



**T.C**

**BİNGÖL UNIVERSITY**

**GRADUATE SCHOOL OF SOCIAL SCIENCE**

**BUSINESS ADMINISTRATION DEPARTMENT**

**THE IMPACT OF MANAGEMENT INFORMATION  
SYSTEM (MIS) ON THE QUALITY OF  
ADMINISTRATIVE DECISIONS MAKING**

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**Master's Thesis**

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**Bingöl – 2017**



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BİNGÖL ÜNİVERSİTESİ  
SOSYAL BİLİMLER ENSTİTÜSÜ  
İŞLETME ANABİLİM DALI**

**YÖNETİM BİLGİ SİSTEMLERİ (YBS)' NİN YÖNETİMİN  
KARAR VERME KALİTESİNE ETKİSİ**

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**Bingöl – 2017**

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## **SCIENTIFIC ETHICAL NOTICE**

This work I have prepared in accordance with the thesis writing rules, which I have prepared in accordance with scientific ethics and tradition and all the information in the thesis, which I have met with the scientific ethics and academic rules carefully until the conclusion of the recommendation phase of the master thesis [the impact of management information system on the quality of administrative decision making in hawler polytechnic university ] I declare that the works I have shown and utilized for each quotation consist of those shown at the source.

... / ... / 2017

Hilmit Fouad KHUDHUR

## THESIS ACCEPTANCE AND CONFIRMATION

BINGÖL UNIVERSITY

SOCIAL SCIENCES INSTITUTE DIRECTORATE

This work entitled [the impact of management information system on the quality of administrative decision making in hawler polytechnic university], prepared by [Hilmit Fouad KHUDHUR], was found to be successful as a result of the thesis defense examination held on the date of [ ] and accepted by our juror as the Master's Degree in the Department of Business Administration.

THESIS JURY MEMBERS (Title, Name and Surname)

Chairman: ..... Signature: ..... ..

Supervisor: ..... Signature: ..... ..

Member: ..... Signature: ..... ..

### CONFIRMATION

This thesis has been accepted by the jury determined in the..... / ... / 201      Session  
of the Board of Directors of the Institute of Social Sciences of Bingöl University.

Director of the Institute

## PREFACE

[The impact of management information system on the quality of administrative decision making in hawler polytechnic university] has been highlighted in the context of employees focused that are important on maintaining the management of organizations and human resource, and are considered the backbone of all organizations.

I would like to thanks the advisor who does not spare his help in the preparation of this work [**Prof. Dr. Muammer ERDOĞAN**]; and also, I would like to thank all the contributors who contributed to the research [Fatema Othman HAMARESUL] and [Assist Prof. Dr. Imran ASLAN] who did not spare their contribution in the writing and correction of the thesis and who contributed to my education throughout my life.

I would like to extend my sincere thanks to my partner in the life my dear wife to my heart.

I offer relief gratitude to help keep my morale and motivation at a high level in completing my work.

/ / 201

Hilmit Fouad KHUDHUR



## ÖZET

Bu çalışma Irakın Erbil şehrindeki Hawler Polytechnic Üniversitesinde, Yönetim Bilgi Sistemlerinin (YBS) ve diğer işlemlerin idari kararların kalitesini üzerindeki etkisini belirlemeyi amaçlamıştır. Üniversite İdari kararların etkilenebileceği sorunların keşfedilmesi ve tespit edilmesi sonucu, çalışmada, YBS (operasyonel, işlevsel ve karar destek) ile alt, orta ve üst düzey yöneticilerin karar verme kalitesi arasında anlamlı bir ilişkinin bulunduğu anlaşılmıştır. Çalışmanın sonunda araştırmacı, Üniversitenin YBS'ni sürekli güncellemesini, çalışanların sistemin kurulmasına dahil edilmesini ve sistem hakkında daha fazla eğitimlerin verilmesini önermiştir. Çalışmadaki en önemli öneri, Yönetim Bilgi Sistemleri ile idari kararların kalitesi arasında yakın bir ilişki bulunduğu yönündeki öneridir. Bundan başka Üniversitede, YBS'nin alt seviyelerdeki kararların kalitesine olumlu bir etkide bulunduğundan, bu seviyelerde karar destek sisteminin etkinliğinin artırılmasında önerilmiştir. Bu çalışmadaki bazı öneriler gelecekte bu alanda yapılacak araştırmalar dolayısıyla araştırmacılar için yararlı olabilir. Ayrıca, Hawler Polytechnic Üniversitesi'ndeki yönetim kararlarının kalitesi üzerinde YBS'nin etkisiyle ilgili bazı sonuçlardan. Yararlı olduğu anlaşılmıştır.

**Anahtar Kelimeler** : Yönetim Bilgi Sistemlerinin (YBS), Operasyonel, İşlevsel ve Karar destek, Karar kalitesi.

## **ABSTRACT**

This study aimed to identify the impact of Management Information Systems (MIS) and other effects on the quality of administrative decision making at Hawler Polytechnic University, Located in Erbil City, in Iraq. With discovering and identifying problems that the administrative decision making be affected by it in the university, It is found in study that there is significant relationship between MIS (operational, functional and decision support) and the quality of administrative decision making of bottom, middle and top administrative levels .

At the end of study, researcher recommended the university to update MIS continuously, to engage employees in building systems, and to train more on the system. The most prominent recommendation has been reached in this study that there is a close correlation between the Management Information Systems (operational and functional) and the quality of administrative decisions. Moreover, the lower and middle levels of Management Information Systems have influenced a positive impact on the quality of decisions at these levels at the university; hence we recommend increasing the efficiency of decision support system at these levels. Many recommendations of this study could be useful for researchers for future researches in this field. Also, some results of the impact of Management Information Systems on the quality of management decisions at Hawler Polytechnic University were found to be beneficial.

**Keywords:** Management Information Systems (MIS), Decision Support System, Operational Information System, Functional Information System, Decision Making.

## **ABBREVIATIONS**

**MIS:** Management Information System

**DM:** Decision Making

**DSS:** Decision Support System

**OIS:** Operation Information System

**QDM:** Quality of Decision Making

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## INTRODUCTION

Management Information Systems (MIS) focus on the use of Information and communication technologies (ICT) in managing organizations. In the 21st century almost all organizations use Information and communication technologies to efficiently manage their operations, to help managers make better decisions and achieve competitive advantage, and to facilitate seamless internal and external communications with their employees, customers, partners, and other stakeholders. (Scranton, 2016, p.8)

MIS is a system providing management with accurate and timely information. Such information is necessary to facilitate the decision-making process and enable the organizations planning, control, and operational functions to be carried out effectively. MIS's increase competitiveness of the firm by reducing cost and improving processing speed, the power of technology has transformed the role of information in a business firm. Now information has become recognized as the lifeblood of an organization and without information, the modern company is dead. (Predrag Ranisavljevic, 2016, p. 21) As a result of technological developments and globalization, Information systems have become occupies a wide position of importance in all fields, especially in administrative areas (Moroccan, 2002, p. 32).

The evolution and the emergence of the global economy (Economic Global) and the shift in the industrialized economies (Economic Industrial) and the changes that accompanied the business management projects (Business enterprise) in addition to the emergence of what is termed the digital company (Firm Digital) are all made of the information systems essential in contemporary daily Business administration. (Guendhilji and al-Janabi, 2005, p. 38).

Information is a key resource of the organization's resources and an important source of Its success, is also considered a factor in increasing the efficiency and effectiveness of the various administrative activities, which made the presence of management information systems in different organizations is particularly important, as it helps organizations to carry out the performance of its functions successfully and high efficiently (Alepehabshh, 2005, p.57).

That's based on the above information or evidence showing the importance of information systems in the various administrative processes in organizations, this study was to clarify the effect of the use of management information systems, the

quality of management decisions hawler polytechnic University. This is based on the above of information or evidence which Explains How Information systems is important In various administrative processes in all types of organizations, this study is to clarify the effect of the use of management information systems, the quality of management decisions in hawler Polytechnic University.

# **CHAPTER ONE**

## **GENERAL FRAMEWORK**

### **1.1.Overview and Background**

What is MIS? MIS stands for management information system, which we define as the development and use of information system that help businesses achieve their goals and objective. This definition has three key elements: development and use, information system, and business goals and objectives (Kroenke, 2011, p.103). A system is a group of component that interacts to achieve some purpose, an information system (IS) is a group of component that interacts to produce information. Information technology and information system are two closely terms, but they are different. Information technology (IT) refer to the products, methods, inventions, and standards that are used for the purpose of producing information, IT pertains to the hardware, software, and data components, Whereas information system (IS) is an assembly of hardware, software, data, procedures, and people that produces information (Laudon, 2013, p.11).

An organized approach to the study of the information needs of an organization's management at every level in making operational, tactical, and strategic decisions. Its objective is to design and implement procedures, processes, and routines that provide suitably detailed reports in an accurate, consistent, and timely manner. In a management information system, modern, computerized systems continuously gather relevant data, both from inside and outside an organization. This data is then processed, integrated, and stored in a centralized database (or data warehouse) where it is constantly updated and made available to all who have the authority to access it, in a form that suits their purpose in a form that suits their purpose in a form that suits their purpose. (Businessdictionary, 2016, p.6)

### **1.2.The Research Problem**

The success of the organizations depends on the efficiency rate of the management of the successful decision-making and information is Cornerstone of the decisions, as far as accuracy, comprehensiveness and timeliness in the provision of information Necessary increases the efficiency of those decisions (Tai, 2005, p. 223).Universities are considered the most important non-profit organizations in the community and



depend on the information generated from management information systems in administrative decision making, and for this It is very important that the selection of these national institutions to assess the role of information systems in Decisions, because the decisions of the university touches and affects a wide range of society, This study tries to answer these questions below:

1. Is using Decision Support System (DSS) affects quality of administrative decision making?
2. Is using Management Information System (MIS) affects quality of administrative decision making?
3. Is using Transaction Processing System (TPS) affects quality of administrative decision making?

### **1.3.The Research Objectives**

This study aimed to identify the impact of management information systems (MIS) and other effects on the Quality of administrative decision making, hawler polytechnic university – case study, due to discovering and identifying problems that the administrative decision making be affected by it in the university.

### **1.4.Importance of the Research**

This study tries to make conclusions and recommendations for the university and who uses information system in the decision making which they can benefit of it to solve the problems and to improve the quality of administrative decision making. Also the study reflected its importance in the test and tries to prove the extent of the impact of the use of Management information systems on the quality of administrative decisions used in the hawler polytechnic university and the consequent on it to achieve satisfactory returns and Competitive advantage.

### **1.5.Research Hypothesis**

To answer the questions, the research depends on the following main zero hypotheses:

**First Hypothesis:** there is no statistically significant relationship of impact of using of decision support systems on Quality of administrative decisions making in hawler polytechnic university.

