أثر تطبيق استراتيجيات التغيير التنظيمي في تحقيق النجاح الاستراتيجي

دراسه تطبيقية في جامعة الأميرة سمية للتكنولوجيا الأردنية

"The Impact of Implementing Organizational Change Strategies on Achieving Strategic Success: an Applied Study at Princess Sumaya University for Technology in Jordan."

prepared by

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Abstract:

The aim of this study was to investigate the impact of applying organizational change strategies on achieving strategic success. The study was conducted at Princess Sumaya University for Technology in Jordan using a descriptive-analytical methodology. The study population consisted of all employees in the university, totaling 300 workers from upper, middle, and lower management. A sample was selected using the stratified sampling method, representing 56.3% of the workers, or 169 subjects. To achieve the study objectives, a questionnaire was designed to collect data, which was distributed to the participants electronically. After retrieving the questionnaires, 7 were excluded for being invalid for statistical analysis purposes. The final sample size was 162 workers, representing 95.8% of the main sample. Descriptive statistical methods were used, including frequencies, percentages, Cronbach's alpha test, mean and standard deviation, and multiple linear regression, within the Statistical Package for the Social Sciences (SPSS).

The study found that the dimensions of organizational change strategies were available and practiced collectively at a high level in Princess Sumaya University for Technology, and the dimensions of strategic success were also at a high level.

The study recommended enhancing the concept of strategic change in the university, promoting the use of scientific research methods to help generate new knowledge and skills for university workers, increasing attention to skilled workers, creating a suitable climate to encourage them to stay and continue working, and enhancing the role of university management in activating strategic risk management to improve the university's strategic performance.

Keywords: organizational change strategies, strategic success, Princess Sumaya University for Technology, Jordan.

Introduction:

 All known systems in the universe require management, and the educational system is no exception. To achieve the fruits of development, it needs effective management to organize its activities, coordinate the efforts of its members to achieve its desired goals. Due to the many variables and the rapid spread of information, institutions must be managed with a purposeful and conscious management style to develop their current reality, overcome problems and obstacles, and to achieve the goals and tasks for which they were established. This management style is called strategic management in general and change management in particular. Applying the change management strategy in educational institutions contributes to improving the quality of the educational process.

Strategic success works to serve the current reality of organizations without harming or affecting the future interests of upcoming organizations. Strategic success is an important factor in development plans in general, starting from achieving the set goals, to achieving sustainability, adaptability, predictability, increasing the size of the organization, and achieving greater growth. It

is a concept that links the aspects of activity and the means necessary to achieve them with the objectives that these activities seek to achieve within the organization (Badr and Alsabagh, 2020).

The concept of strategic organizational change is considered one of those modern administrative means and a fundamental requirement to achieve the set goals of any institution, especially long-term ones. It is an effective management style that differs from others, as its principles and theories have been developed through a mixture of scientific field experiences and specialized methodical administrative thought, which was born out of a scientific field reality enhanced by academic thought stemming from the need to develop institutions that rely on strategic organization as a brilliant scientific approach to achieve objectives.

Strategic leadership is about achieving a competitive advantage compared to competitors and is the product of the strategic management process, which transforms the organization from its current situation to what the leader wants it to be, and organizations are a mirror of their leaders (Macmillan & Tampoe...)
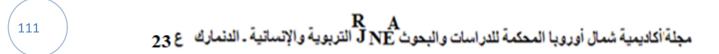
The study aims

The study aims to investigate the impact of implementing organizational change strategies on strategic success at Princess Sumaya University for Technology in Jordan. The university operates in a highly competitive and rapidly changing environment, driven by market demands, information revolution, and technological advancements. The study identifies the problem statement as the need for the university to create a strategic leadership that adopts strategic success as its fundamental strategy and implements change in its structure, culture, and technological tools to enhance its ability to support leadership, regulate processes, and focus on the customer.

The research questions formulated to address the problem statement are:

1. To what extent are the organizational change strategies available, with their dimensions integrated (change in culture, change in organizational structure, change in technology) in achieving strategic success at Princess Sumaya University for Technology in Jordan?

2. To what extent are the organizational change strategies practiced with their dimensions (change in culture, change in organizational structure, change in technology), and what is their impact on strategic success at Princess Sumaya University for Technology in Jordan?

The significance of the study lies in several aspects, including its scientific importance, as it tackles variables of high importance in the administrative literature, such as organizational change strategies and strategic success. Also, the university sector is critical in the Jordanian economy and positively contributes to economic growth. Finally, the study is a contemporary one that explores the impact of change strategies in universities, which is a relatively new research topic in the literature.

The objectives of the study are to identify whether organizational change strategies have an impact on strategic success and to achieve the following goals:

•To identify the impact of organizational change strategies, in its dimensions of cultural change, structural change, and technological change, on strategic success.

•To provide a theoretical framework that covers the study variables (organizational change strategies and strategic success).

•To identify the level of organizational change strategies at Princess Sumaya University for Technology in Jordan.

•To identify the level of strategic success at Princess Sumaya University for Technology in Jordan.

•To provide a set of recommendations and proposals that decision-makers at Princess Sumaya University for Technology in Jordan and other universities can benefit from.

The following hypothesis was formulated based on the problem of the study and its objectives:

(H01): There is no statistically significant effect at the significance level ($\alpha= 0.05$) of organizational change strategies, in its dimensions of cultural change, structural change, and technological change, on strategic success at Princess Sumaya University for Technology in Jordan.

The study's boundaries are as follows:

1. Geographical boundaries: Princess Sumaya University for Technology in Jordan.

2. Time boundaries: The study was conducted during the academic year 2022/2023.

3. Human boundaries: All academic and administrative staff at Princess Sumaya University for Technology in Jordan, within the following job titles: Vice President, Dean/Vice Dean, Assistant Dean, Director, Department Head, and employee.

4. Scientific boundaries: Through available books and references, the internet, libraries, previous studies, journals, previous research, reports, and conferences.

The terms used in the study are defined as follows:

Change: The concept of change has various definitions and interpretations based on researchers' viewpoints. It is described as a directed and purposeful transition that aims to achieve an environmental adaptation state in both internal and external aspects of the organization, ensuring a transformation to a state that better serves the organization's goals and objectives. Organizational change can occur in various forms, such as cultural, structural, and technological changes. Strategic success refers to the achievement of an organization's objectives and goals within the framework of its strategic plan.

Strategic success has been defined as "the successful leadership of the organization's strategy, which directly focuses on enhancing its intellectual capital in order to maximize its true wealth" (Brooking, 1996: 58). By focusing on the nature of the relationship between the organization and all stakeholders, it has been defined as "the ability of any organization to create added value for its operations, contributing to enhancing value for stakeholders who affect and are affected by

achieving its objectives" (Antonio & Waldron, 2008: 153).It has also been defined as "the organization's ability to determine the programs, policies, and procedures necessary to implement its strategy in a targeted manner and avoid failures" (Koseoglu, et al., 2009: 78). This definition emphasizes the importance of successfully implementing and achieving the organization's strategy through securing all necessary factors and means to support it. Based on a decision-making approach, strategic success has been defined as "the series of decisions made by top management in the organization to enhance its competitiveness and sustainability for as long as possible in the contemporary dynamic environment" (Aghashahi & Amoli, 2016: 448). This is in line with the elements emphasized by researcher Hussein (2018) in his definition of strategic success, which he referred to as "growth, adaptation, and survival" that must be focused on (Hussein, 2018: 112).

