



The Reflection of IT Governance on the Organizational Performance of the IT Center and its Associated Units - Tikrit University

Lect. Suhaib Abdel Rahman Tuhma Al-Doory

Tikrit University, College of Administration and Economics, Department of Business Administration, Iraq

s.doory@tu.edu.iq

ABSTRACT

Information technology (IT) is considered one of the basic requirements for organizations due to its closeness to the concept of electronic management. Therefore, governance is an effective part in the field of IT within the current orientation of organizations, noting that the goal of this governance is reflected in ensuring oversight and achieving control within the framework of a strategy that suits the organization's goals, managing risks and resources, and delivering value at the appropriate time with the aim of raising the level of the organization's performance. This has increased interest in this field in a way that has given it a character of importance and at the same time enabling organizations to strive to provide the best practices to their clients. From there, the study has found an entry point to describe a case in (Tikrit University / Information Technology Center and its associated units in the colleges) by selecting a random sample with a total size of (68) respondents. A number of (55) answers are obtained from them, relying on the descriptive analytical approach and using the SpssV23 program. This situation was evident in the statement of the relationship and the impact it has on the reflection of information technology governance on organizational performance. The study has detected that there are significant correlations and influence between

ARTICLE INFO

Article history:

Received 20 Sep 2023

Received in revised form
20 Oct 2023

Accepted 20 Nov 2023

Keywords: information technology governance, organizational performance, information technology center

information technology governance and the organizational performance of the information technology center and its units at a rate of (63.5%). This indicates the effective contributions to crystallizing the cognitive framework for information technology governance, including the implementation of work mechanisms, laws, and instructions, including their basic concepts, while adopting an appropriate strategy linked to all risk indicators and required resources, and delivering value in a timely manner. This in turn is reflected in the reality of the information technology center's performance by increasing the improvement rates in organizational performance that has increased significantly, reaching the latest levels of excellence in service provision.

© 2023 *Hosting by Research Parks. All rights reserved.*

Chapter One General Framework of the Study

First: Introduction

In recent years, the issue of information technology governance has become one of the biggest concerns of business organizations, and in most projects, information technology has become an integrated part of the organizations' work to support, sustain, and grow the business. A successful understanding of the management of risks and obstacles associated with information technology, and as a result of enhancing the Board of Directors' understanding of its strategic importance, directly affects the success and continuity of organizations.

All business organizations today deal with the problems of adapting to the business environment, which is associated with uncertainty, risk, and change. The biggest challenge is how to build the right vision and how to use organizational resources to enhance responsiveness to the environment and determine exactly what products should be offered and in which markets. Using the means and appropriate strategic approaches to respond to these challenges leads organizations to succeed or avoid failure, the ambiguity of the future on the one hand, and the organizations' connection with stakeholders who work to ensure increasing the value of their investments and reducing the risk associated with investing in some projects. On the other hand, managements seek to develop and grow their organization, sometimes at the expense of some immediate benefits that concern stakeholders. To ensure the achievement of the aims of each party, organizations today seek to achieve the concept of organizational governance, which governs the relations between all those parties in a way that guarantees their rights. To achieve these goals, it seeks to invest in information technology and be distinguished in its performance. Reliance on information technology and systems has become greater in the process of providing services, as organizations have begun to use them to manage, develop and provide services and improve performance. The more efficient organizations are in providing the appropriate service, the more it has impact on their success and performance improvement. It is found that all theoretical frameworks have emphasized and are still emphasizing the importance of providing service to the beneficiary according to the best characteristics as a justifiable approach to developing organizations. This study is

an attempt in this context to enquire: Does information technology governance have a role in improving performance? What does the direction of the information technology center reflect?

Second: Statement of the Problem

Many organizations lack consideration of IT governance in order to obtain services provided to customers with the required quality or that meet the needs of customers, which leads to a lack of reliance on integrating information technology with organizational performance. In light of this, a set of questions can be set, which together constitute a basic problem for the study, as follows: Is there a clear vision at the Information Technology Center about the concept of information technology governance? Does the Information Technology Center have a clear vision of organizational performance? Are there correlations and influences between IT governance and IT center performance?

Third: Significance of the Study

The study has special importance from the fact that it attempts to use the tools provided by information technology and the cognitive revolution that accompanied the spread and use of information technology in performing the functions of organizations in our Iraqi environment, especially in the processes of providing services that meet the desires of customers. The study also demonstrates the importance of information technology governance - as a variable - which has begun to take a large space in management literature and commentary in general and in the field of management information systems in particular, with what can be reflected in organizational performance - as a variable - in the field of service production. In light of the above, the study has its significance in the following aspects:

1. At the academic level, the study addresses two new concepts in the field of business, represented by the reflection of IT governance and organizational performance, and follows up on what has been written regarding them to provide a conceptual and theoretical framework that provides the Iraqi and Arab library with the most prominent written books by prominent writers and organizations that have moved towards adopting these two concepts in their work.

2. The importance of this field study is evident in increasing the awareness of the researched center's management in adopting the concept of IT governance as one of the most important areas in the field of information systems. It enables the center to improve organizational performance and the services it provides, as it has become necessary for such organizations to use modern technologies in their work to achieve the best benefit from the potential and capabilities of IT in enhancing and developing the performance of these organizations.

