

Digital Marketing Transformation and Its Role in Enhancing Strategic ENTREPRENEURSHIP: An Analytical Study of the Opinions of a Sample of Administrative Leaders at Private Universities in Dhi Qar Governorate

Dr. Dhrgam Ali Muslim Al-Ameedi ¹, Fatima Ali Khalaf Al-Ghalbi ²

^{1,2} Al-Furat Al-Awsat Technical University (Technical Administrative College/Kufa, Department of Business
Administration Technologies, 54003, Iraq)

¹ dr.dhrgam.ameedi.cku@atu.edu.iq

² fatima.khalaf.ckm@student.atu.edu.iq

Abstract. *This research aims to determine the impact of digital marketing transformation on enhancing strategic entrepreneurship. The research was conducted in a number of private universities in Dhi Qar Governorate, namely Al-Ain University, Al-Wataniya University, Mazaya College, and Imam Jaafar Al-Sadiq Private University. The research problem was represented by a fundamental question: What is the role of digital marketing transformation in enhancing strategic leadership? This question was translated into a hypothetical model that includes two variables: The independent variable is digital marketing transformation with its four dimensions: (transformational leadership, organizational and marketing principles, marketing culture, and work environment). The other dependent variable is strategic leadership with its four dimensions: entrepreneurial mindset, entrepreneurial leadership, entrepreneurial culture, and strategic resource management. To achieve its objectives, the research used the descriptive-analytical approach to obtaining information, relying on data sources, observation, and personal interviews. Then, a field survey method was used by distributing a questionnaire to a sample of (220) administrative leaders, including (the university president, the dean, the head of the department, and department directors) in several private universities in Dhi Qar Governorate, from a study population of (170) individuals. The number of questionnaires valid for statistical analysis was (155). The researcher conducted the analysis process using the statistical analysis program (SPSS v.25). The study reached a set of statistical results, the most prominent of which was the existence of a correlation and a positive moral impact between digital marketing transformation and strategic leadership, as digital marketing transformation is one of the best administrative rescue strategies in the age of technology and digital transformation, which works to uncover and address functional imbalances to achieve strategic entrepreneurship.*

Keywords: *digital marketing transformation, strategic entrepreneurship, private universities in Dhi Qar Governorate.*

1.INTRODUCTION

Private universities' interest in achieving strategic entrepreneurship is a vital topic that has become a focus of interest in the education sector today, particularly those keen to achieve their goals of survival, growth, excellence, development, and gaining market space based on digital marketing transformation, while competing in the face of changing environmental conditions. This interest is supported by the field reality and the researcher's approach to studying private universities as important business organizations. In addition to the emergence of many private universities that have

become dimensions of entrepreneurship at various organizational levels, competition between organizations has spread over time, resulting in market modifications. The capacity to digitally redesign businesses is significantly influenced by executives who foster an innovative and adaptable culture, as well as a clear digital strategy. Additionally, it is anticipated that leadership will be adept at overcoming and addressing the challenges that are inherent in the digital marketing transformation process. The transformation must cultivate a blend of human and digital skills to surmount the obstacles associated with digital marketing transformation. These phenomena, concepts, and strategies have been generated by the internationalization of markets, the multiplicity of commodity products and services offered, the increasing interest of organizations in growth and customer acquisition, and their awareness of the importance of achieving competitive advantage, in addition to major transformations and fierce competition among educational organizations. These phenomena have acquired a new dimension of critical importance to the future and survival of educational organizations, providing them with the motivation and encouragement to capitalize on weak opportunities presented by competitors and develop new methods to enhance competitiveness at the cognitive and technological levels, with the goal of achieving strategic entrepreneurship. Many organizations have observed the rapid escalation of competition in the field of strategic leadership, leading to the recurrence of the term "strategic leadership" in the strategic literature. This competitive landscape is characterized by intense and strong competition, and in some cases, it is referred to as "fierce competition." The question facing every organization, regardless of its type, is how to achieve strategic leadership in such a competitive environment, and what methods should be followed to achieve the desired goals? Is sustainable competitive advantage achievable under these conditions? This study attempts to answer these questions, as technological developments, as well as the workforce revolution, require closer scrutiny. In this context, this study discusses the concept of digital marketing transformation and strategic entrepreneurship. The study is divided into four chapters distributed over eleven sections. The first chapter includes two chapters. The first chapter reviews some previous contributions and scholarly efforts related to the study variables, while the second chapter addresses the scientific methodology of the study. The second chapter consists of three chapters. The first chapter addresses the theoretical framework of the independent variable, digital marketing transformation, while the second section is devoted to presenting the theoretical framework of the dependent variable, strategic leadership, from the researcher's perspective. The third chapter addresses the applied and analytical aspects of the study, consisting of four chapters. The first chapter is devoted to examining the reality of the organization under study. The second chapter addresses tests of normal distribution and the validity and reliability of the study data. The third chapter is devoted to a descriptive analysis of the sample's responses. The fourth chapter is devoted to testing the hypotheses of the correlations between the study variables. Finally, the fourth chapter includes two sections. The first section deals with the conclusions reached by the study, while the second section is devoted to recommendations and suggestions for future studies.