**Second Hypothesis:** there is no statistically significant relationship of impact of using of management information systems on Quality of administrative decisions making in hawler polytechnic university.

**Third Hypothesis:** there is no statistically significant relationship of impact of using of Transaction Processing System on Quality of administrative decisions making in hawler polytechnic university.

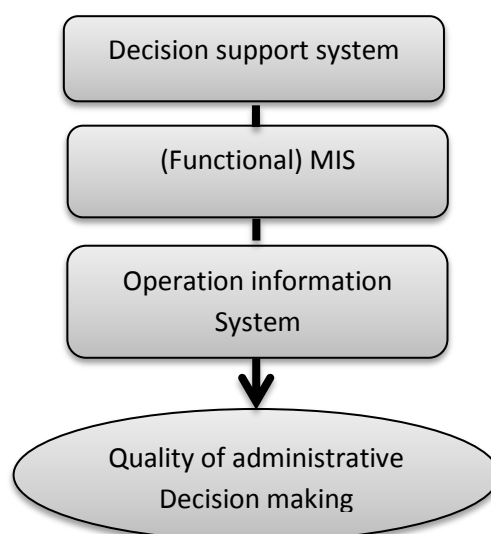
### 1.6. Research Limitations

- This study will limit on variables of (DSS), (MIS) and (TPS) and its impact on the quality of administrative decision making.
- The location of the study is limited on the hawler polytechnic university.
- This study uses descriptive and reasons method.
- Statistical package for social sciences (SPSS) was used to analyse the data. Descriptive techniques such as Frequencies, Percentages, Means, standard deviations , Coefficient of correlation, were used to describe variables and multiple regression analysis were used to test the hypothesis of the study.

### 1.7. Research Models

This study tries to make conclusions and recommendations for the university and who uses it in the decision making which they can benefit of it to solve the problems and to improve the quality of administrative decision making.

**Figure (1):** research model



**Source:** by the research

$$Y = a_0 + b_1x_1 + b_2x_2 + b_3x_3 + E_i$$

Y= dependent variable

a<sub>0</sub>= fixed part of the equation

b<sub>i</sub>= coefficient of independent variations

x<sub>1</sub>= independent variables

## 1.8. Definitions of Study Variables

### 1.8.1. Independent variables of the study

#### 1.8.1.1. Decision support systems (DSS):

Computer information that is in support of operations management decision-making systems, as well as There are some concepts that are contained in the words of some academics and scientists such as (Liker, 1999, p.134) Who sees the decision support systems as an interactive computerized systems will help the decision-maker to use data And models to solve problems. While (Case & Packer, 1999, p.92) believe that decision support systems processing Managers with tools to help them solve the semi-structural and non-structural problems. Featuring systems decision support for other computer information ingredients and characteristics of the support systems provided by the administration. So the Components of decision support systems are:

1. Model Base
2. Data Base
3. The ultimate beneficiary (End-User). (Yassin, 2006, p. 109)

And decision support systems serve management levels in the organization where they help managers make decisions that characterised by individual decisions or subject to rapid change and are not easily defined in advance. Finally The decision support used by managers to achieve a rapid response to problems in its real-time occurrence. (Idris, 2005, p. 242) The decision support system, which is to support the decision-making process, has several characteristics mentioned in the table number (1).

Which related to the organization's strategy and the organization as well as has several links with its environment, so it need information related to the areas belongs to the organisations to do these decisions, and this information contain studies concerning both actions of competitors and consumers, whether these actions represent a threat or an opportunity for the organisations, And also needed information about the availability of resources by the organization and for the demographic growth of the country in both private and governmental enterprises and their actions through new legislation that can be issued the government. This administrative level also needs to be a so-called predictive of any of the information to predict what might be in the future and predict this will be a long-term trend.

#### **1.8.1.2. Management Information Systems (MIS):**

Is a formal technique used to provide accurate and reliable information for the management and is necessary to facilitate the decision-making processes, which enable managers to carry out the functions of planning, operating and control of the organization so that it can achieve the objectives sought by effectively. As the responsibility of management information system is to provide managers needed information to do three Types of tasks and administrative namely the operational control, administrative control and strategic planning, and these Three levels reflect the different activities that are carried out at different levels in the pyramid Managing which is the first line Supervising, middle management, and senior management (Idris, 2005, p. 201). The importance of management information systems is in its fundamental task to provide the necessary data And processed it to produce useful information to management and that timely and appropriate of accuracy and quantity and to suit the needs of decision makers (Idris, 2005, p. 200) The management information systems are considered in support of the management of the administrative work, which show a range of Characteristics are described in Table (1). This kind of decisions is in relatively mysterious circumstances they need to require more information than routine decisions. As it is in this context of administrative information is collected from inside the organization and outside it and as well as providing information about the various administrative functions. For example, descriptive and historical information about the activity of the institution and branches as

well as private information rates and future performance information, but in the short term for the expected state of the foundations. This information makes the decision-maker can choose between alternatives relating to the goals and policies of the companies identified by senior management. (Ayoub, 1997, p.120)

#### **1.8.1.2.1. Components and Functions of the Management**

##### **Information Systems:**

Computer has entered into most areas of life, as today it seems difficult to go a lot of activities without relying on computers, flight reservations and transactions of banks, the weather forecasts and the automotive industry, and heating systems in homes and government business, and many others Rely on computers for different sizes (Walton, 1990, p.1)

- **Inputs:** There are several ways to enter data into the computer or to the information system, and there is no room here to enter into a detailed discussion of these units but can mention them exclusively Some of these units are traditionally considered such as: (Keyboard) and others are newly considered, such as: (Touch Screen), (Light Pen) which is used in the charts and (Scanners) a device that enters and graphics to the computer without having to re-print them on the keyboard, and there are also input devices by voice (voice - input device) and, (Optical Character Recognition). (Al husniyah, 1998, p.86).
- **Processing:** After the data is entered into the computer system or to the Management Information System is made of different processors it to be converted into information that can benefit from them, and include several activities, data processing such as (classification), (Sorting ), (Calculating), (Comparing ) ,(Summarizing) ,(Storage and retrieval). an example, data on the numbers of students enrolled on the first Course materials may be operated and processed to be converted into useful information, , for example, classification of students enrolled by their specialties Study or age or cumulative grades or academic year, and the calculations are made on this data to determine the number of students enrolled in each subject, and may be a comparison of that number with the number registered in the same material in the previous year, and is

made to summarize operations to determine the total number of students enrolled in this chapter in the fairway all the materials at hand, and then the result of all previous operations may be stored for retrieval Behold the future when you need to. It is worth mentioning that there are two basic ways can all on their way to the computer processes data in the organization, the first way in is in data processing as they become available and entered into the computer and then produce the information immediately, and this method is called operating current or run the open-line operations), (the processing line and be here like unit terminal connected directly to the computer. (McLeod, 1990, pp.267)

- **Outputs:** After processing the data and turn it into information the latter offers the ultimate beneficiary For the use, it may submit these outputs containing information in many forms, such as reports or fees Charts or representational forms or acoustic responses or offers screens or is, and there are several practical Means and units for output such as printers and plotters and magnetic tools and terminal screens.
- **Storage:** Data and information need to be stored after their introduction and during the treatment process and before you remove, in manual systems are the storage process in the form of leaves contain data and information to the reservation to include cabinets for use when needed, and in systems are automated storage using practical means more sophisticated, such as microfilm (Microfilm), while in the computerized information systems are storage function using the unit of primary memory (Storage Circuits Primary) (CPU) also is using the unit's secondary storage and CDs and magnetic tapes and others. Thus, one should say that the data is stored in the computer takes the form hierarchically, in the lower level there is a data item (Data Element), such as employee number or name and the data elements that describe the particular thing grouped together to be a (record) for example, each specific to a particular employee's salary data are record, and all records of the same type accumulate to be file the file is located. (McLeod, 1990, pp.298)

### **1.8.1.3. Operational Information Systems:**

Is a system to provide the institutional administrative departments the necessary information through the lower level administrative departments, which the information it be taken from it and it presented to senior management to assist in making the right decision and called This electronic system for data processing (EDP) Electronic Data Progressing. Operational information systems also known as the Computer Information system holds the record of facts and events and The details of the daily routine activities of business activities, such as purchase orders and payroll sales transactions And the recording of expenditures and other activities detailed, and specializes in operational information systems or so-called processing systems Transactions, registration and processing of data that result from repetitive routine activities or for registration activities Customer transactions or record incoming and outgoing movements storage transactions, and also help treatment systems Transactions in documenting all the activities and operations of the internal and external organization through computer-related Internet (Yasin, 2006, p. 97) The operational information systems is the mechanism restoration and support the daily operations of the organization which has a set of characteristics shown in Table (1).

The adoption of this kind of decision requires information to be in the form of periodic reports, including technical information and internal, such as descriptive and historical information about the activity of each branch in the enterprise, as well as information on the rates of performance in each branch.

This information allows decision-making and the latter is based on the guidance provided by the senior management and as such Routine decisions and constantly be the solutions to problems are stored so that if it appeared a problem of the same type His decision does not have to re-analysis and study, but resort to direct solutions.(Ayoub, 1997, p.120)

**Table (1):** Summary of the Different Types of Management Information Systems

type	Level/purpose	Characteristics
TPS	Strengthen and support Daily operations in the organization	<ul style="list-style-type: none"> <li>• Detailed, and there are reports.</li> <li>• Stereotyped running.</li> <li>• Good reliability and performance.</li> <li>• Technology used stable.</li> </ul>
MIS	Support the administration in Administrative action	<ul style="list-style-type: none"> <li>• Summarized and a variety of reports.</li> <li>• Timing and reliability.</li> <li>• Simplified models with the basic structure of the data.</li> <li>• Technology fairly stable.</li> </ul>
DSS	Decision support	<ul style="list-style-type: none"> <li>• System to facilitate more of its kind system Basic.</li> <li>• Represents a rapid response to the needs of miscellaneous information.</li> <li>• Flexibility and adaptability.</li> <li>• Includes models and can develop models new.</li> <li>• Advanced technology.</li> </ul>

**Source:** thabit Abdul Rahman Idris (2005), management information systems in contemporary organizations, University house of publication and distribution, Zakaria Ghoneim Street "Abrahamic", p. 191.

## 1.8.2. Dependent Variables of the Study

### 1.8.2.1. Quality of Management Decisions

The quality of administrative decisions is an administrative decision which is good that decision, which aims to solve the problem Certain or respond effectively to the problem, and that the quality of administrative decisions is a make decisions With specifications and specific properties, as well as the good decision is to be implemented, as well as the



decision is good Which predicts the expected good consequences and negative effects always aims to achieve the benefits, as well as the decision is not good Necessarily have to have everyone agree to it, but it is a good decision that reflects the integrity of the process of making the decision. In short, it is the right decision and the right to work and taken depends mainly on systems Correct and accurate information to help him provide the necessary information in good decision making.

