

The Role of Digital Marketing Technologies in Enhancing Business Process Management

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Abstract - In the many stages of the digital revolution's progress, digitalisation has strong foundations and significant turning points. The word "digit" was derived etymologically from the Latin phrase "digitalis." The practice of counting with fingers and toes numbers lower than ten was commonly referred to by this phrase in the middle of the fifteenth century. Going forward to the 1650's numerical meaning, data processing on computers began in 1938, replacing analogue methods. 1945 marked yet another turning point in the rapid processing of evolutionary changes, before the 1960s saw the emergence of extensive data collection and broadcasting of events. Marketing operates through an integrated method that combines the arts and sciences. The arts create demand, while the sciences assess market potential and the company's ability to meet that need. It is harder to market services than it is to sell items. The field of digital marketing has grown more dynamic and complex. Technology is constantly requiring exceptional upgrades due to its rapid changes, diversified applications, version modifications, and advanced generations. A company's ability and desire to adapt to the evolving form, function, and structure of digital technology is a prerequisite for any stable reliance on it.

Keywords: Digital Transformation, Digital Marketing, Business Management

I. INTRODUCTION

In a knowledge-based economy, businesses that rely on product and service promotion are competing to reach clients ahead of their rivals. These long-term endeavours, along with the generation, sharing, and application of information, rely on a variety of instruments, apparatuses, technologies, procedures, platforms, and sophisticated systems from the

corporations. A clear paradigm shift of power from marketers to consumers exists in such a market environment (Di Vaio et al., 2021). Customers now rule like monarchs, determining what gets produced, when, how much, and even how much a commodity costs.

Fulfilling the needs, wants, and desires of customers is the goal of marketing as an exchange process. It is required of the suppliers of goods and services in this exchange process to maximise the value returned to the clients (Urbinati et al., 2020). Relationship management produces a distinct value offer that gives both suppliers (companies) and receivers (customers) a competitive edge (Kohli & Melville, 2019; Baiardi et al., 2016). Relationship reciprocity paves the route for sustaining brand equity, consumer loyalty, and even the businesses' own existence. In its most basic form, internet marketing (micro-level) and digital marketing (macro-level) allow business owners to obtain direct, unfiltered client input, allowing them to tailor their marketing campaigns to their target audience's preferences.

Because digital marketing uses information and communication technology (ICT) to spread awareness of various products and services, it has had a major impact on society's general standard of life. As a general phrase for business, "digital marketing" refers only to the promotion of products and services through various digital platforms. It is employed in everything from television commercials to social media platforms for corporate marketing shows in Fig. 1. These advertisements aren't just found online. The

research community long ago recognised the necessity of implementing digital methods for business-to-customer advertising of goods and services. Nevertheless, its significance in promoting products and services in relation to business-to-business trade was only recently recognised (Nambisan et al., 2017).



Fig. 1 Digital Marketing (Source: web)

A crucial component of digital marketing is internet marketing. It is a completely internet-dependent form of online marketing. It employs calculated techniques to increase website traffic for marketers. Online shopping has begun to change as a result of the widespread use of digital devices and the internet. It is a strategic commercial activity that employs a number of approaches and is expanding quickly. Public relations, direct marketing, sales promotion, and advertising are the fundamental instruments of online marketing. Utilising any of the suitable tools or a mixture of them effectively helps the businesses make the initial conversion feasible and successful. E-marketing is any form of advertising that is done online in addition to email marketing and even with wireless media assistance. E-marketing assists companies in connecting with their target market by leveraging a variety of digital platforms, including computers, tablets, smartphones, and smart TVs (Oleksandr et al., 2024). It also utilises conventional offline routes. Because email marketing is so flexible, it has many benefits over traditional marketing, including a higher return on investment, more affordable marketing campaigns, faster output generation, ease of monitoring, powerful web-tracking capabilities, and the ability to do viral marketing (Podvalny et al., 2021). Researchers studying the use of e-marketing to promote educational brands have found that prospective students only consult the university website to learn about relevant course information. The faculty's uploaded articles and the university's current events are not as relevant as the information needed (Mazza, 2015).

In this case, the introduction is examined in section 1 of the article. Section 2 describes the review of the work further Section 2 and 3 explains the goal of the work digital technologies, and Section 4 concludes the project.

