

The role of the ERP system in improving the quality of decision-making in the economic enterprise A case study of the National Insurance Company (SAA-CAAT), which are active in both the wilaya of El-Oued and the wilaya of Touggourt

Dr. Kamal dida

Faculty of Economics , University of E loued – Algeria, Lecturer professor A
Email : dida-kamel@univ-eloued.dz

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Abstract:

This study aims to identify the impact of the ERP system on improving the performance of Algerian oil institutions, and included a sample of institutions represented in both ENAFOR and ENTP, where we adopted in this study to collect information on the questionnaire procedure, where we used descriptive statistical analysis On the SPSS V22 program, simple and multiple regression analysis, one of our most important findings is that there is use of all ERP modules in the institutions under study. The results also showed that the Financial Resources Management, CRM and Supply Chain Management module have no effect on Improved Ada The rest of the units have a statistically significant impact on the use of the ERP system in improving the performance of the oil institutions operating in Algeria under study.

Key words: system, information; enterprise resource planning system; integrated management; performance improvement;

Jel Classification Codes: 032;

1. Introduction

The increasing intensity of competition between institutions has led them to exploit all means that would gain them a competitive advantage, especially in the field of information systems, which have become one of the most important pillars on which institutions are based in the modern era due to the great role played by these systems. After the emergence of independent software that showed a qualitative leap in previous periods, however, over time, its inability to unify information in the institution and not obtain information at the appropriate time has been proven, thus affecting the making of decisive decisions that would determine the fate of the institution.

Therefore, there has been increasing interest on the part of decision-makers in institutions in order to choose the most appropriate of these systems for the institution's activity, and to implement the system capable of providing the appropriate information at the appropriate time, which ensures making wise decisions in managing the various activities of the institution.

Information systems have gradually developed until the emergence of the Enterprise Resource Planning (ERP) system, which is considered one of the most widely used software in recent years, and is one of the most important developments in the use of information technology by institutions as an integrated software package that contributes to helping the institution's management to use resources effectively, by providing an integrated software package to process information requests in the institution.

Accordingly, this study came to search for the contribution of the Enterprise Resource Planning system in improving decision-making, a case study of the insurance companies (Saa.Caat) in the state of El Oued and the state of Touggourt.

First: The problem of the study:

Based on the above, the problem of the study can be formulated through the following question: To what extent does the Enterprise Resource Planning (ERP) system contribute to improving decision-making in the insurance companies (Saa.Caat) in both their branches in the state of El Oued and the state of Touggourt?

Second: Sub-questions:

To study the subject from its various basic aspects, the following sub-questions were raised:

-Does the compatibility between (ERP) operations and the institution's operations contribute to improving decision-making in the insurance institution in Touggourt?

-Does the support of system suppliers contribute to improving decision-making in the insurance institution in Touggourt?

-Does training contribute to improving decision-making in the insurance institution in Touggourt?

-Does the compatibility of change and re-engineering the system contribute to improving decision-making in the insurance institution in Touggourt?

Third: Study hypotheses:

To answer the study questions, we adopted the following hypotheses:

1 -Main hypotheses:

First main hypothesis: The Enterprise Resource Planning (ERP) system contributes to improving decision-making in the insurance institution in Touggourt.

Second main hypothesis: There are statistically significant differences attributed to each of the variables of gender, age, educational level, and seniority, at the significance level ($0.05 \geq \alpha$)

2 -Sub-hypotheses:

The following sub-hypotheses fall from the main hypothesis:

-The compatibility between (ERP) processes and the institution's processes contributes to improving decision-making in the insurance institution in Touggourt at the significance level ($0.05 \geq \alpha$)

-Supporting system suppliers contributes to improving decision-making in the insurance institution in Touggourt at the significance level $0.05 \geq \alpha$.

-Training contributes to improving decision-making in the insurance institution in Touggourt at the significance level $(0.05 \geq a)$.

-Change and re-engineering the system contribute to improving decision-making in the insurance institution in Touggourt at the significance level $0.05 \geq a$

The first axis Theoretical and applied literature on the ERP system and its role in decision-making

First: Definition of the ERP system:

The name ERP (Entreprise Resource Planning) means (enterprise resource planning) in English, and PGI (Progiciel de Gestion Intégré) means (integrated management program) in French, which means an information application that allows the institution to manage and improve all its resources. The ERP system is actually an extension of MPR manufacturing resource planning, taking into account the integrated management of the institution, including accounting and financial management, production and supply management, human resources management, administrative management, and sales and purchasing management.

It is a system for managing the resources of the project or facility (financial and human) by linking all databases in an integrated manner to complete operations in an organized and accurate manner through the system's work to enhance production efficiency, and provide information continuously. It also contributes to the redistribution of work, tasks and control over them in an accurate and balanced manner.

It is a network information system that collects, processes and provides information to the organization to identify customer needs, deliver orders, distribute goods and receive payments.

It is a set of technical systems that rely on a package of software designed to coordinate all resources, information and activities necessary to complete practical procedures, by integrating all the main operations of the organization into a single system that serves all the needs of each function, department or branch, linked to a single database for the system, thus facilitating the exchange of information and improving communications in all functions of the organization.

It is a package of standard application software ready to be built based on the best expertise in the world in all business areas, as it includes integrated solutions for all the main businesses in the facility, which form the backbone of any organization, such as supply chain management, inventory control, human resources management, customer relationship management, and accounting operations in an organization with the aim of enhancing and improving the competitiveness of the facility.

From the previous definitions, the following definition can be extracted:

As the enterprise resource planning system is an integrated information system, in which information system software is integrated into a unified database to serve all the main operations of the organization and the various needs of functional departments and administrative levels, so that system users can access accurate information about the status of the institution.

Second: The importance of the enterprise resource planning system

The importance of the enterprise resource planning system is clear in the following:

-The ERP system is considered one of the most important modern systems in the field of data operation and information provision.