The quality of decisions made by administrative levels depend on the availability of information Available to decision makers, usually it is judged on the quality of decisions based on the two entrances, the first evaluation of the entrance Decisions in the light of its consequences, it is more entrances visible and acceptable practice, if The consequences of a decision acceptable resolution considered true, taking into account the time period During which the evaluation of resolution, and may lead some decisions to undesirable results in a short period of time, But it leads to undesirable results in the range of long term of time. The second contains the entrance to evaluate decisions that Determine the best decision taken in the light of the circumstances that were available at the decision-making, it is characterized by the entrance by takes into account the skills of decision-makers to be evaluated in light of the case the subject of the decision, and the availability of Information and resources. The points that must be taken into account until it is to get an optimal decision is:

- Clear and precise understanding of the multiple targets that are appropriate to the subject of the decision problem.
- Definition of a specific, comprehensive and accurate to the problem, and the various aspects and the subject of the decision.
- Full knowledge of the possible alternatives, and reliable way to estimate the consequences of each choice Alternative.
- Determine the relationship between the outcome of each alternative, and the desired goals to achieve
- Full freedom to choose between alternatives that achieve the optimal solution to the problem.(Al-Raweey,1997, p.255)

### **1.8.2.1.1. The good decision depends on three main properties.**

The following is a brief explanation of the characteristics of a simple and good decision:

- **The Coherence Consistency of good decision**

The coherence and consistency of decision comes by giving the real reasons for the decision making and in fact properly with the same resolution, and cohesion we do not get it by chance or spontaneity, but the decision-maker is the one who makes the decision and take. There are many of the most important of the decision and decision-making things a face difficult situation Courage and act decisively, determination and insistence, which reduces the decision maker before starting work is considerations Important values when the decision maker and when the causes and values associated with the decision-making process then be Our decisions are coherent and consistent.

- **Transparency and Integrity of good decision**

The fairness and transparency of the decision Integrity is a big word, commentators complain about the decision routinely lack of integrity in the decision-making Whether shortcomings by the Chief Executives or by the media to the violations and irregularities Repeated who committed the decision-maker in the different companies. there are a few who use the term integrity by definition it means some of them take it a dimension of Integrity The dimensions of the decision-making process, also known as the Integrity quality taken any decision or action, regardless of Operation or treatment or context, and the focus of the book is different from the Integrity Some of them believe that the decision-maker is Who builds integrity also it is heading.

- **Integration and Comprehensiveness of good decision**

We get integrated and comprehensive structural building through integrated decision-making process when decisions all the necessary support components are available and connected and interconnected with each other, the decision is important similar demands attention by the decision makers in the university to stay and continue to work. as well as the foundation stone for all the important decisions is the values and ethics of the decision maker, we as a decision maker to choose And decide based on what is important to us to build on the information available on this subject.

#### 1.8.2.1.2. Classification Decisions by Administrative Levels:

1. **Strategic decisions:** decisions that are affected by the external environment organization and mutual relationship and the extent of interaction with him. Or are those that aim to change the company's objectives in the long-term overall shape desired for the organization in the future, in other words are the decisions that determine what will be the organization in the future, such as its size or its competitive position or market share. Senior management is responsible for these kinds of decision is the most prominent characteristics of being a rare redundancy and relate to the organization as a whole and take in case of uncertainty.
2. **Tactical decisions:** it is the functional decisions that are made in the middle-management level to get the various functional activities of the organization such as production, marketing and function of the human and other resources to optimize performance, and is characterized by being related to short activities term, which involve acceptable to ascertain the degree of which tend to be less ambiguous, complexity and less recurrence of such decision-making for the development of monitoring interest on all lines of production, finance, administration ... etc. Or decision for choosing my information private accounting program.
3. **Operational:** It makes sure that the tasks and activities have been implemented efficiently and effectively and aims to conduct regular things and solving everyday problems and they are many repetitions decisions, for example, the decision to determine the necessary amount of raw material for the development of the stock in the security workers' wages account rate, distribution and resolution of product quality control related. (Ayoub, 1997, p.45)

### **1.8.2.2. The role of information in decision-making**

The information it is only a product of the so-called information system, which in turn converts the raw data in the form of value to the decision-maker needs information. And the value of information appears in all stages of decision-making and we will cite this value in the following:

#### **First: the role of information in the process of identifying the problem:**

At this stage, the decision-maker a comprehensive survey of internal circumference and the outside of the institution and for the purpose of discovering the problem and contribute to the clarification of the causative factors system of information can provide information on every problem as it can be the decision-maker the quality of information and its own systems, the decision-maker in the advised forecasts and projected for the future.

**Second: the role of information in the development of alternative solutions to the stage:** Considering of that included in the process of identifying alternatives to identify the alternatives possible actions to resolve the problem and determine the criteria for awarding them and use to predict outcomes, and also requires that the expression of the problem in the form of a simple disposable solution model.

#### **Third: the role of information in the evaluation stage:**

It is no secret that the information systems do not often decision-making, but it provides these systems of mathematical models and contribute to the amount of the possible solutions and evaluated in accordance with any undesirable standards.

Fourth: the role of information in the process of choosing the best solution  
Contribute information systems to facilitate the selection process and that providing information about all of the alternatives available and appear entirely positive and negative aspects as they appear over the impact of each alternative natural situations and the expected results achieved by it.

**Fifth: the role of information in the process of implementation of the resolution:** At least the role of information systems in the process of implementing solutions for their role in the earlier stages of the decision-making the implementation of the decision requires the participation and persuades the parties to the process, which will also implementation. The persuasion process itself needs to be communication between the many parties involved and the decision processes therein lays the role of the information system and its impact on the conduct of

these contacts through the computer networks. through an alternative that was selected and the results desired goals or value of the information shown and its accuracy in providing aid to the decision-maker at every stage of the decision-making results. (Mansour, 2000, p.56)

## **1.9. Information Systems in the Age of Globalization**

Globalization has spread and everything is changing in the world of globalization and the information revolution thinking in terms of markets on a global level rather than the local level, as the world has become a single market without borders, and we must various organizations adapt to these global changes.

the nations plays the role in international strategies have increased, as the international expansion of the business making the companies are able to determine the physical location of each activity in the value chain, where companies take substantive decisions in determining the location of each activity to enhance performance and reduce cost and risk. The business direction of global moved forms of organizations, but the success of that regulation requires information systems and standardization in business processes where the information can be used by the various business units in several diameters.

But managers in the global context, working in a volatile environment is familiar and complex cannot be ignored compared to the local context, where an entity dealing with multiple nationalities and cultures affect the deployment and the flow of information between corporate sponsor and followers in the multinational enterprise. Hence the need for a rapid change in strategy was the inevitable result of a private facility for the emergence of mega-mergers that led to the emergence of giant entities in order to deal with many different cultures and environments and search for the appropriate information systems. It is imperative for organizations to work on strategy development, taking into account the development of the information system and not to ignore the need to deploy this system to the business units and partners breakers. (Salwa, 2008, p.339)

It helps networks to promote the implementation of the strategic alliance between local and foreign companies because of the ease of electronic data exchange across the vast and global networks, and operating networks to connect branches and subsidiaries because of the cost and increase drop in acceleration performance, as the database is working to provide the necessary reports to senior management on the company's

activities Geography should be in this area noted that the task of developing a management information system does not stop at the design, testing and implementation of the final, but also important to make such a system live and interact with the organization and meet the evolving needs of information and is characterized by a high degree of flexibility that make many variables facing the inside and outside the organization, as well as Unending management information system project completion of the design and implementation day. But perpetuating and review process between now and then to make the changes it remains. With the development of the world and entered the second millennium a major revolution occurred in the development of new methods and innovative concepts for planning, monitoring and evaluation of performance and the inevitable result of this development emerged in the form of a huge volcano of audit information that comes out as a result of man and the experience and expertise of thinking, and has become a balance of humanity information is growing, threatening that it could not control and a payment by the prosecution. In a bid to cope with this huge flood of information loaded in the documents of various forms require devising suitable to accommodate management information systems through the introduction of information systems at the computer sophisticated types of modern techniques and methods developed that can correspond to the problem with a view to transforming the Save method and processing flow of information to the system (programs ) fits the nature of the information and the workplace in which they exist .(Salwa, 2008, p.339)

## CHAPTER TWO

### THE THEOROTICAL FRAMEWORK

#### 2.1. Previous Studies

Table (2): Previous Studies

<b>1</b>	
<b>Name of the researcher and Date of the study</b>	Alepeshabshh (2005)
<b>Title of the study</b>	The impact of the quality of management information systems in raising the level of job performance
<b>Sample of the study</b>	Security Corporation of Jordanian social.
<b>Most Important goals of the study</b>	This study aimed to identify the impact of the quality of management information systems to raise the level of performance Career in the Jordanian Social Security Corporation. It also aimed to identify the reality of quality systems Management Information in this institution, and the level of functionality.
<b>Most importance conclusion</b>	The study found the results having a significant impact to the quality of information systems to raise the level of performance Career
<b>2</b>	
<b>Name of the researcher and Date of the study</b>	Muasher (2006)
<b>Title of the study</b>	The impact of organizational and technical factors in the management information systems (application study)
<b>Sample of the study</b>	Jordanian banking sector.
<b>Most Important goals of the study</b>	The study targeted the impact of organizational and technical factors in the administrative information systems in the sector applications Jordanian banking.
<b>Most importance conclusion</b>	The study recommended the need to involve workers and users in the design of management information systems process And development
<b>3</b>	
<b>Name of the researcher and Date of the study</b>	(2007) Supattra Boonmak.

