article from *Digital Marketing Institute* entitled "The What, Why & How of Social Media for Higher Education", underscores the multifaceted nature of social media platforms and their strategic use in digital marketing for higher education institutions, emphasizing the importance of diverse content, engagement, and strategic partnerships.

The article "Digital marketing as a route to reaching international students" from *Times Higher Education*, highlights, among others, that the recruitment of international students is becoming more competitive, making universities to adopt effective digital marketing strategies to stand out, while there is a need to understand the fact that unique preferences of different demographics is crucial and tailoring marketing content based on the preferences of the target demographic is essential.

The ongoing expansion of the digital landscape presents an extensive and untapped opportunity for reaching wider audiences. For universities seeking to connect with potential students, engage with current ones, and establish a strong online presence, digital marketing has become fundamental. It empowers higher education institutions to transcend geographical limitations. Using social media platforms, search engine optimization (SEO), and online advertising, institutions can showcase their programs, faculty, and campus life to a global audience. This extended reach not only attracts a diverse student body but also contributes to the creation of a multicultural and inclusive learning environment.

There is an obvious transformative impact of digital marketing on higher education, the following key aspects being relevant in this sense.

#### 2. Global and accessible

Digital marketing serves as a catalyst for higher education institutions to pass geographical boundaries. With a simple click, universities can establish connections with prospective students from every corner of the globe. Utilizing social media platforms, search engine optimization (SEO), and online advertising, institutions can present their programs, faculty, and campus life to a worldwide audience (see table 1 below). This expanded reach not only attracts a diverse student body but also contributes to the establishment of a multicultural and inclusive learning environment.

Social Media Advertising	Targeted ads on platforms such as Facebook and Instagram to reach specific audiences globally.
Virtual Campus Tours	Utilization of virtual reality or 360-degree videos for immersive online campus experiences.

Multilingual Digital	Creation of digital content in multiple languages to cater to
Content	global audience.

Table 1. Expanded reach with the help of digital marketing

# 3. Tailored communication

A significant advantage of digital marketing represents its ability to personalize communication for specific audiences. By leveraging targeted advertising and data analytics, higher education institutions can craft personalized messages tailored to the interests, demographics, and behaviors of potential students (see table 2 below). This personalized approach enhances engagement and fosters a meaningful connection between the institution and its audience.

Email Marketing Campaigns	Sending personalized emails based on a student's interests.
Targeted Social Media Posts	Crafting social media content that speaks directly to the interests and aspirations of different audience segments.
Custom Landing Pages	Developing landing pages for specific programs or events to provide customized digital content.

Table 2. Crafting personalized messages

# 4. Content marketing and storytelling

In the very competitive field of higher education, storytelling plays an important role. Digital marketing offers higher education institutions a platform for engaging in content marketing, allowing them to share narratives that resonate with their audiences. Whether through blog posts, videos, or social media campaigns, institutions can showcase their unique identity, values, and successes, cultivating a sense of community and loyalty among students and alumni (see table 3 below).

Blog Posts	Regular blog posts featuring student success stories, faculty interviews, and campus events.
Video Content	Creating engaging videos, including virtual campus tours, interviews, as well as documentary-style digital content.

Social Media	Launching social media campaigns that tell a relevant story	
Campaigns	across various platforms, generating interest and	
	engagement.	

Table 3. Content marketing and storytelling

It is worth mentioning within this framework that according to a 2022 Aira survey of marketers worldwide (Voss, 2023), the majority of respondents (58.9%) confirmed that they optimized existing content (for search or to outshine competitors' copy, for instance) by using AI tools. The article's author added that is worth paying attention to how can be enhanced content (repurposing content, personalizing it, creating high-ranking content, testing content) by using ChatGPT and other generative AI tools (like Anyword, Jasper, Copy.ai, Frase, and Quillbot).

# 5. Engagement through social media

Social media platforms have evolved into powerful digital tools for higher education institutions to connect with their audiences. From Instagram and Facebook to LinkedIn and Twitter, higher education institutions can use these platforms to share updates, spotlight achievements, and engage with both current and prospective students (see table 4 below). Social media also provides a space for students to connect with each other, fostering a strong sense of community.

