



INTERNATIONAL JOURNAL OF
TRANSFORMATIONS IN BUSINESS MANAGEMENT

e-ISSN: 2231-6868, p-ISSN:2454-468X

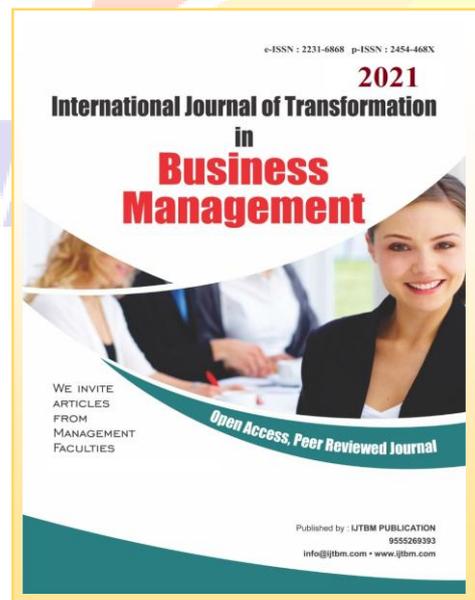
DIAGNOSING THE LEVEL OF INFORMATION
MANAGEMENT TECHNO-STRATEGY AT THE
UNIVERSITY OF DHI QAR

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Paper Received: 03rd September, 2021; **Paper Accepted:** 15th October, 2021;
Paper Published: 26th October, 2021

How to cite the article:

Jamal Kamel Thajeel, Assist. Dr.
Suhair Adel Hamed, Diagnosing
The Level of Information
Management Techno-Strategy at
The University of Dhi Qar,
IJTBM, October-December 2021,
Vol 11, Issue 4; 73-86



ABSTRACT

This research aims to clarify the diagnosis of the information management techno-strategy at the University of Dhi Qar, and in order to achieve this, the information management techno- strategy variable was measured in five sub-dimensions, and (20) colleges were selected representing the total of the colleges of the University of Dhi Qar as an environment for application. The research sample included (116) university leaders, and the questionnaire was used as a main tool in collecting data and information necessary for this study. For the purpose of data analysis and statistical processing, the study relied on a set of appropriate statistical methods such as the normal distribution test, confirmatory factor analysis, descriptive statistics, Pearson correlation coefficient and structural equation modeling based on ready-made statistical programs (SPSS V.23, Amos V.23). The study reached a set of results, including the interest of Dhi Qar University in the information management techno-strategy, so I decided to provide it with financial support by owning the necessary financial allocation for research and development in the field of information technology, in addition to the university's reliance on a technological infrastructure and improving the technology of information management strategy. As well as the distinction of its technological infrastructure and ease of use by its users and other beneficiaries The University of Dhi Qar expressed its adherence to knowledge makers, which contributes to enhancing the level of information management technology, with the university's interest in skill and experience, especially as it adopts a development and training strategy In the field of work on technological devices and equipment, as well as the interest of the university in technology efficiency and in improving the level of information management techno-strategy, as a result of providing devices, equipment, software and technological algorithms of high quality and efficiency, as a result of providing devices, equipment, software and technological algorithms of high quality and efficiency

Keywords: *Information management techno-strategy, University of Dhi Qar*

THE INTRODUCTION

Since the last years of the twentieth century and the beginning of the new millennium, the contemporary world has witnessed tremendous, qualitative and rapid developments in the field of technology, and its reflection on all forms of life. Where the business environment has become a complex environment characterized by rapid change and volatility, the technological revolution

and what was accompanied by a wide spread and high rates in the use of the Internet and information technology for various sectors, prompted organizations to adopt technology in facilitating their work, by searching for new strategies, facilitating the process of absorbing these technological changes and making them one of their main priorities to achieve excellence and success and obtaining a competitive advantage Information management techno- strategy is considered a

necessary tool for organizations working in the scientific research and higher education sector (universities), where the value of organizations has become in light of the technological revolution and the accompanying rapid developments, lies in the extent of their ability to manage their intangible assets, which is represented in the management of information that it owns it, so the organization seeks to invest in information techno-strategy and employ it to achieve effectiveness in its various activities.