Operationally, strategic success is the main criteria for evaluating the ability of Princess Sumaya University for Technology to survive and continue its operations, and it represents the essence of strategic management.

Organizational change is one of the most important areas of interest for experts and specialists in business organizations of all sizes and tasks, as it poses a common challenge in the organization's needs to improve its performance level, enabling it to adapt to rapid change requirements. To achieve this goal, organizations need high-performance management in managing the process of change effectively. The management of organizational change involves a series of planned activities aimed at changing the organization's structure, culture, systems, and processes to achieve the desired outcomes. This change can be in response to internal or external factors, such as market competition, technological advancements, or shifts in customer needs and expectations.

Organizational change involves a range of activities, including identifying the need for change, formulating a change plan, communicating the change plan, implementing the change plan, and evaluating the results. It is important to note that organizational change is a complex and continuous process that requires continuous monitoring and improvement. Successful organizational change requires effective leadership, stakeholder engagement, and the development of an organizational culture that supports change.

Organizational Change Elements:

Change in Culture: The interest in organizational culture peaked in the 1980s and it became widely discussed in management journals such as AMJ, HRB, and ASQ. Research on the concept of organizational culture found that it is a borrowed concept from the cultural anthropology, and it entered the academic field in 1974. Three approaches have been identified to understand organizational culture through its development: The first approach is through its apparent and superficial manifestations and characteristics such as symbols, stories, rituals, and ceremonies. The second approach is through focusing on the intangible and imperceptible intellectual dimensions such as habits, values, assumptions, ideologies, philosophy or what is known as the essence of culture. The third approach is known as the organizational model approach and is based on adopting organizational cultural characteristics (Abdelhamid, 2022).

Change in Organizational Structure: The change process focuses on redefining responsibilities, merging and consolidating jobs, redesigning communication lines, tracking power and responsibility channels, redesigning functional structures, and introducing new organizational units while excluding some existing ones. This results in modifications in other organizational areas, such as human resources, policies, capabilities, systems, and procedures (Attaz, 2020).

Organizations change their structures because of its importance to their level of organizational structure. This can be done through canceling organizational units, merging them, redistributing some responsibilities, and redefining roles, authorities, and tasks that are consistent with the modern changes (Zapata & Gomez, 2021).

The organizational structure of organizations can also be understood by how tasks are officially distributed, combined, and coordinated for the human resources working in it. Change occurs in one or more elements that design the organization such as the integration of unit responsibilities within the organization, removal of vertical organizational levels, or an increase in the scope of supervision to create a more horizontal or less bureaucratic organization (Wiedemann, 2021).

Change in Technology:

 Organizational change is also related to technology change, as organizations need to adapt to new technological advancements to stay competitive. Technological change is not only about introducing new technologies but also about using existing technologies in new ways to improve efficiency, reduce costs, and enhance organizational performance (Abdelhamid, 2022).

The importance of keeping up with technological developments and changes on a permanent and continuous basis requires us to take all necessary measures to establish a clear policy in activating technology and working to maximize its benefits and transform it from a mere tool into a solid and reliable approach for the organization. Thus, steps must be taken to ensure the optimal use of technology, such as restructuring legislation and laws, focusing on technology and its requirements to ensure the organization's survival and development, and restructuring its traditional structure to reduce costs and adopt electronic governance. This should also include investing in available human resources and working on improving their technological skills and efficiency (Beyzan, 2018).

In this context, there is an increasing trend towards the use of digital technology and its effective application in organizations due to advances in processing, publishing, production, and transmission methods, making it easier to accomplish organizational tasks with less time, cost, and effort, through the creation of electronic resources and digital archiving. Sometimes this requires partnerships and collaboration with high-skill partners such as software developers, web page designers, graphic designers, and others. To make its role effective and influential, the organization must also contribute to the innovation and design of systems, so that its role is not limited to their operation and use (Beyzan, 2019).

Strategic Success:

 Concept of Strategic Success:

The concept of strategic success has arisen from reality, in an environment of rapid change and development, with successive technological advancements, scarcity of available resources, and global crises that have affected organizations. It is not merely an intellectual luxury, but a call to adopt a broader concept of "efficiency, effectiveness, or organizational success" to a concept that embraces long-term dimensions of success and is cautious of any contingencies that may cause the organization to suffer strategic failure, and to adopt specific measures to confront external threats and aid in achieving strategic success (Al-Taan, 2013).

Elements of Strategic Success

Survival and the ability to sustain: Organizations always require adapting to the suitable situation and continuing to adapt to the surrounding environment in the long term, with striving and perseverance for further growth, stability, and adaptation, within a sequential framework that begins and ends with survival, as a sign indicating the senior management's way of thinking in a competitive and broad environment. The organization's ability to survive is an implicit assumption based on the fact that organizations start and end like organic entities with the difference in discussing organizations (as they do not disappear and end easily, but they are capable of continuity and survival). However, it should be noted that the stability of the organization is important and not to aspire to its survival due to a number of individuals who do not want its demise. This drives many organizations to seek new future goals and visions that justify their continuity and transformation into another form of organizations (Snider & Davies, 2018).

The reasons for the failure of organizations to survive, which is considered the essence of strategic success, are attributed to the critical financial situation that makes many organizations resort to a type of re-existence through acquisition and merger, and the difference that may occur between the organization's goals and the goals of its human resources working in it, their frustration with their creativity, weakness in developing innovation programs and updates, the organization's inability to satisfy the needs of society, its weak response to emergencies and various environmental changes, and the weakness of conflict management in the organization (Mohamed, 2018).

Adaptation and the ability to predict:

Strategic adaptation is defined as the extent to which the organization can respond and interact with changes in its internal business environment or changes in the external environment affecting its administrative, production, financial, and service activities, which is measured through strategic transformation, meaning the process of transferring the organization from its current state towards the desired future state with the aim of achieving a competitive advantage. Interacting with the environment, i.e., the degree of interaction of organizations with their work environment, according to specific methods and mechanisms, and strategic convergence, which is concerned with interaction and cooperation between the organization and its environment, in order to achieve its goals and objectives, and the ability to predict, i.e., the ability of organizations to predict the future and prepare for it by taking the appropriate measures in order to avoid potential negative effects, as well as the ability to forecast future trends and changes in the environment (Snider & Davies, 2018).

Innovation and the ability to lead:

The organization's ability to innovate is one of the most important elements of strategic success. Innovation means the ability to create new things and ideas, or to develop existing things and ideas, and it is essential to provide the organization with the ability to compete in the marketplace, achieve a competitive advantage, and respond to environmental changes. Innovation can take many forms, such as product innovation, process innovation, and service innovation, and it requires the organization to have a culture that encourages creativity, supports experimentation and risk-taking, and is open to new ideas and different perspectives. In addition, the organization's ability to lead is critical to its strategic success, as it allows the organization to set goals, develop a vision, and create a sense of direction for its employees. Leadership also involves the ability to motivate and inspire employees, create a positive organizational culture, and manage change effectively (Snider & Davies, 2018).