Instagram	Regular posting of visually appealing digital content.
Twitter	Active participation in trending educational topics and real- time engagement with students and alumni.
LinkedIn	Professional engagement, sharing faculty achievements, research breakthroughs, and industry partnerships.
TikTok	Good for short video content

Table 4. Engagement through social media

It is worth mentioning that progress could be seen in many areas including in video effects making. For example, as shown recently by Sato (2023), without downloading another app TikTok users can use a new mobile editing feature and create video effects right in it, confirming the expansion of TikTok culture (where AR effects are a big part of it). It is also well-known that TikTok filters (always central to it) are increasingly becoming more realistic, while users can add interactivity in filters and work off (in the TikTok mobile app) of filter templates, having the possibility to use in their effects more than 2,000 assets. On

the other hand, it is good to know that the performance (in revenues) obtained by ByteDance, the TikTok parent (Konstantinovic, 2023), challenged the social media throne of Meta.

# 6. The importance of Search Engine Optimization (SEO)

In a world where many prospective students initiate their interaction with a university through online searches, SEO takes center stage. Higher education institutions must ensure that their websites prominently appear in search engine results (see table 5 below). By optimizing content for relevant keywords, universities can enhance their visibility and attract more relevant leads.

Keyword Optimization	Identifying relevant terms potential students are likely to search for and incorporating them into website content.
High-Quality Relevant Content	Producing content that answers questions, provides value, and relevant to the target audience.
Backlink Building	Developing a network of high-quality backlinks from well-known sources to enhance the website's credibility.

Table 5. The importance of Search Engine Optimization (SEO)

It is useful to note here how important is for higher education institutions what is happening in the field of search regarding the evolution of new tailored experiences. As shown by a Google expert (Edwards, 2023), there is a continuous evolution and improvement alongside the web and in general in our world in which at no time will be search (that is connecting human curiosity and wisdom placed on web) a solved problem. And Google already introduced new improvements (while also exploring another new way regarding web content) to help searchers: find the relevant and reliable information when following a topic; valorize Google app and mobile web by exploring diverse perspectives on Search; learn from others' experiences on the web (based on a new experiment introduced in Search Labs). And as SEO is always changing it is also important to better understand the role of user-generated content (UGC, a game-changer in digital content) in SEO as a key activation, by incorporating UGC into the SEO strategy (Liddell, 2023), so as to obtain significant benefits (such as: enhanced search engine rankings, increased user engagement, content variety, long-tail keywords, authenticity and trust, community building, social signals, user-generated backlinks, lower content creation costs, feedback and insights, diverse perspectives and opinions brought to organization content).

# 7. Data-driven decision making

Digital marketing offers a vast amount of relevant data that institutions can leverage for informed decision-making. Analyzing website traffic, social media engagement, and online campaign performance provides valuable insights regarding the audience preferences (see Table 6 below). This data-driven approach allows universities to refine their strategies, allocate resources more effectively, and measure the return on investment (ROI) for various digital marketing initiatives.

Website Traffic	Understanding which pages attract the most traffic helps in	
Analysis	optimizing content.	
Social Media	Tracking engagement metrics, such as likes, shares, and comments,	
Analytics	to measure the success of social media efforts.	
Conversion Rate	Analyzing how many visitors take desired actions provides insights	
Monitoring	into campaign effectiveness.	

Table 6. Improving data-driven decision making with the help of digital marketing

# Understanding the deep linkage between universities' challenge to align their program offerings with the dynamic demands of the labor market, and the role of the digital marketing in enhancing the educational value chain

According to *The Skills Revolution and the Future of Learning and Earning* Report from the *World Government Summit 2023* in collaboration with *McKinsey & Company*, higher education is undergoing a transition towards a skills-centric approach. Institutions are augmenting the practical application of skills in their curricula, placing a significant focus on fostering communities and networks. This shift prompts a reassessment of certain credentials, giving rise to a novel micro credentialing system in higher education designed to equip students more flexibly for the professional pathway.