2. LITERATURE REVIEW

2.1. Digital Marketing Transformation

2.1.1. The Concept of Digital Marketing Transformation

(Hamad and Mohammed, 2020: 431) [1] explain that digital transformation is the accelerating development of communication technology and the knowledge economy, which has led to the development of new concepts for digital development, The most significant aspect is digital transformation. The issue of digital transformation has evolved as one of the most significant contemporary administrative themes in recent years, driven by research, development, processing, and the ongoing transmission of valuable and sensitive information to different stakeholders in the digital landscape to the growing interest in information and the growing role of knowledge in education. The digital transformation has been coupled with the emergence of knowledge and the tremendous development of information and communication technology. According to [2], digital transformation in education is facing major changes and transformations, which requires a large number of scientific talents and new technologies. Furthermore, the digital transformation of education, and teachers are the main body for talent development, and their digital competence becomes key to the new situation. In light of the rapid developments and changes experienced by organizations, the increasing intensity of competition among them, and the significant developments and progress in modern technology, techniques, and the Internet, the work has become widespread in organizations that are considered the backbone of the country's economic life due to the vital functions and roles that contribute to the growth of the country's economy, especially those that affect the economy (Ali and Khader, 2020: 2). In light of this, the term "digital marketing transformation" has become very popular in recent years among relevant organizations due to its great importance in organizational and marketing changes resulting from technological developments. It leads to the use of digital marketing technologies to create value and change the work style and model, as it works on change as a basis and essence of business within the institution, such as product innovation. Therefore, the prevalence of digital technology stimulates organizational change, which enables new strategies (Bress and Jabr, 2020: 207). Ópez García et al., 2019:3) Indicate that advancements in old marketing methods have progressed to include modern digital marketing, when prospective clients are seen as users. Globalisation has prompted ongoing transformations whereby information and knowledge assume a significant role. Emerging business models are redefining conventional notions of commerce, clientele, taxation, and operational processes. Historically, the economy has had to modify its techniques to satisfy individual wants.

2.1.2. Dimensions of Digital Marketing Transformation

Through an extensive analysis of existing literature, the researcher identified several perspectives from writers and scholars about the definition of talent management strategy aspects. Nonetheless, the majority center on three fundamental characteristics that constitute the essence of the talent management process: "retaining, developing, and attracting talent." Consequently, the present research will depend on these three dimensions for their pertinence to the subject of inquiry, as per the scale. Thus, the researcher relied on the dimensions [3] of digital transformation (transformational leadership, organizational and marketing capabilities, marketing culture, and work environment) in:

2.1.2.1. Transformational Leadership

Al-Otaibi and Marzouq (2020: 133) [4] defined transformational leadership as the leader's ability to clearly communicate the organization's message and future vision to followers and motivate them through practicing highly ethical behaviors to build trust and respect between the two parties to achieve the organization's goals. Transformational leadership refers to enhancing followers' feelings by appealing to ethical ideas and values such as freedom, justice, equality, peace, and humanity. Transformational leadership behavior begins with the leader's personal values and beliefs, not through the exchange of interests with subordinates. The transformational leader operates within established value systems such as justice and integrity. These internal values cannot be negotiated or exchanged between individuals. Transformational leadership is viewed by [5] as a leader's capacity to inspire, encourage, and foster dedication to collective objectives. These leadership competencies resemble those associated with transformative leadership (Hetland & Sandal). Numerous characteristics linked to transformative leadership seem to be culturally influenced, including attributes such as risk-taking, self-efficacy, compassion, sensitivity, and ambition. Attributes like communication proficiency, reliability, and motivational capability have been consistently recognized as essential elements of exemplary leadership in research. These conditioned characteristics may indicate difference in culturally influenced values.

2.1.2.2. Organizational and Marketing Capabilities

(Jabb and Bara, 2023: 358) defined organizational capabilities as high-level organizational processes that include the ability to establish recurring standards for activities. Also called routine procedures, they are the factors and methods organizations follow to exploit strengths and avoid weaknesses, with the goal of survival, continuity, and achieving competitive advantage. They also include all the competencies and skills an organization employs to manage its resources efficiently and effectively. Organizational capabilities represent the organization's ability to perform a coordinated set of tasks using its organizational resources. The importance of organizational capabilities lies in providing service and customer satisfaction. Organizational capabilities also aim to build reciprocal relationships with other organizations, while constantly striving to enhance administrative and organizational skills to the extent that they enable the organization to achieve its mission, develop leadership skills, and increase the necessary knowledge of its employees. It must be taken into account that it is not the possession of organizational capabilities that will achieve the desired goals, but rather how they are used and activated within the organization. And defined it (Sabai et al. 2022: 7) Organizational capabilities are high-level organizational processes that include the ability to establish recurring standards for activities, also called routines. Capabilities are developed through the complex interaction of tangible and intangible resources, which takes time. They are also complex social routines that create efficiency and adaptability, with the physical components transferred from inputs to outputs. In an organization, individual capability, defined by an individual's knowledge, skill, and influence, reflects the ability to handle the assigned work. Conversely, organizational capability can be defined as the ability demonstrated by an organization to achieve its goals through the right work and completion. Therefore, organizational capabilities can be defined as the organization's ability to invest its unique tangible and intangible resources in an optimal manner, enabling it to achieve its strategic objectives and gain a competitive advantage and unique services over competitors.