Fourth: Aims of the Study

In light of defining the problem of the study and its significance, the study seeks to achieve a number of aims, whether at the academic level or at the applied level, as follows:

1. Providing theoretical and field milestones for the Information Technology Center on IT governance and its role in organizational performance.

2. Studying the current situation in the IT center under investigation and attempting to extrapolate the problems facing it on the one hand, and providing solutions related to the subject of the study and its direction on the other hand.

3. Contributing to the development of a theoretical and cognitive framework for information technology governance, including concepts and their reflection on the reality of the IT center.

4. Identifying modern concepts in the field (the concept of organizational performance), and clarifying their importance, benefits, implementation steps, and elements.

5. Reaching the results of the correlation, influence and significance relationships between the two investigated variables and attempting to interpret them and benefit from their results in addressing one or more problems in the IT Center.

6. Reaching a set of conclusions that can provide a set of necessary recommendations for the center under research.

Fifth: Previous Studies

1- A study by Wraikat (2010) entitled (*The role of information technology governance in improving performance: A case study on the Jordanian public sector*). This study aims to give an image of IT governance and determine its role in improving the performance of organizations. The conclusions of this study indicate that there is a relationship between IT governance and its pillars: responsibility, transparency, participation, and predictability. It also indicates that there is a relationship between information technology governance and performance.

2- A study by Abu Khadra *et.al.* (2007) entitled (*An experimental test of the maturity model as a measure of information technology governance implementation*). The aim of this study is to evaluate the application of information technology governance in Jordanian local banks. The results reveal that Jordanian local banks mainly apply awareness, effective communication, responsibility, and the dimensions of experience and skills, while do not work sufficiently with regard to the other dimensions (tools, automation, setting goals, standards, and policies, plans and procedures). The main recommendation for local banks is to pay more attention to IT governance. Professionals in Jordanian local banks must work more to increase the strength of information technology governance in all its dimensions.

3- A study by Argyropoulou (2007) entitled (*Effectiveness of information systems and organizational performance*). The study aims at determining the extent to which the organization can benefit from information systems to improve its business performance. The results of this study test a framework related to information systems and organizational performance by providing experimental evidence that demonstrates the positive statistical relationship between the effectiveness of information systems using financial and non-financial criteria on organizational performance. It recommends that the impact of the effectiveness of information systems on organizational performance is through the quality of the system, the quality of information, and the quality of providing services to the beneficiaries in the organization.

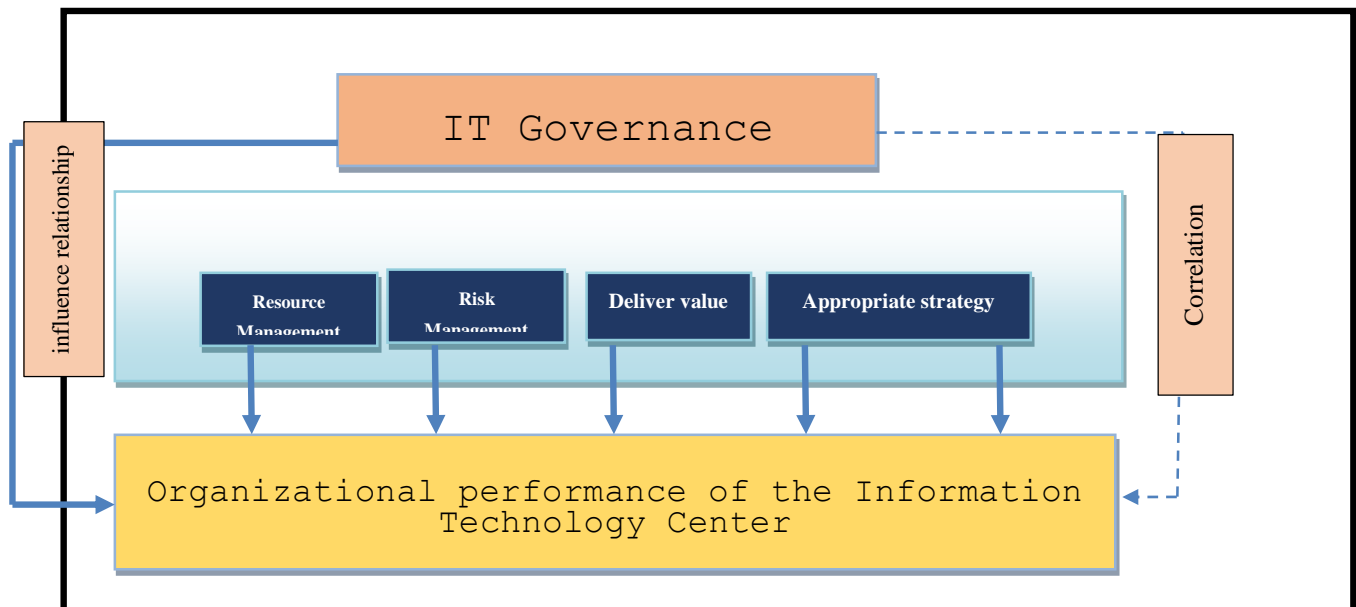
Comments on the previous studies: Through presenting the previous studies, the researcher has reached the following aspects:

1. The current study differs from previous studies in terms of the study model and dimensions, and this represents the research gap that is to be highlighted through the current study.

2. There is a difference and discrepancy between the results reached by previous studies and the current study due to the difference in dimensions and environments in which these studies were conducted.

