

## **CHAPTER II**

### **LITERATURE REVIEW**

A literature review has viewed as a digestion of previously researched data generated by scholars, searchers, or academicians. The review of the previous literature is to acknowledge the reader about other researchers' perspectives on the particular topic. It attempts to synthesize and evaluate the material and information.

#### **2.1. Theoretical / Conceptual Basis**

##### **2.1.1 Organizational Behavior Theory**

Organizational behavior theory or organization behavior (According to Robbins in Butarbutar.2021) is a study that explores the influence of individuals, groups and structures on behavior in organizations with the intention of applying supporting knowledge to optimize organizations. In this case organizational behavior is closely related to situations related to work, work, absenteeism, productivity, human performance, and management. Meanwhile, according to Nugroho (2019) that the more main focus in managing behavior in organizations is how to obtain, develop and apply knowledge and expertise to members of the organization.

##### **2.1.2 Performance**

###### **Definition of Performance**

Actual performance, sometimes referred to as work performance, actual performance, or actual accomplishments that an individual has made, derives its meaning from the word "job performance". As Robbins (2016) said that performance is a function of Ability,

Motivation, and Opportunity. According to Rivai in Adamy (2016) employee performance is crucial in the company's attempts to attain its goals since performance is genuine behavior that is demonstrated by everyone as work performance created by employees in accordance with their roles in the organization. According to Endrianto (2021) performance evaluation or assessment is a technique used by corporations to gauge worker performance. As a result of the performance appraisal process, employees' previous work performance is assessed, and/or future work performance forecasts are made. According to the statement above, it can be inferred that performance is the outcome of work completed by workers within a specific timeframe while carrying out their duties and responsibilities in order to advance an organizational goal.

### **2.1.3 Theory of Resource Based View (BRV)**

#### **Definition of Resource Based View Theory**

View based on resources According to one hypothesis, a business can get a competitive edge through utilizing resources, which will help it become more sustainable (Barney, 1986). The basic approach of the Resources Based Theory is a knowledge of the relationship between resources, capabilities, competitive advantage, and profitability in order to comprehend the mechanism for maintaining competitive advantage from time to time. In relation to the meaning of the RBV, Wernerfelt (1995) contends that a company's resources are crucial to gaining a competitive advantage, which will have an impact on the profits of the company. The issue with internal resources is the main concern in the RBV concept. Internal resources in it are human resources. Human sources play an necessary position in bringing a company/organization to progress and strengthen.

#### **2.1.4 Organizational performance.**

Organizational performance is a fundamental and important concept for business organizations, and it represents the common denominator of the interest of management scholars, and it is almost a comprehensive phenomenon and a pivotal element for all branches and rights of administrative knowledge, and despite a large number of research and studies dealing with performance, no agreement has been reached on a specific concept for its. and despite the multiplicity of studies that dealt with the issue of performance and the institutions' continued interest and focus on its various aspects, organizational performance remains a fertile field for research and study due to its close association with various environmental variables and factors whether internal or external.

The concept of performance in general refers to that act that leads to the completion of the work as it should be done, which is characterized by inclusiveness and continuity, and therefore in this sense it is considered the main determinant of the success of the organization and its survival in its target markets, and at the same time, it reflects the extent of the organization's ability to adapt to It showed it, or its failure to achieve the required adaptation (Al-Dawi (2010), and accordingly it can be said that organizational performance is the primary means for any institution that wants to reach the stage of superiority and excellence, and achieve its strategic goals (Al-Ansi 2019).

##### **a. The concept of organizational performance improvement:**

Organizational performance is one of the administrative terms that are almost the most frequently used term in the literature of various administrative sciences, as many writers dealt with it directly or indirectly, and it represents the basic foundation and the goal that

all departments of public and private organizations seek to improve. The difference or relative convergence of points of view on the concept of organizational performance is due to the diversity of goals and directions of writers and performance researchers, and the following is the presentation of the group's views of researchers and writers on this concept.

Daft (1992,120) believes that organizational performance is the ability of the organization to achieve it through the use of available resources in an efficient and effective manner. Al-Enezi and Khalil (2005) agree with him that organizational performance is the ability of the organization to use its resources efficiently and effectively to create success.

**b. Importance of improving organizational performance:**

The issue of organizational performance is of great importance for business organizations in general and investment business organizations in particular, as it constitutes an essential aspect; Through it determines the success or failure of organizations, but is considered the most extensive of the effectiveness of the organization, which reflects its ability to achieve its strategic goals of survival, adaptation, and growth. Dosa and Hussein (2008) believe that The study of organizational performance helps to reveal the extent of the organization's ability to face environmental challenges and the degree of suitability of strategic actions to the organization's goals and resources. It ensures that the changing needs of customers are met and achieves the greatest return for the organization for the purpose of achieving its goals and those of those who deal with it. The importance of improving organizational performance lies in the fact that it supports decision makers to identify the strengths and weaknesses of the

organization, which helps them to strengthen the weaknesses in the organization and to draw plans and policies that help support them and exploit the strengths and invest them optimally.

**c. Measures of Organizational Performance Improvement:**

Organizational overall performance measures face many challenges represented in the specific concepts and popular warning signs of the exceptional dreams and nature of companies and the unique goals of the parties related with them, which requires figuring out what are the excellent measures that can be used in performance and the source of facts accredited in the size and how to combine extraordinary measures to grant a practical photo of the organisation (Al-Ghaliby and Idris, 2007). Several measures have emerged in order to identify how to measure the performance of business organizations, and these measures differ from one goal to another and from one strategic direction to another. There are two types of measures of organizational performance:

- 1- Single measures: They are measures concerned with achieving specific goals for a particular aspect of the organization, including financial performance, marketing performance, adaptation to the environment, value-added, and performance of individuals and stakeholders (Al-Dulaimi, 1978: 87).
- 2- Composite standards, which are measures that include both efficiency and effectiveness, if business organizations strive to grow using centralized standards that are flexible on the one hand, and comprehensive on the other hand (Al-Khatib, (86: 2002)

Organizational performance is a broad concept that includes many essential concepts related to success, efficiency, effectiveness, and the actual plan in terms of quantity and quality. It is what was relied upon in this study, in order to fit in with the objectives of the current study.