Effective communication and teamwork: Effective communication and teamwork are also essential elements of strategic success. Effective communication means the ability of the organization to transmit information and ideas accurately and clearly to all stakeholders, including employees, customers, suppliers, and shareholders, and to listen carefully to feedback and suggestions. Effective teamwork means the ability of employees to work together effectively and efficiently to achieve the organization's goals and objectives

Organization Growth and Expansion:

The size of an organization is an indicator of its financial capacity and competitive strength. The measures of organizational size vary depending on its nature and field of work, and it can be measured along several dimensions such as the density of capital directed towards the technology used in its operations, the number of products sold in a certain period of time, the services it provides, the number of customers, the size of deposits, the number of shares, the number of branches, or other measures. Despite these differences, the goal for strategic organizations is one, which is to grow in size and provide products and services better to customers, thereby increasing their influence in the competitive environment. Growth is success (Alwan, 2020).

Previous Studies:

•Al-Mashaqba, R. and Al-Maqdadi, M. (2022) conducted a study entitled "The Degree of Practice of Academic and Administrative Leaders at Al al-Bayt University in Managing Change and Its Relationship to Organizational Excellence." The study aimed to identify the degree of practice of academic and administrative leaders at Al al-Bayt University in managing change and its relationship to organizational excellence from the perspective of employees working at the university. The study population consisted of the administrative and academic staff, who numbered 1,121 according to the statistics of Al al-Bayt University for the year 2021/2022. The study sample was randomly selected and consisted of 146 administrative and academic employees. A questionnaire was developed as a tool for the study, distributed in three parts: study variables, change management areas, and organizational excellence areas. The validity and reliability of the questionnaire were verified. The results showed that the degree of practice of academic and administrative leaders in managing change from the perspective of faculty members and administrators at Al al-Bayt University was high. The level of organizational excellence in Al al-

Bayt University from the perspective of faculty members and administrators was also high. There is a statistically significant correlation at the significance level (ά ≤.05) between change management at Al al-Bayt University and organizational excellence, and there are no significant individual differences.

•Study by Al-Bashabsheh, Samer, and Al-Mari, Mohammed (2020) titled: The Effect of Strategic Agility on Achieving Strategic Success in Qatari Commercial Banks.

The study aimed to measure and analyze the impact of strategic agility on achieving strategic success in Qatari commercial banks, which are five banks in total. The study population consisted of employees working in the upper and middle management in these banks, totaling 197 employees. The entire study population was taken as a comprehensive sample, and the comprehensive survey method was used for job titles: (general manager, deputy general manager, department manager, branch manager). The descriptive analytical method was used, and a questionnaire was used to collect data from the study sample, consisting of 35 paragraphs. The study found a statistically significant effect at the $(0.05 \geq \alpha)$ level of strategic agility and its dimensions (strategic sensitivity, leadership unity, resource liquidity) collectively in achieving strategic success and its dimensions (effective strategy implementation, business growth, customer satisfaction, motivational culture for employees) collectively in Qatari commercial banks. The study recommended that Qatari commercial banks adopt the concept of strategic agility to benefit from its outputs in developing banking services, meeting current and future customer needs, and achieving strategic success.

•Study by Sada, Khorshid, Mohammed, and Othman (2020) titled: The Impact of Administrative Leadership on Achieving Business Success Strategies from the Perspectives of Faculty Members at the Lebanese French University in Erbil, Kurdistan, Iraq.

The study aimed to investigate the impact of administrative leadership on achieving business success strategies from the perspectives of faculty members at the Lebanese French University in Erbil, Kurdistan, Iraq, and to provide an interpretation of the study variables, administrative leadership, and business success strategies. The descriptive analytical method was used, and the most important results that the study found were that there is a positive correlation between administrative leadership and business success strategies, and that the study recommended the development of administrative leadership skills and the adoption of a participatory leadership style that encourages communication and cooperation with faculty members to achieve business success strategies

•Ahmad & Baei & Hosseini-Amiri & Moarefi & Sweis (2020) conducted a descriptive and inferential study aiming to test the relationship between strategic intelligence of managers, organizational development, and entrepreneurial behavior in developing countries' governments. The research community included 480 employees from developing countries' governments, and the research sample was a stratified sample of 199 employees. The study found, among other things, a positive statistically significant relationship between strategic intelligence in organizational development, a positive statistically significant relationship between strategic intelligence and directional entrepreneurship, and that demographic characteristics have no effect on the relationship between variables except gender.

•Chankson, Thitinan (2019) conducted a descriptive applied study aiming to investigate the multi-level causal factors affecting the strategic success of Thai export businesses. The study's research community included 384 employees and businessmen from Thai export companies, and the research sample was a random sample consisting of 1152 employees and businessmen from 384 Thai export companies. The study found, among other things, that the respondents' opinion about the availability of strategic success in Thai export businesses was high, as well as the reliability and competitive advantage, modern organizational management, and incentives and intellectual capital. The study also found that marketing and intellectual capital have a positive causal relationship with the strategic success of Thai export businesses.

•Jensrowold & Abrell (2014) conducted a study titled "Leader's commitment to change and their effectiveness in change - A multi-level investigation," aiming to identify the extent of educational institution managers' practice in Germany in managing change to bring about change. The researchers used a quantitative approach, and the study sample consisted of 177 change leaders in educational institutions in Germany. The researchers used an electronic questionnaire to collect data, and the study found, among other things, that there is a positive relationship between the change leaders' commitment to change and their effectiveness in implementing change.

Study methodology

This study uses a descriptive-analytical approach to suit the purposes of the current study related to the impact of implementing organizational change strategies in achieving strategic success at Princess Sumaya University for Technology in Jordan.

Study population and sample:

The study population consists of all employees in the higher education sector at Princess Sumaya University for Technology in Jordan, including (Vice President, Dean or Vice Dean, Assistant Dean, Director, Department Chair, and Administrative Staff), totaling (300) employees during the period of the study, which is the first semester of the academic year (2022/2023). The study sample was selected from the employees in the higher education sector at Princess Sumaya University for Technology in Jordan, using the stratified sampling method from the study population, which represents (56.3%) of the employees and totals (169) respondents according to the sample selection table for Krejcie and Morgan, Sekeran and Bougie. (Krejcie & Morgan, 1970; Sekeran & Bougie, 2010). (169) electronic questionnaires were distributed to them through the electronic link provided by the Google Survey system at

https://docs.google.com/forms/d/e/1FAIpQLSfU5iVydhUSbxtT5_EV795auW9A8-XjfLQt0jHezjLqF8_QsQ/viewform?usp=sf_link.

Under the supervision of the researcher, after retrieving the questionnaires, (7) questionnaires were excluded for being unfit for statistical analysis purposes due to incomplete responses, resulting in a final sample of (162) employees at Princess Sumaya University for Technology in Jordan, which represents (95.8%) of the main sample. The demographic distribution of the study participants (respondents) is presented in Table (1) below.