<b>Title of the study</b>	the impact of information systems and the administrative information systems at the administrative work efficiency
<b>Sample of the study</b>	It has been prepared The study to measure the impact of management information systems and information technology on the company's management efficiency, and the Business strategy there.
<b>Most Important goals of the study</b>	Executive Director of the Different institutions in Thailand
<b>Most importance conclusion</b>	The study found a number of the most important results of the administrative information and information technology systems increase The organization's effectiveness and efficiency of their performance and improve the strategic work in, and that whenever it was relying on information More the greater the need for information technology, and that the greater reliance on management information systems And information technology the greater the efficiency and effectiveness increased, and the better the culture of workers Foundation towards efficient performance and effectiveness

#### 4

<b>Name of the researcher and Date of the study</b>	Robert, David and Lori (2007)
<b>Title of the study</b>	the impact of information technology on individual and firm marketing performance
<b>Sample of the study</b>	US marketing executives
<b>Most Important goals of the study</b>	they tried to clarify the impact of information technology on individual and firm marketing performance, a theoretical model is presented linking organization and end user traits, information quality, system /service quality, industry traits and tasks performed using a system to perception of organizational performance impact through ease of system use, perceived individual performance impact, attitudes toward using the system, and system use.
<b>Most importance conclusion</b>	The results indicate that measures of organizational traits, individual traits, information quality, system /service quality, industry traits and tasks performed using the system impact perceived performance of the marketing organization mediated individual performance impact, attitudes toward using the system, and system use

#### 5

<b>Name of the researcher and Date of the study</b>	Kasasbeh (2007)
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<b>Title of the study</b>	The role of information technology in improving corporate performance: A Case Study Jordanian Free Zones Corporation
<b>Sample of the study</b>	Study Jordanian Free Zones Corporation
<b>Most Important goals of the study</b>	This study aimed to determine the role of information technology in improving the efficiency of the performance of the Free Zones Corporation Jordan during the period 1996 - 2005,
<b>Most importance conclusion</b>	Received an improvement in all elements of information technology, with the difference in the rates of improvement, No significant correlation between the size of the investment, hardware, software, and workers in the field of information technology with all the effectiveness of the institutional performance indicators except for the goal of return on cost. No impact for each of the size of the investment, hardware, software, and workers in the field of information technology at all effective institutional performance indicators except for the goal of return on cost.

## 6

<b>Name of the researcher and Date of the study</b>	Al Meetany (2004)
<b>Title of the study</b>	The impact of the management information system to improve the efficiency and effectiveness
<b>Sample of the study</b>	Jordanian Commercial Banks: Arab Bank
<b>Most Important goals of the study</b>	This study aimed to identify the impact of management information system to improve the efficiency and effectiveness of the Arab Bank from the perspective of both the staff and the Arab Bank management and dealing with customers.
<b>Most importance conclusion</b>	Among the most important findings of the study, said that users of management information systems have a level technicians and highly skilled and qualifications and experience to enable them to perform their work to the fullest, and that an appropriate degree of information provided by the systems used very high and reflected thus on the effectiveness of decision-making that are meant to take, and that Arab Bank has efficiently by providing hardware and software required for operation of the system, as evidenced by The study on the existence of a positive relationship between the linear size of investment in management information systems and the bank's profits greater the volume of investment in management information systems increased the bank's profits.

## 7

<b>Name of the researcher and Date of the study</b>	Al Fawzan (2003)
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<b>Title of the study</b>	modern information systems and their impact on the performance of employees
<b>Sample of the study</b>	General Customs Authority, Saudi Arabia
<b>Most Important goals of the study</b>	This study aimed know the sources of information flow in the Customs Department, and the identification and classification of internal and external information of interest
<b>Most importance conclusion</b>	find out the positive role of systems use modern information on the performance of employees, as well as knowledge of the negative role of the systems use modern information on the performance of employees, Among the most important findings of the study 61% of respondents do not know for specialized training programs in the field of modern information technology, and answered 24.2% of respondents said that it is not already present in the training programs, Lack of knowledge of staff interest in e-commerce, Endorsed by 91.5% of respondents believed that the use of modern information systems will contribute to the accuracy of the business, Approved by 87% of respondents believed that in the event of use slept interest information will improve the performance of modern interest, Approved by 87% of respondents believed that the use of modern information systems will facilitate the work of the staff, The majority of respondents agreed that there are administrative and financial constraints, operational and psychological facing the use of modern management information systems of interest.

## **2.2. The Theoretical Framework**

### **2.2.1. Quality of Management Decisions**

In fact, the decision is a choice between an offer of solutions to a problem or a crisis and the functioning of a specific and therefore we in our daily operation can almost take a series of decisions, some pay attention and study it and others randomly go out without a study. (Sqarra.Wordpress, 2010, p. 8)

Considered an administrative decision acted legally or disciplined and a means of management tools to achieve its goals and objectives where the administrative decision a major role in the field of the administrative process, The decision is the one who believes in manpower, material and means necessary administrative process and the decision is that crystallizes trends and policies into concrete things, as amended errors the warp in the course of that process, it also demonstrates the commitments and reveals the rights and importance of the era by issuing to the upper levels of the administrative hierarchy, where is the process of issuing or decision-making of the basic functions of the ministers and directors and toward them, and that this process will ensure the character organizationally to the fact that the decision, although it was issued on behalf of a officials, however, the result of combined efforts. (Sqarra, 2010, p.8)

The quality of the decision are the use of accurate and reliable information relevant to the problem and to reach a decision Good decision at the various administrative levels of the organization, each decision carries with it a great deal of Risks, in order to avoid the decision-maker or limit the impact of these risks must be based on good information For good decision making, good The decision is that decision that is based on accurate and complete data and information and comprehensive and relevant to the problem, and when they are available to the decision-maker such information lies the problem of access a good decision taken in this decision a person. Good the decision is primarily based on two components:

- 1. Provide accurate and comprehensive and complete and reliable information relevant to the problem.**
- 2. Provide a good person (decision maker) to take the appropriate decision, and is capable of analysing this information and exploitation in the decision making process.**

There are many types of decisions that suit different types of management information systems. Decisions by matching structural information that identifies operational information systems, systems either semi decisions Structural information that identifies matching management information systems, and making non-structural systems by matching Information known to decision support systems Information Systems (Hassan, 2008, p. 21)

We are in this research highlight to get to know the impact of the use of management information systems in quality Administrative decisions in the hawler polytechnic university, after recognition of the quality of administrative decisions variable And its members will recognize the independent variables of management information systems of various kinds, and the extent Its relationship to the quality of administrative decision.

#### **2.2.1.1. Decision-making process is divided into several stages.**

- Identification of the target or desired goals clearly.
- Identify all possible alternatives and accepted.
- After assembling the analysis of alternatives and complete information on each of them using the following general criteria:
  - ❖ Degree of consensus among the targets achieved by the alternative and objectives of the individual.
  - ❖ Realized benefit of choosing the alternative, and the degree of risk involved.
  - ❖ Effort required implementing the alternative.
  - ❖ Individual values and determinants of society.
  - ❖ Order of the alternatives in the list of priorities according to the degree achieved with established standards.
    - Re-best alternative or three in the evaluation of the risks involved in each alternative light, and possible outcomes that have emerged after the initial analysis.
    - Choose the best alternatives among the alternatives or three that have been evaluated in the previous step and adopted for implementation. (Alukah, 2013, p. 12)

### **2.2.1.2. Decision Quality:**

A single decision-maker can decide when the time has come to stop the analysis and make the decision; decision analysis can provide some guidance, but it is really up to the decision-maker to decide when the decision is “good”— logically consistent with the decision-maker's decision basis (alternatives, information, values). However, in the cross-organizational, multi-decision-maker environment it is not so easy to determine when a decision is “good.” A more detailed language is needed to facilitate the discussion and indicate when the team is decision-ready. The language of Decision Quality has been developed to fill this need. It describes both the quality of the analysis and the quality of commitment to action. Decision Quality is measured by a number of quantitative estimates which, although subjective, are less ambiguous than purely verbal descriptions. And Decision Quality can be monitored periodically during the course of a DDP and corrective actions can be taken if required. (Celona, 2008, p. 73)

### **2.2.1.3. Types of Decision:**

Various types of decisions are taken by managements. Some of these are given below: - (Singh, 2011, p. 11)

#### **1. Programmed Decisions**

- a. Very structured in the nature.
- b. Are for short term
- c. Work according to some of the norms that have been laid down.
- d. The various situations of such a scenario are known.
- e. Such Decisions are taken at the operating or the lower levels of an organization.
- f. Are generally routine decisions.
- g. Can be repetitive in the nature.
- h. Certain particular procedure is needed to be followed.
- i. The programmed Decisions can be taken with the help of the following techniques –
  - A. Habit
  - B. Computers
  - C. Operational research

- D. Organizational Hierarchy or structure
- E. Standard operating procedure

**2. Non- Programmed Decisions**

- a. New situations
- b. Novel not cut
- c. Dried
- d. Very innovative in the nature
- e. Long term
- f. Strategic
- g. Important and critical
- h. Complex situations
- i. The different techniques for taking the non- programmed Decisions can be summarized as the follows –
  - A. Judgment
  - B. Intuition
  - C. Creativity
  - D. Business acumen
  - E. Training executives
  - F. Complex / specially designed computer programs. (Singh, 2011, p. 11)

**Figure (2):** info systems, level, decisions

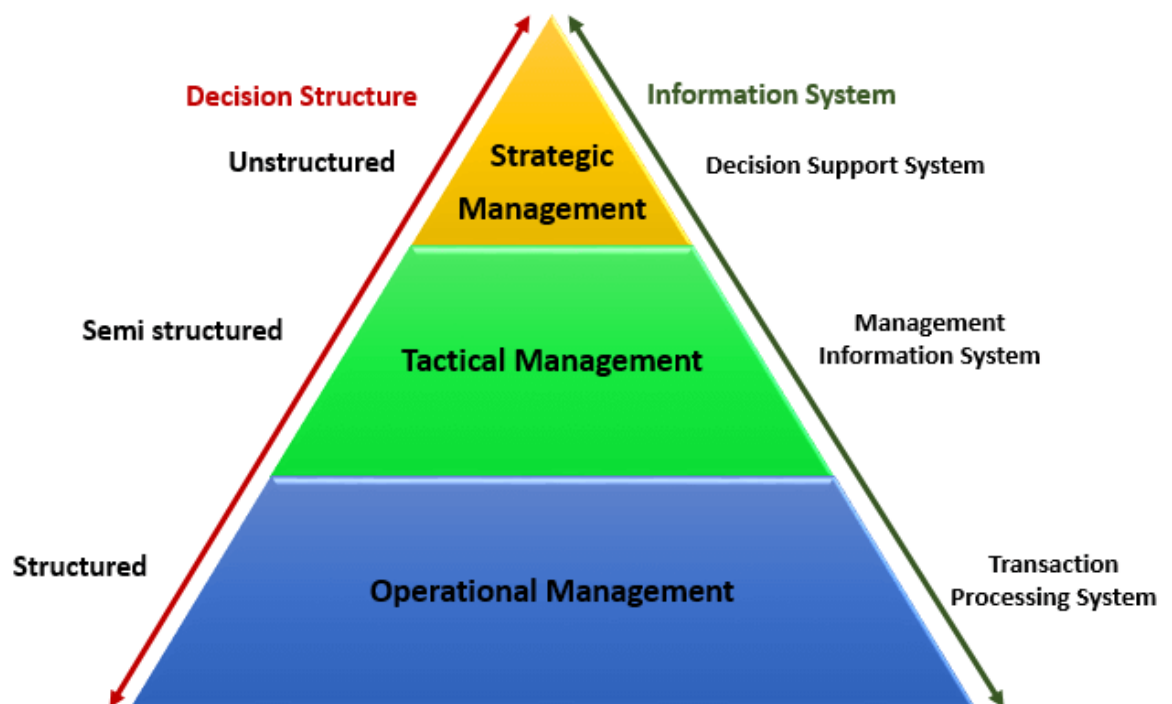
TYPE OF DECISION	ORGANIZATIONAL LEVEL			
	OPERATIONAL	KNOWLEDGE	MANAGEMENT	STRATEGIC
STRUCTURED	ACCOUNTS RECEIVABLE TPS	ELECTRONIC SCHEDULING OAS	PRODUCTION COST OVERRUNS MIS	
SEMI-STRUCTURED	PROJECT SCHEDULING		BUDGET PREPARATION DSS	
UNSTRUCTURED		PRODUCT DESIGN KWS	FACILITY LOCATION	NEW PRODUCTS NEW MARKETS ESS