### **2.1.5 Information Technology.**

#### **a. Information technology concept:**

There are numerous concepts of information technology, shaped by the perspectives of writers and researchers. Attempting to synthesize these perspectives into a unified concept is challenging, given the variance in their scientific references and intellectual foundations. The term 'technology' finds its origins in two words: 'techno,' signifying art, skill, workmanship, and craft, and 'logy,' derived from 'logs,' which refers to science or study. Some translate the term 'technology' into 'technical' or 'technical' in Arabic, while others perceive it as 'technology' or 'technique'. (Alsamraee, 2002:35).

The Council of the Advisory Council for Applied Research in Britain defined the term information technology as dealing with the scientific, technological, and engineering fields in addition to the management methods used in processing information and its applications for computers and their interaction with people and machines; As well as matters related to social, economic and cultural aspects(Badr,2000:39).

Reix also defined it as a set of technologies that allow the entry, processing, storage, and transmission of information based on the principle of electronic processing (Reix,1995:58).It was also defined as "the tools and techniques used by information systems to implement computer activities of all kinds and applications, and include both

computer hardware, computer hardware, computer programs, storage technology, and communication technology."(Yaseen,2009:44).

More comprehensively and more precisely, information technology is “the mating and interdependence between advanced computer technology and communication technology of various types and trends, which have achieved the possibility of transmitting a huge amount of information at high speed, regardless of time and place, all the way to information networks and at the top of which is the Internet”(Aldlahmh,2007:237).

**b. The importance of information technology:**

Information technological know-how is the "vital nerve of the organization's activity"; The lack of it leads to terrible decision-making; The significance of information science lies in the following:

Information science works to deliver about radical adjustments in all components of the organization, its business, products, and markets, due to its use in the a variety of things to do of the company.

Drives the company to respond and adapt to the necessities of the environment; the utility of the thinking and strategies of data technology in businesses requires them to seize up with development in order to avoid the opportunity of isolation and failure to keep pace with the information age (Abo Ghonaim,2002:97).

It helps in developing capabilities and information that enrich the intellectual aspect of employees; Which helps in providing innovative works and ideas; It contributes to the economic system and costs ensuing from the benefits it provides, which are speed,

stability, accuracy, reliability...etc. It is mirrored in the efficiency of overall performance (Alsabbagh, 2002:182).

Information technology has facilitated corporations in expanding their capacity to streamline coordination not only within their internal departments but also across external entities through the utilization of contemporary communication networks. This is achieved by interconnecting computers with one another, thereby enabling enhanced interagency collaboration.

Information technology has contributed to reducing the prevalence of crises by providing a future statistics base.

Enhancing the timeliness and accuracy of decision-making is accomplished by furnishing decision-makers with precise and timely information. This is further facilitated through the provision of appropriate communication channels that aid in amplifying the seamless flow and exchange of information.

Information technology is an invaluable tool in reducing the size of organizations, minimizing the number of administrative tiers, and embracing networked organizational structures in lieu of traditional ones. It has also facilitated the adoption of innovative approaches to business planning and organization, such as the implementation of business reengineering. (Yaseen, 2003:51).

It helps the company to construct a strategic data base with its most advantageous skills in dealing with statistics in order to acquire the corporation a competitive gain and to supply direct guide to the organization's approach by way of supplying data on

opposition elements to overcome the obstacles of time and area (Azab & Hijazi, 1999:127).

**c. Information Technology functions:**

A number of researchers (senn, 1998:21) (Alsabbagh, 2002:178-182) (Aldailami, 2006:39-40) have pointed out the most important major IT functions; It relates to the following:

- 1- Get data; this is done by storing data for later dealing with the organization or individuals.
- 2- Processing: It is the transformation and evaluation of facts and facts forms as a result of its connection with the computer; the remedy includes a number of operations, the most essential of which are.
- 3- Data processing: (symbols; numbers; letters ;...) and transforming them into useful information.
- 4- Information processing: It is the transformation of any of the statistics into a greater comprehensive, different, greater detailed, diversified, and accurate one that is clear and purposeful closing information.
- 5- Text equivalent: It capability the drafting of text documents such as reports, newsletters, and correspondences; Word processing systems help in entering and presenting data, text, and shapes in an attractive way.
- 6- Sound processing: especially optical information processing; this remedy has witnessed a qualitative development; It discovered systems that allow persons to speak at once to a computer device to direct it and perform particular movements.

- 7- Image processing: It means changing visual information, graphics, and snap shots into varieties that can be managed within the personal computer or transferred between humans and different computer systems.
- 8- Creation and generation of information: Information technology is usually used to create facts through processing; developing data potential processing information and organizing data usefully either in the form of numbers; text, images, or sounds; and sometimes unique re-generation of information; At different times, it is generated in a new structure.
- 9- Data and information storage: By storing statistics and information, computers or different facts science devices preserve their use at a later time. As the stored data and information are placed in the middle for storage; Such as: (magnetic disks or compact discs) that a computer can read when needed; The computer converts the data and information into a form that takes up a smaller space than the original source; For example, audio information is not stored in the form of sounds like the ones we know, but in an encrypted form that takes less space and the computer can deal with it.
- 10- Retrieval: ability placing and reproducing information and records for future processing or passing it on to every other user; Therefore, the pc person must preserve the addresses of the media on which the statistics was once stored and make it equipped for retrieval and processing.
- 11- Transfer: the transmission of statistics from one region to another; For example, a telephone or pc linked to the community transmits conversations from one place

to another; This is done by adopting different mediums such as satellites, optical fibers...etc.