Sixth: The Hypothetical Study Model

To complete the requirements of the study methodology, a hypothetical chart is formulated as shown in Figure (1) to address the study problem by measuring each of the study variables and their availability in the information technology center of the sample studied, which contributes to interpreting the results that are to be reached through the field study.



Seventh: Hypotheses

In line with the aims of the study and to test its chart, the study relies on two main hypotheses, as follows:

The first main hypothesis: There is no significant correlation between the dimensions of information technology governance, namely (appropriate strategy, value delivery, risk management, materials management, and the organizational performance of the information technology center).

1. There is no significant relationship between appropriate strategy and organizational performance.
2. There is no significant relationship between value delivery and organizational performance.
3. There is no significant relationship between risk management and organizational performance.
4. There is no significant relationship between resource management and organizational performance.

The second main hypothesis: There is no significant effect of information technology governance in its dimensions on the organizational performance of the information technology center.

Eighth. Research Methodology: The current study follows the descriptive approach in order to achieve the aims of the study, obtain detailed data, diagnose the phenomena and conditions existing at a specific time, and monitor the current reality as it helps to change the conditions that control the

phenomenon.

Chapter Two: Theoretical Background

Information Technology Governance

Information technology governance represents one of the areas of development in the use of modern information technology in terms of the possibility of benefiting from this technology to facilitate the implementation of administrative operations and improve their performance based on the related data that can be collected, stored, processed and circulated among many parties related to commercial and economic aspects. In view of the rapid and amazing developments that have accompanied the use of information technology by many international organizations in different countries, it has required many other organizations to prepare the necessary studies on how to enter the world of information technology so that they can keep pace with these developments and follow their path to be able to achieve its goals like many organizations that achieve benefits under the governance of information technology. Therefore, the following is addressed:

Section One: The concept of governance and its origins

Despite the importance of information for organizations, traditional theories show that researchers do not pay attention to it, not even to technical development at the time, as these theories considered technology and knowledge to be external factors that do not affect economic growth, and consider that the creation of wealth arises from three main factors: land, work, and physical capital (Duvina, 2003: 20). This situation can be understood when we return to one of the basic theories of traditional microeconomics, which believes that the economic system is based on the rational choices of economic agents and that they possess the full information and knowledge necessary to achieve their goals: Accordingly, the issues of information or knowledge required to make decisions were not the subject of research for classical researchers, if they were taken for granted. This is why they considered the accumulation of intangible capital and technical development as external factors that do not affect economic growth. Criticizing this concept, Harper Simon and other researchers affirmed the invalidity of the theory that calls for the complete rationality of individuals in decision-making and the availability of all information necessary for decision-making. He stressed that the capabilities of individuals are limited and that they cannot in any way obtain all the information and this is what we also find in Friedrich Hayek. Ronald Cowes analyzed in a famous article that organization theory solved the issue of transaction costs and that the transactions conducted by the organization cannot take place without costs, taking into account several factors. All exchange transactions face problems related to obtaining information and implementation, and all the problems that a person faces result from the lack of information and its asymmetry between the two parties of the exchange, and that obtaining information requires time and effort, so it is an expensive process (Al-Daya, 4, 2009).

Today we find that governance has many terms and concepts. There are many proposals put forward (Abu Al-Atta, 2012): governance of organizations – organizations that govern - as well as a number of other alternatives, such as: the method of exercising management authority in organizations, the method of Optimal management, corporate rules, honest management, etc. In this regard, it should be noted that there are supporters of the first choice according to the interpretation mentioned, but on the other hand, a

number of opinions agree to exclude the rule of organizations because of the word's connotation that organizations are the rulers or the actors, which may reflect the intended meaning. The wisdom of organizations is also excluded due to the immediacy, similarities, and similes linked to their linguistic structure: which causes the intended meaning to be lost. Governance of organizations is also excluded because its use may cause confusion with one of the Islamic theories called "governance theory," which deals with governance and political authority of the state. It was also decided to exclude the other proposed alternatives because they depart from the root of the word (h k m) which is equivalent to Governance in the English language. Hence, some focus on the concept of governance of organizations based on the weight (fā'ula) to be closest to the concept of the term in English, as it includes the meanings of governance and oversight through an internal oversight body (Governing Body) or an external oversight body (Regulatory Body), and it also maintains the root The word represented by (HKM), which cannot be excluded if we want to find a synonym for the term. It should be noted that this term was proposed by the Secretary-General of the Arabic Language Academy and was approved by a number of Arabic language specialists, including the Center for Arabic Language Studies at the American University in Cairo.

Accordingly, Oliver Williamson defined governance as (the various procedures put into practice by the organization in order to create internal coordination in order to reduce the costs and burdens of exchanges that the market currently faces). Abdel-Al (2007) defines it as the system through which the organization's work is directed and monitored at the highest level in order to achieve its goals and meet the necessary standards of responsibility, integrity and transparency. Al-Douri and Saleh (2009) define it as a set of mechanisms that ensure the strategic direction of the organization is drawn up, to control the variables of its internal environment, meet its requirements, and prepare to confront and adapt to the variables of its external environment, within an ethical perspective and with the availability of professional administrative capabilities to achieve the demands of all stakeholders, and the permanence of the organization's survival, free from the dominance of any individual in it. Zyngier (2004) defines governance as a framework of responsibility that ensures the expected benefits of a service or process in an organized and permissible manner. The term governance refers to all the administrative and organizational elements that must be provided to ensure a specific asset to be managed properly and in an ongoing manner. Through the proposition, we show that the governance of information technology is the responsibility of the Board of Directors and the executive management of information technology, and the main purpose of information technology is to achieve (harmony) between the organization's strategy and the information technology strategy.