To ensure a workforce equipped with skills aligned to the evolving workplace landscape, employers are encouraged to prioritize hiring based on skills rather than solely relying on experience and qualifications. Adopting a 'talent incubator' mindset becomes pivotal, supporting employees as they assume varied roles.

The same report highlights the concerted efforts of educational institutions and businesses to adapt and integrate evolving skill requirements into their frameworks underscore the global commitment to preparing learners for the dynamic demands of the future workforce. The emphasis on higher-level cognitive and social-emotional skills, as demonstrated by initiatives like the OECD Learning Compass 2030 and UNICEF Global Framework,

reflects a forward-thinking approach aimed at fostering resilience and adaptability in individuals.

According to the report, higher education institutions play a very important role in shaping individuals for the future job market. Despite the evolving emphasis on continuous learning, degrees remain highly valued by both individuals and employers, with the assurance of a better life. The global higher education market is projected to grow substantially, highlighting the ongoing importance of higher education institutions in the educational value chain.

The imperative for higher education institutions is to align program offerings with the dynamic demands of the labor market. This involves investing in guidance and support systems for students to identify career pathways matching their talents and interests. Strengthening relationships with employers is also very important to ensure that programs are industry-aligned.

Below, table 7 highlights the key stages of the educational value chain while providing clearer descriptions for each stage.

Pre-Enrollment	Outreach, marketing, and recruitment efforts to raise awareness and attract prospective students.
Admissions	Application processes, assessments, and enrollment procedures for new students
Curriculum Design	Development and planning of academic programs, courses, and learning objectives
Teaching Methods	Implementation of pedagogical approaches and assessment methods
Student Engagement	Activities and initiatives fostering student participation, interaction, and collaboration
Assessment & Feedback	Activities and initiatives fostering student participation, interaction, and collaboration
Credentialing	Granting degrees, diplomas, certificates or other credentials upon successful program completion.

Career Services	Assistance and resources to support
	students in transitioning from education to
	the labor market

Table 7. Key stages of the educational value chain

Addressing to the changing nature of work within the context of digital transformations post COVID-19 crisis, Bousrih, Elhaj and Hassan (2022) underlined significant aspects, such as: the labor market indicators are influenced by digitalization which changes essentially the nature of work; being competitive in the labor market is involving mastering digital skills, between these skills and higher salaries being a clear correlation. They also showed that to generate economic growth the most important key factors are technology, labor, and capital (according to macroeconomic theories), and that the labor market is impacted by the new technologies.

Thirteen years ago, two researchers (Pathak and Pathak, 2010) from one of Australia's leading universities, Queensland University of Technology (QUT), Brisbane, addressed the topic of the process of making a new arrangement of the higher education value chain, starting from the need of creating competitive advantages of cost and differentiation (demanded by the changing dynamics of higher education sector), and considering Michael Porter's concept of value chain launched in 1985 and conceived as having five primary (inbound logistics, operations, outbound logistics, marketing and sale, services) and four support services (human resource, technology, firm infrastructure, procurement) in the value chain proposed by Porter. On the basis of identified trends in the literature they gave a brief statement of the main points of the new age value drivers in higher education (student enrolments, research grants and publications, teaching and learning training, research training and development services, technology: it enabling students, student's evaluation of teaching, visibility through active brand building and differentiation, and alumni as brand ambassadors), showing that the new emerging power centers in the reconfigured value chain of the higher education sector are the support services (value being commensurate with the emerging performance benchmarks, and the key thrust areas being revaluated). Beyond the increasing significance of support services within the emerging value chain in higher education discussed by these Australian researchers, they also underlined not only the emerging trend of teaching and learning, but also the role of technology (as an enabler and creator of both cost advantage and enhanced efficiency) and the formalization (rules, regulations, policies and procedures governing the specific activities) of marketing & sales services. They brought to our attention the coexistence of all three formats (with their own unique business model) of higher education (brick, brick & click, and click).