**d. Information technology components:**

Information technology has six main components; which:

**1- Human Resources Skills:**

Human assets are "a set of skills and know-how to accomplish the duties of the organization. The human resource is one of the most essential aspects of information technology, as it can be described as a case of implicit accumulation of information in the minds of employees in the enterprise" (Abo Ghonaim, 2007:111).

"Creating the skills of human resources with experience and competence is one of the necessities for the utility of information science" (Aldulaimi,2006:43); "This is achieved through coaching in specialized scientific institutions; The human aid is responsible for the control, management, and operation of different aspects and is one of the most necessary elements of statistics technology" (Albaghdadi,2006:82).

**2- Devices and Equipment (computers):**

They are "electronic devices directed to accepting, processing, storing and displaying statistics and information, and the presence of a pc nowadays has emerge as a necessity that can in no way be substituted for it" (Alzoobi & Alsharayah, 2004:11).

**3- Communication Networks:**

The capacity used to ship and get hold of data and information; consists of a crew of stations placed in different locations and linked to every different by way of potential that

enable the beneficiary to raise out the method of sending and receiving. "Companies ought to figure out the type of networks (internet and extranet) that are appropriate for their work, with the want to continuously develop the abilities of their personnel in information technology" (Guna Sekaran A. & Ngait, 2004: 289).

#### **4- Software:**

They are all educational groups for processing information (O'Brien, 2004:10) and can be categorized into:

System software: such as the running system software program that manages and helps the operations of a computer system, such as home windows.

Application software:" It is software program that does direct processing for non-public use with the aid of the stop user, such as payroll software; word processing software; and different packages such as the computer-mediated (CAD) program; Computer-aided manufacturing (AM) program" (Heizer & render, 2004: 282-283).

#### **5- Database:**

A set of interconnected facts or records saved in facts storage devices; the database can be the store of the corporation (or organization); time standards for exceptional organizations' operations; Cost data or facts about the customer's order (Krajewski & Ritzman, 2005: 513).

The database can be constantly added, modified, and updated to keep tempo with emerging modifications to assist managers make their strategic selections in accordance

to the proper foundations. It enables customers to carry out their work efficaciously and efficaciously (Ajam, 2007: 56).

Databases help in the following matters (Alobadi, 2006: 40):

1. Reducing data redundancy because of the logical relationships imposed by database systems; leads to an increase in the speed of processing and obtaining information.

- a. Provide safety and protection of information from unauthorized access. Protection may additionally range from simple that makes use of a password to the most complex.
- b. Representation of facts according to the actuality of the organization; the facts in the databases is same to the organization's situation.
- c. The capability to use a couple of languages in writing applications and the ease of growing those purposes.

**d. Information technology application requirements:**

Researchers emphasize that there are a number of different requirements when applying information technology in organizations in order to reap success of the organization; among the most important of these requirements are the following:

- 1- Technical requirements include (Turban et.al, 1999: 50):
  - a. Improving infrastructure and support, such as communications, transportation, and others.
  - b. Creating human skills with experience and competence.
  - c. Providing suitable equipment for efficient operation and constantly updating it.
  - d. Building an information base practically, regionally, and internationally.

- 2- Economic requirements include (Belqasim & Ali, 2002: 368) (Salman, 2004: 75):
    - a. Allocate sufficient funds for research and development activities in the field of information technology.
    - b. Supporting the information industry and its basics.
    - c. Encouraging investment in the field of information technology.
  3. Social requirements include (Alalaq & Altkriti, 2002:151):
    - a. Creating teamwork patterns and spreading the spirit of cooperation between different work groups.
    - b. Adopting mechanisms to encourage individuals to accept technological change.
    - c. Working on changing the prevailing organizational culture patterns in line with the informatics culture.
  4. Administrative requirements constitute (Abdelwahab, 1998: 443):
    - a. Appointing administrative leaders capable of change.
    - b. Adoption of decentralized and flexible structures.
    - c. Establishment of organizational units to manage the development of information technology requirements.
    - d. Reengineering business and operations within the organization.
  5. Other requirements include (Alghalbi & Alaskri, 2002: 185):
    - a. Issuing laws and legislations regulating the exchange process through information technology channels and protecting the interests of the parties.
    - b. Providing the elements of security and privacy on the networks.
    - c. Provide principles of intellectual property protection and respect for privacy.
- e- Information technology features:**

Information technology has been distinguished from other technologies by a number of characteristics, the most important of which are (Alhajj, 2019: 36):

- 1- Time reduction: Technology has made all locations electronically contiguous.
- 2- Space Reduction: Provides storage capabilities for a significant amount of information that may be conveniently accessible.
- 3- 3- Intellectual task sharing with the machine: As a result of the interaction between the individual and the system.
- 4- Artificial intelligence: such as simulation systems.
- 5- Networking: The most essential aspect of information technology is the advancement of knowledge and the expansion of chances for users to be trained for inclusion and control.
- 6- Configure the communication network (Mrabit, 2015: 9).

**f- The relationship of information technology with oil organizations:**

Information technology offers a range of applications used in petroleum organizations; these applications have capabilities that help us to accomplish complex work in a quick and easy way (prepared by the researcher).

- 1- Provides speed, accuracy, and cheap communications within the organization and between its branches.
- 2- The accomplishment of oil exploration operations (seismic) at high speed and high volumes of data.
- 3- It facilitates the interpretation of seismic information in its two and three dimensions.