II. LITERATURE REVIEW

It is harder to market services than it is to sell items. Digital marketing has grown increasingly dynamic and complex (Herrera González & Hidalgo Nuchera, 2019). Technology is constantly requiring exceptional upgrades due to its rapid changes, diversified applications, version modifications, and advanced generations. A company's ability and desire to adapt to the evolving form, function, and structure of digital technology is a prerequisite for any stable reliance on it. One of the important areas of services marketing is education marketing (Steiber et al., 2021). When compared to the marketing of products, this category is distinguished by its distinct qualities of heterogeneity, intangibility, perishability, and inseparability (HIPI). It has enormous potential to be both the main driver of the national economy and a Key Performance Indicator (KPI). Higher education institutions, particularly newly established colleges and universities, often engage in marketing to encourage student enrolment.

The main challenge of digital marketing practices is selecting the appropriate platform, appropriate communication channels, and marketers' abilities to identify and engage the target audience. Methods, designs, and tools used in student mobilisation are all subjective and dependent on a variety of factors, including available and designated resources, the institution's capacity to bear risk, its ability to adapt and keep up with technological advancements, its willingness to change, and its ability to manage internal resistance to change (Fichman et al., 2014). In its September 2019 issue of "Higher Education Market," Market & Market assessed the higher education market's growth trajectory. Between 2021 and 2028, a compound annual growth rate of 21.1% was predicted.

Higher education institutions must guarantee adherence to the democratisation of information (the information transmitted is personalised, customised, targeted, digitised, and freely accessible) to the targeted consumers in order to gain from the adoption of digital marketing methods. promoting strong social networks and utilising trust are two ways that educational institutions might go about promoting their brands (Bruselas Efigenia Malca Guerra et al., 2024).

It is important to do a micro-level analysis of implicit and explicit aspects in order to comprehend their impact on the adoption of digital marketing methods in higher education (Nasiri et al., 2023). Since education is the foundation of all other disciplines, strengthening it from the ground up with the right tactics should be the main goal of academic administration, teaching fraternities, and governance. Even at the tertiary level of education, or higher education, the gaps and lacunae can be filled. Higher education institutions have an ethical duty and obligation to provide students with the necessary skill sets to meet the unheard-of demands, expectations, and challenges of the future labour market. The global education market seeks to maintain the norms and standards of Industry 4.0 (I4.0), and all the players in the

industry are required to ensure that benchmark (Nwankpa et al., 2022).

III. ROLE OF DIGITAL TRANSFORMATION ON DIGITAL MARKETTING

The type and authenticity of the data obtained, the data's origin and legitimacy, and the thoroughness of the process employed for data collecting, analysis, and interpretation all have a major role in the importance and validity of any study from which it is produced. Along with the primary data collected by structured questionnaires and formal and informal interviews as a primary source, a sufficient number of related literatures, including journals, books, and trustworthy data from numerous online sources, were employed as secondary data (Svahn et al., 2017). The current study's focus has been restricted to higher education establishments (HEIs). Due to two main factors—the fierce competition between private universities for student mobilisation and subsequent brand image, and the expansion of existing courses and enrollment—the study's focus area has been further narrowed down to focus only on state-private universities in Chennai city. Twelve of Tamil Nadu's twenty-one state private universities—according to the UGC List—are situated in Chennai (District) city alone. Of those twelve, two did not indicate their interest in participating in the study or their willingness to do so during the survey. As a result, the researcher has not included them in the study's preview. Lastly, this analysis included ten Tamil Nadu state-private universities that are situated in Chennai (Arvidsson & Mønsted, 2018).

The primary data was gathered via a questionnaire. The purpose of the closed-ended questionnaire was to get the opinions of students as consumers regarding the different digital marketing strategies that their respective universities have implemented for online service delivery and brand promotion (Chengyonghui et al., 2024). In order to get their insightful opinions on the successful digital marketing strategies used by them as service providers in the higher education sector, the researcher spoke with a few professionals in the field of marketing educational services as well as academic administrators of higher education

institutions (Beliaeva et al., 2020). Research journals, conference proceedings, study reports, research theses and dissertations, blogs, and other digital depositories were among the many digital sources from which the data was gathered. Additionally, the researcher has consulted a number of books by reputable authors on marketing, including those on digital marketing and services marketing, periodicals, magazines, National Education Policy 2020, websites of higher education institutions, and the private universities that were chosen for the study. Governing bodies like UGC and AICTE have also been consulted. Generally speaking, the importance and best use of primary data in research have been changing as a result of the fundamental benefits of specificity, correctness, and timeliness as well as direct solutions to any important research issues (ivoryresearch.com) they offer (Svahn et al., 2017). According to Adrianna Rozi and Gabriele Lenzini (2020), the main data imposes accountability and responsibility on the researcher to uphold the values of openness as a trust, data privacy, ethical data use, and business secrecy of the company. Using a pre-made, structured questionnaire, primary data was gathered from students at ten Chennai-based private universities that were chosen for the study (Tortora et al., 2021).