Table (1)

Distribution of study sample participants by gender

Gender	Frequency	Percentage
Male	94	58.0
Female	68	42.0
Total	162	100.0
Age	Frequency	Percentage
than 25 years	7	4.3
25 to less than 35 years	36	22.2
35 to less than 45 years	75	46.3
45 years and above	44	27.2
Total	162	100.0
Job Level	Frequency	Percentage
Dean or Vice Dean	9	5.6
Assistant Dean	1	0.6
Director	2	1.2
Head Department	31	19.1
Employee	119	73.5
Total	162	100.0
Nature of Work	Frequency	Percentage
Academic	41	25.3
Administrative	96	59.3
Academic/Administrative	25	15.4
Total	162	100.0

Study Tool:

The questionnaire was developed to measure the impact of implementing organizational change strategies on achieving strategic success, critical success factors as a mediating variable at Princess Sumaya University for Technology in Jordan. The study questionnaire was composed of two parts:

The first part includes demographic information such as gender, age, education level, years of experience, job level, and nature of work. The second part contains the study questions, consisting of 35 paragraphs, all related to the impact of organizational change strategies on achieving strategic success at Princess Sumaya University for Technology in Jordan. The tool was designed based on the Likert five-point scale, and it includes two main axes and sub-dimensions, as shown in Table 2:

Table (2)

Distribution of Main Axes and Sub-Dimensions:

الرقم	Axis/Sub-Dimension	Paragraphs
	Axis 1: Organizational Change Strategies, which includes the following sub-dimensions	17
1	Cultural Change	5-1
2	Change in Organizational Structure	11-6
3	Change in Technology	17 – 12
	Axis 2: Strategic Success, which includes the following sub-dimensions:	18
1	Survival	23-18
2	Adaptation	29-24
3	Growth	35 – 30

Validity of the Study Tool:

After preparing the initial version of the scale, it was presented to a number of reviewers who were faculty members in the Department of Public Administration and Strategic Management. They were asked to give their opinions on the validity of the content, the appropriateness of the phrases used in the scale, the clarity of the questions, and the suitability of the scale for measuring what it was designed to measure. An 80% reliability standard was used to determine the validity of each question. Based on the reviewers' feedback, some questions were modified to increase their clarity, while others were deleted because they were too similar to other questions or because they were not appropriate for the purpose of the study or for the specific dimension to which they belonged. As a result, the scale was composed of 35 questions distributed across three main dimensions: change strategies, organizational change, and strategic success. The researchers considered the reviewers' opinions and modifications as evidence of the validity and suitability of the scale's content and diversity of questions. After making the necessary modifications, the scale achieved a balance between its contents and dimensions. The reviewers expressed their desire to interact with the questions, indicating the apparent validity of the tool.

Reliability of the Study Tool:

To assess the consistency of each question with the dimension it belongs to, the correlation coefficients between each question in the scale were calculated using Cronbach's alpha. The results of the test are shown in Table 3.

Table 3:

Reliability Coefficients of the Questions in the Study Tool using Cronbach's Alpha Test.

Study variables:	Cronbach's alpha coefficient of reliability
Cultural change	0.862
Organizational structure change	0.904
Technological change	0.879
Organizational change strategies	0.945
Survival	0.879

Adaptation	0.916
Growth	0.909
Strategic success	**0.961**
The tool as a whole	0.982

The table (3) shows that the Cronbach's alpha coefficient for the Change Management Strategies dimension ranged between 0.862 and 0.90, with a total reliability coefficient of 0.945. The Cronbach's alpha coefficients for the Organizational Change, and Strategic Success dimensions ranged between 0.879-0.916 and 0.909-0.961, respectively. The overall Cronbach's alpha coefficient for the entire instrument was 0.982. These are acceptable values for the purposes of the current study, where the acceptable value of Cronbach's alpha for the purpose of this study is 0.70 according to Hair et al. (2010) and Sekeran & Bougie (2016).

Scale Correction Key:

The Likert scale used in the study was adjusted according to the rules and characteristics of scales as follows:

Response options				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

Based on the above, the mean values obtained by the study were dealt with according to the following equation to arrive at the rating score for the paragraph:

Upper value - lower value of response options divided by the number of levels, that's mean

$(5-1)/3 = 4/3 = 1.33$, and this value is equal to the length of the category.

Thus, the low level is $1.00 + 1.33 = 2.33$

The medium level is $2.34 + 1.33 = 3.67$

The high level is 3.68 - 5.00

Statistical Analyses Used:

Descriptive and inferential statistics were used to answer the study questions and test hypotheses, as follows:

•Extracting frequencies and percentages to describe the sample individuals.

•Using Cronbach's alpha test to ensure the reliability of the tool.

•Mean values were used to measure the level of response of the study sample individuals to the paragraphs and axes of the study tool, and standard deviations were used to identify the degree of variability of the responses of the study sample individuals from their mean.

•Stepwise multiple regression analysis was used to identify the order of the most important independent variables affecting the dependent variables.

Results related to the first question:

What is the extent of availability and implementation of organizational change strategies in their combined dimensions (change in culture, change in organizational structure, and change in technology) at Princess Sumaya University for Technology in Jordan? To answer the first question, the means and standard deviations of the responses of the study sample were extracted to identify the extent of availability and implementation of organizational change strategies in their combined dimensions (change in culture, change in organizational structure, change in technology) at Princess Sumaya University for Technology in Jordan, and Table (4) illustrates that:

Table (4)

Means and standard deviations of the responses of the study sample regarding the extent of availability and implementation of organizational change strategies in their combined dimensions (change in culture, change in organizational structure, change in technology) at Princess Sumaya University for Technology in Jordan are arranged in descending order.

Number	Organizational Change Strategies Practice	Mean	Standard Deviation	Rank	Level
3	**Change in technology**	4.45	0.53	1	High
1	**Change in culture**	4.38	0.55	2	High
2	**Change in organizational structure**	4.19	0.66	3	High
	Total	4.34	0.53		High

From Table (4), it is clear that the arithmetic means for the level of availability and practice of organizational change strategies at Princess Sumaya University for Technology in Jordan ranged between (4.45 and 4.19). The university's overall organizational change strategies received a total arithmetic mean of (4.34), which is a high level. Technological change came in first place with the highest arithmetic mean of (4.45) and a standard deviation of (0.53), which is also a high level. Secondly, cultural change came with an arithmetic mean of (4.38) and a standard deviation of (0.55), which is also a high level. In the third place, there was a change in organizational structure, which obtained an arithmetic mean of (4.19) and a standard deviation of (0.66), which is also a high level.

To identify the level of practice of the sub-paragraphs of each element of organizational change at Princess Sumaya University for Technology, arithmetic means and standard deviations were calculated, and the following are the results:

1- Practice of Cultural Change Strategy:

Table (5)

Arithmetic means and standard deviations for the responses of the study sample on the paragraphs "Practice of Cultural Change Strategy" ranked in descending order.

Number	Practice of Cultural Change Strategy Paragraphs	Mean	Standard Deviation	Rank	Level
3	The university strives to develop a distinctive organizational culture that sets it apart from its competing universities.	4.46	0.64	1	High
1	The university is committed to adapting its organizational culture according to the goals it seeks to achieve.	4.45	0.64	2	High
2	The university has evolved its organizational culture to achieve harmony with the culture of its students.	4.43	0.60	3	High
5	The university emphasizes cooperative relationships and mutual respect among its employees by solidifying the university's culture.	4.36	0.73	4	High
4	The university encourages its employees to participate and provide their opinions in the process of organizational change within the university.	4.20	0.80	5	High
	Total	4.38			High

From Table (5), it is evident that the arithmetic means of (cultural change) ranged between (4.46 and 4.20), with an overall arithmetic mean of (4.38), which is a high level. Paragraph (1) obtained the highest arithmetic mean at (4.46) with a standard deviation of (0.46), which is a high level. The paragraph stated that (the university seeks to develop a distinctive organizational culture that sets it apart from its competing universities). Paragraph (4) came in last place with an arithmetic mean of (4.20) and a standard deviation of (0.80), which is a high level. The paragraph stated that (the university encourages its employees to participate with their opinions in the organizational change process).