- 4- Assist in the creation of geological maps of the oil layers.
- 5- Assist in the process of preparing and implementing drilling programs.
- 6- It helps to speed up the completion of reservoir studies.
- 7- Assist in well testing and analysis of test data.
- 8- It helps in speeding up production operations in oil fields.
- 9- It helps in speeding up the completion of marketing operations for oil in the global markets.
- 10- Helps quickly send data to and from shareholders anywhere in the world.
- 11- It helps in completing accounting operations at high speed and with high volumes of data.
- 12- It helps in accomplishing personnel operations such as payroll, etc. at a high speed. It helps in storing large amounts of information in an easy-to-access way at any time.
- 13- Allows rapid, low-cost access to large amounts of information around the world.
- 14- It allows communication and cooperation between investment organizations anywhere and at any time.

**g- Investing in information technology:**

Information technology has received wide attention from writers, researchers, and administrators in evaluating its impact on improving performance in organizations. It was very important for this attention to be directed toward analyzing the benefits that organizations can achieve from investing in information technology.

As the investment in information technology results in organizations incurring significant financial expenses, it is one of the investment decisions that need study and analysis to choose the appropriate project for the organization, because of the risks that these decisions entail due to the high costs required by the process of investing in information technology.

It is worth noting that the oil organizations tended to invest in information technology in all their operations, from the beginning of the exploration stage to the oil export stage. Many programs were purchased with hundreds of thousands of dollars for most of the technical and other departments. The leadership of large organizations has felt the benefit of information technology in improving organizational performance, and this in turn led to an increase in productivity, which led to an increase in profitability for these organizations. (Prepared by the researcher).

#### **h- Information technology dimensions:**

It is the interaction of information technology with its six dimensions to process, store, retrieve data, and provide it to the different administrative levels to help make decisions in the appropriate form and time.

##### **1- HR Skills:**

They are represented by a collection of skills and knowledge required to complete the company's duties; the human resource is one of the most essential components of information technology; it can be regarded as an example of implicit accumulation of knowledge in the brains of workers in the organization. (AboGhonaim, 2007:11).

Human elements: they include the human element that controls all the previous components and works to benefit from them; the human element is considered one of the most important elements of information technology, as it is the real focus of it. Based on the design, implementation, and control; this element is represented in the educated manpower trained to use modern technology, including hardware and software, to a degree that achieves the desired benefit from it (Farajallah, 2012, 26). Both (Ajam, 2007, 588) and (Martin et.al, 2002, 11-12) agreed. In addition (Alter, 2002, 45-46) on the classification of human elements into two categories:

The first are the end-users; they make up the majority of those who treat application programs as their beneficiaries without going into the nitty-gritty of their programming.

As for the second category, they are specialists in the field of computers; they are the ones who design and program the various application programs; these include the administrator and database; network administrators; computer engineers, and programmers; and each of them has a special job. The Human Resources Skills Authority with experience and competence is one of the requirements for the application of information technology (Aldulaimi, 2006:43).

## **2- Devices, equipment ,and computers:**

They are electronic devices directed to accept, process, store, and display data and information; the presence of the computer today has become a necessity that can never be replaced. It is difficult to find a specific activity or work in which there is no place for a computer; As a result of the diversity of businesses, their differences, and their

development, you have had a diversity of different computers (Alzooby & Alshrayaa, 2004:11).

**Devices:** which includes all and diverse sorts of components and virtual media utilized in data and information transmission procedures; Computers and other gadgets are not considered hardware. Rather, all media and visual objects on which data is recorded, ranging from sheets and bits of paper from which information is retrieved to magnetic or optical discs, are included. (Qandaligi & Alganabi, 2009); It includes all tools and devices that are used to process, store and transmit data; The most important of these devices, the most famous and the most widely used is the computer (Gradat & Others, 2009, 15). The computer can be defined, as (Idrees, 2005) says, as an electronic device (or machine) that receives and processes data and transforms it into useful and meaningful information for the user; This device has the ability to receive, store, play, and retrieve data and transform it into information using arithmetic and logical operations through programs that are installed or stored; And through specific orders or instructions from the user to him.

### **3- Communication Networks:**

**Networks:** It includes communications technology and long-range communications; various types of networks, such as the Internet, intranets, and extranets, have become vital in the successful administration of electronic commerce. And commercial activities of all types in the organization's information system (Qndlji & Alganabi, 2009).

In addition, (Shalabayah, 2002:13) defined a communications network “as a group of computer systems connected to each other; or a group of devices that are linked using communication wires. Connection”. And (Alshwabkh, 2011:211) defined the

communication network as “a technical means that is used to transfer data from one computer to another computer or from one terminal to another terminal, in order to provide the opportunity to benefit from all the data on all terminals and the central computer.” within the user-related limits of use within the organization. As (Altaee, 2009: 117) defines it, "It means linking two computers together, either physically through wires or wireless connection tools, as this connection allows the two computers to share files and printers and even communicate through the Internet."

#### **4- Software:**

They are all educational groups for processing information; they can be categorized into:

Operating system software: An operating system manages and supports the operations of a Windows computer system.

Application software: It is the software that performs direct processing for personal use by the end user; such as payroll software; processing software, manufacturing software (CAD), and words; And other software such as the computer-aided design program (Heizer & Render, 2004:282-283).

It is defined as a set of orders and instructions prepared by a person; It directs the hardware components of the computer for the purpose of performing a task or work in a specific way according to accurate step-by-step instructions to obtain desired results in a specific way (Aldlahmh, 2007:327).