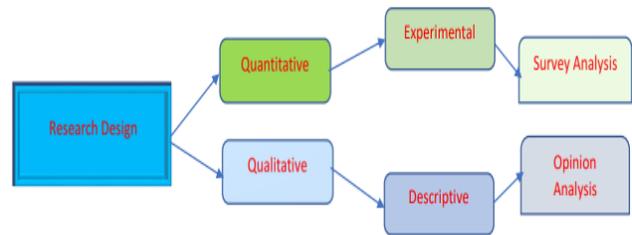


Fig. 2 Research Design

This section presents an analysis of the data gathered from students at a few private universities in Chennai that shows in Fig. 2. Using Wilcoxon Rank Sum Test, several methods that are acceptable to students in their choice of preferences are shown and analysed in relation to the digital marketing techniques implemented in private universities shows in Table I.

TABLE I DEMOGRAPHIC VARIABLES

	Age of the Participants	Gender of the Participants	Marital Status of the Participants	Course Pursuing	Dwelling Location	IncomeLevel of Family	Stream of Study
Valid N	750	750	750	750	750	750	750
Missing	0	0	0	0	0	0	0
Mean	1.82	1.47	1.88	1.70	1.79	2.81	3.35
Median	2.00	1.00	2.00	2.00	2.00	3.00	3.00
Std. Deviation	.971	.500	.324	.727	.409	.433	1.444
Variance	.944	.250	.105	.529	.167	.188	2.085
Minimum	1	1	1	1	1	1	1
Maximum	4	2	2	3	2	3	9
Sum	1368	1105	1411	1273	1341	2109	2516

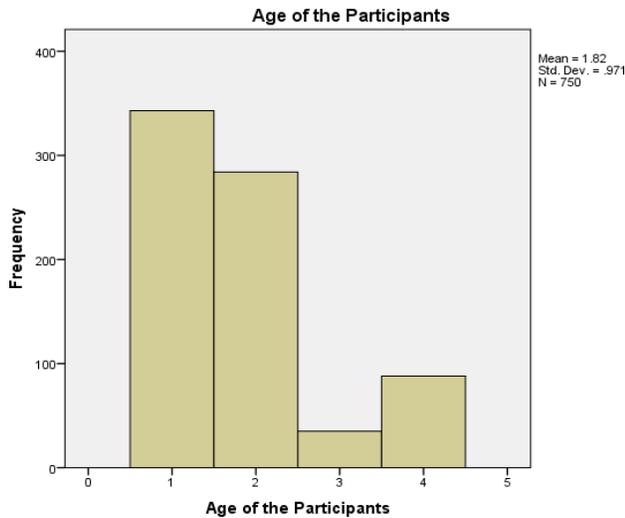


Fig. 3 Age of Participants

Using Fig. 3. Based on the analysis above, it can be observed that approximately 46% of the respondents (N = 343) are between the ages of 18 and 20, 28% are between the ages of 21 and 23, 5% are between the ages of 24 and 26, and 12% are over 20. The observation shows that, out of the four student groups provided, the 18–20 age group uses digital devices more frequently and for longer periods of time.

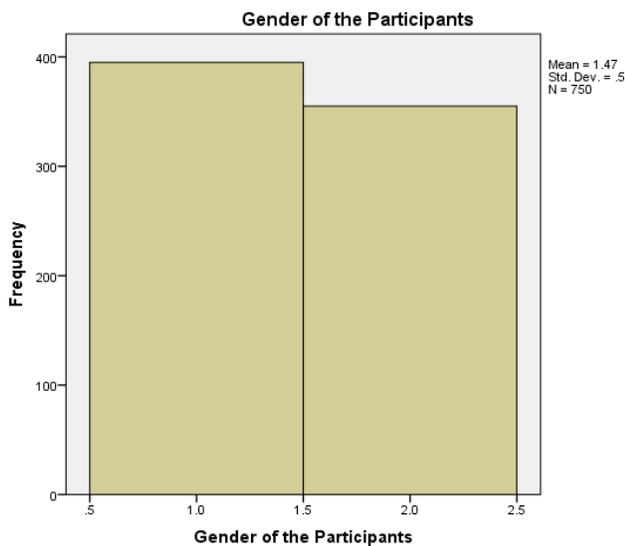


Fig. 4 Gender of Participants

As seen in Fig. 4, From the analysis above, it can be seen that approximately 40% (N=297) of respondents strongly agreed that digital platforms aid in maintaining the University's public image, approximately 50% (N=377) of respondents agreed with the statement, approximately 5% (N=35) of respondents were neutral, approximately 2% (N=14) of respondents disagreed with the statement, and approximately 4% (N=27) of respondents strongly disagreed with the statement. Ninety percent (N = 674) of the respondents agreed with the statement, almost six percent (N = 41) objected, and the remaining respondents were neutral.