Second: The importance of information technology governance

Information technology is necessary to manage information and knowledge for initiating and sustaining economic and social activities. These activities depend on the cooperation of global entities to be successful. Information technology is essential in many organizations to support and grow businesses. Many organizations distinguish between the potential benefits of producing technology as well as understanding and managing the risks associated with implementing new technology. Information technology governance is an integral element of organizational governance, which includes leadership, organizational structures, and processes that ensure the organization's information technology is assigned and expand the organization's strategies and goals. Since information technology governance leads to

achieving an appropriate strategy between information technology and the organization and reasonable measurement of performance, businesses depend on information technology as a complementary element to the organization's strategy in general (Eslami et. al., 2008, 73). Information technology governance is the process that describes organizations or governments that adopt an effective and secure mechanism for implementing information technology that can accomplish tasks, balance risks in the information process, and ensure that those organizations can achieve strategic goals. The mission of IT governance is to maintain consistency between information technology and practical objectives and develop advanced processes. The urgent desire to achieve maximum income, use IT resources reasonably, and properly manage the risks associated with IT are all among the priorities of IT governance (Jianmu, 2011, 4284). Senior management must be knowledgeable about information technology in order to make the best decisions. The importance of information technology governance in organizations is summarized in the following points: 1- Information technology governance enables effective management of customers' wants and needs within the framework of the organization's general strategy. 2- Information technology governance helps direct senior management and its participation towards achieving the interests of those dealing with the organization. 3- Information technology governance supports the rapid and complex development of information technology used in all fields.

Third: Objectives of information technology governance

There are a set of objectives that organizations seek to achieve by applying information technology governance (Iliescu, 2010: 93):

1. The best investment in information technology is by determining investment priorities according to the organization's need.
2. Determining the priorities for implementing information technology initiatives, so that priority is given to implementing information technology projects to the extent that they contribute to supporting the organization's strategy and adding value to its work.
3. Defining clearly the roles and responsibilities related to information technology, as well as the scope of responsibility and authority to which those roles and responsibilities are limited.
4. Achieving efficiency and effectiveness in information technology management, as information technology governance enables information technology executives to clearly lead information technology initiatives.
5. Reducing information technology risks, by defining the purpose and scope of each information technology activity, so it can be monitored and controlled. Moreover, defining the scope and functions of information technology more accurately and in proportion to the organization's goals and operations, which reduces risks. Also, providing mechanisms to manage all information technology components in the organization according to unified and pre-defined standards.

Fourth: Elements of information technology governance

1- Appropriate strategy

The strategy is a process that aims to achieve a competitive advantage through developing and supporting the harmonious relationship between the organization and information technology, and the idea behind this strategy is to be very comprehensive. But the question is how organizations can achieve this strategy (Grembergen, 2004, 7). The definitions of information technology governance clearly

confirm that there is an important feature of information technology governance, which is the compatibility of information technology with the organization, and in most cases it is called strategic fit. This is an important driving force for achieving business value through investments in information technology. Grembergen (2004, 7) indicates that appropriate strategy is achieved through a set of specific practices, which are as follows:

- 1- Forming an IT advisory committee to oversee decisions related to IT strategy and policy.
- 2- Basing IT decisions on broad strategic plans.
- 3- Preparing a position for the IT manager as a strategist who solves business issues related to IT.
- 4- Ensuring that IT customer service managers possess excellent communication and interpersonal skills.
- 5- Monitoring and preparing reports on the delivery of IT strategic plans.

2- Delivering value: The IT department offers value to organizations when projects are completed and this is conducted on time and within the specified budget. The IT department also adds value by meeting customers' expectations for basic IT services such as e-mail and Internet access. To deliver value, IT expenditures and IT ROI need to be well managed and evaluated (Portland, Oregon, 2005, 11).

3- Risk management: Portland, Oregon (2005, 19) indicates that internal control and policies enable the information technology department to evaluate and control many risks related to information technology projects and this includes many practices.

- 1- Applying principles found in IT best practices.
- 2- Using clear policies, procedures and resources to manage change.
- 3- Clearly defining the scope of the ERP system.

4- Resource management

The use of ideal assets and allocation of resources are success criteria for managing available resources such as data, hardware, software, skills, and human resources. When the organization adheres to good policies and procedures, it helps organizations to fully utilize existing resources and gain anticipation of new resources. The resource management process begins with analyzing the information technology resources currently available, then allocating the available information technology resources to the information technology project in particular, and finally implementing the information technology project. There is to be a review of resource performance every 6 months of project implementation (Miadin & Arshad, 2010, v1-534).

Section Two: What is organizational performance?