THE FIRST TOPIC: THE THEORETICAL ASPECT (INFORMATION MANAGEMENT TECHNO-STRATEGY)

1. The Concept of Information Management Techno-Strategy

The interest in information management technology by organizations and its strategic use as a tool to lead the local and global markets began in the early nineties of the twentieth century, where information technology was harnessed for the purpose of achieving efficiency in performance and work (Curry & Joanne, 2000: 2). Information technology has been able to produce a set of new concepts that have spread and expanded in multiple joints of contemporary daily life processes, thus posing a cognitive challenge in the midst of a world full of computer activities and the global Internet and the

dominance of computing vocabulary knowledge in many scientific, economic and social fields. And other areas, which prompted business organizations to develop their strategy for information technology or the so-called (information management techno- strategy) (Al-Hadrawi , 2012 : 33) . The process of information management techno-strategy is an organizational process that has a multi-faceted nature because it represents a very complex school, as it deals with two basic ideas, namely information technology and strategic management, which represent an important belief in management thought, both of which have a significant impact on performance, which requires action A process of integrating strategic planning and information management technology in the organization, as planning for information management technology is a complex activity due to the increasing changes in them, so it requires work and technological knowledge together and (Campos, et al, 2009: 48).

2. The importance of information management techno – strategy:

The real challenge facing those involved in modern organizations is how to use information technology as a strategic tool to confront civilization and technological progress and confront major challenges in order to ensure the success and continuity of organizations in a competitive environment characterized by complexity and rapid

change (Mahdi, 2006: 12). Therefore, advanced information technology is considered as the beating heart of various organizations, as it contributes to the process of facilitating the smooth flow of appropriate and appropriate decisions, as well as directing and implementing its various operations, so it is a vital source for its survival, continuity and competitive advantage (Al-Lami, 2007: 166).

Building and developing information systems is directly related to the growth and progress of the organization's work, as the need to produce information has become not only to improve efficiency, but rather it has become one of the necessary and basic requirements for the sustainability and continuity of organizations, so the information management strategy has become the backbone of information systems in any organization for what It provides it with great support and assistance in carrying out various operations and assisting all administrative levels in all activities and decisions required by the work (Tamimi, 2011: 3).

(Ramadan et al., 2007: 7) believes that the importance of information management techno- strategy lies in achieving the following:

a. Achieving compatibility between the organization's information systems and network on the one hand, and the organization's goals and tasks on the other

hand, in order to ensure the contribution of information technology to raising the efficiency and performance of the organization, and cooperating in achieving its goals and strategies.

b. Work to achieve consistency and integration between the current and planned information systems in the future.

c. Seeking to make the most of the information technology resources in the organization.

d. Ensure that the organization's information systems and network follow up on technological development and raise its capabilities and efficiency, as required by its strategic role in the organization.

And adds (Hammoud, 2010: 70) to what was mentioned above, a number of benefits, namely:

The ability to reach creative ideas at various levels of the working administrative organization.

a. Quickly treat and solve problems by providing all the required information.

b. Increasing coordination and integration between the various organizational departments.

c. Increasing the quality and quantity of employees' performance level.

d. Increasing the efficiency and effectiveness of the organization because the information management technology will raise the level of performance efficiency and help reduce

the costs of the various means of communication by reducing paperwork.

3. Dimensions of information management techno- strategy:

a. Financial Support: Financial support is the extent to which the necessary funding is available to develop the work of organizational structures and the development of technologies within the organization, such as the purchase of modern technological equipment and devices. (Al-Ali, 2012, 87). While (Mohammed, 2008, 142) believes that without the availability of financial resources, the efficiency of the organizational process will decline, and therefore the matter will negatively affect the organization's achievement of its goals efficiently and effectively. The implementation of any new work programs requires an increase in the budget than it was in the past, so the financial support is considered one of the most important factors governing the success of any program.

b. Technology Infrastructure: (Al-Jubouri, 2009: 141) believes that the technological infrastructure is a strategic weapon, and it can help in building and strengthening the strategic capabilities of the organization by providing the best data and information inside and outside it, and in what strengthens the organization's relationship with customers, suppliers and other organizations. And (Masrek, 2009: 59) defines it as a group of information management technology

resources spread throughout the organization, which works to provide it with a solid foundation for information technology applications that supports and supports all the work and operations of the organization, so the emphasis on the development of this structure requires management. The organization works to activate the culture of continuous improvement efficiently and effectively for all systems, processes and mechanisms of work for the organization.