-Information systems aim to have an integrated information system within the facility that includes all internal activities.

-Increase control over all operations and increase the speed of implementation.

-Reducing the number of paper documents.

-Speed of response to customers and following up on their affairs.

-Improving the follow-up of requests and the speed of dealing with them.

-Facilitate rapid response to changes in operations and markets.

-Help achieve competitive advantage by improving business processes.

-Provide a unified database for customers and clients that can be used across all applications.

-The ERP system is a distributed database that supports the flow of information across the facility by providing a unified environment for the facility's operations and the operational database that supports communications.

Third: Characteristics of the Enterprise Resource Planning System:

The Enterprise Resource Planning System is characterized by several characteristics, the most important of which are:

-The Enterprise Resource Planning System is a program: It is a set of programs designed by the publisher to meet the needs of many institutions and market them with additional services such as assistance in implementation, maintenance, training, etc.

-The Enterprise Resource Planning System is integrated: The different units are not designed independently, they can exchange information according to the expected plans and designs and unified destinations, this communication between operations improves internal consistency and leads to avoiding duplication of processing.

-The Enterprise Resource Planning System focuses on a single reference system: This means that all data used by the different units is defined in a single and standard way, i.e. the same form and is managed by one type of software, often a relational data management database management system, similarly defined, this strong standardization of data and languages simplifies communications and reduces the difficulties of learning users.

-Rapid adaptation to operating rules: professional, legal or resulting from the internal organization of the company and the rules dictated by the market.

-The ERP system aims to improve management processes: when installing the ERP, the designer focuses on operational models resulting from the best applications in the sector, also benefits from the experience of the best institutions in the field of activity in question. By analyzing the best applications, the software designer obtains a set of management rules that constitute the de facto standard for a given sector.

-The ERP system is modular: a standard product, the ERP has been designed primarily to meet the needs of different institutions, here as different versions according to the sector of activity (cars, banking, collection of languages of use), and moreover, the adaptation of the products to

meet the needs of the institution is done by setting up and choosing the management rules, choosing the processing options, choosing the data format, etc.

-The ERP system is modular: it is not a homogeneous installation but a set of programs or separable modules, each module corresponds to a management process, since its installation and operation can be done independently.

Fourth: Factors for the success of the enterprise resource planning system:

1- Support from senior management: The success of implementing the enterprise resource planning system depends on strong and continuous support from senior management, because this support and commitment will be transferred to other administrative levels, which will be reflected in the level of commitment in the organization as a whole. Without good leadership and support from senior management, individuals throughout the organization will try to discover new ways to perform work, which will lead to creating more chaos within the organization. What highlights the need for the organization and the support of senior management is that implementing the enterprise resource planning system is not just a matter of changing software systems, but rather a matter of structuring the organization and changing its operations, and this requires providing adequate support from all administrative levels for the successful implementation of the enterprise resource planning system.

2- Project management: Project management refers to the creation of a set of activities that will ensure that the project is implemented as planned, because the implementation of this type of project involves multiple and different groups, which leads to a high level of uncertainty. This requires that the project management have a level of knowledge and skills that can reduce uncertainty. Researchers recommended that the project team have knowledge of how to manage well, as the availability of planning, organizing, follow-up and control skills throughout the project stages is vital. Based on the above, the project manager must be able to lead the project and overcome difficulties.

3- Re-engineering processes: Most organizations that want to implement an ERP system are likely to have business processes and organizational structures that are not compatible with the structure, tools, and types of information provided by the organization's ERP systems. Therefore, re-engineering processes is considered an important factor for the success of implementing an ERP system. Business processes must be compatible with the requirements of implementing the ERP system. Aligning business processes with software is extremely important for the success of implementation. Therefore, organizations must be prepared to change their processes to suit the new system, and not modify the software, to reduce errors and benefit from the advantages of new versions of software. This requires that business processes be extensively re-engineered before starting to choose ERP systems.

4- User training and education: Training users to use the ERP system is important for the success of implementation, because there is difficulty in using the ERP system, and this requires managers to have a high level of education and good IT skills. In this regard, researchers have indicated that appropriate training can help increase the success of implementing the ERP system. Some have also indicated that lack of appropriate training can frustrate users of the

system, as employees can be trained and other users can be helped to intensify with the new system, which will reduce the level of resistance to change and help build positive attitudes towards the new system, which will enhance the chances of successful use of the ERP system.

Communication: Effective communication, whether across administrative levels or across the various functions of the organization, is essential for the successful implementation of the ERP system. Effective communication is one of the requirements that must be met to complete the guidance processes, understand the organization's mission and plans, obtain feedback, and make the required changes in all stages of implementing the ERP system. Effective communication is also essential to create a state of readiness at the level of the organization as a whole to accept the ERP system, as it helps in the success of change management efforts during the implementation process, which will allow employees to understand the necessity of making the change and how it will benefit the organization.

6- ERP system vendor support: There are many ERP system vendors in the market, and choosing the right ERP system vendor is important to ensure the implementation of the ERP system, as a good vendor provides technical support and knows the crisis to implement the ERP system, and it also enables the organization to reduce implementation costs, and obtain other benefits from partnering with ERP system vendors, and in practice, vendor evaluation criteria include vendor reputation, financial strength, technical capabilities and clear vision, because the ERP system vendor is one of the important things in the success of implementing the ERP system. (ERP)

Fifth: Definition of decision-making:

A/Language: In the language, decision means reassurance, and decided the matter means satisfied with it and approved it, and the matter was decided means established and settled, and the decision is what the matter ended with.

B/Definition of the decision technically

We will try below to present some definitions of the decision, which are characterized by multiplicity and diversity with the diversity of the bodies interested in this profession. Among the most important of these definitions, we mention:

A Latin word meaning: DECIDER body.