First: The concept of organizational performance

Organizational performance is the integrated system of the results of the organization's work in light of its interaction with elements of its internal and external environment. It includes the performance of individuals, the performance of the organization's departments, and the organization's performance within the framework of the economic and social environment. Organizations face challenges stemming from many economic, social, and political variables, as well as the rapid development of information technology, which has become the norm for most contemporary organizations. Therefore, knowing the organization's position, capabilities, and competitive capabilities compared to others who can be considered pioneers in the organization's field of work requires examining organizational performance

in order for the organization to produce a clear result and determine the position of others toward it (Al-Zahr, 2017, 40). The concept of organizational performance can be clarified by presenting the viewpoints of a number of researchers, including Khan et.al (2011: 3) who states that organizational performance is integrated with the organization's strategy, and whose ability adapts to the requirements of the environment, by achieving harmony between the business environment and its strategy to achieve optimal performance. On the other hand, Ebongkeng (2018: 9) states that it is the ability to achieve planned goals with the least capabilities and available resources through efficiency combined with reducing costs, matching standards, and reaching optimal performance for the organization. As for Alhammadi (218:318), he notes that it is the outcome of the efforts and operations undertaken by the organization, which is represented by its ability to employ its financial, human and material resources and direct them towards achieving its goals in light of the organization's interaction with the changing environment in which it operates.

Second: The importance of organizational performance

The importance of organizational performance is crystallized as it is the main focus of organizational success and its position in relation to organizations. The importance of organizational performance can be explained as follows:

1- Organizational performance stimulates the efforts of individuals within the organization towards developing the organization by defining the duties and responsibilities of each individual in the organization, as well as enhancing collective participation to achieve the organization's goals (Sanchez *et.al*, 2018: 5).

2- Organizational performance is the most comprehensive indicator of an organization's effectiveness, which measures its goals of survival, adaptation, and growth.

3- Organizational performance expresses the organization's ability to create the desired results in achieving the demands of stakeholders, as it represents the extent to which the organization can accomplish its work successfully, that is, it represents the final result that the organization wants to reach (Thonaz *et.al.*, 2017: 4).

4- Organizational performance contributes to strategic, financial and structural transformations and changes, therefore, this increases the organization's management's interest in performance, its importance and its various aspects.

5- Organizational performance contributes to revealing the gap between actual performance and planned performance.

Third: Organizational performance objectives

Measuring organizational performance shows how the IT department is improved, how its goals are achieved, and how its failure areas are identified. Performance allows for continuous organizational improvement, as this is done by measuring performance and using the results to begin the process of improvement and making change (Portland, Oregon, 2005, 25). The balanced scorecard for information technology is one of the measurement systems widely used in the organization. Everyone points out that there is no tool used in government agencies. Some of the writers mention that in the current scenario the performance measurement system of organizations is evaluated through the use of customer reviews twice a year. There is also something to appreciate the system as there will be several materials arriving

through information, through the website, documents and minutes of the meeting. Structures of the organization's performance measurement system for the information technology project are proposed. This includes the name of the IT project and the organization's IT goal, which is linked to the method of measurement and the status and justification of failure. Every IT project that is implemented must be evaluated every 6 months until the project is completed. Through this structure, the organization can take a clear picture of how to measure each IT project in support of achieving the organization's goals in general, and IT goals specifically. As a result, governance practices are linked to the five basic areas, which are essential factors in the decision-making process to reach self-imposed goals. Information technology governance achieves the alignment of information technology investments with the organization's goals and the use of information technology resources responsibly. All of this demonstrates that information technology performance is within the limits of the certified budget and the strategic plan for information technology. The principles of IT governance support the process of reducing IT risks through continuous examination of threats and system weaknesses to improve organizational performance, commitment, personnel development, and IT resource initiatives.

Fourth: Determinants of organizational performance

The determinants of organizational performance can be explained as follows: 1- setting standards for organizational performance that are unrealistic and illogical and are not consistent with the goals and strategy of the organization, and it is considered one of the determinants that negatively affect organizational performance. 2- The organization's inability to adapt to rapid developments in the surrounding environment is one of the most influential determinants on organizational performance (Aning, 2012: 49). 3- Focus on the short term, as the organization provides information about its current performance for a short period, and does not focus on organizational performance in the long term, which is represented by the quality of products, customer satisfaction, and employee satisfaction, which are linked to the organization's goals. 4 - Difficulty in identifying the most important priorities, aspects, and variables related to organizational performance (Sabah, 2010: 97), 5- Weakness in how to optimally exploit the resources available to the organization and resources outside the organization, in addition to the lack of comprehensive reports on organizational performance, which are the determinants of performance. The organization's lack of awareness of the gap between planned performance and actual performance and addressing the causes of the difference, as well as the lack of accurate and appropriate definition of the tasks assigned to working individuals, and the distribution of powers among them, as well as the difficulties associated with work and ongoing routine within the organization, so performance must be monitored and followed up on an ongoing basis.

Fifth: The theoretical relationship between the study variables

Information technology governance plays a distinct role in improving and developing organizational performance, by supporting various functions and areas of work through increasing administrative communication channels between various departments. It helps managers bring about superior performance improvements in the organization's work by providing information systems to make decisions that contribute to enhancing organizational performance. Therefore, organizational performance is the final result of any work in the organization in a way that achieves the organization's

goals. Information technology governance also provides many opportunities to support organizational performance by achieving leadership and innovation in business to support the organization's competitive capabilities, work on optimal exploitation of the organization's resources, increase productivity, and obtain a larger market share. In addition, information technology works to create new products directed toward customers.