It is defined as a series of commands that are executed by a computer; with the aim of accomplishing a specific task; It is thus considered a complement to the computer; It is

the system software; As well as in various operational programs in addition to processing programs and applications that differ according to the desired goal; It is stored as a set of files in memory (Pascal Vidal, 2005:81).

Computer software is defined as “a set of programs that enable the computer to enter data and process it based on certain instructions in a way that leads to obtaining accurate and sound results. The hardware components cannot perform their work without the software components. The person who makes the software is called the programmer (Alshwabkh, 2011:187).

#### **5- Database.**

(Alshwabkeh, 2011:187) is described as a container that stores data on computers; it is the raw material that is processed, updated, and retrieved in order to access information. It is an organized and documented set of data on a storage media from which information can be easily accessible. Furthermore, it is defined by (Alsawi, 2007:121) as "a set of logical data elements linked to each other by a mathematical relationship; they are stored in the computer in an organized manner to facilitate dealing with them, searching within them, adding and modifying them."

(Alqadhi Abu Zalatah, 2010: 87) defines it as a group of interconnected files or tables that store data within files; each of these costs contains a number of records; Each record contains a number of fields. The database is stored within the storage media in the computers using a special file system.

It was explained by (Talab, 2011:95) as “a large repository for storing various data; it consists of a set of tables; the table consists of columns or fields; rows or a record; and the intersection of the column with the row leads to the fold of a cell; Only in the cell.

More generally and more precisely, databases are a logical organization of groups of interrelated files; where the data is integrated and interconnected with certain.

#### **6- Information Security.**

Information security is the science of securing information circulated via the Internet from the risks that threaten it. With the development of technology and the means of storing and exchanging information in different ways, or what is called the transfer of data over the network from one location to another, looking at the security of that data and information has become an obsession and a very important vital issue. Information security can be defined as the science that works to provide protection for information from the risks that threaten it or the barrier that prevents it from being attacked, by providing the necessary tools and means to protect information from internal or external risks (Wikipedia site).

Information security means complete control over the information, identifying the parties required to receive this data, and defining the powers to access it, by using a set of technologies in order to ensure that it is not subject to penetration by any party. The importance of information security is doubled in preserving privacy and preserving important data. Of organizations' bank accounts, so we can say: Information security is a package of methods, processes, and procedures that are followed by some insurance organizations and sectors to impose the strongest methods of protection on their

information and to impose protection on their media and systems in order to prevent access to unauthorized data. (Encyclopedia site). Information security is also defined as protecting certain information from being viewed or used by persons who are not authorized to do so, or from being disclosed to the public, distributed, accessed, destroyed or deleted, and this definition applies to any type of information, whether the information is written on paper or in a file on the Internet (Salamtak wiki).

## 2.2 Previous Research Results.

### 2.2.1 Studies in English

No	Author, Year, Journal Identity	Variable (Independent & Dependent)	Result
1	Anastasia A. Katou ,(2008), <i>Journal of Industrial Engineering and Management.</i> Vol. 1: 119-142 ISSN :2013-0953	Y1- Organizational performance X1- <i>Business Strategies</i> X2- HRM Policies X3-HRM Output	<b>1-HRM improve organizational performance.</b> <b>2-Organizational performance depends heavily on HRM</b> <b>3-HRM associated influence organizational performance</b>
2	Hüseyin Tanriverdi, (2006), <i>MIS Quarterly: Management Information Systems.</i> Vol. 30 No. 1: 57-77	<b>Y – Performance</b> X1-IT Strategy Making (STR) X2 -IT Infrastructure (NFR) X3- IT Vendor Management (REL) X4- <b>IT HR Management (HR)</b>	1- The additional cost synergy arising from the use of information technology resources or related administrative processes does not affect the performance of the company. <b>2- Outstanding value synergies arising from the use of a complementary set of IT resources and management processes have significant impacts on company performance.</b>

3	Kitti Kiatsuranon, Opal Suwunnamek,(2019), Kasetsart Journal of Social Sciences. Vol. 40: 113–120	<b>Y-ICT Organization Performance</b> <b>X1-Human Resource Management</b> X2-Knowledge Management X3- EmployeevCompetency	<b>1-The human resource management system in an organization is the most important factor.</b> 2-The importance of ICT cannot be underestimated. 3-That education and training institutions have not been able to equip graduates adequately with the skills that the growth industries need.
4	Jason F. Cohen Karen Olsen, (2013), <i>International Journal of Hospitality Management</i> . Vol. 34: 245–254	Y- Innovation performance <b>X1- The introduction of new HR management practices for R&amp;D work - IT Infrastructure.</b>	<b>1-That the complementary system of IT resources has effects on competitive performance.</b> 2- That the complementary system of IT resources has an effect on customer service.
5	Darius Antoni, Ferry Jie and Ahmad Abareshi,(2020), <i>Int. J. Agile Systems and Management</i> . Vol. 13, No. 2:159-181	<b>Y1- Environmental Performance.</b> X1-IT Infrastructure Quality. <b>X2-Human Resources Competence.</b> X3-Environmental IT competence.	1- That environmental performance is influenced by IT infrastructure quality <b>2-That environmental performance is influenced by IT human resources competence</b>
6	Carmen Pérez Cano ,Pilar Quevedo Cano, (2006), <i>International Journal of Technology Management</i> . Vol. 35:11-28	<b>Y- Innovation performance</b> <b>X1- The introduction of new HR management practices for R&amp;D worker.</b> X2- The influence of new HR management practices for R&D workers. X3- The influence of new HR management practices for R&D workers.	<b>1- Human Resources (HR) has a positive effect on innovation performance in the firm.</b> 2-That the HR management practices applied in innovative Spanish companies can be considered well entrenched.