According to European Union (2017), there is a contrast between value chain (understood as a way of obtaining a competitive advantage and fulfill customer requirements) and

supply chain (seen as a business transformation tool both minimizing costs and maximizing customer satisfaction by providing – formulated in terms of the marketing mix – the right product at the right time at the right place and the right price). Within this framework, it was highlighted significant aspects, as follows: the prominence of the digital value chain (as term), value chains being made by the digital transformations (key to competitiveness if used effectively) more digital, while business processes become digitized; considerable opportunities to create value for customers are being offered by the value chains on the basis of digital technologies' mastery; a key technological trends' convergence facilitate digital innovation in all sectors (products, processes, services, business models).

As the reputed father of modern marketing, Professor Philip Kotler (2012), reminded us, the art of brand building means marketing. And we have seen above how visibility through active brand building and differentiation, and alumni as brand ambassadors, is one of the main points of the new age value drivers in higher education. And within the above-mentioned prominence of the digital value chain, it is imperative to pay attention to the way of leveraging digital marketing.

As demonstrated by the reputed digital strategist Dr. Dave Chaffey (2023): "In practice, digital marketing focuses on managing different forms of online company presence, such as company websites, mobile apps and social media company pages, integrated with different online communications techniques... These include search engine marketing, content marketing, social media marketing, online advertising, email marketing and partnership arrangements with other websites... digital marketing is sometimes considered to have a broader scope than online marketing since it refers to digital media such as web, e-mail and wireless media, but also includes management of digital customer data and electronic customer relationship management systems (E-CRM systems)." It is well-known that Chaffey (2022) identified the so-called 7Ds of digital marketing (including key digital marketing concepts and techniques): Digital goals, Digital audiences, Digital devices, Digital platforms, Digital media, Digital data and Digital technology.

According to an author from the digital marketing agency Search Influence (Scott, 2023) – who revealed research findings regarding the top 10 results in Google for marketing strategies in higher education institutions – the most frequently cited strategies were as follows: SEO, Social Media Marketing, Email Marketing, Video Content, Personalization, Pay-Per-Click (PPC () and Digital Advertising, Content Marketing, Branding, Chatbots and Conversational Marketing, Data-Driven Strategies. He also revealed his perspectives after analyzing the articles, resulting significant aspects such as: despite the fact we are already in the new normal, there is still a continued focus on the COVID-19 pandemic; there is a focus on the rise of Instagram, and Generation Z are starting product experiences on TikTok; before students even know they are looking they will continue to be exposed to universities' schools and programs, where the continuous importance of social; it is important to be focused on real-time and alumni engagement; it is also important for universities to have a

#### Journal of Information Systems & Operations Management, Vol. 17.2, December 2023

central oversight (to avoid dismantling their own messaging and budgets), considering the decentralized nature of a higher education marketing strategy that is costing very much; there is a real need to pay more attention to analysis, tracking, and reporting,

Allow us to add that, without doubt, digital marketing has the potential to profoundly elevate multiple phases of the educational value chain, enabling effective outreach, engagement, and support for students. Below are several steps through which digital marketing can enhance the educational value chain.

Pre-Enrollment	Targeted Social Media Advertising,
	Content Marketing (Blogs, Videos)
Admissions	Webinars and Virtual Tours, Online
	Application Promotion
Curriculum Design	Data Analytics for Program Improvement,
	Online Surveys and Feedback
Teaching Methods	Social Media Engagement for Community
	Building, E-Learning Platforms
Student Engagement	Email Campaigns, Social Media
	Engagement for Community Interaction
Assessment & Feedback	Online Assessment Tools, Data Analysis
	for Personalized Feedback
Credentialing	Virtual Graduation Celebrations, Digital
	Certificates/Diplomas
Career Services	Digital Alumni Networks, Online Job
	Platforms

Table 8. How digital marketing can enhance the educational value chain

According to an article entitled "Learn how and why schools and colleges use digital marketing" from WSA The Communications Agency, a strategic and well-executed digital marketing strategy represents an imperative for educational institutions to thrive in a competitive, technology-driven world, where digital marketing platforms facilitate open dialogue and interaction, encouraging feedback and suggestions for improvement, fostering a sense of community and inclusivity.