Source: (Slideshare, 2013, p. 31)

### 2.2.2. Types of Information Systems

The type of information system that a user uses depends on their level in an organization. The following diagram shows the three major levels of users in an organization and the type of information system that they use. (Guru99, 2016, p. 43)

**Figur (3):** Types of Information Systems



Source: (Guru99, 2016, p. 43)

#### 2.2.2.1. Decision Support Information Systems

The concept of decision support systems in the early seventies by Scott Morten departments under the support systems Name, The decision support systems it is free of any term that is agreed on a common definition for being a new science and the large number Specialists who drank at the present time. Which it is defined as "an information system based on the use of Computer and give managers easy and quick access to internal and external information they need to perform administrative activities "(Salmi, 2005, p. 62)

It can clarify the concept of decision support systems through the so-called system itself where we find:

**Decision:** where the focus of decision support systems to support the transition with interest managers Levels of operational interest to resolving administrative problems (Hamidi et al., 2005, p. 112) It follows from the above definitions that the primary purpose of decision support systems is to improve and support Administrative decisions making in senior management, and decision support systems focused on decision support is structured in the organization. Well these systems serving senior management primarily in the field of planning Long-term for all aspects of the organization, as it works to improve the quality of administrative decisions taken in senior management. (McLeod, 2000, p. 22)

A choice made between alternative courses of action in a situation of uncertainty. (Businessdictionary, 2016, p. 6)

**Support:** as decision support systems to support, not replace the Director in decision-making, it prepares the Director of the appropriate analysis of the phenomenon being studied methods and leaves the final decision of managers.

**System:** where the decision support system is built based on the needs of the actual beneficiaries' with Note environmental changes that deal with it.

**2.2.2.1.1. Functions of a DSS:**

DSS manipulate and build upon the information from a MIS and/or TPS to generate insights and new information. (Chris-Kimble, 2016, p. 3)

**Table (3):** Functions of a DSS in terms of data processing requirements

Inputs	Processing	Outputs
Internal Transactions Internal Files External Information?	Modelling Simulation Analysis Summarizing	Summary reports Forecasts Graphs / Plots

**Source:** (Chris-Kimble, 2016, p. 3)



#### **2.2.2.1.2. Some examples of DSS**

1. Group Decision Support Systems (GDSS)
2. Computer Supported Co-operative work (CSCW)
3. Logistics systems
4. Financial Planning systems
5. Spread sheet Models?

#### **2.2.2.1.3. The role of DSS**

1. Support ill- structured or semi-structured decisions
2. Have analytical and/or modelling capacity
3. Used by more senior managerial levels
4. Are concerned with predicting the future
5. Is effectiveness oriented?

#### **2.2.2.2. Management Information Systems (Functional)**

For historical reasons, many of the different types of Information Systems found in commercial organizations are referred to as "Management Information Systems". However, within our pyramid model, Management Information Systems are management-level systems that are used by middle managers to help ensure the smooth running of the organization in the short to medium term. The highly structured information provided by these systems allows managers to evaluate an organization's performance by comparing current with previous outputs. (Chris-Kimble, 2016, p. 3)

It can be defined as a group of individuals, data, and procedures associated with each other to provide useful information. (Al-Quds Open University, 2007, p. 16)

Also it is known as a sort of information systems designed to provide the organization with the necessary information management Planning, organization, leadership, and oversight of the organization's activities or to assist in decision-making. (Hassania, 2006, p. 53)

It follows from the above definitions that the basic function of management information systems is to provide Accurate and comprehensive information that increase the efficiency of administrative processes in the organization and also improve the quality of Administrative decisions semi structured, and considered the most important in the implementation of various administrative functions and

activities, MIS also aims to provide information that meets the requirements of administrative levels Middle and lower, as it specializes in short-term events and administrative activities. As well as the systems Administrative information helps managers and decision-makers to make decisions more accurately and better Taken without this information or reliance on the information that has been processed manually, although this Systems do not provide all the required information, and therefore has been designed to support the decisions that are more systems Privacy in the decision-making process (Salmi, 2003, p. 175)

Kind of organizational information computer systems, that take internal information from operating processing system and summaries them to Meaningful and useful forms as management reports to use in performing management duties such as monitoring and decision making. Management information systems are a kind of computer information systems that could collect and process information from different sources in institute decision-making in level of management. Management control, needs to information that some part of it generated by transaction processing systems.

Support management control information system, process generated data by Transaction processing systems and offer them to Manager in a new significant form. (Arash Heidarkhani, 2013, p:80).

#### **2.2.2.2.1. Advantages of Information Systems:**

Information systems provide three types of advantage to organization:

##### **❖ Improving productivity:**

Efficiency improvements occur when that with the same or fewer resources, we could do more work. In Organizations, improving productivity occur in improving work processes. Information systems can be effective in making work faster, accurate and easier and via this way improve their productivity.

##### **❖ Improve Effectiveness:**

The effectiveness to ability of an individual or an organization is in doing the things that must be done. Manager, who predicted the conditions that may cause problems and examine causes before problems occur, is more effective than a manager that should solve some problems continuously that they could avoid them. Information systems provide information to help manager to evaluate circumstance and choice better option.

❖ **Competitive advantage:**

An Organization that with using information systems has improved its efficiency and effectiveness has the potential to change method of organizational competing. (Arash Heidarkhani, 2013, p:80)

**2.2.2.2.2. Functions of a MIS:**

MIS are built on the data provided by the TPS

**Table (4):** Functions of a MIS in terms of data processing requirements

<b>Inputs</b>	<b>Processing</b>	<b>Outputs</b>
Internal Transactions	Sorting	Summary reports
Internal Files	Merging	Action reports
Structured data	Summarizing	Detailed reports

**Source:** (Chris-Kimble, 2016, p. 3)

**2.2.2.2.3. Some Examples of MIS**

1. Sales management systems
2. Inventory control systems
3. Budgeting systems
4. Management Reporting Systems (MRS)
5. Personnel (HRM) systems. (Chris-Kimble, 2016, p. 3)

**2.2.2.2.4. The role of MIS**

1. Based on internal information flows
2. Support relatively structured decisions
3. Inflexible and have little analytical capacity
4. Used by lower and middle managerial levels
5. Deals with the past and present rather than the future
6. Efficiency oriented. (Chris-Kimble, 2016, p. 3)

### **2.2.2.3. Operational Information Systems (TPS)**

Another type of information system that has become very popular is TPS. It stands for Transaction Processing System and collects, stores, modifies and retrieves all information about transactions in an organization. A transaction here is referred to any event that generates or modifies the already stored information.

Transaction Processing System is operational-level systems at the bottom of the pyramid. They are usually operated directly by shop floor workers or front line staff, which provide the key data required to support the management of operations. This data is usually obtained through the automated or semi-automated tracking of low-level activities and basic transactions. (Chris-Kimble, 2016, p. 14)

If an organization is using both MIS and TPS, there is regular exchange of data among these systems. TPS becomes a major source of data for MIS. The data that is generated through TPS is on the level of operations such as payroll or order processing. TPS tracks daily routine transactions that are essential to conduct business. MIS makes heavy use of data from TPS though it also utilizes data from other sources. (Difference Between TPS and MIS, 2011, p. 2)

Al-Tai defined operational information systems with information on the daily operations of which must be provided Detailed and accurate information on an on-going basis and frequent on all aspects of activity of the organization, for example, Information relating to the presence of the departure of individuals, the types and quantities of goods produced and sold Interruptions occurring in machines and equipment.... etc. (Tai, 2005, p. 239)

Operational information systems as computer processing systems oriented management support is also considered Operational (management in the first line) to implement its programmed activities and to support decisions also represents the base Launch is indispensable for the development and implementation of management information systems in business organizations and institutions General economic, social and other .(Yassin, 2006, p. 98)

It follows from the above definitions that the basic function of operational information systems Lower administrative levels is to get the information, and analysis, classification, and classified manner Accurate and good. because it is considered the front line to deal direct with customers, so the information systems Operating get a true, accurate and reliable information for management decision-making in Lower administrative levels, but also an input to the management information systems (functional). (Salmi, 2003, p. 175) and therefore the information that is obtained from the systems Operational information significantly affect the quality of the administrative decisions taken at the same level Administrative and other administrative levels.

This system processes data by transferring numbers and letters to the information in order to take advantage of them and use them. And it is treated in several ways (manual processing, processing machines that operate keys such as writing machines, calculators, and boring machines cards, and computers). One of the main tasks of the data processing system includes: (Aqsa, 2010, p. 23)

- 1.** The collection and preparation of data. It is the primary task of this system by recording activities of the Foundation and saved in the records, and the data can be gathered using the terminal end (Terminals) An example of this are in the airline office where the booking officer can enter data (such as the flight number and date of take-off and the name of the traveller and class seat), but he You must set up, classification and coding data before it entered.
- 2.** Review the data. So as to ensure it is correct and free of errors before they are treated.
- 3.** Data processing. The move has a number of sub-activities such as (Data Sorting Order) and the files are created and stored, and perform calculations and summary, then put a certain format, and stops to create the file on the file management system (File Manager), and the calculation is made by applying equations mathematical models to data for additional information, and finally the data is summarized to provide senior departmental process and can display data forms and fees and the program (Harvard Graphics).
- 4.** Data storage. And the storage media help of the computer, and called on the data that is stored (data base), which arise mainly from data processing.

5. The preparation of reports. Previous operations carried out (1-4) for the purpose of reporting which is how to make the data to the user or the ultimate beneficiary, such as sales reports. These reports are (daily, weekly, monthly, or yearly).