2.1.2.3. Marketing Culture

Organizations acquire cultures that are the prevailing state of their competitive position over their competitors. These cultures have become entrenched over successive periods of time until they represent the cultural behaviors practiced by individuals within those organizations. This applies to organizations. Marketing culture is defined as a set of prevailing and dominant foundations and values that help create integration among the organization's components. Therefore, marketing culture is the method through which things are marketed within an organization (Shadid and Mustafa, 2021: 157) [6]. (Abdul Wahid and Muhammad, 2021: 675, 676) [7] Highlight that marketing culture comprises a collection of common values, ideas, and constructions that shape the behavior of persons inside the marketing domain. It may be used as a method of delivering exceptional and high-quality services to clients to achieve and maintain their pleasure. Consequently, it mirrors the organization both inside and outside. The culture of digital marketing is a crucial element of the broader organizational culture, intricately connected to the shared values and beliefs that enable workers to comprehend the marketing function and their sentiments towards it. Thus, it furnishes them with the methodologies and factors influencing behaviors necessary for adherence inside the organization. It underscores the significance of digital marketing transformation initiatives across all facets of the organization's operations. It is an organizational variable that works efficiently and effectively to generate the basic behaviors necessary to develop and deliver higher value to customers. Customer retention and the organization's position in the market are closely linked to marketing culture.

2.1.2.4. Work Environment

The practical meaning of "environment" is those spaces, organizations, and other forces of a social, economic, technological, and political nature that lie outside the direct control of management. Linguistically, work is the act, craft, or profession that a person engages in in exchange for remuneration, ensuring their survival. Work is defined biologically as any human muscular effort accompanied by activity specific to the muscular system, as well as the chemical changes and cellular activity of the human body during work. The work environment is defined as the framework within which a social organization operates or exists, the sphere in which stimulation and interaction occur for every living unit, or everything surrounding a person or organization, including nature, human communities, social systems, and personal relationships. Definition of the work environment: The concept of the work environment has received considerable attention from those concerned with contemporary organizational thought, after criticizing the pioneers of traditional thought regarding the role of the work environment for neglecting the influence of the work environment on institutions. The work environment is defined as a set of constraints that determine an organization's behavior and also defines the models or methods of behavior necessary for the organization's success and survival. From this definition, we conclude that the business environment refers to the practice of business within an organization, which influences and is influenced by the surrounding conditions (Makhoulfi et al., 2021: 27) [8]. Vaska et al., 2021: 2 [9], believes that the new digital environment requires organizations to use digital technologies and platforms to collect, integrate, and leverage data to adapt to the platform economy and find growth opportunities to remain competitive. Furthermore, (for example, startup and accelerator programs) develop dynamic capabilities. Therefore, digital transformation is viewed as an entrepreneurial process, whereby organizations seeking digital transformation render previously successful business models obsolete, implementing business model innovation that revolutionizes many organizations. Organizations embracing digital technology's

view data flows as paramount and assign them a central role in supporting their digital transformation strategies.

2.2. Strategic ENTREPRENEURSHIP

2.2.1. The Concept of Strategic ENTREPRENEURSHIP

The concept of leadership was first used in French in military operations at the beginning of the sixteenth century, where it included meanings of risk, endurance, and responsibility. entrepreneurship means promoting innovation in the sense of development through the use and organization of resources, and achieving excellence at the local and global levels, by adopting modern methods in all fields (Covin, & Miles, 1999) [10]. Hamdi (2021: 163) presented the concept of leadership as complex and multidimensional due to the various disciplines that comprise it, such as economics, management, sociology, and others. Thus, it is impossible to assert that there is a unified agreement among researchers and writers regarding leadership. At the same time, the concept of leadership is traced back to a French expression that appeared in the Middle Ages. The functional connotations of this concept have evolved, starting from the meaning of mediation between two parties in the sixteenth century until it reached its contemporary meaning, which includes accomplishing work through the enjoyment of characteristics. Researchers have not agreed on a unified concept for the term, as it was previously done by (Ghanem (2024) Entrepreneurship is defined as the practice of seeking opportunities to create value and taking risks. It is also closely linked to innovation. Leadership has changed in organizations today, and the success of any organization depends on the leadership styles practiced by the entrepreneur. True entrepreneurs engage with others based on their values and humility, as they engage in what they already do, not for individual gain. This is to ensure organizational success and strive to achieve the collective goals of the organization. Abdel Aziz Ragab (2023: 767) [11] emphasized that entrepreneurial philosophy is defined as the integration of entrepreneurial traits with strategic traits to design and implement entrepreneurial strategies that help organizations create wealth. These organizations search for new strategies to create wealth and value through science, research, creativity, and innovation. It is a newly widespread phenomenon among strategic business organizations of all shapes and sizes, combining the characteristics of entrepreneurship and strategic management, and working to create entrepreneurial strategies that help organizations create value for the various stakeholders, achieving their aspirations and achieving outstanding performance. Referred to by (Ibrahim, et al., 2022) [12] are considered entrepreneurial actions from a strategic perspective. The historical roots of strategic entrepreneurship are in the field of economics, and later moved to the field of management, where studies in the field of strategic management revealed that there is a connection and overlap between the fields of strategic management and entrepreneurship. Entrepreneurship and strategy are two sides of the same coin, as both focus on the idea of the strategic entrepreneurship industry, on creating value. The concept of the strategic position of entrepreneurship was presented and worked within organizations, referring to strategic decisions and an operational management philosophy that focuses on the entrepreneurial aspect. With the beginning of the current century, strategic management referred to specific procedures, decisions and commitments to achieve a competitive advantage and achieve higher profits (Luke & Verreynne, 2006, 6) [13].