7	Deh M.A Al-Gharaibeh, Dr. Nazem M.M Malkawi, (2013), International Journal of Business and Social Science. Vol. 4 No. 17	Y1- Performance of Governmental Organizations. X1-Equipment and software. X2- Networks within organizations. X3-Individuals and procedures.	1- <b>There is no impact of hardware on the performance of governmental organizations.</b> 2- <b>There is a significant impact of networks on the performance of governmental organizations.</b> 3- There is a significant impact of individuals on the performance of governmental organizations. 5- <b>There is a significant impact of management information systems on the performance of governmental organizations.</b>
8	Samy S. Abu Naser, Mazen J. Al Shobaki, (2016), (First Scientific Conference for Community Development 5-6 November 2016)	Y- <b>Performance development.</b> X1- <b>Requirements Management and operation of computerized administrative information systems.</b> X1a-material supplies. X1b-human requirements. X1c-Software supplies. X1d-Organizational supplies.	1- <b>Computerized MI has a positive impact on the development of performance.</b> 2- <b>The is a statistical significance impact between “the physical, software supplies, human and organizational” and performance development in the Gaza Electricity Distribution Company.</b>
9	Daowd, A., Kamal, M. M., Eldabi, T., Hasan, RUAA., Missi, F. & Dey, B. L.. (2020). Information Technology and People. vol. (In-press) ISSN:0959-3845	Y1- <b>Improved Performance</b> X1- <b>Communication.</b> X2-Efficiency. X3-Staff Productivity. X4- Financial Sustainability. X5- Portfolio Quality. X6- Outreach.	1- That the adoption of social media as marketing, advertising, and communication tools may significantly improve the MFIs performance.

11	Kim, S., & Park, H. (2013), International Journal of Information Management.	<b>Y- Trust Performance</b> Y1- Purchase Intentions Y2- Word-of-Mouth Intentions <b>X-Trust</b> <b>X1- Communication</b> X2-Reputation X3-Size X4-Information Quality X5-Transaction Safety X6-Economic Feasibility X7-Word-of-Mouth Referrals	1- Online buyers realize that they take a risk in making any purchase Online. 2- The size of an e-commerce firm plays an important role in the formation of consumers' trust in that firm. 3-The quality of the information provided by an e-commerce firm has a considerable influence on consumers' trust in that firm. <b>4-communication has a positive and significant impact on performance.</b>
11	Bernard T. Widjaja , Iriana Wihardja Sumintapura,Ahmad Yani, (2019),Management Science Letters.	<b>Y1- Financial Performance (FP)</b> <b>Y2- Market Performance (MP)</b> <b>Y3- Production Performance (PP)</b> <b>X1- Information and Communication Technology (ICT)</b> <b>X2- Innovation (IN)</b>	<b>1- The study reveals that a positive impact is created by Information and Communication Technology to improve the performance of companies and achieve competitive advantage.</b> 2-No association was found between innovation and organizational performance with reference to Indonesian organizations.
12	Andersen, T. J. (2001), The Journal of Strategic Information Systems. Vol. 10: 101-119	<b>Y- Organizational performance:</b> Y1a- Profitability. Y1b-Sales growth. Y1c-Innovation. <b>X1- Use of computer network to enhance internal communication [Intranet use].</b> <b>X2- Use of the Internet to enhance external communication [Internet use].</b> X3- Strategic planning.	<b>1- That there are positive associations between the use of communication-enhancing information technology and organizational performance.</b> 2-The effects of economic performance may arise from the use of the Internet and industries that are characterized by lower levels of dynamism and complexity.

13	Luftman, J., Lyytinen, K., & Zvi, T. ben. (2017). Journal of Information Technology	<b>Y - Company Performance.</b> X1-IT-Business Alignment. <b>X1a-Communications.</b> X1b-Value Analytics. X1c-IT Governance. X1d-Partnering. X1e-Dynamic IT Scope. X1f-Bus, and IT Skills Development.	1- The strategic alignment has a moderate positive impact on company performance. 2- Some performance measures could be classified. 3-Additional responses and performance variables would increase the model's accuracy.
14	Jabbouri, N. I., Siron, R., Zahari, I., & Khalid, M. (2016). Procedia Economics and Finance.	<b>Y1- Innovation Performance (product &amp; process).</b> X-IT Infrastructures. X1-Hardware. X2-Software. X3-Human Resource. X4-Database.	<b>1-There is a good relationship between hardware with the dimensions of innovation performance.</b> <b>2-There is a good relationship between software with the dimensions of innovation performance.</b> <b>3-There is a good relationship between human resource with the dimensions of innovation performance.</b> <b>4-There is no significant moral effect between database and innovation performance dimensions.</b> <b>5-There is a good relationship between communications with the dimensions of innovation performance.</b> <b>6-IT helped improve the effectiveness of innovation performance.</b>

15	Hasyima, Janner Simarmatab And Nasirwan, (2022), International Journal of Data and Network Science. Vol. 6:1125–1134	<b>Y-Marketing Performance</b> <b>X1-Relational Based Database.</b> X2-Relational Capability. X3-Quality Strategy. X4-Digital Marketing	<b>1- That SMEs are more likely to build and develop database-based networks to improve marketing performance.</b> 2-Digital marketing improve SMEs' marketing performance. 3- Strategy quality improve SMEs' marketing performance. 4-relationship-building skills improve SMEs' marketing performance. <b>5- database has a positive and significant impact on performance</b>
16	Sulieman Ibraheem Shelash Al-Hawary, Mohammad Faraj Saket AlDafiri, (2017), <i>International Journal of Academic Research in Economics and Management Sciences</i> . Vol. 6, No. 2. ISSN: 2226-3624	<b>Y-Employees Performance.</b> <b>X1-Hardware.</b> <b>X2-Software.</b> <b>X3-Databases</b> <b>X4-Networks.</b> <b>X5-Human element.</b>	<b>1- There is a statistically significant effect of the adoption of information technology elements represented in (hardware, software, databases, and the human element) on the performance of workers at the Ministry of Interior in the State of Kuwait.</b>
17	Dany Di Tullio,Bouchaïb Bahli. (2014).Systèmes d'information & management. Vol. 18: Iss. 3:85-116	<b>Y- Software Project Performance</b> <b>X1-Software Process Maturity.</b> <b>X2-Software Development Risk.</b> <b>X3-Maturity x Risk.</b>	<b>1-A positive effect of software process maturity level on software project performance while underscoring the negative effect of software development risk on software project performance.</b> <b>2-Software development risk plays a contingent role in software process maturity level on software project performance.</b>