#### Conclusion

Digital marketing plays a pivotal role in Higher Education by enhancing the educational value chain. Its strategic implementation not only expands institutional reach but also fosters engagement, facilitates personalized communication, and ultimately contributes to a more dynamic and inclusive learning environment. Embracing digital marketing practices is essential for higher education institutions seeking to adapt, thrive, and effectively meet the evolving needs of modern and digital education. It will be interesting to follow the synergistic relationship generated by the CMO – CIO partnership that gives a particular form to the digital transformation vision of the Higher Education institution, the movement from vision to reality on the path to digital maturity (according to the agile digital road map built by the CMO – CIO partnership) being also impacted by a digital marketing considering the above-mentioned 7Ds.

#### References

- [1] AMERICAN MARKETING ASSOCIATION, Analyzing Effective Higher Education Marketing Strategies, Retrieved from: <a href="https://www.ama.org/analyzing-effective-higher-education-marketing-strategies/">https://www.ama.org/analyzing-effective-higher-education-marketing-strategies/</a>
- [2] ARIKER M. and PERREY J., CMOs and CIOs need to get along to make Big Data work (February 1, 2014), Retrieved from: <a href="https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/cmos-and-cios-need-to-get-along-to-make-big-data-work">https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/cmos-and-cios-need-to-get-along-to-make-big-data-work</a>
- [3] BRANDON C., Why Digital Transformation Haunts: Spooky Tales of Failure (October 2023), Process Excellence Network, OPEXWeek, pp. 2-3, 10, Retrieved from: <a href="https://eco-cdn.iqpc.com/eco/files/event\_content/why-digital-transformation-haunts-spooky-tales-of-failureU5Z9alg68W47FFohqDsajtftn8aCSJ42hMr5dcYf.pdf">https://eco-cdn.iqpc.com/eco/files/event\_content/why-digital-transformation-haunts-spooky-tales-of-failureU5Z9alg68W47FFohqDsajtftn8aCSJ42hMr5dcYf.pdf</a>
- [4] Bousrih J., Elhaj M., Hassan F., The labor market in the digital era: What matters for the Gulf Cooperation Council countries? (16 November 2022), Front. Sociol., Sec. Work, Employment and Organizations, Volume 7 2022. <a href="https://doi.org/10.3389/fsoc.2022.959091">https://doi.org/10.3389/fsoc.2022.959091</a>
- [5] CHAFFEY D., What is digital marketing? Using RACE to structure your digital plans (28 Jun, 2023), Smart Insights, Retrieved from: <a href="https://www.smartinsights.com/digital-marketing-">https://www.smartinsights.com/digital-marketing/</a>
- [6] CHAFFEY D., Introducing the 7Ds of managing digital marketing (January 13, 2022), Smart Insights, Retrieved from: <a href="https://www.davechaffey.com/digital-marketing-definitions/what-is-digital-marketing/">https://www.davechaffey.com/digital-marketing/</a>