2.2.2. Dimensions of Strategic Entrepreneurship

The dimensions of strategy have been addressed from various perspectives. Some have identified them as four dimensions closely related to strategic entrepreneurship, as indicated by (Kyrgidou & Hughes, 2010) [14] (resources and capabilities, strategic capabilities, entrepreneurship, environment, organizational structure). Other dimensions (entrepreneurial opportunity management, entrepreneurial resource management, entrepreneurial culture, entrepreneurial leadership) developed by (Ismail et al., 2022) [15] and numerous studies indicated by (Ziyae & Sadeghi, 2020) [16], are represented by four dimensions (entrepreneurial mindset, entrepreneurial culture, entrepreneurial leadership, strategic resource management).

2.2.2.1. Entrepreneurial Mindset

Strategic entrepreneurship, facilitated by an appropriate mentality and entrepreneurship, enhances value in individual or collective endeavors, resulting in the production of products and services that are quicker, more accurate, more efficient, better in quality, more responsive, and more comprehensible within small and medium-sized enterprises. The development of a strategic mindset and leadership enhances value creation, enabling SMEs to make informed choices, manage resources effectively, and cultivate an entrepreneurial culture (Farida et al., 2022:2) [17]. Organizations have cultivated the entrepreneurial attitude necessary for effective strategic entrepreneurship. Future successful strategists will adopt an entrepreneurial attitude, integrating insights from traditional models with the capacity to perceive, respond, and mobilize swiftly, even under significant uncertainty. An entrepreneurial attitude is a phenomena that encompasses both individuals and collectives. An entrepreneurial mentality is essential for individual entrepreneurs, as well as for managers and staff inside established organizations, to engage in entrepreneurial thinking and actions. Perceiving the entrepreneurial mentality as a framework for marketing enterprises, it may enhance competitive advantage and is crucial for wealth generation. We describe the entrepreneurial mentality as a growth-oriented approach that enables people to cultivate flexibility, creativity, continual invention, and renewal, building on prior research. Individuals with an entrepreneurial mentality may recognize and capitalize on fresh chances due to their cognitive skills that enable them to comprehend unclear and fragmented circumstances (Ireland, et al., 2003:967) [18].

2.2.2.2. Entrepreneurial Leadership

Organizations have shown a period where strategic leadership was closely correlated with the behaviors of leaders. Entrepreneurial leadership envisions the future, articulates a compelling potential, and inspires people with the excitement and energy necessary to actualise this vision. In this context, strategic leadership embodies the heroic leadership of an enterprising figure who identifies a problem or opportunity and formulates a solution, either alone or in collaboration with a select group of like-minded individuals. Since the 1970s, when the knowledge era began (Quong, Walker, 2010:22) [19], entrepreneurial leadership has constituted the paramount duty (McGrath, MacMillan, 2000:2) [20]. While uncertainty may incapacitate several individuals, it might be used to your benefit. Ambiguous circumstances are replete with novel options. Your responsibility is to consistently uncover lucrative business prospects and capitalize on them swiftly and decisively. Consequently, entrepreneurial leaders are differentiated from other managers by their own methods. These activities are categorized into three areas: establishing the work environment, coordinating the pursuit of possibilities, and individually spearheading particular tasks. Climate-setting procedures

establish a pervasive feeling of urgency for everybody to engage in new business activities. Hitt (2017, p. 24) [18] cites several of those recognized as top leaders who are also known for their entrepreneurial spirit. They emphasize the definition of entrepreneurial leadership as the ability to anticipate, envision, maintain flexibility, and empower others to effect strategic change as necessary. Superficially, entrepreneurs can be associated with leadership functions such as providing the vision for developing a new product, service, or organization. The leader must also be an entrepreneur. Entrepreneurial leadership deals with concepts and ideas, often related to problems unrelated to the organization. Managers and leaders differ. They differ in what they care about and in how they think, act, and interact.

2.2.2.3. *ENTREPRENEURIAL CULTURE*

An organization's acquisition of a distinctive organizational culture distinguishes it from others. An innovative culture is an organizational culture in which employees create new ideas, implement them at work, and dedicate their efforts to achieving organizational success. We measure entrepreneurial culture through innovative culture, and the extent of an organization's innovation was determined. The measure of innovative culture was derived from the five elements of entrepreneurial culture (Danish, et al., 2019:5) [21]. Al-Swidi & Mahmood (2011:33, 34, 35) [22] believe that an organization's cultural uniqueness constitutes an unparalleled organizational ability to create a competitive advantage over its competitors in the turbulent and ever-changing global business environment. How to shape their organizational culture to achieve short- and long-term goals. In effective cultures, they thus encourage continuous change and establish an environment of never-ending innovation. Organizational culture is defined as the system of shared values and beliefs that interact with the people, structures, and control systems of an organization, not as a product of behavioral norms. It is also a human-created philosophy that fosters solidarity among individuals and inspires them to enhance their productivity through high commitment. Furthermore, organizational culture is defined as the pattern of shared values and beliefs that helps individuals understand the organization's functions by providing them with standards of behavior. It is described as a collection of shared beliefs, assumptions, and standards among senior workers in an organization that must be imparted to younger employees. In this context, Arabeche et al. (2022: 5) [23] delineate culture as including collaboration, employee engagement initiatives, and organizational commitment to personnel. It emphasizes principles such as coherence, involvement, and interpersonal environments via organic processes (e.g., flexibility, spontaneity) and internal maintenance (e.g., integration). Restrictive limits that inhibit external contacts may hinder the generation of fresh ideas. A market culture prioritizes stability and control, fosters a competitive leadership environment, and concentrates on external transactions with suppliers and consumers, aiming to establish a market-oriented culture. A market culture aims to mitigate uncertainty inside the market. Leaders in this organization are exacting, rigorous, and possess well defined objectives.