1-Practice of Change in Organizational Structure

Table (6)

Arithmetic means and standard deviations of the responses of the study sample on the paragraphs "Practice of Change in Organizational Structure" ranked in descending order.

Number	Practice of Change in Organizational	Mean	Standard	Rank	Level

	Structure paragraph		Deviation		
11	The university is committed to maintaining a high level of cooperation and coordination between its departments and units.	4.25	0.80	1	High
7	The university's management is working on reviewing its organizational structure in accordance with the requirements of regulations and legislation.	4.22	0.79	2	High
6	The university's management adjusts its organizational structure when new departments and positions are established.	4.20	0.79	3	High
8	The university has a flexible organizational structure that responds to changes in both the internal and external work environment.	4.20	0.75	3	High
10	The university has a clear organizational structure that defines the duties and responsibilities of each position.	4.19	0.74	5	High
9	The university's management adopts a decentralized philosophy and delegate's authority to middle and lower-level administrative levels.	4.09	0.91	6	High
	Total	4.19			High

From Table (6), it is evident that the arithmetic means for "Organizational Structure Change" ranged between (4.25 and 4.09), with an overall arithmetic mean of (4.19), which is a high level. Paragraph (11) achieved the highest arithmetic mean, reaching (4.25), with a standard deviation of (0.80), which is also high level. The paragraph stated that "the university is keen to maintain a high level of cooperation and coordination between departments and divisions in the university". Paragraph (9) came in last place with an arithmetic mean of (4.09) and a standard deviation of (0.91), which is also a high level. The paragraph stated that "the university adopts a philosophy of decentralization and delegates authority to central and lower administrative levels". This indicates that the organizational structure change is of a high level at Princess Sumaya University for Technology.

1- Practicing change in technology:

Table (7)

Arithmetic means and standard deviations of the study sample's responses on the paragraphs "Practicing the technology change strategy" ranked in descending order

Number	Practicing the technology change strategy paragraph	Mean	Standard Deviation	Rank	Level
15	The university provides an electronic website to offer its services to customers through the internet.	4.52	0.63	1	High

16	The university has computerized information systems.	4.51	0.60	2	High
14	The university has a center for e-learning and learning resources.	4.49	0.59	3	High
12	The university has advanced equipment labs for all its faculties.	4.44	0.67	4	High
13	The university has an internal communication network technology for all its departments.	4.44	0.68	4	High
17	The university is committed to providing opportunities for employees to participate in training courses accompanying the introduction of new technology.	4.31	0.82	6	High
	Total	4.45			High

From Table 7, it is evident that the arithmetic means of "change in technology" ranged from 4.52 to 4.31, with an overall arithmetic mean of 4.45, which is at a high level. Paragraph 15 had the highest arithmetic mean at 4.52, with a standard deviation of 0.63, which is at a high level. The paragraph stated that the university provides an electronic website for providing its services to customers through the internet. In last place was paragraph 17 with an arithmetic mean of 4.31 and a standard deviation of 0.82, which is also at a high level. The paragraph stated that the university is keen on giving the opportunity for employees to participate in training courses accompanying the introduction of new technology.

The results related to the second question

"what is the level of strategic success at Princess Sumaya University for Technology?"

Arithmetic means and standard deviations were calculated to identify the responses of the study sample regarding the level of strategic success at Princess Sumaya University for Technology in Jordan. Table 8 shows the results.

Table (8)

Arithmetic means and standard deviations of the study sample individuals' responses regarding the level of strategic success at Princess Sumaya University for Technology in Jordan, ranked in descending order.

Number	strategic success	Mean	Standard Deviation	Rank	Level
3	Growth	4.39	0.52	1	High
1	Survival	4.34	0.56	2	High
2	Adaptation	4.32	0.56	3	High
	Total	4.35			High

It is evident from Table (8) that the arithmetic means for the level of "strategic success at Princess Sumaya University for Technology" ranged between (4.39 and 4.32), where the overall strategic success of the university obtained a total average of (4.35), which is a high level. Growth came in first place, obtaining the highest average of (4.39) with a standard deviation of (0.52), which is also a high level. Second, survival came with an average of (4.34) and a standard deviation of (0.56), also at a high level. Third, adaptation came in with an average of (4.32) and a standard deviation of (0.56), which is also at a high level.

To identify the level of practice of the sub-paragraphs for each element of strategic success at Princess Sumaya University for Technology, arithmetic means and standard deviations were calculated, and the following are the results:

1-Survival:

Table (9)

Arithmetic means and standard deviations of the study sample responses on the "survival" sub-paragraphs, ranked in descending order.

Number	"survival" sub-paragraphs	Mean	Standard Deviation	Rank	Level
19	The university strives to possess distinguished academic competencies that enable it to perform its activities within its academic environment.	4.43	0.69	1	High
22	The university works to follow up on the needs of students and maintain internal balance with them.	4.38	0.60	2	High
18	The university has the flexibility to easily deal with changes resulting from the implementation of new strategies.	4.36	0.71	3	High
20	The university is keen on optimal utilization of its resources.	4.35	0.71	4	High
21	The university is committed to periodically evaluating its capabilities to face any deficiencies in its performance.	4.34	0.69	5	High
23	The university encourages employees to present new methods and ideas.	4.21	0.84	6	High
	Total	4.34			High

It is clear from Table (9) that the arithmetic means for "retention" ranged between (4.43 and 4.21), with a general arithmetic mean of (4.34), which is at a high level. Paragraph (19) had the highest arithmetic mean of (4.43), with a standard deviation of (0.69), which is at a high level. The paragraph stated that "the university is committed to possessing distinguished academic

competencies that enable it to perform its activities within its college environment." In last place was paragraph (23) with an arithmetic mean of (4.21) and a standard deviation of (0.84), which is at a high level. The paragraph stated that "the university is committed to encouraging employees to provide new methods and ideas."

1-Adaptation:

Table (10)

Arithmetic means and standard deviations of the study sample's responses to the "adaptation" paragraphs ranked in descending order.

Number	Adaptation paragraphs	Mean	Standard Deviation	Rank	Level
27	The university is capable of continuously adapting to the changing requirements of the academic or higher education sector.	4.38	0.65	1	High
25	The university has the necessary abilities to adapt to the variables that occur in the external environment.	4.33	0.66	2	High
28	The university has alternative options to adapt to the changing and evolving needs of students.	4.33	0.67	3	High
29	The university continually strives to study and analyze the environmental variables surrounding it to determine how to adapt to them in the future.	4.32	0.66	4	High
24	The university has strategic analysis capabilities to deal with challenges and predict future risks.	4.29	0.73	5	High
26	The university has sufficient abilities to quickly adapt to sudden events that occur in the internal work environment.	4.28	0.67	6	High
	Total	4.32			High

From table (10), it is clear that the arithmetic means of "adaptation" ranged from 4.28 to 4.38, with an overall average of 4.32, which is at a high level. Paragraph (27) received the highest average of 4.38 with a standard deviation of 0.65, which is also at a high level. The paragraph stated that "the university can continuously adapt to the emerging academic or higher education requirements". The last paragraph, number (26), had an average of 4.28 and a standard deviation of 0.67, which is also at a high level. The paragraph stated that "the university possesses sufficient capabilities to adapt quickly to sudden events that occur in the internal work environment".