6. Steps of data processing.

a) **Input (Input)**. Includes:

Construction (Originate) and rating (Classify) and revision (Edit).

b) **Processing (Processing)**. It includes (sorting, calculation, and the summary, comparison, retrieval).

c) **Storage (Storage)**. This includes (indexing, protection, and update).

d) **The output (Output)**. It includes output reports, presentation, and the release or publication.

e) **Data processing systems properties.**

- Data processing system leads basic tasks indispensable for any organization reported.
- The data is processed in accordance with specified procedures.
- Handles the data processing system with this data historically where this data describing the events that occurred in the past.
- Provides the minimum needed to resolve the problems of the organization of information, through the preparation of reports.
- Is used in the lower level (operational) for the exercise of office work and dealing with records. (Aqsa, 2010, p. 53)

**2.2.2.3.1. Functions of a TPS:**

TPS are ultimately little more than simple data processing systems. (Chris-Kimble, 2016)

**Table (5):** Functions of a TPS in terms of data processing requirements

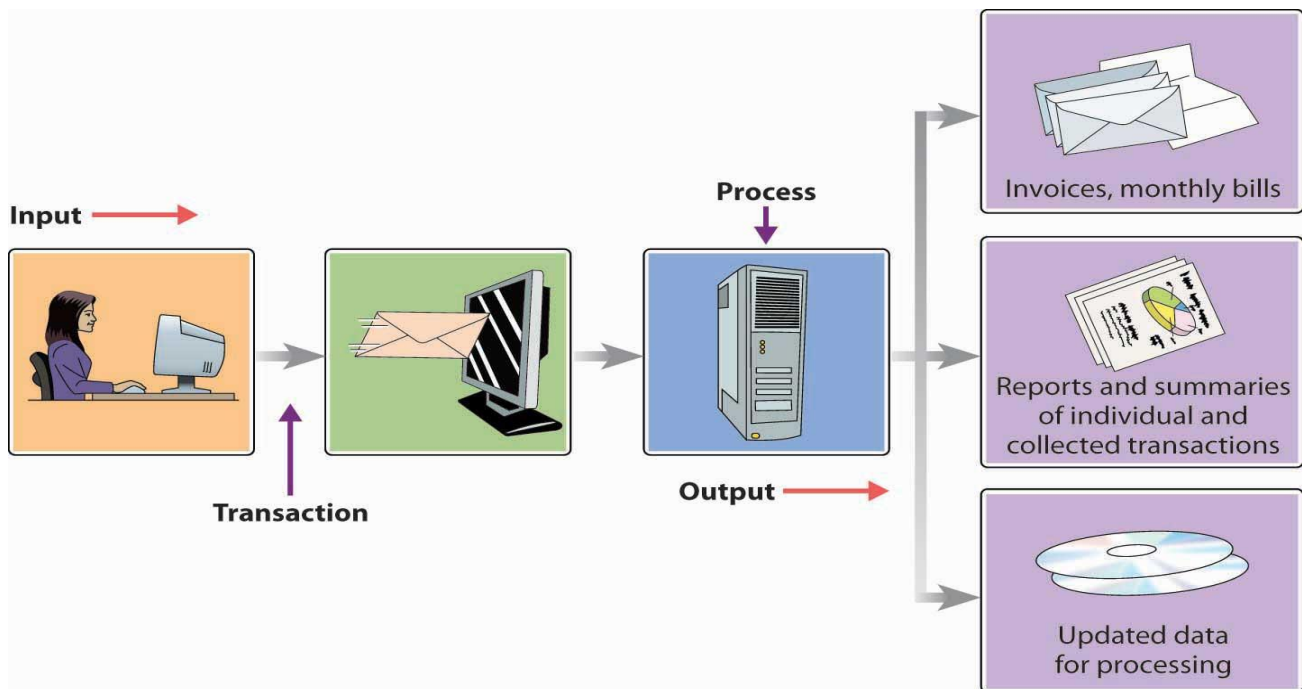
<b>Inputs</b>	<b>Processing</b>	<b>Outputs</b>
<b>Transactions, Events</b>	<b>Validation, Sorting, Listing, Merging, Updating, Calculation</b>	<b>Lists, Detail reports, Action reports, Summary reports?</b>

**Source:** (Chris-Kimble, 2016, p. 3)

Table (5) above "Transaction Processing System" illustrates a TPS in which the transaction is a customer's electronic payment of a bill. As you can see,

TPS output can consist not only of documents sent to outside parties (in this case, notification of payment received), but also of information circulated internally (in the form of reports), as well as of information entered into the database for updating. (Collins, 2012, p. 218)

**Figure (4)** Transaction Processing System



Source: (Collins, 2012, p. 10)

#### 2.2.2.3.2. Some examples of TPS

1. Payroll systems
2. Order processing systems
3. Reservation systems
4. Stock control systems
5. Systems for payments and funds transfers. (Chris-Kimble, 2016, p. 16)

#### 2.2.2.3.3. The Role of TPS

1. Produce information for other systems
2. Cross boundaries (internal and external)
3. Used by operational personnel + supervisory levels
4. Efficiency oriented. (Chris-Kimble, 2016, p. 16)

- **Difference Between TPS and MIS**

TPS stands for Transaction Processing Systems and MIS stands for Management Information Systems. This article will tell the difference between the two based on the type of users, activities, report generation and type of data.

MIS provides information about internal operations to managers for decision making, planning and analysis. The system helps compare this data to facilitate decision-making and answer questions. TPS on the other hand, performs routine operations for supervisory executives which include storing, retrieving, possessing, creating and formatting data. The users of TPS come on the lower most level in the management hierarchy while the users of MIS are the mid-level managers.

The activities performed by TPS are different from that of MIS. The input activity involves data entry, transaction processing, TPS file and database processing and TPS documents and report generation. The activities performed by MIS are taking high volume transaction level data as an input and then processing this input based on simple models. The outputs of MIS are the summary reports that are used by the middle managers. It must also be noted that MIS uses compressed and summarized data provided by the TPS, while TPS deals with raw data.

The documents generated by transaction processing systems and management information systems also differ. TPS generates action documents (for example purchase orders and pay cheques), information documents (for example sales orders and sales receipts), control listings that include transaction logs and turnaround documents. All these documents do not help in decision making. While the reports produced by MIS are scheduled reports (monthly financial statements) and exception reports (for example credit reports). TPS provides information to the MIS and DSS (Decision Support Systems) while MIS provides information to ESS (Executive Support Systems) and DSS. (Stepbystep, 2016, p. 7)



## **CHAPTER THREE**

### **METHODOLOGY OF THE STUDY**

This research follows a methodology descriptive and causal to describe the variables of the study and then conduct Standard questionnaire tests, and a causal connection between the independent and the dependent variables. Also it will be described in the study the demographic characteristics of the sample items of the study by calculating the percentages Centennial and frequency. As it will be describing response of study sample items (independent and depends variables) by calculating Averages, standard deviations,

#### **3.1. Types and Sample Size**

It was a random sample of the study population, who are employees of the University of Hawler Polytechnic in Iraq and the number of them was nearly (1000) in the city of Erbil, and based on the scientific foundations developed by Both Kreczs and Morgan (Kerjcie & Morgan, 1970, p. 607) about the appropriate sample size depending on the size of The study population, which consists of employees in the Polytechnic University.

And dividing the sample number (100) on the number of the study population (1000), so the sample ratio of the study population will be  $(0.1 * 1000 = 100)$  In general, the sample size is appropriate for most research if it is greater than (30) and less than (element 500) (Roscoe, 1975, p.142).

#### **3.2. Data Collection Tool**

The questionnaire will be used to collect data on the variables of the study will be distributed on the items of The sample, as shown in the previous table that illustrates the main axes and the number of paragraphs of each variable. According to what is featured in the study extension.

This study consists of two aspects; the theoretical side and the practical side, in the theoretical side most related scientific ideas will be touched to the subject, but in the practical side researcher has relied on Analytical and descriptive approach, using the method applied, in order to collect and analyse data and test Hypotheses. The study is based on data collection on two sources:

**Secondary sources:** books, journals and theses; and with the aim of preparing the theoretical frame work for the study.

**Primary sources:** a questionnaire, which was developed by the researcher to collect data and information that relate to the study of the study sample. The questionnaire included a number of statements to reflect Objectives of the study and questions; to answer them by the respondents.

### **3.2.1. Measuring and Standard of Variables.**

Validity of study tool and stability was adopted in the study of measurement on the virtual honesty tool to make sure of the sincerity and feasibility of questionnaire, through a presentation to a group of people with administrative and academic competence of Professors.

### **3.2.2. Methods of the Statistical Analysis of the Study Data and Test**

#### **Hypothesis.**

The stability value of tool measurement was to determine by calculating the coefficient of reliability each area of the questionnaire, as well as to determine the total score for stability. This was done by using Cronbach's alpha test the value of this parameter ranging from (0) to (1) the value of ( $\alpha \leq 0.06$ ) is an indication of the weakness of the degree of reliability of internal measure. (Molhotra, 2004, p.268) the alpha value for the study variables has reached as follows:

**Table (6):** Results Value Reliability Coefficient Alpha

Variable	Cronbach's alpha coefficient
Stability of all the variables coefficient	95.3%

**Source:** According to the research (survey)

Notes of Table (6) the reliability coefficient for all variables of the study is higher than the minimum accepted ratio (%60).

### **3.3. Measuring the Variables of the Study:**

It was measured decision support and management information systems and operational information systems at the Hawler Polytechnic University by using a Likert scale to select a standard questionnaire, and the causal relationships between these variables as follows:

#### **3.3.1. Decision Support Information Systems**

The decision support system has some range of property information systems which are as follows: Information systems Detailed and prompt reports, typical information systems, good performance, reliability, the technology used stable, The paragraphs of measurement as follows: strongly opposed -1, opposed-2, neutral -3, agree-4, Strongly agree-5.

#### **3.3.2. MIS (Functional)**

The management information systems has a range of properties which are as follows: reports summarized Variety, timing and reliability, simplified models with the basic structure of the data, the technology fairly stable, The paragraphs of measurement as follows: strongly opposed -1, opposed-2, neutral -3, agree -4, Strongly agree -5.

#### **3.3.3. Operational Information Systems**

The operational information systems has a range of properties which are as follows: A system for facilitating more than being a platform, represents a rapid response to the diverse needs of information, flexibility And the ability to adapt includes models and can nominate new models, sophisticated technology, and the vertebrae Measurement is as follows: strongly opposed -1, opposed-2, neutral -3, agree -4, Strongly agree -5.

#### **3.3.4. Quality Management Decisions**

The quality of administrative decisions has a range of characteristics, namely: consistency and coherence of the decision, the integrity of the decision and transparency, inclusiveness and integration decision. The paragraphs of measurement as follows: strongly opposed -1, opposed-2, neutral -3, agree -4, strongly agree -5.

Then a questionnaire was developed for this purpose has been directed to the item of the sample and was one of four main sections as Illustrated in Table (7).