- [7] CHWIŁKOWSKA-KUBALA A., CYFERT S, MALEWSKA K., MIERZEJEWSKA K., SZUMOWSKI W., The impact of resources on digital transformation in energy sector companies. The role of readiness for digital transformation, Technology in Society, Volume 74, August 2023. <a href="https://doi.org/10.1016/j.techsoc.2023.102315">https://doi.org/10.1016/j.techsoc.2023.102315</a>
- [8] DELOITTE, Higher Education meets digital technology (April 20, 2023), Retrieved from <a href="https://www.deloitte.com/au/en/Industries/government-public/perspectives/higher-education-meets-digital-technology.html">https://www.deloitte.com/au/en/Industries/government-public/perspectives/higher-education-meets-digital-technology.html</a>
- [9] DIGITAL MARKETING INSTITUTE, The What, Why & How of Social Media for Higher Education (June 6, 2023), Retrieved from: <a href="https://digitalmarketinginstitute.com/blog/what-why-and-how-of-social-media-for-higher-education">https://digitalmarketinginstitute.com/blog/what-why-and-how-of-social-media-for-higher-education</a>
- [10] EDELMAN D., In 2014, marketing becomes the "Giving Tree" for the C-Suite (December 1, 2013), Retrieved from: <a href="https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/in-2014-marketing-becomes-the-giving-tree-for-the-c-suite">https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/in-2014-marketing-becomes-the-giving-tree-for-the-c-suite</a>
- [11] EDWARDS C., New ways to find just what you need on Search (Nov 15, 2023), Google Search, Retrieved from: https://blog.google/products/search/google-search-november-2023-update/?
- [12] European Union, Digitising European Industry: Working Group 2 Digital Industrial Platforms (August 31, 2017), p. 11, Retrieved from: <a href="https://ec.europa.eu/futurium/en/implementing-digitising-european-industry-actions/report-wg2-digital-industrial-platforms-final.html">https://ec.europa.eu/futurium/en/implementing-digitising-european-industry-actions/report-wg2-digital-industrial-platforms-final.html</a>
- [13] GRAMMARLY FOR EDUCATION, ROI Under Fire: Why Higher Education Will Outlast Every Threat (n.d.), GEDU-Q32023 eBook-LR, pp. 12-13, Retrieved from: https://go.grammarly.com/ebook
- [14] GRAMMARLY FOR EDUCATION, Innovation in Education: How Technology Is Shaping the Future of Learning (n.d.), Innovation in Education\_031723, Retrieved from: https://go.grammarly.com/ebook-future-of-learning-TY
- [15] HORRIGAN J.B., 1. The meaning of digital readiness (September 20, 2016), PEW RESEARCH CENTER, Digital Readiness Gaps, Retrieved from: <a href="https://www.pewresearch.org/internet/2016/09/20/the-meaning-of-digital-readiness/">https://www.pewresearch.org/internet/2016/09/20/the-meaning-of-digital-readiness/</a>
- [16] HORRIGAN J.B., 2. The spectrum of digital readiness for e-learning (September 20, 2016), PEW RESEARCH CENTER, Digital Readiness Gaps, Retrieved from: <a href="https://www.pewresearch.org/internet/2016/09/20/the-spectrum-of-digital-readiness-for-e-learning/">https://www.pewresearch.org/internet/2016/09/20/the-spectrum-of-digital-readiness-for-e-learning/</a>