2.2.2.4. *STRATEGIC RESOURCE MANAGEMENT*

Many (Wahish et al., 2017: 134-135) have addressed the concept of strategic management and its associated basic concepts, each according to their own perspective and the extent to which they are influenced by various approaches to strategic thought. However, most of these definitions ultimately agree in terms of content. The concept of strategic management, operationally, is a modern administrative approach that seeks to develop administrative work among senior management in higher education institutions and chart the future direction of their institutions in the long term

through a set of processes including planning, implementation, and evaluation. Strategic management is considered a connected series of decisions and actions that lead to the development or formulation of an effective strategy for achieving the organization's goals. Strategic management is defined as the process of formulating and executing strategic choices. It is a cohesive sequence of choices and activities that culminate in the creation and formulation of successful strategies to attain the organization's objectives. The strategic management process includes establishing objectives and devising strategic choices. It is a process via which an organization delineates its objectives, identifies the necessary steps to accomplish those objectives promptly, endeavors to execute those actions, and assesses the degree of progress and outcomes attained. Strategic management encompasses a series of choices and activities that dictate the long-term efficacy of organizations. It is a process by which an organization delineates the steps required to attain its objectives promptly, attempts to implement those actions and activities, and assesses the degree of progress and outcomes achieved. Strategic management refers to a series of choices and activities that dictate the long-term efficacy of organizations. It is also referred to as the collection of choices and activities pertaining to the development and execution of strategies aimed at attaining the organization's objectives. (Hamza, 2024: 95).

3.MATERIALS AND METHODS

3.1.MATERIALS

The researcher used the analytical approach and appropriate tools to collect data related to its variables. The researcher examined various academic materials, including books, journals, research, master's and doctoral theses, as well as information available on the internet, which helped build the theoretical framework for the research. On the applied side, the researcher used a questionnaire as the primary tool for collecting data related to verifying the study's hypotheses and achieving its objectives, after reviewing it by several reviewers specialized in this field. The questionnaire consists of (40) paragraphs, including (20) paragraphs related to the variable of digital marketing transformation and (20) paragraphs related to the variable of strategic entrepreneurship. During field visits to the organizations under study, the researcher conducted personal interviews with several administrative leaders, which reinforced the practical importance of the study through accurate diagnosis of issues and data collection. The researcher used SPSS.v25 to evaluate the questionnaire data and conduct the necessary statistical analyses to obtain accurate and reliable results that align with the study's objectives.

3.2. STUDY METHODOLOGY.

Study Methodology. To complement the theoretical and field frameworks of the current study, and through the study questionnaire questions answered by the sample members under study, the researcher used the analytical method. This method is considered one of the most important and prominent scientific research methods.

as it relies on a precise and detailed description of the subject or phenomenon underlying the problem, followed by analyzing it and examining the correlation and impact among its components to derive overarching findings that aid in diagnosing reality and comprehending the present.

Study Population

Study Population

The study population and sample included all administrative leaders at private universities in Dhi Qar Governorate (4): Al-Ain University, the National University of Technology, Al-Mazaya Private College, and Imam Ja'far Al-Sadiq University, totaling (220) individuals, including (the university president, the dean, the head of the department, and the heads of departments). These universities represent a suitable environment for embodying the study problem and seeking solutions. The target study sample was selected according to the statistical table for determining the sample size provided by (Krejcie & Morgan, 1970). According to this table, the sample size was (155) individuals for the study population of (220). The researcher distributed (170) questionnaires to administrative leaders to obtain an appropriate sample size and ensure the neutrality of the questionnaire questions. (155) valid questionnaires were returned for statistical analysis. Thus, the study sample consisted of (155) leaders at the studied universities, with a response rate of (91.2%), which is a good rate for conducting the analysis.

4. STUDY POPULATION

The study population included all members of the administrative leadership in (4) private universities in Dhi Qar Governorate, totaling (220) individuals, including (the university president, the dean, the head of the department, and department managers). These universities represent a field for embodying the study problem and searching for solutions to it. As for the target sample, the study sample was selected according to the statistical table to determine the sample size provided by (Krejcie & Morgan, 1970). According to this table, the sample size was (155) individuals for a population consisting of (220) individuals. The researcher distributed (170) questionnaires to the administrative leaders to obtain an appropriate sample size and ensure the neutrality of the questionnaire questions. (155) valid questionnaires were retrieved for statistical analysis. Thus, the study sample consisted of (155) leaders in the universities studied, with a response rate of (91.2%), which is a good percentage for conducting the analysis.