-The decision is defined as: A rational process that crystallizes in choosing between multiple alternatives with specifications that are consistent with the available capabilities and the desired goals.

*The decision is "a conscious and logical behavior or action of a social nature, and represents the solution or action or alternative that was chosen based on the trade-off between several alternatives and possible solutions to solve the problem, and after this the most efficient and effective evidence among those alternatives available to the decision maker and is considered the result of the decision-making process and its summary.

Definition of decision-making:

The first definition: It is "the process of choosing alternatives or the appropriate alternative from among several alternatives, and this requires the researcher to collect and prepare information about the different alternatives related to the problem he is researching, then choose the appropriate alternative from among them based on the results of his analysis of the information.

The second definition: It is "choosing between different alternatives, and this meaning is consistent with the nature of many administrative situations, as we find that the decision-maker is always asked to choose a specific alternative from the alternatives presented to him".

Through the previous definitions, it can be said that decision-making is an organized and objective process that is far removed from emotions, and is based on scientific foundations, study, and objective thinking to reach an appropriate or satisfactory decision, and the latter is defined as a state of mental arbitration that precedes action.

The importance of decision-making:

The importance of decision-making can be explained in the following points:

-Decision-making is an ongoing process, as the average person practices making decisions throughout his daily life, as there are easy and simple decisions, and there are decisive and fateful ones, and the matter is no different from the institution, as it is a continuous and diverse group of administrative decisions in various fields such as production, marketing, individuals, etc.

-Decision-making is the manager's tool in his work, and it is by means of which he practices administrative work, as he decides what should be done? Who will do it? And when will it be done?... Accordingly, the higher the manager's ability to make decisions, the higher the level of his administrative performance.

-Making strategic decisions determines the future of the organization, as such decisions have a significant impact on the success or failure of the organization.

-Making decisions is the basis for managing the functions of the organization, such as decisions related to production, marketing, human resources, or finance, as well as decisions related to capital management and its uses.

-Decision-making is the essence of the administrative process of planning, organizing, directing and controlling, because each of these functions involves a set of decisive administrative decisions.

-Decision-making is a means of selecting and measuring the ability of leaders and administrative heads to perform the administrative functions and tasks required to be achieved and accomplished, in a scientific and practical manner.

Eighth: Types of decision-making:

- There are many classifications of decisions, including those based on the goal as follows:

- Effective decisions: are those made at the highest level of intellectual understanding, meaning that they address high abstract intellectual concepts, comprehensive strategic concepts with a strong impact that is implemented and achieves an effective result.
- Ineffective decisions: are those made at a level of abstract thought, partial concepts that do not seek to achieve an effective influential goal.
- There are classifications of decisions according to the administrative level, which are:
 - Operational decisions: are made at the lower levels of the organization and are related to the operational process of the organization, such as inventory control. Selection of means of production.
 - Administrative decisions: They are made at the middle management level, where managers make decisions to solve organizational problems and monitor performance, and by virtue of them, it is ensured that resources have been obtained and used efficiently and effectively in achieving the organization's goals, such as forecasting sales.
 - Strategic decisions: They are made at the top of the organization by senior management, and they cover a long time frame, such as research and development decisions, expansion decisions by joining other institutional groups, and new product decisions.
- Some classify them according to the availability of data and information systems as follows:
 - Programmed decisions: They are characterized by being repetitive, routine, and well-defined, and there are prior procedures for solving them. It is noted in this type of decisions that the criteria for judging them are usually clear, and sufficient information and data are often available about them. It is also easy to identify alternatives, and thus there is relative certainty that the chosen alternative will result in solving the problem effectively.
 - Non-programmed decisions: are characterized by being non-recurring, non-routine, not well-defined, and there are no known procedures in advance to solve them. The need to make these decisions usually arises when the organization faces a problem for which there is no prior experience on how to solve it. In this type of decision, there are no specific patterns for solving this type of problem, and therefore uncertainty prevails.
 - Semi-programmed decisions: are those in which some of their stages can be well defined and a certain amount of information and data is available about them, while others are difficult to define well and are characterized by uncertainty, and therefore part of those decisions can be programmed.
- They are also classified according to who is making the decision as follows:
 - Personal decisions: concern the manager as an individual and not as a member of the administrative organization, and thus personal decisions cannot be delegated to others.
 - Organizational decisions: here the manager makes personal decisions that work to achieve personal goals, and makes organizational decisions that aim to achieve organizational goals, and sometimes both may agree and facilitate the achievement of other goals and sometimes others.

Ninth: Improving decision-making using the enterprise resource planning system:

-Institutions seek to adopt the ERP system in order to improve decision-making in the highly competitive scientific environment, as we find that many institutions have been able to occupy an important position in the market, and this is due to the information system they use, as what made these institutions apply information systems in their work is their flexibility and adaptation to current variables, which made the information system a basic factor and a catalyst for major changes, whether in operations or the management of the institution as a whole, due to its ability to improve the decision-making process.

However, some researchers in the field of enterprise resource planning believe that the main goal of adopting and using the ERP system in the institution is to improve comprehensive decisions, as when using an integrated information system, it increases the ability of decision-makers to analyze information, which contributes to the time required to make a decision using the analysis method with less effort and time, and this will lead to choosing the appropriate alternative to solve the problem, and thus the use of the information system leads to high-quality decisions.

From this, we conclude that the ERP system has a major role in supporting and assisting senior management in its structural decisions, as well as middle management in its semi-structural decisions.

2.2 Applied literature (previous studies)

1. Nour Eddine Mezhouda's study, entitled: The impact of the integrated information system "ERP as a model" on improving the performance of economic institutions, a field study of a sample of institutions operating in Algeria, the study is a thesis submitted to obtain a PhD in Science, University of Kasdi Merbah - Ouargla - Algeria, 2016/2017, which addressed the following problem: To what extent can the integrated information system ERP as a model affect improving the performance of institutions operating in Algeria?