Therefore, the University can capitalise on this chance by maintaining a strong online presence throughout digital channels.

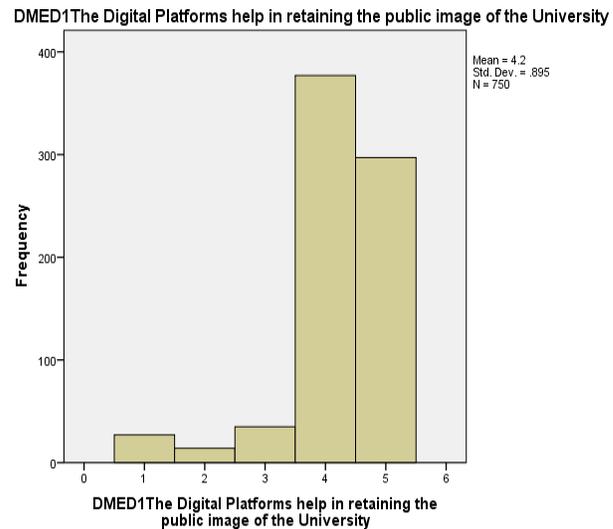


Fig. 5 The Digital Platforms Help in Retaining the Public Image of the University

According to the analysis above in Fig. 5, approximately 34% (N=258) of respondents strongly agreed that the university's digital platforms help visitors understand various courses; approximately 39% (N=290) of respondents agreed with the statement; approximately 13% (N=100) of respondents were neutral; approximately 8% (N=63) of respondents disagreed with the statement; and approximately 6% (N=39) of respondents strongly disagreed with the statement. Approximately 14% (N=102) of the respondents disagreed with the statement, while 73% (N=548) of the respondents agreed with it. The remaining respondents were neutral. Therefore, one can use the digital platforms.

Digital Platforms of the University make the visitors understand various courses

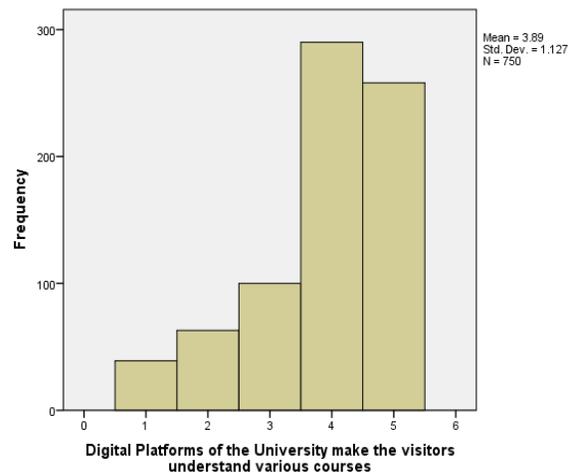


Fig. 6 Digital Platforms Make the Visitors Understand Various Courses

According to the analysis above in Fig. 6, approximately 34% (N=258) of respondents strongly agreed that the university's digital platforms help visitors understand various courses;

approximately 39% (N=290) of respondents agreed with the statement; approximately 13% (N=100) of respondents were neutral; approximately 8% (N=63) of respondents disagreed with the statement; and approximately 6% (N=39) of respondents strongly disagreed with the statement. Approximately 14% (N=102) of the respondents disagreed with the statement, while 73% (N=548) of the respondents agreed with it. The remaining respondents were neutral. Therefore, one can use the digital platforms.

Digital Platforms of the University measure its performance from time to time

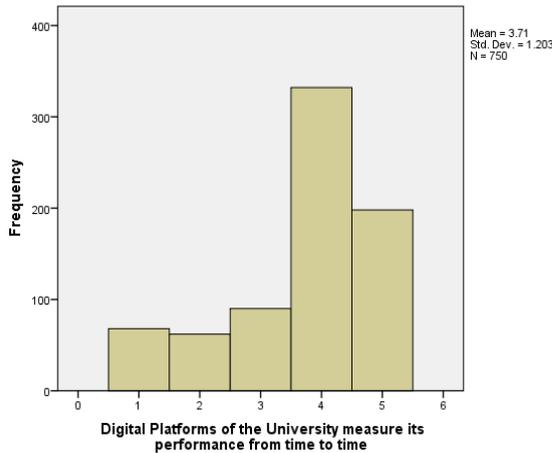


Fig. 7 Digital Platforms of the University Measure its Performance from Time to Time