**Table (7):** Independent and Depend Variables of the Study and the Questionnaire Distributed by Phrases.

Variables	questionnaire phrases
Operational information systems	6 -10
MIS functional	11-15
Decision Support Information Systems	16-23
Quality of management decisions	24-30

**Source:** according to the research (survey form)

### 3.4. Data Processing Methods

The study data has processed using a number of descriptive statistical methods depending on A statistical analysis program (SPSS) and a sample has been developed demonstrates a correlation and the impact of Management Information system with its departments in the quality of management decisions, and then the test of those correlation and causality relations has been conducted using linear regression model depending on the initial data. where the study hypotheses has tested using (t-test) to test the impact of the independent variable on each dependent variable in the Simple regression linear model, also a correlation coefficient (R) has found to determine the strength and type of relationship between the dependent variable And the independent variable. The coefficient of determination ( $R^2$ ) used in order to determine the extent of the contribution of independent variables to change the contrast in the dependent variable. In addition to descriptive statistics methods to calculate the mean, standard deviation to determine accept or reject degree to the questionnaire's paragraphs of the study sample. The five (likert) scales was used in the questionnaire form, so each relative answer takes importance.

## CHAPTER FOUR

### RESULTS OF STATISTICAL ANALYSIS

#### 4.1. Results of the Statistical Analysis Descriptive of the Characteristics of the Sample Item:

In this section will display the characteristics of the sample according to demographic characteristics are as follows:

##### 4.1.1. Gender

**Table (8):** The sample distributed by gender

Gender		Frequency	per cent	Cumulative per cent
Valid	MALE	61	61.0	61.0
	FEMALE	39	39.0	100.0
	Total	100	100.0	

**Source:** By researcher according to the survey

As can be seen from the above table, the sample distributed by gender to varying degrees, the Male respondent's ratio was (61%) that is Larger than Females Rate who replied questionnaire sections and their proportion of The questionnaire respondent was (39%) but This Disparity is small and has not Great Effect.

##### 4.1.2. Age

**Table (9):** The sample distributed by age

Age		Frequency	per cent	Cumulative per cent
Valid	18 - 25	4	4.0	4.0
	25 - 35	35	35.0	39.0
	35 - 45	30	30.0	69.0
	45 - 63	31	31.0	100.0
	Total	100	100.0	

**Source:** By researcher according to the survey

As can be seen from the table above, the sample distributed by age to varying degrees, The proportion of people who answered the questionnaire's paragraphs and from 25 - 35 years was 35%, which is the largest proportion, The percentage of people who answered and their age from 35 - 45 years old was 30% and also the proportion of people who answered the questionnaire's paragraphs and their age from 45 - 63 year was 31% and finally , the percentage of people who answered the questionnaire and their age from 18- 25 and over It was 4%, that is the lowest ratio.

#### 4.1.3. Qualification

**Table (10):** Distribution of the sample by qualification

Qualification	Frequency	per cent	Cumulative per cent
Valid Primary	4	4.0	4.0
diploma	47	47.0	51.0
bachelor	39	39.0	90.0
Graduate Certificate	10	10.0	100.0
<b>Total</b>	<b>100</b>	<b>100.0</b>	

**Source:** By researcher according to the survey

It can be noted from the table above, the distribution of the sample by qualification and who answered the questionnaire it was as follows:

the proportion of people who obtain the certificate of diploma and answered the Questionnaire was 47%, that is the largest proportion and also the percentage of people obtaining a bachelor's and answered Questionnaire was 39%, and the people who obtain the Graduate Certificate and they answered sections of the questionnaire is 10%, and primary qualifications was 4% which is the lowest ratio.

#### 4.1.4. Experience

**Table (11):** Distribution of sample by years of experience

Experience	Frequency	per cent	Cumulative per cent
Valid LESS THAN 3	2	2.0	2.0
3 - 6	18	18.0	20.0
6-10	29	29.0	49.0
MORE THAN 10	51	51.0	100.0
<b>Total</b>	<b>100</b>	<b>100.0</b>	

**Source:** By researcher according to the survey

Notes from the table above, the distribution of sample by years of experience and who answered the questionnaire form it was distributed as follows:

the proportion who have of experience less than 3 years was 2% that is the lowest percentage of respondents While the percentage of those their experience from 3 years to 6 years was 18%, while the percentage of those who answered the paragraphs of the questionnaire and their years of experience from 6 to 10 years was 29% and finally, the percentage of who has years of experience more than 10 years was 51%, which is the largest percentage of Respondents to the questionnaire form.

#### 4.1.5. Functional level

**Table (12):** The distribution of sample by functional level

Functional level	Frequency	Per cent	Cumulative per cent
Valid DEPARTMENT MANAGER	1	1.0	1.0
UNITE MANAGER	13	13.0	14.0
EMPLOYEE	86	86.0	100.0
Total	100	100.0	

**Source:** By researcher according to the survey

It is noted from the above table, the distribution of sample by functional level it was distributed as follow:

The proportion of people who were on the top of the administrative levels (DEPARTMENT MANAGER) of the university's hierarchy was 1%, the lowest administrative level, while the proportion of people in the middle administrative level (UNITE MANAGER) was 13%, while the proportion of people respondents the questionnaire at the lower administrative level (EMPLOYEE) is 86% that was the highest rate.

## 4.2. Results of the Statistical Analysis of the Sample Response of the Response for Dependent and Independent Variables of study

This section will be in the extraction of the arithmetic mean and standard deviation of the study questions (Independent and dependent Study variables).

#### 4.2.1. Descriptive Statistics

**Table (13):** Descriptive statistical analysis

	N	Mean	Std. Deviation
<b>OIS</b>		<b>1.94</b>	<b>0.86</b>
Q1	100	1.84	.884
Q2	100	1.96	.875
Q3	100	1.90	.847
Q4	100	1.96	.852
Q5	100	2.05	.869
<b>MIS</b>		<b>1.94</b>	<b>0.90</b>
Q6	100	2.00	.899
Q7	100	1.90	.870
Q8	100	1.92	.929
Q9	100	1.82	.925
Q10	100	2.08	.907
<b>DSS</b>		<b>2.13</b>	<b>0.91</b>
Q11	100	2.02	.932
Q12	100	2.10	.870
Q13	100	2.16	.907
Q14	100	2.10	.905
Q15	100	2.34	.913
Q16	100	2.13	.917
Q17	100	2.26	.981
Q18	100	1.95	.880
<b>QDM</b>		<b>1.95</b>	<b>0.92</b>
Q19	100	1.95	.903
Q20	100	2.01	.870
Q21	100	2.03	.926
Q22	100	1.99	.927
Q23	100	1.91	.954
Q24	100	1.86	.932
Q25	100	1.92	.939
Valid N (list wise)	100		

**Source:** According to the research (survey)



The results of the descriptive statistical analysis of the questions of the study in the table (13) appear that the study sample was positive toward all paragraphs (questions) that Measures Independent variables, because the arithmetic means of the performance of the study sample is greater than mean of the average Measurement Tool:

**(\*) Average Measurement Tool = Total measurement weights/5**

$$5 = (1+2+3+4+5)/5 = 3$$

And the standard deviation is Less from Half Arithmetic mean, Where Notes that There is High approval of the paragraphs of the first independent variable, with an average mean of response (1.94) and Standard deviation (0.86), questions (6-10) this means that hawler polytechnic university actually used Operational information systems at the lower level management (the first front line to deal With customers ) as well as using of operational information systems in this administration level has impact on the quality of Administrative decisions making at that university.

According to the findings contained in the table also refers that there is a high degree of approval on the paragraphs of the second independent variable from the management information systems used in the Hawler polytechnic university, the Average response mean for this variable has reached (1.94) and Standard deviation(0.90) This refers to the expand of impact of the use of management information systems ( functional) at middle Management Levels at the university On Quality of Management Decisions making in middle management level, (Questions 11 -15).For the third independent variable, a decision - support information system used in the hawler polytechnic university. descriptive analysis results indicates that the overall response of individuals around the paragraphs of this independent is High (questions 16-23) , with an average response mean to this independent is (2.13), and the Standard deviation (0.91) This means that the decision support in the upper levels of management information systems of the university uses this system effectively and efficiently.

The results of the analysis, according to what is contained in the table, that there is a high approval of the quality of decisions Management has average response mean

(1.95) and standard deviation (0.92) These values are for dependent variable questions, (24-30) which indicates that the quality of the administrative decisions taken In the Hawler polytechnic university is take of all administrative levels with good quality and efficiency of the Organization , and all types of management information systems affects various kinds to effectively influence the quality Administrative decisions taken in this organization.

#### **4.3. Reliability Test:**

Reliability coefficient was calculated in a manner the internal consistency of the paragraphs of the questionnaire calculates Cronbach's Alpha coefficient in terms of the degree of reliability (% 95.3) indicates this value that the tool has a suitable degree of reliability and fulfils the purposes of the study.

#### **4.4. Hypothesis Testing Rules:**

The hypotheses nihilism has been tested by the critical value approach which Base decision States by this rule that it cannot reject the hypothesis nihilism ( $H_0$ ) If parameter Or test statistic (F) or (T) locate in the admission area (that is, the value of (T) Statistical calculated less than Tabulated value) so when significance scale ( $\alpha$ ) (.05) Which Confidence scale.  $(1 - \alpha)$  (0.95).

The correlation coefficient (R) was identified to measure the Strength of Association In the relationship between the independent variable and the dependent variable in the simple regression model. (Berenson & Levine, 1999, p. 790) Addition to the Coefficient of Determination ( $R^2$ ) which measures the strength of that coexistence through it shows the proportion of the total variation in the dependent variable explained by the variation in independent variable. (Malhotra, 2004, p. 503).

Below are test hypotheses incoming in the tables are described later depending on the rule described above.

#### 4.5. Results of The Analysis to Test Hypotheses:

##### 4.5.1. Results of the First Hypothesis Test (Ho1):

**Table (14):** Shows Results of the first hypothesis test (Ho1), which states that there is no statistically significant impact of the use of decision support system on the quality of management decisions at the Hawler polytechnic university.

Statistical decision	R <sup>2</sup>	R	Tabulated T	Calculated T	Sig.
reject nil hypotheses	0.287	0.535	1.96	6.281	0.000

**Source:** By researcher according to the survey

The table above shows that the hypothesis nihilism (Ho1) can be rejected Depending on the decision rule described previously Where is noted that the(T) value is greater than the calculated in Tabulated (T), and the significance test is less than (0.05) It can the conclusion From here that the efficiency of decision - support and efforts in which they operate these systems in the levels of information systems The Supreme Administrative hawler polytechnic university greatly affects the quality of administrative decisions taken in this level. Despite the weakness of the proportion of each of the R (0.535) and (0.287) R<sup>2</sup> However , it remains important in the interpretation of The relationship between the two variables because of the Significant influence decision - support systems and the work carried out by the Information In order to provide accurate and detailed information, and the good, the modern .... etc., in the quality of administrative decisions can be the interpretation of this relationship through the adoption of good decision - maker on such modern systems to get Information for approval as a basis for effective decision - making in the university.