This study aims to highlight the impact of the integrated information system on improving the performance of economic institutions, by investigating the relationship between the requirements for implementing the enterprise resource planning system and performance improvement indicators, and the importance of this study lies in the fact that it addresses an important and sensitive problem in the organization, which is the optimal use of information, as this topic is related to the information system and its method of performance, by providing information that helps in particular in making rational decisions to develop the performance of the organization as a whole.

The study reached a set of results, including that the requirements for implementing the enterprise resource planning system differ according to the nature of the institutions under study, and that the view of these institutions to improve performance varies according to their nature, and that the impact of the integrated information system on improving performance varies according to the institutions operating in Algeria.

2. Kamal Dida's study, entitled: The impact of using the enterprise resource planning system (ERP) on improving the performance of the economic institution? The study is a thesis submitted

for a PhD in Science, University of Kasdi Merbah Ouargla - Algeria, Faculty of Economics, Commerce and Management Sciences, 2018/2019 AD, which addressed the following problem: To what extent does the use of the enterprise resource planning system affect improving the performance of a sample of oil institutions operating in Algeria?

This study aims to identify the impact of the enterprise resource planning system on improving the performance of some oil companies operating in Algeria, where the importance of the study lies in, the study has concluded that there is a use of all ERP system units in the institutions under study, and that the latter are based on certain indicators in order to improve their performance, and differ in terms of importance and reliance from those reached in previous studies.

3. The study of Sheikh Ould Mohamed, entitled: The use of information systems in decision-making in the economic institution, the study is a memorandum to obtain a master's degree in economic sciences, Abu Bakr Belkaid University - Tlemcen -, Faculty of Economics, Management and Commercial Sciences, 2010/2011, which addressed the following problem: Does the management in the Mauritanian dairy company Top LaiT tend to use information systems with the necessary efficiency that allows it to activate the decision-making process?

This study aims to highlight the importance of the information system in decision-making and to present some proposals to improve the effectiveness of the information system within the institution and through it improve the quality of decisions taken as well as draw up rational strategic plans that ensure achieving goals at the lowest costs. The importance of this study lies in shedding light on the information system and decision-making in the Mauritanian Dairy Company. The study reached a set of results, including: By diagnosing the method of decision-making in the institution, the institution needs to expand the participation of subordinates in decision-making more and try to control the basic stages of decision-making more in order to activate it.

4- The study of Asmahan Khalifi, entitled : "The role of information systems in decision-making" (Case study of the Naqaous Canning Company in Batna), a thesis for a master's degree in commercial sciences in business administration for the academic year 2008/2009, Hadj Lakhdar University in Batna. Where the approach was relied upon, as the study was limited to comprehensive and complete support for the decision-making process in its various stages using information systems, regardless of their degree of development, is considered far from the truth, especially for unstructured decisions or strategic decisions that depend in an important part on the judgment, experience and intuition of the decision-maker, and this was confirmed by decision-makers in the Naqaws Canning Company.

5. Hossam Eddine Majawi's study, entitled : "The Role of the Enterprise Resource Planning System in Improving Decision-Making", the study is a master's thesis in auditing and management control, Faculty of Management, University of Kasdi Merbah, Ouargla, Algeria, 2013.

Which addressed the following problem: How does the enterprise resource planning system affect the improvement of the decision-making process?

The study aimed to clarify the extent of the contribution of enterprise resource planning in decision-making, identify this system and how to apply it in the institution, and research the difference between the traditional information system and the enterprise resource planning system. To address the subject, the researcher used the descriptive and historical approach based on the economic nature of the research topic, and the study community included the insurance institutions La CAT and Saa.

The most important findings of the researcher are highlighting the role of the enterprise resource planning system in improving the decision-making process and that the system covered the problems of the traditional information system by eliminating the problem of papers and the trouble of moving and contributed to reducing the costs of decision-making.

6. Amira Madfouni's study entitled: (The role of information systems in decision-making), a field study at Ibn Sina Hospital, Oum El Bouaghi, a supplementary memorandum to obtain a master's degree in sociology, specializing in human resources development and management, University of Arab Ben M'hidi - Oum El Bouaghi -, Faculty of Social Sciences, 2015/2016. Which addressed the following problem: How does the information system contribute to decision-making within the institution, Ibn Sina Hospital, Oum El Bouaghi?

This study aims to: Identify the role played by information systems in the decision-making process. The descriptive analytical approach was used in this study, as the importance of the study lies in the fact that information systems are an important tool in making sound and correct decisions, as the decision-maker cannot do his work unless he has information in an organized manner and in the appropriate manner, as well as at the appropriate time, which is the role that information systems work to perform. Where she reached the most important results, including: Information systems play a role in the effectiveness of decision-making by providing information in an organized and quantitative form that facilitates its understanding and analysis, as well as by providing programs that facilitate the process, such as the processing system, the programming and maintenance system, and others, and that the quality of information provided to the decision-maker plays an important role in the effectiveness of the decision taken.