5. STABILITY OF THE MESSAGE SCALE

Before engaging in the various statistical tests in the study, it was necessary to determine the extent of the scale's stability across all the necessary data. The stability and consistency of its items is an urgent necessity for reliable data collection. To determine the stability of the current study's scale, the researcher extracted Cronbach's Alpha values for the current study's scale using SPSS V.25, the results of which are shown in Table (1).

Table 1. Cronbach's Alpha for the study's scale

Cronbach's alpha	Number of items	Symbols	Dimension	Cronbach's alpha	Variable
885	5	X1	Transformational leadership	0..900	Digital Marketing Transformation X
889	5	X2	Organizational and marketing capabilities		
892	5	X3	Marketing culture		
895	5	X4	Work environment		
882	5	Y1	Entrepreneurial Mindset	0.901	Strategic Leadership Y

890	5	Y2	Entrepreneurial Leadership		
884	5	Y3	Entrepreneurial Culture		
883	5	Y4	Strategic Resource Management		

Source: Prepared by the researcher based on the results of SPSS V.25 program.

According to Table (11-3), the results indicated that the Cronbach's alpha coefficient for the study variables and dimensions exceeded (0.70), which indicates the availability of stability and internal consistency for the items of the scale used according to (76. Hair et al., 2014, p).

6. DATA ANALYSIS

Descriptive analysis serves as the framework for examining the prevalence of the variables investigated within the study's organizational community. Descriptive statistical analysis summarizes the responses of the sample studied in relation to the primary or secondary variables, using several descriptive statistical markers. Descriptive analysis is a crucial component of analytical data examination, wherein the behavior of the studied sample is articulated. This approach provides the researcher with a comprehensive understanding of the analyzed data, necessitating the use of various descriptive metrics, notably the arithmetic mean, which indicates the sample's responsiveness to the investigated variables, and the standard deviation, which reflects the degree of variation of values from their arithmetic mean. The hypothetical mean value of 3 was used, as per Hair et al. (2017, p. 49) [24]. The derived arithmetic mean that meets or surpasses the hypothetical mean is deemed acceptable, indicating a response, whereas the contrary is deemed unacceptable, indicating a lack of response that necessitates further examination and managerial attention to rectify the underlying causes for not attaining acceptable values. This assessment is based on a five-point Curtis scale (strongly agree, agree, neutral, disagree, strongly disagree), through the evaluation of the arithmetic mean, standard deviation, and relative importance, as outlined below:

6.1 DATA ANALYSIS FOR DIGITAL MARKETING TRANSFORMATION

To assess the availability of the independent variable, digital marketing transformation, comprising four dimensions (transformational leadership, organizational and marketing capabilities, marketing culture, and work environment) in the examined universities, several tests were performed concerning mean, standard deviation, and relative importance. Tables (3-17) provide the descriptive data and the final ranking of the dimensions, illustrating the degree of interest among sample members in these dimensions and their practical relevance and significance. The transformational leadership dimension (x1) ranked first with an arithmetic mean of (4.09), a relative importance of (0.82), and a standard deviation of (0.66). The marketing culture dimension (x3) ranked first with an arithmetic mean of (4.01), a relative importance of (0.80), and a standard deviation of (0.72). The ranking was as follows: (transformational leadership, capabilities, Organizational and marketing, marketing culture, work environment).

Table 2. The hierarchical importance of the dimensions of the digital marketing transformation variable

Ordinal importance	Relative Importance	Standard Deviation	Mean	Paragraphs	Dimension
First	0.82	0.66	4.09	x1	Transformational Leadership
Third	0.80	0.74	4.02	x2	Organizational and Marketing Capabilities
Fourth	0.80	0.72	4.01	x3	Marketing Culture
Second	0.81	0.72	4.07	x4	Work Environment
	0.81	0.60	4.05	X	Digital Marketing Transformation

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software".

Tables (3-22) provide the descriptive statistics and the final ranking of the dimensions, illustrating the degree of interest shown by the sample participants in these dimensions, as well as the level of their practical engagement and seriousness, where the entrepreneurial mentality dimension (y1) achieved first place with an arithmetic mean (4.09), relative importance (0.82), and standard deviation (0.70). The entrepreneurial culture and sustainable procedures dimension (y3) also achieved a ranking with an arithmetic mean (4.05), relative importance (0.81), and standard deviation (0.74). Its ranking came as follows (entrepreneurial mentality, entrepreneurial leadership, entrepreneurial culture, strategic resource management).

Table 3. The ordinal importance of the dimensions of the strategic leadership variable

Order of importance	Relative Importance	Standard Deviation	Mean	Paragraphs	Dimension
First	0.82	0.70	4.09	y1	Entrepreneurial Mindset
Fourth	0.79	0.83	3.96	y2	Entrepreneurial Leadership
Second	0.81	0.74	4.05	y3	Entrepreneurial Culture
Third	0.81	0.78	4.04	y4	Strategic Resource Management
	0.81	0.67	4.03	Y	Strategic Entrepreneurship

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

H.1: Testing the first main influence hypothesis: The first main influence hypothesis includes: There is no significant influence relationship between the independent variable (digital marketing transformation) and the dependent variable (strategic leadership). For the purpose of testing this hypothesis, Table (4) may display the results of evaluating the structural model for this hypothesis.