Chapter Three: Practical Framework of the Study

First: An overview of the Information Technology Center at Tikrit University

The Computer and Information Center was established in August 2006 after the growing urgent need for such a center to provide the university with expertise in the field of software, training, the Internet, and computer maintenance. The database unit, which was linked to the Office of the Assistant President for Scientific Affairs, was transferred to the center with its staff to be one of the center's units to include five units, namely the networking unit, the database unit, the maintenance unit, the training unit, and the research and development unit. In 2011, the center's units were changed into divisions, namely (Training Division, Software Division, Networking Division, and Maintenance Division). In 2017, the name of the center was changed to (Electronic Computer Center), and the names of the center's divisions were changed to (Technical Training Division and Systems and Software Division), and the Maintenance and Networks Divisions were merged to become (Computer and Networks Maintenance Division) with the creation of (Administrative Affairs Division). In 2023, the center's name was changed to (Information Technology Center) and the names of the center's divisions were changed to (Training and Technical Support Division) and (Website Division).

Second: Activities of the Information Technology Center

The center's divisions have designed several programs and monitored their work in addition to developing the performance of previous programs. Among the most important programs designed are: the electronic examination program for academic and job promotions, computer and English proficiency exams, the appointments program, the university structure organization program, the design of the university's electronic management system, and also the establishment of an MS-PROJECT course for the staff of the Construction Department using electronic programs to manage and implement projects at Tikrit University. Moreover, operating the university's smart boards, conducting strengthening lessons for a group of Computer Science Department students in developing software in databases, networks, and other programs that can be used to serve the community and provide job opportunities for students after graduation.

Practical Framework of the Study

Third: Testing reliability and validity

Reliability refers to the stability of the results when the measure is repeated on the same sample and under the same conditions. It is calculated using the split-half method using the Pearson equation, whose value is (0.86), which represents the reliability of half the scale. In order for the scale as a whole, the Spearman-Brown equation is used, which reached (0.92), and the validity coefficient, which is the square root of the reliability coefficient. The reliability and validity of the test indicate the veracity of the questionnaire statements and their expression of the research topic at a high level, and also indicate a high level of internal consistency between the items of the questionnaire list, which makes the items highly scientifically acceptable and suitable for data collection.

Fourth: Description of the dependent factor scale (organizational performance).

The respondents are divided according to the performance scale items into three categories, with the highest percentage being in the *agree* category, as shown in Table (1).

Table (1): Distribution of respondents according to the items of the organizational performance scale

No.	Performance Scale	Recurrence	Percentage
1	Agree	43	78.2
2	Neutral	9	16.3
3	Not Agree	3	5.5
Total		55	100%

The table is prepared by the researcher based on the questionnaire form

It is clear from Table (1) that 78.2% of the respondents answered within the “agree” item, and 16.3% answered with “neutral,” while 5.5% of the respondents answered with the “disagree” item. It is concluded from this that most of the respondents agree on the items of the scale and this reflects positively on the level of performance of the respondents.

Fifth: Testing the Hypotheses

1- Appropriate Strategy

The results show that the lowest value is (15) and the highest value is (27) with an arithmetic mean of 23.54 and a standard deviation of 2.78. The respondents are divided using the range law. To identify the correlation between the appropriate strategy dimension and organizational performance, the simple Pearson correlation coefficient is used, which has a value of 0.739 and indicates a positive, significant relationship between the two variables according to P-Value = 0.000. It can be concluded that the appropriate strategy dimension has a significant correlation with the level of organizational performance, as shown in Table (2).

Table (2): Correlation between the appropriate strategy dimension and organizational performance

No.	Strategy categories	No. of categories	%	organizational performance Mean	R- Value	P-Value	Significance
1	Low (15-18)	4	7.3	20.50	**0.739	**0.000	Significant
2	Medium (19-22)	12	21.8	25.75			
3	High (23-27)	39	70.9	26.39			
Total		55	100%	**Significant at 0.01 probability level			

The table is prepared by the researcher based on the results of Spss, V23

2- Value delivery:

The results show that the lowest value is (14) and the highest value is (24) with an arithmetic mean

of 21.32 and a standard deviation of 2.08. The respondents are divided using the law of range. To identify the correlation between the value delivery dimension and organizational performance, the simple Pearson correlation coefficient is used, which has a value of 0.478 . It indicates a positive, significant relationship between the two variables according to P-Value = 0.000, it can be concluded that the value delivery dimension has a significant correlation with the level of organizational performance, as shown in Table (3).

Table (3): Correlation between the value delivery dimension and organizational performance

No.	Value Delivery categories	No. of categories	%	performance Mean	R- Value	P- Value	Significance
1	Low (14-16)	3	5.5	19.23	**0.478	**0.000	Significant
2	Medium (17-19)	8	14.5	22.25			
3	High (20-higher)	44	80	26.59			
Total		55	100%	**Significant at 0.01 probability level			

The table is prepared by the researcher based on the results of Spss, V23

3- Risk Management:

The results show that the lowest value is (12) and the highest value is (21) with an arithmetic mean of 18.18 and a standard deviation of 2.29. The respondents are divided using the range law. To identify the correlation between the risk management dimension and organizational performance, the simple Pearson correlation coefficient is used, which has a value of 0.478. It indicates a positive significant relationship between the two variables according to P-Value = 0.000, it can be concluded that the risk management dimension has a significant correlation with the level of organizational performance, as shown in Table (4).