7. Study of Marghani Belkacem, the information system and its role in decision-making, a case study of the Algerian Telecommunications Corporation - El Oued -, a memorandum submitted to complete the requirements for obtaining a master's degree in management sciences, specialization: Information Systems and Management Control, University of Kasdi Merbah - Ouargla -, Faculty of Economics, Commerce and Management Sciences, 2013/2014, which addressed the following problem: To what extent can the information system contribute to providing decision-makers with the necessary information in the Algerian Telecommunications Corporation, El Oued branch? This study aims to: Evaluate the extent of the use of information systems in institutions and to know its role in decision-making, as the importance of this study lies in: Information systems are one of the most important topics that researchers have increasingly paid attention to, as it is a topic that is in line with the requirements of the modern era, as the increasing need to collect, process and use

data and information effectively has become the basic requirement for the success of organizations in all their forms in our current era, which is characterized by continuous and complex environmental changes, and which has become obligatory for institutions to use information systems to benefit from them in making decisions related to management functions, as the study reached the most important results: The information systems used in Algeria Telecom institutions in El Oued are of great importance in reaching the right decisions, as they are the ones that provide the decision-maker with correct and accurate indicators at the lowest cost to continue working well and reach the set goals. 8- Study of Al-Ayashi Aidouni, the role of the information system in decision-making within the requirements of sustainable development, a survey study on the Algerian Iron and Phosphate Mines Company, a memorandum submitted as part of the requirements for obtaining a master's degree within the framework of the Doctoral School in Management Sciences, specialization in Strategic Business Administration for Sustainable Development, Setif 1 University, Faculty of Economics, Commerce and Management Sciences, 2013/2014. Which addressed the following problem: What is the role of the information system in decision-making within the framework of sustainable development in the Algerian Iron and Phosphate Mines Company? This study aims to: Identify the levels of information systems and decision-making within the framework of sustainable development in the Algerian Iron and Phosphate Mines Corporation, where the importance of the study lies in: The role played by the information system in the performance of the corporation as well as its role in contributing to building and making sound strategic decisions that care about the dimensions related to sustainable development in light of the challenges imposed by the environment and its rapid changes in all economic, social, environmental and political fields, especially with the development of information and communication technology, which has increased the intensity of economic competition between institutions, and reached the most important results: There is an average level of information systems in the Algerian Iron and Phosphate Mines Corporation, and we attribute this level to the corporation's lack of interest in information systems and its lack of experience in this field, especially with regard to collecting, storing and publishing information, as it does not pay sufficient attention to the methods of collecting and publishing information, especially by its employees. Comparison between previous studies and the current study:

After reviewing the previous studies that were conducted in the field of study, we find that there are similarities and differences in several aspects, the most important of which are the following:

-In terms of the goal, most studies shared one main goal, which is the extent of the success of the enterprise resource planning system and its importance in achieving the goals of the institution, which is what our study aims for, but each has its own method of formulating its goal and its method of treatment

-As for the method used for treatment, most studies used the descriptive method to clarify the theoretical aspects of the subject, and the analytical method for accurate and detailed knowledge of the applied aspect, and there are studies that relied on the results of the questionnaire

-As for the study sample, we found a difference between the studies, as each study applied its study to a specific sample, most of which were applied in the institutions under study, and others applied their study to two companies or a group of companies.

.As for the treatment method, there are similarities and differences between the previous studies that can be summarized in that all studies related to the enterprise resource planning system focused on applying the system to improve the management method in institutions, and one of the differences is that the previous studies are comprehensive and extensive.

3 .Field Study

1 .3Tools used in conducting the applied study

First/ Study community:

The study community consists of employees of the National Insurance Company (SAA) in Touggourt and El Oued, which is considered one of the most important agencies affiliated with the Ouargla Unit, and among them are the most active due to the concentration of a significant percentage of the population in it, and the region is distinguished by its economic and commercial activity. It was established in 1973 AD, and was initially an office that carried out the insurance process, then it became an agency starting in 1976 AD, as it has an enterprise resource planning system of the Oracle type.

In addition to the Algerian Insurance Company (CAAT), which was established on April 30, 1985, after the restructuring of CAAR, the company was given the transport activity portfolio, and with the increasing importance of this branch, the state thought of establishing an insurance company specialized in the branch and its capital increased from 60 million dinars in 1986 to 900 billion dinars in 1965, then to 1.5 billion Algerian dinars in 1997, and to enhance its competitive capabilities further, it raised it to 7.49 billion Algerian dinars, so that the company owns a commercial network consisting of seven regional branches, 126 points of sale, including 85 direct agencies, 12 direct subscription offices in addition to 41 general agents and deals with at least two brokers.

Second / Study sample:

A simple random sample of (30) employees of the insurance institution in Touggourt was selected, and after distribution, the same number of the sample (50) valid forms were retrieved for statistical processing.

Third: Determining the study variables and how to measure them:

First: Determining the study variables:

The study variables were represented by the independent variable and the dependent variable.

-The independent variable: It is the variable that we are free to express with any value within a specific equation, and on the basis of which the value taken by another variable called the dependent variable is determined. In our study, it is represented by the "Enterprise Resource Planning (ERP) System" and consists of the following dimensions: (Compatibility between (ERP) operations and the institution's operations, support for system suppliers, training, change and re-engineering the system.

-The dependent variable: It is the variable whose value is determined according to the values taken by other variables called independent variables. In our study, it is represented by decision-making.

Fourth: Validity and reliability of the questionnaire tool:

The reliability of the questionnaire means that it gives the same result if it is redistributed more than once to the same sample and under the same conditions and circumstances.

The reliability of the study questionnaire was confirmed through the Cronbach's alpha coefficient method, and the results were as shown in the table:

Table No. (01): Reliability and validity of the questionnaire tool

Cronbach's alpha coefficient	Number of phrases
0.621	32

Prepared by the researcher

We note from the table above that the Cronbach's alpha coefficient is equal to (0.742 = a) greater than (0.6), which indicates that the measurement tool is characterized by stability, which means that the questionnaire can be relied upon to measure the studied variables due to its ability to give results consistent with the answers of the respondents.

Descriptive analysis of sample members and questionnaire analysis

First: Testing the correlation and relationship of study variables

After presenting and analyzing the various answers of the study sample members included in the questionnaire, we test the hypotheses at a significant level (0.05 = a).