Table 4. Results of evaluating the first main hypothesis model

Result	coefficient of determination R^2	Value F	P Value	R	Impact Relationship	Hypothesis
Reject the null hypothesis and accept the alternative hypothesis	0. 327	74.377	0. 000	.572*	Digital Marketing Transformation <	H2

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

Table 4 shows the results of the analysis, which showed that there is a significant effect between digital marketing transformation and strategic leadership. The relationship of influence is significant when the p value does not exceed 0.05, and the value reached (74.377) (F), which is a highly significant value. This is an indicator of an influential relationship between digital marketing transformation and strategic leadership, according to the rule (Hair et al., 2017). Therefore, the null hypothesis was rejected and the alternative hypothesis (H1) was accepted, which states that there is a significant relationship of influence between digital marketing transformation and strategic leadership. The findings indicated that the adjusted coefficient of determination was 0.327, signifying that the variable digital marketing transformation accounted for 32% of the variance in strategic leadership, with the remaining percentage attributed to other factors not examined in the study. According to Table No. (4), the hypothesis asserting that there is no significant influence of the independent variable (digital marketing transformation) on the dependent variable (strategic leadership) is rejected, while the hypothesis positing a significant influence relationship between digital marketing transformation and strategic leadership is accepted.

H.2. Testing the Second Main Hypotheses of Impact. The sub-hypotheses of the second main hypothesis state the following

H.2.1. There is no significant influence relationship between transformational leadership and strategic leadership.

Table (5) shows the results of the analysis, which concluded that there is a significant influence relationship between transformational leadership and strategic leadership. The influence relationship is significant when the p-value does not exceed 0.05, and the F-value is highly significant. This signifies a significant correlation between digital marketing transformation and strategic leadership, as per the findings of Hair et al. (2017). Consequently, the null hypothesis is rejected, and the alternative hypothesis, which posits a significant link between transformational leadership and strategic leadership, is accepted. The findings indicated that the adjusted coefficient of determination was 0.277, signifying that the variable digital marketing transformation accounted for 27% of the variance in strategic leadership, with the remaining percentage attributable to other factors not examined in the study. Based on Table (5), the hypothesis stating: "There is no significant influence of (transformational leadership) on the dependent variable (strategic leadership) is rejected, and the hypothesis stating that there is a significant influence of (transformational leadership) on the dependent variable (strategic leadership) is accepted."

Table 5. Results of evaluating the model of the first main hypothesis for the second main hypothesis

Result	coefficient of determination R^2	Value F	Value P	R	The relationship of influence	Hypothesis
Reject the null hypothesis and accept the alternative hypothesis	0.277	58.613	0.000	.526	Transformational leadership < Strategic leadership	H21

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

H.2.2. There is no significant relationship between organizational and marketing capabilities and strategic leadership:

Table (7) shows the results of the analysis, which concluded that there is a significant relationship between organizational and marketing capabilities and strategic leadership. The significant relationship is significant when the p-value does not exceed 0.05, and the F-value reached (0.150), which is a highly significant value. This is an indicator of an influential relationship between digital marketing transformation and strategic leadership. According to the rule (Hair et al., 2017), the null hypothesis is rejected and the alternative hypothesis, which states that there is a significant relationship between organizational and marketing capabilities and strategic leadership, is accepted. The findings indicated that the adjusted coefficient of determination was 0.247, signifying that the variable of organizational and marketing capabilities accounted for 24% of the variance in strategic leadership, with the remaining percentage attributed to other factors not examined in the study. According to Table (7), the hypothesis asserting that there is no significant influence on the dependent variable (organizational and marketing capabilities) is rejected, while the hypothesis indicating a significant influence between organizational and marketing capabilities and strategic leadership is accepted.

Table 7. Results of evaluating the model of the first main hypothesis for the second main hypothesis

Result	coefficient of determination R^2	Value F	P value	R	The relationship of influence	Hypothesis
Reject the null hypothesis and accept the alternative hypothesis	0.247	50.150	0.000	.497**	Organizational and marketing capabilities < Strategic leadership	H22

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

H.2.3 There is no significant relationship between marketing culture and strategic leadership:

Table (8) shows the results of the analysis, which concluded that there is a significant relationship between transformational leadership and strategic leadership. The significant relationship is significant when the p-value does not exceed 0.05. The F-value reached 37.031, which is a highly significant value. This is an indicator of an influential relationship between digital marketing transformation and strategic leadership, according to the rule (Hair et al., 2017). Therefore, the null hypothesis was rejected and the alternative hypothesis, which states that there is a significant relationship between marketing culture and strategic leadership, was accepted. The findings indicated that the adjusted coefficient of determination was 0.194,

indicating that the variable marketing culture accounted for 19% of the variance in strategic leadership, with the remaining proportion attributed to other unexamined variables. According to Table (8), the hypothesis asserting that marketing culture does not significantly influence the dependent variable, strategic leadership, is rejected, while the hypothesis positing a significant influence between marketing culture and strategic leadership is accepted.