Table (4): Correlation between the risk management dimension and organizational performance

No.	Risk Management categories	No. of categories	%	organizational performance Mean	R- Value	P- Value	Significance
1	Low (12-14)	5	7.3	9.1	**0.497	**0.000	Significant
2	Medium (15-17)	12	21.8	21.8			
3	High (18-21)	38	70.9	69.1			
Total		55	100%	**Significant at 0.01 probability level			

The table is prepared by the researcher based on the results of Spss, V23

4-Resource Management:

The results show that the lowest value is (9) and the highest value is (18) with an arithmetic mean of 16.10 and a standard deviation of 2.06. The respondents are divided using the range law. To identify the correlation between the resource management dimension and performance, the simple Pearson correlation coefficient is used, which had a value of 0.665 and indicates a significant positive relationship between The

two variables are based on P-Value = 0.000. It is concluded that the resource management dimension has a significant correlation with the level of organizational performance, as shown in Table (5).

Table (5): Correlation between the resource management dimension and organizational performance

No.	Resource Management categories	No. of categories	%	performance Mean	R- Value	P- Value	Significance
1	Low (9-11)	3	5.5	21.33	**0.478	**0.000	Significant
2	Medium (12-14)	9	16.4	23.11			
3	High (15-18)	43	78.1	26.70			
Total		55	100%	**Significant at 0.01 probability level			

The table is prepared by the researcher based on the results of the statistical program SPSS, V23

Sixth: Determining the regression relationship between the main variable and its dimensions and their impact on the dependent variable, organizational performance

A multiple regression analysis is conducted to determine the effect of each dimension of information technology governance individually on the level of organizational performance and the effect of the dimensions combined on the level of organizational performance, and to explain the overall effect of the dimensions of information technology governance on the changes occurring in the level of organizational performance, as shown in Table (6) which clarifies the following results:

Table (6): Regression relationship between the research variables and the dependent variable

The effect of the main variable individually					The Total effect of the independent and dependent variables		
Subvariables	R ² Value	F-Value	P-Value	Significance	R ² -Value	F-Value	P-Value
Appropriate strategy	0.274	19.366	0.000	0.01	0.635	21.728	0.000
Deliver value	0.260	18.579	0.000	0.01			
Risk Management	0.442	41.941	0.000	0.01			
Resource Management	0.546	63.650	0.000	0.0			

The table is prepared by the researcher based on the results of the statistical program, 23SPSS, V

It is clear from Table (6) that the best variable when entered alone in determining the impact relationship is the resource management dimension based on comparison measures, which is the significance of the model (F) and the lowest and highest value of the coefficient of determination, in which the value reached $R^2 = 0.546$. This means that 54.6% of the changes occurring in the level of organizational performance are due to the resource management dimension, while the value of $R^2 = 0.442$ is for the risk

management dimension. This in turn means that 44.2% of the changes occurring in the level of organizational performance are due to the risk management dimension. While the value of the coefficient of determination is $R^2 = 0.274$ for the appropriate strategy dimension, which means that 27.4% of the variations occurring in the level of organizational performance are due to the appropriate strategy dimension, while the value is $R^2 = 0.260$ for the value delivery dimension, which means that the value delivery dimension explains 26% of the changes occurring in the level of organizational performance.

When all dimensions of information technology governance are included to demonstrate their impact on the level of organizational performance, the result indicates that 63.5% of the changes occurring in the level of organizational performance are due to the dimensions of information technology governance included in the study, while the remaining percentage may be due to other dimensions that are not included in the current research.

Conclusions

In light of what the researcher addresses in the study, a number of conclusions are reached, which constitute a basic rule that can be adopted in constructing recommendations, which are as follows:

1. The study sample respondents have clear future knowledge of the information technology strategy, despite the fact that this strategy is compatible with the organization's purposeful strategy.

2. The indicators suggest the effective use of information technology in the organization in a way that supports the level of actual performance of the organization. However, this situation may be faced by some lapses that prevent it from being implemented, but they are not at the level of threat that reduces the fundamental efficiency of this technology.

3. The resources in the researched organization are almost sufficient to support the IT governance of and seek to embody its action in the field. This indicates to us its reliance on a budget as well as taking precedence when allocating those resources in a way that seeks to support its capabilities in the field of meeting the set strategic goals.

4. The Information Technology Center, sample of the study, has a serious approach to diagnosing deviations in a way that paves the way for providing the best services, which means that the aforementioned organization has exerted itself in order to provide distinguished, flawless performance.

5. The results reveal a positive correlation between information technology governance and organizational performance. This relationship is strongest with performance measurement as it represents the final result resulting from the interaction of these dimensions (appropriate strategy, risks, resources, and value delivery with organizational performance).

6. Resource management is the most highly correlated, with risk management for information technology next in correlation. The two dimensions of appropriate strategy and value delivery are next to them, which means to us that the correlation (635%) between the elements of information technology governance and its dimensions in the center of the study sample is the most closely related in light of organizational performance. This means that these elements have the greatest effect in determining the degree of correlation between the variables of the phenomenon under study.

Recommendations

In order to complete the methodological requirements, in light of the theoretical and applied

framework and based on the results reached by the study and the reached conclusions, the researcher has found it useful to present the following recommendations:

1. Working to ensure permanent communication between the information technology manager with the various organizational committees. Constant communication with the various organizational committees to indicate the nature of the risks and threats that accompany information technology, so that every cost results in a satisfactory return for the beneficiaries. This requires constantly reviewing the policies related to information technology and in a manner Ensures governance of information technology in an effort to support the decision-making process prevailing in it.