Table (11)

Displays the arithmetic means and standard deviations of the study sample's responses to the paragraphs about "growth", arranged in descending order.

Number	Growth paragraphs	Mean	Standard Deviation	Rank	Level
30	The university strives to introduce and diversify academic specializations in line with the needs of the job market.	4.46	0.58	1	High
33	The university has the sufficient capabilities to form alliances with other international universities to enhance its local and international competitiveness.	4.43	0.63	2	High
32	The university diversifies its academic services by creating a range of activities that meet the demands of different student groups.	4.41	0.62	3	High
34	The university continuously revises its goals for the purpose of development and expansion.	4.40	0.64	4	High
35	The university enhances research and development services to face the rapid developments in the academic sector.	4.37	0.67	5	High
31	The university is committed to bridging the gap between student expectations and the actual quality of service provided to them.	4.28	0.64	6	High
	Total	4.39			High

From Table (11), it is evident that the arithmetic averages of growth ranged between 4.46 and 4.28, with a general arithmetic mean of 4.39, which is high level. Paragraph 30 received the highest arithmetic mean, reaching 4.46, with a standard deviation of 0.58, which is also high level. The paragraph stated that "the university seeks to introduce and diversify academic specializations in line with the needs of the job market." In the last position, paragraph 31 came with an arithmetic mean of 4.28 and a standard deviation of 0.64, which is also high level. The paragraph stated that "the university is keen to reduce the gap between student expectations and the actual service provided to them."

Testing the study hypothesis:

H01: There is no statistically significant effect at a significance level of ($0.05=\alpha$) for organizational change strategies in their dimensions (change in culture, change in organizational structure, change in technology) on the strategic success of Princess Sumaya University for Technology in Jordan.

To test the main hypothesis, Stepwise Multiple Regression analysis was used to identify the effect of organizational change strategies in their dimensions (change in culture, change in organizational structure, change in technology) on the strategic success of Princess Sumaya University for Technology in Jordan. Table (12) shows the results.

Table (12)

Multiple regression analysis to identify the impact of organizational change strategies with their dimensions (cultural change, structural change, technological change) on the strategic success at Princess Sumaya University for Technology in Jordan.

Dimensions	**B**	Standard Error	**Beta**	The calculated T value.	T significance level
Cultural change	.250	.071	.264	3.513	.001*
Structural change	.219	.056	.277	3.944	.000*
Technological change	.432	.052	.438	8.242	.000*

*"**Statistically significant at a level of (0.05≥α), the tabulated (t) value is (±1.96).**

It is evident from Table (12), and by following the (t) test values, that the sub-variables related to organizational change strategies in their dimensions (cultural change, organizational structure change, and technology change) have an impact on the strategic success of Princess Sumaya University for Technology in Jordan, where the computed (t) values were (3.513, 3.944, 8.242) respectively, and these are significant values at a level of significance (0.05≥ α)."

Table (13)

Stepwise Multiple Regression analysis results for predicting strategic success through dimensions of organizational change strategies.

Model	Entry Order of Independent Variables in the Prediction Equation	Correlation Coefficient (R) Value	R-Squared Value	Beta Value Direction of Relationship	F Value	Significance Level
1	Cultural change	.805[a]	.649	.264	295.598	*0.000
2+1	Technological change	.871[b]	.759	.438	250.444	*0.000
3+2+1	Organizational structure change	.884[c]	.781	.277	187.434	*0.000

statistical significance level is 0.05 or less (0.05≥α).

The Stepwise Multiple Regression analysis was conducted to determine the individual contribution of each independent variable in predicting the impact of organizational change strategies on strategic success at Princess Sumaya University for Technology in Jordan. As shown in Table 13, which illustrates the order of entry of independent variables in the regression equation, the cultural change variable came in first place and explained 64.9% of the variation in the dependent variable. The technology change variable came in second place and, in combination with the cultural change variable, explained 75.9% of the variation in the dependent variable. The organizational structure change variable came in third place and, in combination with the previous variables, explained 78.1% of the variation in the dependent variable (i.e. strategic success). Based on this, the null hypothesis is rejected and the alternative hypothesis is accepted, meaning that there is a statistically significant effect at the (0.05=α) level of organizational change strategies with its dimensions (culture change, organizational structure change, technology change) on the strategic success at Princess Sumaya University for Technology in Jordan.

Presenting and discussing the results:

The study aimed to test the effect of implementing organizational change strategies as an independent variable in achieving strategic success for Princess Sumaya University for Technology in Jordan, in light of critical success factors as a mediating variable. The study was applied to Princess Sumaya University for Technology, and the results were as follows:

1- The results of the independent variable showed the availability and implementation of organizational change strategies in all its dimensions (change in culture, change in organizational structure, and change in technology) at Princess Sumaya University for Technology at a high level, reaching (4.34). The change in technology came in first place with the highest average score of (4.45), which is at a high level. Secondly, cultural change came with an average score of (4.38), which is also at a high level. In third place, there was a change in organizational structure with an average score of (4.19), which is at a high level. All of these dimensions were of high importance in terms of implementation and execution.

According to the first dimension (change in technology), this indicates that Princess Sumaya University for Technology in Jordan is interested in providing a website to provide its services to customers over the information network (Internet), which has made it easier for its customers to receive services provided by the university. Additionally, the university has computerized information systems, an e-learning center, learning resources, and laboratories equipped with advanced devices for all colleges at the university. The university also has an internal communication network technology for all its departments, in addition to giving employees the opportunity to participate in training courses accompanied by the introduction of new technology. This is clearly evident in the university's ranking in advanced global centers, such as the King Talal School of Business Technology at Princess Sumaya University for Technology, receiving an invitation to join the Global Business School Network (GBSN), Which includes a number of distinguished business schools in the world, including 8 schools from the Middle East and North Africa. This makes it the first business school in Jordan to receive this invitation. This is the result of unique achievements the university has made locally and globally, and a reflection of its

academic reputation and practical record. It is also a reflection of the university's diligent efforts to rise to the ranks of prestigious global universities. It is the only university in Jordan accredited by AACSB International, and the university has also received a five-star rating in the global QS Stars evaluation for its prominent role in developing and sustaining e-learning, the services and technology provided by the university, the export of services and exchange of experiences, and student engagement with their professors in interactive lectures. Additionally, Princess Sumaya University of Technology won first place in the world and other advanced centers in the annual IEEEXtreme programming competition, organized by the global IEEE organization, with the participation of 4555 outstanding teams from prestigious international universities such as the Massachusetts Institute of Technology (MIT), the University of Illinois, the Canadian McGill University, the University of California/Berkeley, and others.