c. Technological competence: It means the efficiency of the hardware and software existing in the organization, and in other words it refers to the efficiency of the hardware and equipment used (Software & Hardware), that the physical components (tangible) are the equipment used to enter, store, transmit, trade, retrieve, receive and transmit information to the beneficiaries, and it also includes the calculator and the associated devices that include a set of things such as the central processing unit (CPU), the main board, the screen, etc. (Al-Hadhrawi, 2010: 72). Whereas, software represents the intangible components. From the calculator that assumes the task of operating the calculator, as it is a set of instructions, commands, and instructions that are given to computers that enable them to process data, perform logical and mathematical operations and extract the required results, in addition to controlling and supervising the units of the calculator

and coordinating work between them. (Al-Jubouri, 2020: 285

d. Knowledge makers : He defines them (Denisis & Griffin, 2001: 504) as simply those who add value because of what they know, while (Davenport, 2005: 10) sees them as having high degrees of experience and education, and the primary purpose of their work involves creating and distributing and application of knowledge. According to (Al-Ali, 88: 2012), knowledge makers represent the main pillar of the application of information management technology in the organization, and their importance is represented by the roles that they must play in their organizations in order to help them achieve their goals .

e. Skill and Experience: (Sadiq and Abu Hatab, 1994: 330) see that skill is the characteristics of a complex activity that requires a period of intended training and organized practice, so that it is performed in an appropriate manner, and it indicates learned or acquired behavior that has two basic conditions:

The first: that it be directed towards achieving a specific goal or objective.

The second: to be organized so as to lead to the achievement of the goal in the shortest possible time.

A skill is defined as something that can be learned, formed, or acquired by the learner,

through simulation and training, and that what he learns varies according to the type, characteristics, nature and purpose of the material. (Sahab, 1997: 213). As for experience, it is defined as acquired knowledge that describes the individual's practical experiences during the number of years of his settlement in the administrative position he currently and previously occupies. (Al-Shalma, 2009: 138), And (Al-Hamrani, 217: 2016) defines experience as the set of events and situations that the learner experiences at a certain moment in his life, whether they are past or existing events or situations, provided that they affect his behavior and leave traces in his personality and make him a formula that differs from others.

THE SECOND TOPIC: THE PRACTICAL SIDE (INFORMATION MANAGEMENT TECHNO-STRATEGY PRESENTATION & DIAGNOSIS)

The information management technology strategy was measured in this study through five dimensions (financial support, technological infrastructure, knowledge makers, skill and experience, technological competence) at Dhi Qar University. The descriptive statistical analysis of the dimensions of information management technology was concluded as follows:

Table (1) Analysis and discussion of information management techno –strategy

coefficient of variation %	T test	Relative importance	standard deviation	Arithmetic mean	The dimension	ت
13.62	13.820	71.6	0.452	3.58	knowledge makers	1
13.88	12.015	71	0.493	3.55	Skill and experience	2
16.34	9.414	70	0.572	3.50	Technological efficiency	3
17.83	8.774	70.2	0.626	3.51	technology infrastructure	4
20.02	7.283	69.4	0.695	3.47	Financial support	ت
9.77	16.280	70.4	0.344	3.52	information management techno-strategy	

It is clear from the results of the statistical analysis and as shown in Table (1) that the information management techno- strategy obtained a high-level arithmetic mean (3.52), and it is practiced with good relative interest (70.4%) by the University of Dhi Qar, to obtain a standard deviation (0.344) at the level year, and a relative coefficient of difference (9.77%) to indicate the homogeneity of the sample’s opinions and their agreement on the ability of Dhi Qar University to perform various interactive and harmonious organizational processes with its overall strategic plan, especially which it invests in the development of information technology as it represents long-term goals, by integrating its energies Humanity with its technological capabilities in order to achieve its organizational reputation, so that the information management techno-strategy in

general obtains the calculated (T) value (16.280) that exceeds its tabular value at the significance level (0.05) , to outweigh the calculated mean over the hypothetical mean, which indicates the availability of the variable, its practice and adoption, and its dimensions (financial support, technological infrastructure, knowledge makers, skill and experience, technological efficiency) were arranged according to the coefficient of variation, to be as follows:

The data in Table (1) shows that after **knowledge makers**, it ranked first among the five dimensions in which information management technology was measured, with a relative coefficient of variation (13.62%), and availability with an arithmetic mean (3.58) high, to be practiced with relative interest (71.6%) good from During the

possession of Dhi Qar University a group of distinguished working individuals who differ from their peers, as a result of their possession of high levels of knowledge, education, higher awareness, experience and skill that enable them to solve the work problems they face, as well as their tendency to put forward various new ideas that lead to develop its future work, the dimension in general obtained a standard deviation (0.452), which indicates convergence and homogeneity in the opinions of the sample. The calculated (T) value (13.820) was outweighed, and the dimension was measured through items (15-10), so that the six items obtained an arithmetic mean (3.82-3.37) High level, with a standard deviation (1.068-0.883), to arrange these paragraphs according to the relative difference coefficient (31.69%-23.99%), which showed compatibility and harmony with the university's tendency to adopt the strategy of attracting human resources from outside those who possess distinct intellectual abilities, skills and benefits, especially And it is concerned with creating an appropriate organizational climate for distinguished workers to improve their work and motivate them to be creative, as it deals with its distinguished workers as they are a precious wealth that should be preserved, as a result of their enjoyment of the ability to solve technological problems that they encounter in their work with high efficiency, the

university also relied on the distinguished among them in building and developing projects concerned with information technology, and having the ability to react quickly with unexpected technological problems, to get a relative level of interest (76.4%-67.4%) from average to good, and the six paragraphs got the value of (T) calculated (9.537-3.731), which is more than the tabular value (1.96) at the significance level (0.05).

While the second rank was in the dimension of **skill and experience**, with a relative coefficient of variation (13.88%) indicating agreement about the relative interest of Dhi Qar University (71%) in the knowledge possessed by workers about the mechanism of using technology, which accumulates over time and turns into experiences that enable them to deal with Technological problems efficiently and effectively. Overall, the dimension obtained a high-level arithmetic mean (3.55), with a standard deviation (0.493), and the dimension was measured through paragraphs (19-16), and all items received the relative attention of Dhi Qar University (74.6%-67%). from average to good, and a relative coefficient of difference (29.46%-23.94%) indicates the university's adoption of a strategy for developing and training in the field of work on technological devices and equipment, especially since it has specialized individuals who have the skills and experience necessary to deal with

the information technology environment, as its members tend to adapt to modern technological methods with a goal Improving their work, and constantly working on developing databases to benefit from them in completing their work , all items had an arithmetic mean (3.73-3.35) from moderate to high level, and the calculated mean was outweighed by the hypothetical mean of the items, which confirms the significance of the answer, and the calculated (T) values for all items (8.804-4.322), all of which exceed their tabulated value (1.96.) at the significance level (0.05). Referring to the outputs of Table (1), the researcher finds the **technological efficiency** in the third order, with a relative coefficient of variation (16.34%), as the University of Dhi Qar showed a good (70%) relative interest in the tendency to obtain the devices, technological equipment, computers, software and algorithms necessary to accomplish their tasks on the He completed a face, and the overall dimension scored on the average of my calculation (3.50), which is a high level . with a standard deviation of (0.572) at the general level, it indicates consistency and agreement in opinions, and the calculated T value (9.414) is less than its tabulated value (1.96) at the significance level (0.05), and the dimension was measured through paragraphs (24-20), It won the calculated (T) value (10.463-3.105), which suggested the university's tendency to provide high quality

and efficient technological devices, equipment and software, which prompted its members to have high confidence in those devices, programs and algorithms they work on, especially since they tend to build software applications and On demand when needed, and especially when its members use devices and software that enable them to flexible exchange of information between its various departments, as these devices are able to classify and save data and information with high efficiency, the five items were arranged according to the relative coefficient of variation (32.78%-20.58%), to get relative interest (75%-66.2%) from medium to good, and with an arithmetic mean (3.75-3.31) from moderate to high, and all of these arithmetic means have a significant answer.