According to the above analysis in Fig. 7, approximately 28% (N=210) of respondents strongly agreed that Facebook is a significant social media platform for marketing communication; approximately 50% (N=376) of respondents agreed with the statement; approximately 16% (N=117) of respondents were neutral; approximately 2% (N=16) of respondents disagreed with the statement; and approximately 5% (N=31) of respondents strongly disagreed. The findings show that while 78% (N=586) of the respondents agreed with the statement, only 7% (N=47) objected, and the remaining respondents were neutral. Thus, it can be said that the university's consistent postings and significant online presence on Facebook aid in building its brand. The Strong Presence of the Facebook of the University by Regular Postings Helps in Promotion of its Brand shown in Fig. 8.

The strong presence of the Facebook of the University by regular postings help in promotion of its brand

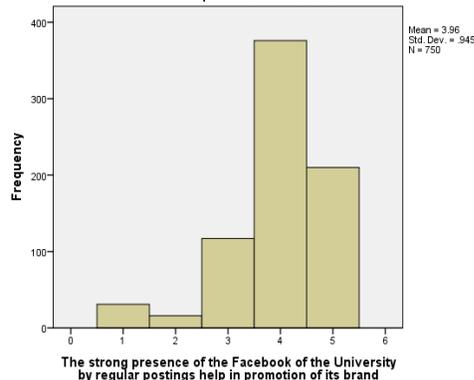


Fig. 8 The Strong Presence of the Facebook of the University by Regular Postings Helps in Promotion of its Brand

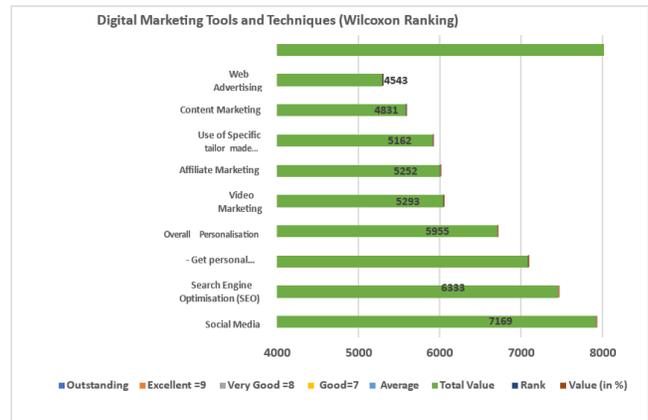


Fig. 9 Digital Marketing Tools and Techniques: Perceived Ranking by Respondents

According to the above analysis in Fig. 9 was approximately 28% (N=210) of respondents strongly agreed that Facebook is a significant social media platform for marketing communication; approximately 50% (N=376) of respondents agreed with the statement; approximately 16% (N=117) of respondents were neutral; approximately 2% (N=16) of respondents disagreed with the statement; and approximately 5% (N=31) of respondents strongly disagreed. The findings show that while 78% (N=586) of the respondents agreed with the statement, only 7% (N=47) objected, and the remaining respondents were neutral. Thus, it can be said that the university's consistent postings and significant online presence on Facebook aid in building its brand.

Any company's long-term performance is largely dependent on how well its overall strategy aligns with its goals and objectives. Its value in society is determined by the brand image it has developed, imprinted, positioned, and maintained on a specific market segment, the distinctive qualities of its goods and services, its engagement and active participation in numerous Corporate Social Responsibility (CSR) initiatives, and its adherence to ethics and integrity in all aspects of its business operations. Digital marketing is centred around providing transparent, instantaneous, and high-quality "services" to clients. This approach prioritises customer happiness, which leads to customer delight in the pursuit of company excellence. When different marketing tools and techniques are used to reach out to customers even at the furthest locations, information and communication technology (ICT) adoption in digital marketing practices has, to some extent, reduced the gaps between the dissatisfied and satisfied customers.

IV. CONCLUSION

Digital marketing plays a crucial role in bridging the vast gaps and disparities of the socio-economic environment and uniting a multilingual and multicultural community on its different platforms. Under such circumstances, digital marketing tends to follow the standard when determining how best to use different digital platforms, techniques like Value-Based Marketing and Sales (VBMS), and tools to improve the affordability, learner-friendliness, and career

advancement of higher education services offered by universities, colleges, and institutions of national importance. The purpose of the study was to evaluate, from the viewpoint of the customers (students), the applicability and efficacy of a variety of digital marketing strategies, methods, tools, techniques, and platforms that are common and employed by the private institutions located in Bengaluru for their brand promotion. The students' responses, which were gathered from 15 categories of factors, were used to measure the relevance and effectiveness of those services.

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