First/ Analysis of variance:

Based on the output of SPSS 22, the results were as follows:

Table No. (02): Analysis of Variance

Sig Probability Value	Fisher's F-test value	Mean squares	Degree of freedom	sum of squares	The model
0.006b	1.132	0.063	1	0.063	Slope
		0.056	28	1.564	Remaining
			29	1.628	the total

Prepared by the researcher

Analysis: From the table we notice that 0.006=Sig and it is smaller than (0.05≥a), and thus it is an appropriate model to measure the relationship between the independent variable and the dependent variable.

Second/ Correlation coefficients:

In this step we use the multiple regression model due to the presence of the following independent variables (compatibility between ERP processes and the organization's processes, support of system suppliers, training, change and re-engineering the system), and the dependent variable is decision making.

Table No. (03): Correlation coefficients between independent variables and decision-making

decision making		Y
Sigmoid value	Pearson correlation	X
0.235	%13.7	Alignment between ERP processes and enterprise processes
0.380	%05.8	System Supplier Support
0.301	%09.9	Training
0.070	%27.5	Change and re-engineering the system

Comment: By extrapolating the values of the relationships shown in the table above, we notice the presence of a very weak direct relationship between the independent variables and the dependent variable "decision-making", where the largest weak direct correlation value was between decision-making and changing and re-engineering the system, where it recorded (27.5%) at the level (0.070), and this indicates that the more the change and re-engineering of the system by one value, the better the decision-making in the organization by a value of (27.5%), and the same comment for the other independent variables.

Table No. (04): Linear correlation between the independent variable and the dependent variable

Standard error of estimate	Corrected coefficient of determination	Coefficient of determination R ²	Correlation coefficient R	The model
0.2408	-0.033	0.109	0.331a	1

Comment: We note that the correlation coefficient (0.331 = R) indicates the existence of a positive correlation, i.e. a "weak direct relationship" of (33.1%) between the enterprise resource planning (ERP) system in the organization and decision-making. We also note that the coefficient of determination is equal to (0.109), meaning that the independent variable affects the dependent variable in the organization by (10.9%), and the remaining percentage (89.1%) explains that there are other factors that also affect decision-making and its improvement.

Second: Testing the study hypotheses:

We test the hypotheses at a significant significance level ($0.05 = \alpha$)

First branch: Testing sub-hypotheses:

In this step, we use the multiple regression line coefficients to test the hypotheses at a significant significance level ($0.05 = \alpha$). Based on the outputs of the SPSS 22 program, the results were as follows:

Table No. (05): Multiple regression line coefficients

Sig probability value	T Student Value Test	Standard Transactions	Non-standard transactions		The model
		Beta	Standard error	B	
0.000	5.269		0.384	2.022	1 constant
0.430	0.802	0.154	0.121	0.097	Alignment between ERP processes and enterprise processes
0.543	-0.617	-0.142	0.107	-0.066	System Supplier Support
0.876	-0.157	-0.035	0.127	-0.020	Training
0.140	1.523	0.363	0.139	0.211	Change and re-engineering the system

Analysis of the results (testing the first sub-hypothesis:

0H: The compatibility between ERP processes and the organization's processes does not contribute to improving decision-making at the significance level ($0.05 \geq \alpha$).

1H: The compatibility between ERP processes and the organization's processes contributes to improving decision-making at the significance level ($0.05 \geq \alpha$).

Analysis: We notice from the table that the probability value of the compatibility between ERP processes and the organization's processes ($0.430 = \text{Sig}$) is greater than ($0.05 \geq \alpha$), which means rejecting the alternative hypothesis and accepting the null hypothesis, i.e. the compatibility between ERP processes and the organization's processes does not contribute to improving decision-making at the significance level ($0.05 \geq \alpha$). In the insurance institution in Al Wadi, and this is not confirmed by the first sub-hypothesis.

2 .Analysis of the results (testing the second sub-hypothesis):

0H: The support of system suppliers does not contribute to improving decision-making at the significance level ($0.05 \geq \alpha$).

1H: System supplier support contributes to improving decision-making at the significance level ($0.05 \geq \alpha$).

Analysis: We notice from the table that the probability value of system supplier support ($0.543 = \text{Sig}$) is greater than ($0.05 \geq \alpha$), which means rejecting the alternative hypothesis and accepting the

null hypothesis, i.e. system supplier support does not contribute to improving decision-making at the significance level ($0.05 \geq a$) in the insurance institution in Touggourt. This is not confirmed by the second sub-hypothesis.

3 .Analysis of the results (testing the third sub-hypothesis):

0H: Training does not contribute to improving decision-making at the significance level ($0.05 \geq a$).

1H: Training contributes to improving decision-making at the significance level ($0.05 \geq a$).

Analysis: We notice from the table that the probability value of training ($0.876 = \text{Sig}$) is greater than ($0.05 \geq a$), which means rejecting the alternative hypothesis and accepting the null hypothesis, i.e. training does not contribute to improving decision-making at the significance level ($0.05 \geq a$) in the insurance institution in Touggourt. This is not confirmed by the third sub-hypothesis.

4 .Analysis of the results (testing the fourth sub-hypothesis):

0H: Change and re-engineering do not contribute to improving decision-making at the significance level ($0.05 \geq a$).

1H: Change and re-engineering the system contribute to improving decision-making at the significance level ($0.05 \geq a$).

Analysis: We notice from the table that the value of change and re-engineering the system ($0.140 = \text{Sig}$) is greater than ($0.05 \geq a$), which means rejecting the alternative hypothesis and accepting the null hypothesis, i.e. change and re-engineering do not contribute to improving decision-making at the significance level ($0.05 \geq a$) in the insurance institution in Touggourt. This is not confirmed by the fourth sub-hypothesis.

Multiple linear regression equation:

$$Y=2.022+0.097 (x1)+(-0.066) (x2)+(-0.020) (x3)+ 0.211 (x4)$$

Y: Dependent variable "Decision making"

X1: Alignment between ERP processes and enterprise processes

X2: Support of system suppliers

X3: Training

X4: Change and re-engineering of the system

Third: Testing the two main hypotheses:

In this section, we will test the first main hypothesis and the second main hypothesis.