And the **technological infrastructure** came in the fourth place, with a relative coefficient of variation (17.83%), about its availability with a high mean (3.51), and a standard deviation (0.626) to indicate the convergence of opinions, agreement and homogeneity about the relative interest of Dhi Qar University (70.2%) good in its tendency To own a group of information management technology resources contained therein, which includes devices and equipment and programs, processes, networks and users, which provide the university with its needs of information technology applications and to ensure its support and support in all its

activities and operations, so that the dimension gets the calculated value (T) (8.774) that supports the level of answers, and the dimension was measured in total through paragraphs (9-5), and the descriptive statistical analysis of its data resulted in all of them obtaining an arithmetic mean (3.82-3.28) from average to high level, to give the university its relative interest from average to good (76.4%-65.6%), and with a relative coefficient of difference (28.80%-23.82%) on the university's resort to owning information technology networks that facilitate the process of communication and cooperation. The use of modern technology contributes to the development of services provided to customers, especially since it has an updated database that facilitates the process of obtaining information in a timely manner, as the information technology infrastructure is characterized by ease of use by its beneficiaries, and all the paragraphs had the calculated T value (9.705-3.221), which exceeds its tabular value to indicate the availability of the paragraphs at the expense of the hypothetical mean.

Finally, after **financial support**, it ranked fifth, with a relative coefficient of difference (20.02%), about its availability with an arithmetic mean (3.47), and with a standard deviation (0.695) at the general level, to indicate the homogeneity and agreement of

opinions about the relative interest of Dhi Qar University (69.4%) in the good. Provide the necessary financial allocation to develop the work of the organizational structure and modernize and develop the technologies within it, such as purchasing and providing modern devices and equipment, and the dimension obtained in total the value of (T) calculated ((7.283), which exceeds its scheduled value (1.96), and the dimension was measured in total through the paragraphs (4-1), the preliminary descriptive statistical analysis of the data of its four paragraphs led to obtaining an arithmetic mean (3.65-3.33) from the average to the high level, to give its relative interest from the average to good (73%-66.6%), and with a relative coefficient of difference (32.76%-27.72). %) about the university's possession of the necessary financial allocation for research and development in the field of information technology, which prompted it to provide financial support to encourage its members, and motivate them to develop and improve their skills and expertise in order to achieve its goals, especially when it is concerned with providing the requirements of modern technological systems of hardware and software, As well as directing its financial resources better to develop its technical work, as the four paragraphs obtained a calculated (T) value (6.917-3.257), which is more than its tabular value (1.96) to indicate

the availability of the paragraphs at the expense of the hypothetical mean.

THE THIRD TOPIC: CONCLUSIONS

1. The University of Dhi Qar has shown that it is attracting a workforce characterized by academic qualifications, in line with the job specialization it assigns to them, in light of the skill and experience, as well as its reliance on male gender more than females.

2. The University of Dhi Qar was interested in the information management technology strategy, so I decided to provide it with financial support by owning the necessary financial allocation for research and development in the field of information technology, as well as using financial resources to develop technical work in a way that does not meet the ambition.

3. The University of Dhi Qar relied on the technological infrastructure, which improves the technology of information management, especially as it relies on internal information technology networks in facilitating the process of communication and cooperation between the various departments and university departments, as well as the distinction of its infrastructure.

Technological ease of use by its users and other beneficiaries.

4. The University of Dhi Qar demonstrated its adherence to knowledge makers and what

contributes to enhancing the level of technology and information management strategy, as it tends to adopt a strategy to attract human resources from outside those who have intellectual capabilities, skills and distinguished experiences, as well as their distinguished individuals with their ability to interact quickly with various unexpected technological problems.

5. It became clear that Dhi Qar University is interested in skill and experience, so it tried to improve the level of information management technology, especially as it adopts the strategy of development and training in the field of work on technological devices and equipment, as well as its tendency to encourage its members to constantly develop databases to benefit from them in providing various achievements.

6. Showing the university's interest in technological efficiency and in improving the level of information management technology strategy, as a result of providing devices, equipment, software and technological algorithms of high quality and efficiency, as these devices and software can easily tabulate and store data and information.

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