Table 8. Results of evaluating the model of the first main hypothesis for the second main hypothesis

Result	coefficient of determination R^2	Value F	P value	R	The influence relationship	Hypothesis
Reject the null hypothesis and accept the alternative hypothesis	0.194	37.031	0.000	.441**	Marketing culture < Strategic leadership	H23

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

H.2.4 There is no significant relationship between the work environment and strategic leadership:

Table (9) shows the results of the analysis, which concluded that there is a significant relationship between the work environment and strategic leadership (the relationship is considered significant when the p-value does not exceed 0.05). The value of (F) reached (46.673), which is a highly significant value. This is an indicator of the effective relationship between digital marketing transformation and strategic leadership, according to the rule (Hair et al., 2017). Therefore, the null hypothesis was rejected and the alternative hypothesis, which states that there is a significant relationship between the work environment and strategic leadership, was accepted. The findings indicated that the adjusted coefficient of determination was 0.233, indicating that the variable work environment accounted for 23% of the variance in strategic leadership, with the remaining proportion attributed to other variables not examined in the research. According to Table (9), the hypothesis asserting that there is no meaningful association between the work environment and the dependent variable (strategic leadership) is both rejected and accepted. The hypothesis posits a substantial correlation between the work environment and strategic leadership.

Table 9. Results of the evaluation of the model of the first main hypothesis for the second main hypothesis

Result	معامل التحديد R^2	قيمة F	P value	R	The relationship of influence	Hypothesis
Reject the null hypothesis and accept the alternative hypothesis	0.233	46.673	0.000	.483**	Work environment < Strategic leadership	H24

"Source: Compiled by the researcher using the outcomes of the SPSS.v25 software"

Table (10) presents the outcomes of the multiple linear regression analysis pertaining to the sub-hypotheses of the second primary hypothesis. It concludes that a significant influence exists between the dimensions of digital marketing transformation and the strategic leadership variable, as indicated by a p-value not exceeding 0.05. The F-values recorded are (58.613, 50.150, 37.031, 46.673), which are highly significant,

thereby indicating a substantial relationship between digital marketing transformation and strategic leadership, in accordance with the criteria established by Hair et al. (2017). The data presented in the table indicates that the null hypotheses (H02-1, H02-2, H02-3, H02-4) were rejected, as the adjusted coefficient of determination values were (0.277, 0.247, 0.194, 0.233), demonstrating that the dimensions of the independent variable (digital marketing transformation) effectively elucidated the dependent variable. Strategic leadership is represented by the indicated percentages, while the remaining percentages pertain to other characteristics not examined in the research.

Table 10. Results of evaluating the model of the first main hypothesis for the second main hypothesis.

Result	coefficient of determination R^2	Value F	P Value	Relationship between variables
Reject the null hypothesis and accept the alternative hypothesis	0.277	58.613	0.000	Transformational leadership – Strategic leadership
Reject the null hypothesis and accept the alternative hypothesis	0.247	50.150	0.000	Organizational and marketing capabilities – Strategic leadership
Rejecting the null hypothesis and accepting the alternative hypothesis	0.194	37.031	0.000	Marketing culture – Strategic leadership
Rejecting the null hypothesis and accepting the alternative hypothesis	0.233	46.673	0.000	Work environment – Strategic leadership

Source: Compiled by the researcher using the outcomes of the SPSS.v25 software

7. Conclusions

1. The researched organization recognizes the importance of digital marketing transformation in enhancing strategic leadership in the education sector. Therefore, private universities in Dhi Qar Governorate seek to spread an entrepreneurial culture and motivate administrative leaders to keep pace with the digital transformation in university marketing.
2. University administrations are committed to adopting transformational leadership, which is considered an important factor in the success of digital marketing transformation within private universities. This focus is on the behavior of transformational leaders, who possess the ability to guide the digital vision and keep pace with developments. The arithmetic mean is greater than the hypothetical mean, as demonstrated by extracting the analytical results.
3. Organizational and marketing capabilities contribute to understanding the digital market, the ability to analyze customer data, manage communication channels, and digital marketing transformation, as well as confronting digital competition. This is demonstrated by the descriptive arithmetic mean, which is higher than the hypothetical mean.
4. The descriptive analysis results indicated that the mean was higher than the hypothetical mean, indicating that private universities have a positive marketing culture that leverages the expertise of their employees and explores new ideas in developing long-term strategic plans.
5. The descriptive analysis results showed that the mean was higher than the hypothetical mean. Therefore, encouraging administrative leadership and internal motivation within the workplace help mitigate resistance to change and increase employee acceptance of digital marketing transformation technologies.

8. Recommendations

1. It is recommended that the organization keep pace with digital transformations in the university market and achieve effective leadership in making successful strategic decisions to link digital marketing transformation to the organization's long-term strategic objectives.
2. Administrative leaders should increase their focus on enhancing internal and external communication by transformational leadership to create a transparent, encouraging, and capable environment for fully embracing digital marketing transformation, as well as developing leadership training and development programs.
3. The researcher recommends restructuring organizational and marketing processes to suit the requirements of the digital environment, including process automation, updating policies to ensure flexibility and rapid response, effective communication networks, and interactive platforms that support digital marketing and organizational activities.
4. Empower administrative leaders to spread digital marketing awareness within the organization under study by integrating marketing culture concepts with digital marketing transformation into cultural policy development programs, and respecting and appreciating different values and traditions.
5. Foster a flexible and innovative work environment that supports the use of technology, such as improving interaction on platforms to facilitate knowledge exchange and efficiently implementing digital campaigns to encourage a digital marketing transformation at private universities.

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