According to the second dimension (cultural change), Princess Sumaya University for Technology in Jordan seeks to develop a distinctive organizational culture that sets it apart from its competitors. The university is committed to modifying its organizational culture in accordance with the objectives it seeks to achieve, and to developing the university's organizational culture to achieve harmony with the culture of its students. The university emphasizes cooperative relationships and mutual respect among its staff by solidifying its culture, and encourages staff to participate in the organizational change process. This is clearly evident in the establishment of the International Relations Office at Princess Sumaya University in response to its strategy, which places international relations at the top of its priorities. One of the pillars of this strategy is that international relations are involved in all vital aspects of the university, aiming to develop a strong institutional and international culture by transferring knowledge and good practices. One of the goals of this strategy is also to provide appropriate knowledge, tools, and methodologies to improve performance and create an international network of international relations. This will enable the university to exchange experiences and innovations, create strong partnerships to obtain diverse knowledge and resources, and expand and enhance the university's relationships with leading universities worldwide. Programs for exchange and joint programs in specific strategic areas, as well as the development of research partnerships, with various regional and international higher education institutions, supervision and management of agreements and memoranda of understanding, and the establishment of international partnerships and relationships are all part of the main objectives of this office. The university provides a wide range of services that support the international aspects of the university's strategy, and has recently joined one of the Tempus projects entitled "Towards a Network for Higher Education Internationalization Partnership between Mediterranean Basin Countries and Europe", which aims to develop institutional capacities in the field of internationalizing institutions in the Mediterranean Basin and the European partner countries in the program, through the transfer of practical knowledge, administrative capabilities, and good practices For international relations offices and administrative writers, aimed at developing a culture of institutionalization through regional work and providing appropriate knowledge, tools, and methodologies to improve institutionalization procedures for Mediterranean basin countries and European countries participating in the program. This involves creating a recognized regional network for institutionalization to transfer best practices, managing external projects for the university and monitoring agreements, supervising and guiding international

researchers, lecturers, and students planning to conduct studies or research at Princess Sumaya University and vice versa. Providing advice to Princess Sumaya University students who wish to study or join training programs abroad is also manifested through cooperation between the Council for International Exchange (CIEE) and Princess Sumaya University of Technology to attract foreign students from several countries in all university faculties to study specialization courses, humanities and social sciences courses, or Arabic language courses for non-native speakers as a special study. All of this began from the beginning of the second semester of the academic year 2013/2014.

According to the third dimension (change in organizational structure), Princess Sumaya University for Technology in Jordan aims to maintain a high level of cooperation and coordination between departments and divisions within the university. The university's management works to review its organizational structure in accordance with the requirements of regulations and legislation, and makes adjustments to its organizational structure when new departments and positions are created. The university possesses a flexible organizational structure that responds to changes in both internal and external work environments, as well as a clear organizational structure for the duties and responsibilities of each position. Finally, the university adopts a philosophy of decentralization and delegates authority to middle and lower administrative levels, as evidenced by the diversity of the strategic plan's axes and strategic objectives, which are constantly modified and developed.

Regarding the first dimension (growth), the results of the combined dimensions of the dependent variable (strategic success) showed a high level of success, with an overall average of (4.35) for the intermediate variable axis, where the averages ranged from (4.39 to 4.32), which is of a high level. This means that Princess Sumaya University for Technology in Jordan has a high level of application of its indicators. It ranked first in the growth dimension with an average of (4.39), second in the retention dimension with an average of (4.34), and finally third in the adaptation dimension with an average of (4.32). All dimensions had a high level of importance in terms of application.

According to the first dimension (growth), Princess Sumaya University for Technology in Jordan aims to strive for the creation and diversification of academic specializations in line with the needs of the labor market, and has the sufficient capabilities to form alliances with other international universities to enhance the local and international competitive position. The university also diversifies its academic services by creating a variety of activities that meet the demands of different categories of students. The university continuously reviews its objectives for the purpose of development and expansion. Furthermore, the university aims to promote scientific research and innovation, and to contribute to the sustainable development of society

According to the second dimension (survival), Princess Sumaya University for Technology in Jordan strives to possess distinguished academic competencies that enable it to perform its activities in its academic environment. The university also follows up on the needs of students and maintains internal balance with them. It has the flexibility to easily deal with changes resulting from the application of new strategies, optimizes its resources, and regularly evaluates its capabilities to address any shortcomings in performance. The university encourages employees to provide new methods and ideas.

As for the third dimension (adaptation), it indicates that Princess Sumaya University for Technology in Jordan has the ability to continuously adapt to the requirements of the academic sector or emerging higher education. It has sufficient capabilities to adapt to the variables that occur in the external environment and also has alternative options to adapt to the changing and renewed needs of students. The university strives diligently to study and analyze the environmental variables surrounding it to determine how to adapt to them in the future. It possesses sufficient capabilities for strategic analysis to deal with challenges and predict future risks. Finally, the university has sufficient capabilities to quickly adapt to sudden events that occur in the internal work environment.

Proposals and recommendations:

1-Enhancing the use of scientific research methodology to help generate and acquire new knowledge for employees, increasing attention to skilled and knowledgeable employees, and creating a suitable environment that encourages them to stay and continue working.

2-Conducting more local and global market research to identify customer needs and desires.

3-Encouraging employees and promoting team values through organizing educational and training seminars that positively reflect on performance.

4-Employing and applying theoretical study concepts, which will be effective in developing work procedures and improving services provided.

5-Continuing to implement accurate and parallel employee training programs with the requirements of each stage, through the following procedures:

A- Holding courses to raise technical skills for employees, such as information security protection courses, artificial intelligence, and others.

B- Conducting workshops for strategic planning and involving managers, employees, and graduates to equip them with those skills.

C- Developing and testing additional models for dealing with different types of education.

6-Strengthening the role of university management to activate the role of strategic risk management, which affects the strategic performance of the university.

7-Updating and developing the current infrastructure and adopting modern technologies to support academic and administrative operations, such as updating the attendance and leave system and using artificial intelligence to analyze data and improve performance.

8- Developing postgraduate and scientific research programs in modern biological and technological fields to meet the needs of the local and global market.

References:

1. Ahmed Naveed and Iqbal Nadeen, (2014), "*Impact of Training and Development on the Employee Performance a Case Study from Different Banking Sectors of North Punjab*", Arabian Journal of Business and Management, Vol. 2, No. 4.

2. Abdel Hamid, Rabbab (2022), "***The concept of organizational culture***: A theoretical and applied review," International Journal of Public Policy, Volume 1, Issue (1), Cairo, Egypt.

3. Abdullah Abd Halid, RazmanRuzaimah& Muslim Rahmat, (2017), **A Review on Critical Factors of Governance to wards Sustainable Campus Operations**. **International Research and Innovation Summit (IRIS2017). IOP CONF. Series**: Materials Science and Engineering 226 (2017) 012057 doil: 10.1088/1757-y899X/226/1/012057.

4. Almarri Khalid &Boussabaine Halim. (2017), *The Influence of Critical Success Factors on Value for Money Viability Analysis in Public-PRIVAT Partnership Projects.* Projects Management Journal, Vol.48, No. 4, 93-106. Published online at www.pmi.org/PMJ .

5. Amoli, Sara Javan &Aghashahi, Farnouche (2016) .*An Investigation on Strategic Management Success Factors in an Educational Complex*, journal of Procedia - Social and Behavioral Sciences, Vol 230 : pp447-454.

6. Antonio Diaz-Andrade, Waldron Santana-Ormeño(2008).**Technological modernization of Peru's public registries [electronic resource]** , Hershey, PA : Idea Group Pub.

7. Al-Ajmi, Nasser Fahad Nasser, and Al-Sawalha, Ayoub Ahmed Mohammed (2021). **"The impact of situational leadership on organizational change**: The mediating role of strategic capabilities in the Kuwait National Petroleum Company" (Unpublished doctoral thesis). Al-Albayt University, Amman, Jordan.

8. Al-Amri, Saleh (2020), **"Production and operations management**," published article, Success Articles Encyclopedia, https://sst5.com/Article/2020/46.