1 .Testing the first main hypothesis:

In this step, we use the linear regression line coefficients to test the hypotheses at a significant level ($a = 0.05$). Based on the outputs of the 22SPSS program, the results were as follows:

Table No. (06): Simple regression line coefficients

Sig	T	Standard Transactions	Non-standard transactions		The model
		Beta	Standard error	B	

0.000	6.394		0.338	2.164	1 constant
0.296	1.064	0.197	0.147	0.157	(ERP)

Analysis of the results (first main hypothesis test):

0H: The Enterprise Resource Planning (ERP) system does not contribute to improving decision-making at the significance level ($0.05 \geq \alpha$).

1H: The Enterprise Resource Planning (ERP) system contributes to improving decision-making at the significance level ($0.05 \geq \alpha$).

Analysis: From the table above, we note that the probability value of the independent variable (Enterprise Resource Planning (ERP) system) is (0.296=Sig) which is greater than ($0.05 \geq \alpha$), i.e. we reject the alternative hypothesis and accept the null hypothesis of the first main hypothesis, i.e. the Enterprise Resource Planning (ERP) system does not contribute to improving decision-making at the significance level ($0.05 \geq \alpha$) in the "Taart Insurance" institution. This is not confirmed by the first main hypothesis.

Testing the Second Main Hypothesis

Hypothesis Test Differences:

-There are no differences attributed to demographic variables (gender, age, educational level, seniority).

-There are differences attributed to demographic variables (gender, age, educational level, seniority).

0H: There are no differences at a significant level ($0.05 \geq \alpha$) for the study variables attributed to gender.

1H: There are differences at a significant level ($0.05 \geq \alpha$) for the study variables attributed to gender.

Table No. (07): T-test for independent samples for gender

Sig	F	T	N	Sex	Study variables
0.834	0.045	1.856	17 13	Male Female	Enterprise Resource Planning (ERP) System
0.562	0.345	0.319	17 13	Male Female	decision making

Comment: To test this hypothesis, the Independent-Samples T-Test was used. We note from the table above that there are no differences at a significant significance level ($0.05 \geq \alpha$) for the

Enterprise Resource Planning (ERP) system, as the significant significance level was equal to (0.834=Sig) greater than (0.05≥a), meaning that the difference in gender does not affect the Enterprise Resource Planning (ERP) system. We also note that there are no differences at a significant significance level (0.05≥a) attributed to the gender variable with regard to decision-making, as the significant significance level was greater than (0.05a>), which indicates that the difference in gender does not affect the study variables.

2-2:Testing Hypothesis

0H: There are no differences at a significant significance level (0.05≥a) for the study variables attributed to age.

1H: There are differences at a significant significance level (0.05≥a) for the study variables attributed to age.

Table No. (08): One-way ANOVA test for study variables according to age variable

Sig	F	Mean squares	Degree of freedom	sum of squares	Contrast	Study variables
0.188	1.778	0.150	2	0.300	Between groups	Enterprise Resource Planning (ERP) System
		0.084	27	2.276	Within groups	
			29	2.576	Total	
0.493	0.727	0.042	2	0.083	Between groups	decision making
		0.057	27	1.544	Within groups	
			29	1.628	Total	

Comment: We note from the table above that there are no differences at the level of significance (0.05≥a) for the Enterprise Resource Planning (ERP) system attributed to the age variable, as the level of significance was equal to (0.188=Sig) greater than (0.05≥a), as for decision-making, there are also no differences at the level of significance (0.05≥a) as the level of significance was greater than (0.05a>), meaning that the difference in age does not affect the study variables.

2-3:Testing Hypothesis

0H: There are no differences at the level of significance (0.05≥a) for the study variables attributed to the educational level.

1H: There are differences at the level of significance (0.05≥a) for the study variables attributed to the educational level.

Table No. (09): One-way ANOVA test for the study variables according to the educational level variable

Sig	F	Mean squares	Degree of freedom	sum of squares	Contrast	Study variables
0.232	1.544	0.132	2	0.264	Between groups	Enterprise Resource Planning (ERP) System
		0.086	27	2.312	Within groups	
			29	2.516	Total	
0.565	0.582	0.034	12	0.067	Between groups	decision making

		0.058	27	1.560	Within groups	
			29	1.628	Total	

Comment: We note from the table above that there are no differences at the level of significance ($0.05 \geq a$) for the Enterprise Resource Planning (ERP) system attributed to the educational level variable, as the level of significance was greater than ($0.05 > a$), meaning that the difference in educational level does not affect the level of the Enterprise Resource Planning (ERP) system in the institution. As for decision-making, we note from the table that there are also no differences at the level of significance ($0.05 \geq a$) attributed to the educational level variable, as the level of significance was equal to ($0.565 = \text{Sig}$) greater than ($0.05 \geq a$), which indicates that the difference in educational level does not affect the study variables.

2-4: Testing Hypothesis

0H: There are no differences at the level of significance ($0.05 \geq a$) for the study variables attributed to seniority.

1H: There are differences at a significant level ($0.05 \geq a$) for the study variables attributed to seniority.

Table No. (10): One-way ANOVA test for the study variables according to seniority

Sig	F	Mean squares	Degree of freedom	sum of squares	Contrast	Study variables
0.104	2.460	0.199	2	0.397	Between groups	Enterprise Resource Planning (ERP) System
		0.081	27	2.179	Within groups	
			29	2.516	Total	
0.612	0.499	0.029	2	0.058	Between groups	decision making
		0.058	27	1.570	Within groups	
			29	1.628	Total	

Comment: We note from the table above that there are no differences at a significant level ($0.05 \geq a$) for the Enterprise Resource Planning (ERP) system, as the significant level was equal to ($0.104 = \text{Sig}$) greater than ($0.05 \geq a$), meaning that the difference in seniority does not affect the Enterprise Resource Planning (ERP) system. As for decision-making, we note that there are no differences at a significant level ($0.05 \geq a$) attributed to the seniority variable, as the significant level was greater than ($0.05 > a$), meaning that the difference in seniority does not affect the study variables.