2. Working to direct the researched organization towards electronic activities so that it can deal with them and provide the best services to its customers.

3. The need for the researched organization to realize the dimensions of information technology governance and then invest in it in order to identify the needs of its customers, which would enhance its capabilities and achieve its competitive advantage.

4. The necessity of seeking to employ information technology as a tool for managing relations between the units of the center under study and managing relations between the organization itself and relevant external parties.

5. The need for the organization to intensify its efforts more regarding diagnosing deviations in a way that paves the way for providing the best services, which means that the aforementioned organization must exert itself in order to evaluate its organizational performance in a hidden manner so that it is free of any defects.

Arabic References

1. Al-Daya, M. Y. (2009). **The impact of the use of accounting information systems on the quality of financial data in the services sector in the Gaza Strip (A field study)**. M.A. thesis (unpublished), College of Commerce - Islamic University of Gaza, Palestine.
2. Abu Al-Ata, Nermin, (2012), **Organizational Governance as a Path to Progress**. <http://www.cipe-arabia.org/files/html/art0811.htm>.
3. Abdul-Al, Tariq, (2007). **Corporate Governance - Public and Private Sector Companies and Banks**. 2nd ed., University House, Cairo - Egypt.
4. Al-Douri, Z. M. and Saleh, A. A. (2009). **Empowerment Management and the Economics of Trust**. Dar Al-Yazouri for Publishing and Distribution, Amman - Jordan.
5. Al-Zahr, R. (2017). **The role of organizational learning in improving the performance of the institution / a case study of the Gypsum and its Derivatives Corporation - Oulad Jalal – Biskra**. Unpublished M.A. thesis, College of Economics, Commerce and General Management, Mohamed Khidir University - Biskra, Algeria.
6. Sabah, Sh. (2010). **The impact of administrative organization on the performance of small and medium enterprises / an applied study of some small and medium enterprises in the state of Setif**. Unpublished M.A. thesis, College of Economics, Commercial and Management Sciences, Farhat Abbas University – Algeria.

B-English References

1. Duvinage, Frederic, (2003), Economic base sur la connaissance et gouvernance territorial de la connaissance-unenouvelle grille de lecture pour le development economique endogene au niveau territorial "these de doctorat, univerite de Nancy II. France.
2. [http://www.creg.acversailles.fr/IMG/pdf/Le government d entreprise.pdf](http://www.creg.acversailles.fr/IMG/pdf/Le_government_d_entreprise.pdf) .
3. Nick Milton : Governance framework for Knowledge Management: Knoco stories: Governance framework for Knowledge Management <http://www.nickmilton.com/2009/07/governance-framework-for-knowledge.html#ixzz1JY1NVpzz> .
4. Eslami, Fatemeh Nasser, & et. al. (2008), Classification of IT Governance Tools for Selecting the suitable one in an Enterprise, the end of North kargar- Iran Telecommunication Research Center .
5. Jianmu, Ye, 2011, A Research on Enterprise IT Governance and Its Framework, School of management, WHUT, wuhan, china, 430070, jianmuye@yahoo.com.cn
6. ILIESCU , Florin-Mihai , 2010, Auditing IT Governance, Informatica Economica vol. 14, no. 1/2010, office@infologica.ro .
7. Van Grembergen W., 2002, "Introduction to the minitrack: IT Governance and its mechanisms". Proceedings of the 35th Hawaii International Conference on System Science(HICSS), IEEE .
8. Portland, Oregon, 2005, Best practices for information technology governance, office of the city Auditor, Auditor services division.
9. Maidin, siti sarah & Arshad, Noor Habibah, 2010, IT Governance practices Model in IT project Approval and Implementation in Malaysian public Sector , International Conference on Electronics and information Engineering.
10. Gheorghe, Mirela, 2010, Audit Methodology for IT Governance, informatica Economica vol. 14, no. 1/2010
11. Khan, Raja Abdul Ghafoor & Khan, Furqan Ahmed & Khan, Muhammad Aslam, 2011, Impact of Training and Development on Organizational Performance, Global Journal of Management and Business Research, Vol.11, Issue.7, University of Lahore, Pakistan, PP: 1 – 7.
12. Alhammadi, Ali Hassan Y. & Alhammadi, Amer Hassan & Ahmad, Abd Rahman Bin., 2018, Leadership, Strategic Planning, Organizational Performace and Innovation: A Case of Dubai / UAE Public Sector, International Journal of Management and Information Technology, Vol.
13. Ebongkeng, Helen, 2018, Organizational Change and Performance/ Case Study in African Financial Company SQFINA.S.A. Cameroon, Master of Business Management, **Centria University of Applied Science**.
14. Sanchez, Encarnacion Garcia & Morales, Victor J. & Rojas, Rodrigo Martin, 2018, Influence of Technological Assets on Organizational Performance Through Absorptive Capacity Organizational Innovation and Internal Labour Flexibility, Sustainability Journal, Vol.10, No.770, University of Granada, Spain, PP: 1 – 25.

15. Thomaz, Joao P., 2017, Organizational Performance Measurement and Evaluation Systems in SMES: The Case of the Transforming Industry in Portugal, Doctor of Philosophy in Consultant Management, **University of Evora**
16. Aning, Akwasi Agyeman, 2012, Effects of Outsourcing on Organizational Performance / The Case of Selected Financial Institutions in Kumasi, Master Thesis in Business Administration, School of Business, Alto University