#### 4.5.2. Second Hypothesis Test Results (Ho2):

**Table(15):** Second Hypothesis of Test Results (Ho2) , which states that there is no meaningful Statistical relationship impact of the use of management information systems (functional) On Quality Decisions Management at the university of hawler polytechnic.

Statistical decision	R <sup>2</sup>	R	Tabulated T	Calculated T	Sig.
reject nil hypotheses	0.396	0.629	1.96	8.022	0.000

**Source:** By researcher according to the survey

The results of simple linear regression analysis appear in Table (15) there is significant effect of MIS efforts on the quality of administrative decisions in the middle management level of Hawler polytechnic university Because that the value of (Calculated T= 8.022) is larger than Tabulated value, and the level of significance less than (0.05) Depending on the decision rule statistical which described previously, we reject the premise second nihilism (Ho2) and we accept Alternative hypothesis (Ha) R value of the correlation coefficient between the two variables has been reached (0.629) and this indicates the presence of significant effect of management information systems (functional) On Quality Decisions Management at the Administrative level in the hawler polytechnic university, and interpretive ability R<sup>2</sup> independent variable was (0.396) Which Considered strong.

#### 4.5.3. Third Hypothesis Test Results(Ho3):

**Table (16):** Test Results of Third Hypothesis of the (Ho3) which is states that there is no meaningful Statistical relationship impact of the use of operational information systems on the quality of management decisions in the hawler polytechnic university

Statistical decision	R <sup>2</sup>	R	Tabulated T	Calculated T	Sig.
reject nil hypotheses	0.615	0.784	1.96	12.530	0.000

**Source:** By researcher according to the survey

The previous table shows that the hypothesis nihilism (Ho3) can be rejected Depending on the rules described Previously, where it can be noted that the value of (Calculated T = 12.530) It is greater than the T value (tabulated), and the significant Test less than (. 05) From here and the conclusion is that the efficiency of operational information systems and the efforts operate by this system in lower administrative levels of the Hawler polytechnic university is significantly effect on the quality of Administrative decisions making at this level.

The value of the correlation coefficient R Between two variables (0.784) this indicates a fair impact of operational information systems on the quality of management decisions at the hawler polytechnic university, and the explanatory power  $R^2$  the independent variable was (0.615). You can interpret this result that the operational information systems are making a fair effort to influence the quality of Administrative decisions making at the administrative levels.

#### 4.5.4. Test Results of the Influence of the Independent Variables

**Table (17):** Test Results of the Influence of the Independent Variables of the Study (x1, x2, and x3) in the dependent variable (Y) multiple linear regression analysis.

Statistical decision	$R^2$	R	Tabulated T	Calculated F	Sig.
reject nil hypotheses	0.619	0.787	1.96	52.154	0.000

**Source:** By researcher according to the survey

Based on what appears in the table above, we reject Ho and accept Ha Because of depending on the rules of hypothesis Test described earlier, where it can be noted that the significance test. Sig Equals (000)which It is less than  $\alpha$  which is equal to (. 05) The Calculated F value equal to (52.154) Greater than tabulated F, and therefore it's significant effect of (x1, x2, x3) the independent variables on the dependent variable (Y), as also noted a strong correlation between the independent variables (management information systems of all its kinds) And the dependent variable (quality of administrative decision), that the R equals (. 787) In addition , the explanatory power of the sample is high which  $R^2$  is (. 619)

#### 4.5.5. Dependent Variable: Quality of Decision Making

**Table(18): Coefficients of (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.657	.981		.669	.505
	TIS	.098	.104	.089	.948	.346
	MIS	-.123	.160	-.097	-.769	.444
	DSS	.654	.089	.806	7.325	.000

**a. Dependent Variable: Q of DM**

**Source:** By researcher according to the survey

So that we can get the study goal:

$$Y = 0.657 + 0.098X_1 - 0.123X_2 + 0.654X_3$$

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATION**

#### **5.1. Conclusion:**

1. The results showed a strong relationship and impact of statistically significant of Management information systems of its different kinds on the quality of management decisions in the Hawler polytechnic university, where The value of the correlation coefficient R between independent variables and the dependent variable of the sample is (% 78)and this is Indicates the presence of positive and acceptable relationship between management information systems and quality management decisions, The explanatory power  $R^2$  the independent variable is (% 61). Test Results of the effect of three types of management information systems in quality of Administrative decisions in the Hawler polytechnic university using simple regression method was As the follows :

- a) The presence of a statistically significant for decision - support systems on the quality of administrative decisions has impact in Administrative top - level Hawler polytechnic university, the value of the correlation coefficient R ( % 53) Between two variables in senior management, it has reached the explanatory power  $R^2$ The independent variable (%28) it is considered strong.
- b) The fair effect of management information systems (functional) On Quality of Administrative Decisions at Managing level. And the Correlation R between Two variables is (% 62) These indicate the presence of a strong and acceptable relationship between information systems Management (functional) And quality of administrative Decisions Taken at the Administrative levels in Hawler polytechnic university, and the explanatory power  $R^2$  of The independent variable reached (% 39) it is considered strong and very valuable.
- c) The presence of a statistically significant relationship between operational information systems on the quality of administrative decisions in Hawler polytechnic university. And the Factor Correlation R Between two variables is (% 78) here indicates the presence of positive and acceptable to the impact of operational information systems on the quality of managerial decisions at the university, reached capacity  $R^2$  the independent variable (% 61).

2. The results showed the existence of a significant impact, and the moral of the management information systems of all kinds on the quality of The administrative decisions of the Hawler polytechnic university R About (%78) And  $R^2$  (%61).
3. The Hawler polytechnic University are actually using operational information systems effectively and efficiently, and influenced positively in management decisions
4. Hawler polytechnic University is not making many efforts in the use of management information systems (Functional) in the administrative level, and therefore the management information systems (Functional) fairly affect the quality of the administrative decisions taken at this administrative level.
5. The Hawler polytechnic University are actually using decision support information systems at the top administrative level at the University in Erbil, effective and efficient in influencing the quality of decisions taken at the university.
6. The administrative decisions taken in Hawler polytechnic University of managerial levels (lower and upper) enjoy quality and high efficiency, and through reliance on the information provided by management information systems of various kinds.

## **5.2.Recommendation:**

1. Although the efficiency of the administrative information systems in Irbil polytechnic University, we must increase the interest MIS (functional systems) at the middle management level and work to increase efficiency The impact on the quality of management decisions.
2. The need to increase the efficiency of operational information systems in the management of the world, as well as decision support information systems in Senior management, in spite of the positive impact of these systems on the quality of the administrative decisions taken at the university That have been reached in this study.
3. Work to take advantage of the administrative information systems in ways that contribute to the improvement of the quality of management decisions At all administrative levels, and in a way help the university in achieving competitive advantage and sustainability.
4. The need to increase the university's interest in the quality of information you get, relying on systems Modern management information to ensure this.
5. The need for more research in the field of modern management information and the quality of decisions managerial systems Through research on the relationship of the modern medium of information systems and administrative decisions in sectors Different economic, as was the role of research in management information systems in the quality of managerial decisions Continuing to small businesses compare with medium or large.



**6.** The need to increase the efficiency of decision-makers at the university using the information generated by systems Various management information on all the different levels of management at the University

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## APPENDIX

### Questionnaire form

The study entitled

"THE IMPACT OF MANAGEMENT INFORMATION SYSTEM (MIS) ON THE QUALITY OF ADMINISTRATIVE DECISIONS MAKING IN HAWLER POLYTECHNIC UNIVERSITY"

In order to complete the requirements for obtaining a master's degree from BINGOL University /TURKEY, Please kindly Patch resolution After reading all the words carefully and then put tick (√) in the Box Which Express About your Consent Note That the answers Not Used Except For the purposes of Scientific And With Appreciation.

Researcher  
Hilmit Fouad Khudhur  
2016

#### Personal information:

1. Gender:	Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
	18-25	<input type="checkbox"/>	25-35	<input type="checkbox"/>
2. Age:	35-45	<input type="checkbox"/>	45 +	<input type="checkbox"/>
	Basic	<input type="checkbox"/>	Diploma	<input type="checkbox"/>
3. Education	BA	<input type="checkbox"/>	Higher	<input type="checkbox"/>
	Less than 3 years	<input type="checkbox"/>	3-6 years	<input type="checkbox"/>
4. Experience	6-10 years	<input type="checkbox"/>	10 +	<input type="checkbox"/>
	Employee	<input type="checkbox"/>	Director of Unit	<input type="checkbox"/>
5. Position	Director of dep.	<input type="checkbox"/>		



no	Paragraph	Extent of approval				
		Strongly agree	agree	neutral	disagree	Strongly disagree
<b>Operational information systems</b>						
6	<b>Provides detailed information</b>					
7	<b>It is oriented reports</b>					
8	<b>Typical operating(sequentially)</b>					
9	<b>Affected by good performance (open system)</b>					
10	<b>The technology used stable</b>					
<b>Managerial information systems</b>						
11	<b>Reports are varied</b>					
12	<b>Affected by the timeliness</b>					
13	<b>Using simplified models</b>					
14	<b>Using a basic data structure</b>					
15	<b>Technology fairly stable</b>					
<b>Decision support information systems</b>						
16	<b>System provides support for the decisions of managers in senior management</b>					
17	<b>System provides support for the decision - making</b>					

18	System offers a variety of decision - making processes					
19	Decision support system easy to use					
20	The technology used sophisticated					
21	The decision support flexible system taking into account the user needs					
22	The system provides information in various form factors and models					
23	Easy to understand and practice					
<b>The quality of administrative decisions</b>						
24	Consistent with the public policy of the University					
25	Consistent with the goals of the University					
26	You can follow easily achievable					
27	Decision maker is knowing always					
28	Unachievable					
29	Contribute to the whole in achieving the mission of the University					
30	It is mixed					

# RESUME

## Personal Information:

Name & Surname: Hilmit Fouad khudhur

Plase and Date of Berth: Erbil /

Iraq. 20, April 1981

Nationality: Iraqi, Kurdish

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## Education Level:

- Bachelor's Degree: 2006, Salahddin University, Erbil. College of Administration & Economy.
- Master's Degree: 2017, Bingol University, Graduate School of Social Science, Business Administration Department.

## Language Skills:

1. **Kurdish:** Kurmanji / Sorani (Native)
2. **English:** Very Good
3. **Turkish:** Little
4. **Arabic:** Very Good
5. **Persian:** Little

## Work Experience:

- Hawler Medical University
- Hawler polytechnic University
- Every Green Company
- Chare Foundation