18	<p>Ashfaq Ahmad, Nisar Ahmad&amp;Nadia Malik. (2020), <i>Global Management Sciences Review</i>. Vol. V:48-59 p-ISSN: 2708-2474 e-ISSN: 2708-2482. L-ISSN: 2708-2474.</p>	<p><b>Y- Perceived Project Performance (PPP).</b> <b>X1- Software Project Risks (SPRS).</b> X2-End User Risk. X3-Requirement Risk. X4-Planning and Control Risk. X5-Quality Risk. X5-Technology and Environment Risk.</p>	<p>1- There is a positive correlation between the Strategic Petroleum Reserve and measures of public-private partnership. 2- <b>That an increase in understanding of SPRs can increase PPP measures used to evaluate the software project.</b> 3- Understanding the impact of different risk factors on software projects' perceived performance.</p>
11	<p>Banker, R. D., Davis, G. B., &amp; Slaughter, S. A. (1998). Vol.44(4):433-450</p>	<p><b>Y-Maintenance Performance.</b> <b>X1- Software Design &amp; Development Practices.</b> <b>X2- Software Complexity.</b> <b>X3- Software Maintenance Process.</b></p>	<p>1- The use of packaged software is associated with decreased software complexity and software enhancement effort. 2- <b>There is an important link between software development practices and maintenance performance.</b> 3-To improve the software process, innovations must focus on improving the effectiveness of design and development procedures.</p>
21	<p>Jung Chieh Lee,I. Chia Chou,Chung Yang Chen, (2021), <i>Information Systems Journal</i>. Vol.J:1-28</p>	<p><b>Y-Software project performance.</b> X1-SPT performance. X1b-SPT efficiency. X1b-SPT effectiveness. X2- Absorptive capacity.  <ul style="list-style-type: none"> <li>• Acquisition.</li> <li>• Assimilation.</li> <li>• Transformation.</li> <li>• Exploitation</li> </ul> <b>X3-Software team trust.</b> <b>X4-Software team experience.</b> <b>X5-Software team communication quality.</b></p>	<p>1-<b>Because SPT critically influences how projects are conducted, its performance should be investigated.</b></p>

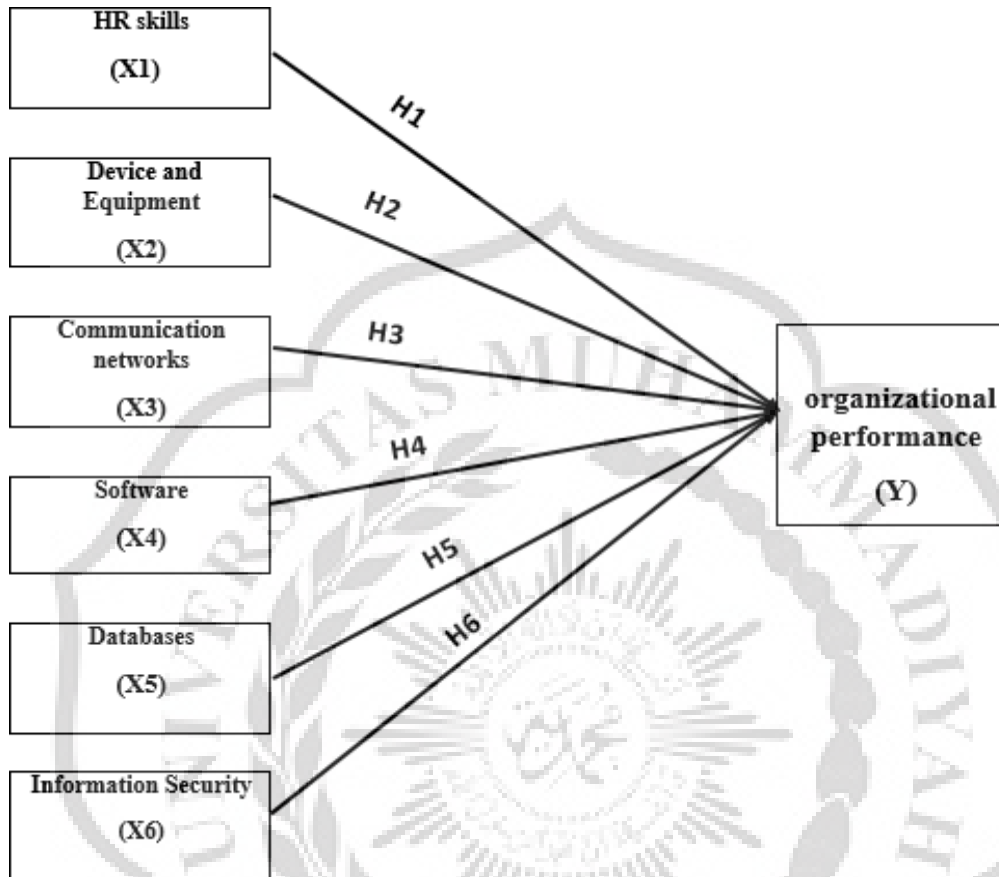
21	Igor Bernik ,Kaja Prislan, (2016), PLoS ONE.	<p><b>Y- Information security performance</b></p> <p><b>X1-Physical Information security controls.</b></p> <p><b>X2- Information security policy and compliance.</b></p> <p>X3-External environment connections.</p> <p>X4-Third-party relationships.</p> <p>X5-Security management maturity</p> <p>X6-Technical and logical security controls</p> <p>X7-Information resources management</p> <p>X8-Employee management</p> <p>X9-Information risk management and incident handling</p>	<p>1- Information security represents one of the measures necessary for improving the current state of play.</p> <p>2-That a high level of information security performance is mostly dependent on measures aimed at managing information risks, employees, and information sources.</p> <p><b>3-Information security performance is strongly influenced by operational and technical measures.</b></p>
22	Latifa Alzahrani Kavita Panwar Seth. (2021).Information (Switzerland).	<p><b>Y- Information security performance.</b></p> <p><b>X1-Information security education.</b></p> <p><b>X2-Information security training.</b></p> <p><b>X3-Information security visibility</b></p> <p><b>X4-Information security knowledge sharing.</b></p> <p>X5-Trust in the organization</p>	<p><b>1-Information security knowledge sharing, training, education, and visibility significantly affect security performance.</b></p> <p>2- When information security management is viewed as an inconvenience or a barrier to task completion, employees can be deterred from following security rules and policy compliance</p>