Conclusion:

Information systems have become an essential element in the organization's strategy, as all previous studies have proven that the role of integrated information systems represented by Enterprise Resource Planning (ERP) systems in organizations has become a strategic dimension.

We were able to answer the research problem and questions, and through testing its hypotheses, we reached the following results:

First: The study reached the following results:

-The study showed that the enterprise resource planning system does not contribute to improving decision-making.

-There is no significant role in the compatibility between ERP processes and enterprise processes in improving decision-making at the significance level ($0.05 \geq a$).

-There is no significant role for system suppliers in improving decision-making at the significance level ($0.05 \geq a$)

-There is no significant role for training in improving decision-making at the significance level ($0.05 \geq a$).

-There is no significant role for changing and re-engineering the system in improving decision-making at the significance level ($0.05 \geq a$).

Second: In light of the results reached in this study, we recommend the following:

1. The necessity of increasing the training process for system managers and users.
2. Holding seminars to present and discuss the reality of the ERP system in the two insurance companies and the means to achieve its optimal utilization.
3. Senior management in the two insurance companies must pay attention to change management and the actual involvement of employees in activating the application of the system and making various decisions related to it.
4. Re-engineering the operations of companies applying the ERP system in a manner consistent with the best practices available in ERP systems, and avoiding modifications to the system, due to the many immediate and future obstacles that follow.
5. Not all decisions should come from the upper levels of management.

References:

1. Lawati Conclusion, Managing Change in the Light of the Implementation of the Enterprise Resource Planning System, Case Study of the National Mining Corporation, Master's Thesis in Management Sciences, Specialization in Information Systems and Management Control, 2013, p. 95.
2. Fadia Abdul Razzaq Al-Sayed, Evaluating the Impact of Using Enterprise Resource Planning Systems on the Effectiveness of Internal Control, (Damascus: Damascus University, Faculty of Economics, Master's Thesis in Auditing, Unpublished, 2012), p. 2.
3. Akram Ahmed Reda Al-Tawil, Bilal Tawfiq Younis, Enterprise Resource Planning System (ERP), Dar Al-Hamed for Publishing and Distribution, Jordan, 1st Edition, 2013, p. 51.
4. Ahmed Rajab Ahmed Nassar, A Proposed Framework for Evaluating the Informational Efficiency of (ERP) Systems for Accounting for E-Commerce Operations (Applied to the Egyptian E-Business Environment), Fifth Annual Conference of the Faculty of Commerce, Cairo University, 2014, p. 18.

5. Asmaa Marwan Al-Faouri, The Impact of the Effectiveness of Enterprise Resource Planning Systems in Differentiating Institutional Performance, (Amman: Middle East University, College of Business Administration, Master's Thesis in Electronic Business, Unpublished, 2012), p. 8.
6. Nasser Nour El-Din, Electronic Accounting and Information Technology, Generalization and Management of Databases (Cairo: Dar Al-Taalim Al-Jami'i, 2014), p. 60.
7. Majida Mujib, Evaluating the Success of the Enterprise Resource Planning System ERP through Strategic and Tactical Factors, An Applied Study in the National Corporation for Well Works ENTP-Hassi Messaoud, University of Kasdi Merbah - Ouargla-, College of Economics, Commerce and Management Sciences, Department of Management Sciences, 2014/2015, p. 5.
8. Akram Ahmed Al-Tawil, Bilal Tawfiq Younis, Distributed Databases: ERP System as a Model (Mosul: University of Mosul, College of Administration and Economics, Al-Rafidain Journal of Computer Science and Mathematics, Volume 10, 2013), p. 5.
9. Ishaq Mahmoud, The impact of strategic and tactical factors on the success of implementing an enterprise resource planning system: An applied study on the Jordanian services sector, Al-Shaar, Jordanian Journal of Business Administration, Volume, Issue 4, 2013, pp. 675-676.
10. Muhammad Al-Sayrafi, Decision and its support systems, Dar Al-Fikr Al-Jami'i, Alexandria, 2007, p. 11.
11. Kaser Nasr Mansour, Quantitative methods in administrative decision-making, Dar Al-Barori, Jordan, 2006, p. 30.
12. Muhammad Bunawara Khazar, Publications of Batna University, Algeria, 1996, p. 2.
13. Walid Ismail Al-Sayfo, Abdul Hafeez Qaddour Belarbi, Saeed Khadir Addas Al-Rahimi, Quantitative Economics, a Quantitative Introduction to Decision-Making Strategy, Dar Al-Ahlia, Jordan, 2007, p. 49.
14. Fadhel Fatima Zahra, Contribution of Internal Auditing in Decision Making in the Institution, Abdelhamid Ibn Badis University Mostaganem, Faculty of Economics, Business and Management Sciences, Department of Finance and Accounting, 2016/2017, p. 37.
15. Previous reference, p. 37.
16. Amna Masghouni, Souhila Shuya, Decision-making mechanisms within the organization and their relationship to job performance satisfaction, a field study at the Electricity Distribution Company - Central - El Oued, Hama Lakhdar University - El Oued, Faculty of Social and Human Sciences, Department of Social Sciences, 2014-2015, pp. 39 to 41.
17. Previous reference, p. 41.
18. Abdel Aziz Fahmy Heikal, Encyclopedia of Statistical Economic Terms, Dar Al Nahda Al Arabiya for Publishing, Beirut - Lebanon, 1985, p. 410.