9. Al-Jabri, Abdulhafiz (2021), "*The Role of Content Credibility in Enhancing Customer Loyalty (A Field Study)*", Administrative Research Journal, Volume 39, Issue (25).

10. Al-Khalifi, Ahmed Ali Yousuf. (2021). *"Requirements for organizational change leadership in intermediate schools in Al-Ahmadi Governorate*," Mansoura College of Education Journal, A113, V1, 2-26.

11. Al-Mashaqbeh, Reem and Al-Muqdad, Mahmoud (2022), "**The Degree of Academic and Administrative Leaders'** Practice in Al al-Bayt University for Change Management and its Relationship to Organizational Excellence" (Unpublished Master's Thesis), Al al-Bayt University, Al-Mafraq.

12. Al-Mangawi, Bahaa El-Din (2010), *"Change Management in Business Organizations: The Malaysian Experience Model" (Master's Thesis),* Department of Administrative Sciences, Journal of Northern Europe Academy in Denmark.

13. Al-Sabaawi, Younis, Khazaal, Basir, and Amin, Youssef (2019). *"Critical success factors in the application of higher education quality standards*: An analytical survey study of the opinions of a sample of administrative leaders and faculty members at Human Development University," Sulaymaniyah, Kurdistan Region of Iraq, Arab Journal of Administration, Volume 39, Issue 4, December 201.

14. Al-Taqazz Ibrahim (2020), *"Change and Modernization Management in Government Institutions*," Arab Journal of Scientific Publishing, Issue 26, Edition (2).

15. Alwan, Ali Saad (2020**), "Organization growth and life cycle,"** published research, College of the University, Kuwait.

16. Badr, Fatima, Al-Sabagh, Muath (2020), **"Organization Theory**", Published book, Syrian Virtual University, Syrian Arab Republic.

17. Bayzan, Hanan (2018), **"Academic Qualification for the Advancement of the Archival Profession.**..An Evaluative Study of the Archive Management Program at the Department of Information Studies at the Libyan Academy", Proceedings of the Second Scientific Conference entitled "The Archival Profession in the Libyan State: Challenges and Developments", held in Benghazi from December 23-24.

18. Bayzan, Hanan (2019), *"Information Architecture and the Importance of Introducing Professions and Jobs...A Contemporary Analytical Vision"*, Journal of Humanities and Social Sciences Studies, Volume 2, Issue (6), Libya.

19. Bayzan, Hanan (2022), *"The Impact of Technological Advancement on the Intellectual Contribution in the Field of Information Science,* Libraries and Archives...An Analytical Vision", Arab International Journal for Information Technology and Data, Volume 2, Issue (1), Libyan Academy for Graduate Studies, Libya.

20. Brooking, A (2006).**Intellectual capital: core assets for the third millennium enterprise** .New York, Thomas Business Press, p 85

21. Celine, F., (2018), **"Effects of Job-Stress on Employee Performance in an Enterprise: A microfinance Institution in Cameroon"**, Master Thesis, Centria University of Applied Siences.

22. Gomaa, Sayed (2019), *"Environmental Change Management Strategies and Their Impact on Job Performance", Scientific* Journal of Economics and Commerce, Egypt, Issue 551.

23. Gure, Naima Abdullahi (2010): **"The Impact of Motivation on Employee Performance: A Study of Nation link Telecom Somalia",** Master's thesis, University Utara Malaysia

24. Habishi, Nahi (2021), *"Assessing the Use of Risk Management in Modern Management Accounting for Value Chain Management - An Applied Study"*, Financial and Commercial Research Journal, Volume 22, Issue (3), Port Said University, Egypt.

25. Hashem, Sameer Mohamed (2022), *"Requirements for Applying Servant Leadership in Public Secondary Schools in Egypt (Analytical Study)"*, Journal of Scientific Research, Volume 1, Issue (41).

26. Hussein, Amra (2019), *"The impact of strategic intelligence on achieving strategic success of service organizations,"* Scientific Journal of Economics and Commerce.

27. Hussein, Huda (2018), *"Using strategic analysis of operating income to evaluate strategic success*: A case study of Northern Cement Company in Mosul," Tikrit Journal of Administrative and Economic Sciences, College of Administration and Economics - Tikrit University, Volume 2, Issue (42), pp. 106-124.

28. Idris, Al-Fadil and Al-Rous, Thabit (2022), *"The Role of Total Quality Management in Improving Organizational Performance Levels"*, Arab Journal for Scientific Publishing, Issue 40.

29. Jafar, Marwa (2016). **"The Mutual Relationship between Change and Organizational Culture and Its Impact on the Dimensions of Organizational Structure"**. Master's thesis, University of Baghdad, Iraq, Baghdad.

30. Jensrowold & Abrell, Carolin(2014):*Leaders commitment to change and their effectiveness in change- a multilevel investigation*، Journal of organizational change management

31. Khalif, Abdullah (2019). **"The impact of training program strategy on the performance of workers in the Jordanian Customs,"** Master's thesis, Faculty of Economics and Administrative Sciences, Al al-Bayt University, Mafraq, Jordan.

32. Koseoglu, Mehmet Ali & Barca, Mehmet &Karayormuk, Kemal (2009) *Astudy on the causes of strategies failing to success* , Journal of Global Strategic Management, Vol 3 , No 2 : pp 77-91.

33. McNamara. K. H. (2010) "**Fostering sustainability in higher education: a mixed-methods study of transformative leadership and change strategies",** Environmental Practive, Vol. 12 (1), Pages 48-58.

34. Mehran, Ibtissam (2022), *"Definition of Forecasting and Its Types*", Published Article, Al-Mrsal Electronic Magazine, www.almrsal.com.

35. Mohammed, Sanaa (2018), "*Cognitive Empowerment of Human Resources and its Role in Achieving Strategic Success*: An Applied Study in the Ministry of Science and Technology Integrated with the Ministry of Higher Education", Journal of Administration and Economics, College of Administration and Economics - Al-Mustansiriya University, Year 41, Issue (114), pp. 189-207.

36. Naamomi, Maryam (2020), *"The Impact of Organizational Culture on the Success of Digital Transformation in the Enterprise*", Journal of the Institute of Economic Sciences, Volume 23, Institute of Economic Sciences.

37. Nasser, Nourhan (2022*), "Methods of Attracting Customers and Outperforming Competitors"*, Published Article, Al-Mrsal Electronic Magazine, www.almrsal.com.

27. Sabawi, Younis, Khozal, Basir, and Ameen, Yusuf (2019). *"Critical Success Factors in Applying Higher Education Quality Standards: Analytical Survey Study of the Views of a Sample of Administrative Leaders and Faculty Members at the University of Human Development*," Sulaymaniyah, Kurdistan Region of Iraq, Arab Journal of Administration, Vol. 39, No. 4 - December 201.

28. Singh, Sanjay Kumar &Pradhan, Rabindra Kumar &Panigrahy, Nrusingh Prasad & Jena, LalatenduKesari (2019) *Self-efficacy and workplacewell-being: moderatingrole of sustainability practices, Benchmarking*: An International Journal: pp 1-19

29. Wiedemann, Crystal (2021), **The Great Transformation? The Cultural Implications of COVID-19**. Barrett Values Centre.

30. Zapata & Gomez (2021).**Intellectual capital**, organizational culture and ambidexterity in Colombian firms. Universidad de Antioquia UdeA, Medelln, Colombia.