23	Sindhuja P.N.,(2014, Information Management & Computer Security. Vol. 22 Iss 5:450 - 473	<p>Y1-Supply Chain Performance</p> <p>X1-Information Security (InfoSec) initiatives.</p> <p>1- Internal</p> <ul style="list-style-type: none"> <li>• Physical security</li> <li>• Logical security</li> <li>• InfoSec culture</li> <li>• InfoSec Policy</li> <li>• Information Communication</li> </ul> <p>2- External</p> <ul style="list-style-type: none"> <li>• Physical security</li> <li>• Logical security</li> <li>• InfoSec culture</li> <li>• InfoSec Policy</li> <li>• Information Communication</li> </ul> <p>X2-Supply Chain Operations.</p> <ul style="list-style-type: none"> <li>• Decision-making</li> <li>• SC Robustness</li> <li>• SC information</li> <li>• Integration</li> </ul>	1- <b>Organizational size, level of investment in IT, organization structure, technical complexity, etc. may have an impact on the relationships defined in this study.</b>
24	Rameshwar Dubey, Angappa Gunasekaran, Stephen J. Childe, Constantin Blome, Thanos Papadopoulos, 2019, British Journal of Management (BJM). Vol. 30, 341–361.	<p>Y1-<b>Operational and Cost Performance</b></p> <p>X1-Coercive Pressures.</p> <p>X2-Normative Pressures.</p> <p>X3-Mimetic Pressures.</p> <p>X4-Tangible Resource (TR).</p> <p>X5-<b>Human Skills (HS).</b></p> <p>X6-<b>Big Data-Driven Culture (BDC).</b></p> <p>X7- Big Data Predictive Analytics(BDPA).</p>	<p>1-Institutional pressures (i.e. CP, NP, and MP) have significant effects on the selection of tangible resources.</p> <p>2-NP and MP have significant effects on HS</p> <p>3-CP has no significant effect on HS.</p> <p>4- Big data culture has significant and positive moderating effects on the path leading from TR/HS to BDPA.</p> <p>5- <b>BDPA has significant and positive effects on cost and operational performance</b></p>

### 2.2.2 Studies in the Arabic

No	Author, Year, Journal Identity	Variable (Independent & Dependent)	Result
1	Yousra Mohamed Hussein ,(2010), Management and Economics Journal.	<b>Y1- Hotel service performance level</b> <b>X1-Devices and equipment</b> <b>X2-HR skills</b> <b>X3-Software</b> X4-Procedures <b>X5-Communication networks</b> <b>X6-Database</b>	<b>1- There is no effect relationship between information technology and organizational performance</b> 2-The low level of information technology use leads to a decrease in the efficiency of human resource skills.
2	Nada Ismail Jubouri ,( 2009 ), Journal of Baghdad College of Economic Sciences, the university, the twenty-second issue	<b>Y1-Organizational performance</b> Y1a- Growing sales and increasing profits Y1b- Market share Y1c-Customer satisfaction Y1d-Innovation and creativity X1-Information technology <b>X1a-Hardware and software</b> <b>X1b- Databases</b> X3-Experience and skill <b>X4-Communication networks</b>	1-There is a significant correlation between devices, equipment and organizational performance. 2- Information technology affects organizational performance 3- Networking communication effect on the level of organizational performance

## 2.3 Research Framework



## 2.4 Research Hypotheses:

### The first main hypothesis:

H1: There is a statistically significant effect of information technology (human resource skills, hardware, and equipment, communication networks, software, databases, information security) in improving the organizational performance of Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

The following sub-hypotheses emerge from it:

H1: There is a statistically significant effect of human resources skills in improving organizational performance at Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

H2: There is a statistically significant effect of Devices and Equipment in improving organizational performance at Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

H3: There is a statistically significant effect of communication network devices in improving the organizational performance of Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

H4: There is a statistically significant effect of software in improving organizational performance at Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

H5: There is a statistically significant effect of databases in improving organizational performance at Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.

H6: There is a statistically significant effect of information security on improving organizational performance at Jannah Hunt Company in the Republic of Yemen and Pertamina Company in the Republic of Indonesia.