- [17] ISWAHYUDI, HINDARTO, D., INDRAJIT, R.E., Digital Transformation in University: Enterprise Architecture and Blockchain Technology, Sinkron: JurnaldanPenelitianTeknikInformatika (e-ISSN: 2541-2019), Volume 8, Number 4, October 2023, pp. 2501-2512. DOI: <a href="https://doi.org/10.33395/sinkron.v8i4.12977">https://doi.org/10.33395/sinkron.v8i4.12977</a>
- [18] JAUCHIUS M., Building a bridge from CMO to CIO (June 1, 2014), Retrieved from: <a href="https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/building-a-bridge-from-cmo-to-cio">https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/building-a-bridge-from-cmo-to-cio</a>
- [19] KONSTANTINOVIC D., ByteDance revenues rival Meta as both compete over social commerce (Nov 15, 2023), Insider Intelligence, Retrieved from: <a href="https://www.insiderintelligence.com/content/bytedance-revenues-rival-meta-both-compete-over-social-commerce">https://www.insiderintelligence.com/content/bytedance-revenues-rival-meta-both-compete-over-social-commerce</a>?
- [20] KOTLER P., Marketing is the art of brand building (May 1, 2012), Retrieved from: https://twitter.com/KOTLERMARKETING/status/197412991841472512
- [21] LIDDELL, A., How to integrate user-generated content into your SEO strategy (November 17, 2023), Search Engine Land, Retrieved from: https://searchengineland.com/seo-strategy-integrate-user-generated-content-434757?
- [22] MCKINSEY & COMPANY, The World Government Summit, The Skills Revolution and the Future of Learning and Earning (PDF), Retrieved from: <a href="https://www.mckinsey.com/~/media/mckinsey/industries/education/our%20insights/the%20skills%20revolution%20and%20the%20future%20of%20learning%20and%20earning/the-skills-revolution-and-the-future-of-learning-and-earning-report-f.pdf">https://www.mckinsey.com/~/media/mckinsey/industries/education/our%20insights/the%20skills%20revolution%20and%20the%20future%20of%20learning%20and%20earning/the-skills-revolution-and-the-future-of-learning-and-earning-report-f.pdf</a>
- [23] NEGRICEA C.I., & PURCAREA I.M., Digital Marketers at the Intersection of Digital Transformation with CX (December 2017), Holistic Marketing Management, ISSN: 2247-1189, vol. 7(4), pp. 20-26
- [24] PATHAK V. and PATHAK K., Reconfiguring the higher education value chain. Management in Education (2010), 24(4). pp. 166-171, Retrieved from: <a href="https://eprints.qut.edu.au/37936/1/c37936.pdf">https://eprints.qut.edu.au/37936/1/c37936.pdf</a>
- [25] PURCAREA I.M. & NEGRICEA C.I., Chief Marketing Officer and the Challenge of Digital Maturity (September 2014), Holistic Marketing Management, ISSN: 2247-1189, vol. 4(3), pp. 28-36
- [26] ROPER-BROWNING C., Digital marketing as a route to reaching international students (June 9, 2023), Retrieved from: <a href="https://www.timeshighereducation.com/campus/digital-marketing-route-reaching-international-students">https://www.timeshighereducation.com/campus/digital-marketing-route-reaching-international-students</a>
- [27] Sato M., Users will be able to make video effects in TikTok without downloading another app (Nov 16, 2023), The Verge, Retrieved from:

  Pag. 191/235

### Journal of Information Systems & Operations Management, Vol. 17.2, December 2023

https://www.theverge.com/2023/11/16/23963772/tiktok-effect-house-filters-mobile-app-creator

- [28] SCOTT W., 10 Winning Higher Education Marketing Strategies (August 14th, 2023), Search Influence, Retrieved from: <a href="https://www.searchinfluence.com/blog/winning-higher-education-marketing-strategies/">https://www.searchinfluence.com/blog/winning-higher-education-marketing-strategies/</a>
- [29] TIPPETS M., How The CMO And CIO Can Work Together On Digital Transformation (Sep. 19, 2023), Forbes, Retrieved from: <a href="https://www.forbes.com/sites/forbescommunicationscouncil/2023/09/19/how-the-cmo-and-cio-can-work-together-on-digital-transformation/">https://www.forbes.com/sites/forbescommunicationscouncil/2023/09/19/how-the-cmo-and-cio-can-work-together-on-digital-transformation/</a>
- [30] TREND HUNTER, AI Education (September 2023), Protrends, Retrieved from: https://www.trendhunter.com/protrends/ai-education?
- [31] VOSS K., 4 promising use cases for generative AI in content marketing (Mar 29, 2023), Insider Intelligence, Retrieved from: <a href="https://www.insiderintelligence.com/content/4-promising-use-cases-generative-ai-content-marketing">https://www.insiderintelligence.com/content/4-promising-use-cases-generative-ai-content-marketing</a>?
- [32] WEIGHT G., Learn how and why schools and colleges use digital marketing (May 26, 2023), Retrieved from: <a href="https://wsacommunications.co.uk/blog/learn-how-and-why-schools-and-colleges-use-digital-marketing/">https://wsacommunications.co.uk/blog/learn-how-and-why-schools-and-colleges-use-digital-marketing/</a>
- [33] WINTHROP R., Revisiting education systems transformation: Why understanding the 5 forms of power is essential (October 9, 2023), The Brookings Institution, Commentary, Retrieved from: <a href="https://www.brookings.edu/articles/revisiting-education-systems-transformation-why-understanding-the-five-forms-of-power-is-essential/">https://www.brookings.edu/articles/revisiting-education-systems-transformation-why-understanding-the-five-forms-of-power-is-essential/</a>?