

العنوان: A Proposed Framework for Impact of the Enterprise

Resource Planning Systems on Audit Risk: A Field

Study

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### A Proposed framework for Impact of the Enterprise Resource Planning Systems on Audit Risk: Afield Study

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#### Abstract

The study aims to assess the impact of the Enterprise Resource Planning Systems on Audit Risk. To achieve the study goal, a field study was conducted through using the questionnaire lists on the internet relying on Google forms service ,so some of the target groups could answer the survey list via the internet(WhatsApp , Facebook and LinkedIn) also ,the field study include Internal Auditor, External Auditor, Academic in Egyptian universities. The findings of the study indicated that (1) there are no significant differences among the study categories about the Impact of the Enterprise Resource Planning Systems on Audit Risk, (2) there is a significant relationship between the Enterprise Resource Planning Systems and Audit Risk, and (3) there is a significant impact of Impact of the Enterprise Resource Planning Systems on Audit Risk. Considering the previous conclusions, the researchers can suggest a set of recommendations and future studies in this direction.

Key Words: Enterprise Resource Systems - Audit Risk

الملخص: تهدف الدراسة إلى اختبار أثر تطبيق نظم ERP على مخاطر المراجعة. ومن أجل تحقيق هدف الدراسة، تم اجراء دراسة ميدانية باستخدام عدد من استمارات الاستقصاء والمقابلات مع عينة الدراسة وتشمل المراجعين الخارجيين للشركات التي تطبق ERP والمراجعين الداخليين في هذه الشركات والأكاديميين في الجامعات المصرية. وأشارت نتائج الدراسة إلى: ١) عدم وجود اختلافات معنوية بين فئات الدراسة حول تأثير نظم ERPعلى مخاطر المراجعة ٢) توجد علاقة ذات دلالة إحصائية بين تطبيق نظم ERP ومخاطر المراجعة ٣) هناك تأثير معنوى لتطبيق نظم ERP ومخاطر المراجعة من توضيح مجموعة من التوصيات والدر اسات المتعلقة بهذا المجال

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### 1. Introduction and research problem

The recent financial crisis has highlighted the need for companies to manage their risks effectively. In this regard, one approach that has gained prominence is enterprise risk management (ERM). Importantly, little is known about the link between ERM and the financial reporting process. This link is critical because it is essential that financial reports portray the financial position (eg valuations and estimates) and risks associated with the company as revealed by the ERM.

The purpose of the audit is to enhance the degree of confidence of the intended users in the financial statements. This is achieved by the auditors gathering sufficient and appropriate audit evidence in order to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework (Audit Quality Framework, 2013, International Audit and Assurance Standards Board (IAASB).

Information technology is becoming a necessary component of every activity. IT has, however, had a more significant impact on business. Information technology and information systems revolutionized the corporate environment forever. Production and service rose, quality was encouraged, and at the same time, company competition expanded. In such a competitive environment, businesses can do better if they increase quality, lower prices across their whole supply chain, reduce inventories, diversify their offerings of goods and services, and offer more consistent delivery dates than their rivals. The introduction of enterprise resource planning (ERP) systems enabled numerous businesses and organizations to solve these issues. By closely coordinating and, in some circumstances, integrating their business operations, companies today want to increase their flexibility and productivity so that they can concentrate on providing excellent customer service and resource management. Information and information-based activities are integrated by ERP systems both within and between functional areas of a company (Reza Moohebat al, 2010). Today, the customers of auditors perform accounting transactions using a range of IT platforms, including Enterprise Resource Planning (ERP). The organizations have undergone modifications as a result of these systems. The development of ERP systems created a new audit environment that required auditors to modify audit processes, controls, and tests (Rezaei 2013). An ERP system is an expensive, intricate, all-encompassing system that, when properly deployed, has the potential to provide a number of advantages, including enhanced competitiveness and access to timely and accurate corporate data. Better decisionmaking, improved vendor relationships, and increased consumer loyalty may result from these advantages.

Consider the high risk of failure observed across many unsuccessful ERP implementations. It is important to understand the factors that contribute to success and failure. (Obitade, 2015). Fewer studies have addressed the auditing aspects related to the adoption of ERP. The effectiveness and sustainability of the ERP in modern organization are contingent upon a number of threats or opportunities that may emerge during the post-implementation stage. From the auditing perspective, such threats and opportunities are supposed to influence the client's risk and hence the audit risk and its components (Arafa, I. 2015). ERP systems presented both new opportunities and challenges for auditors to consider. On the one hand, using the system makes business operations more transparent and removes the need for controls to ensure data quality and consistency when moving data between systems. However, the complexity of an ERP system increases risks during both the operational and implementation phases. (Soral Jain 2011).

The research problem is determined in the absence of an integrated framework for the impact of the organization's resource planning system in the formulation of the audit risk, where the ERP system includes many dimensions that led to the development of audit risks compared to traditional systems, and the next section deals with reviewing the research heritage (Literature review) of that phenomenon.

### 2. Study objectives

This research seeks to formulate Proposed Framework for impact of ERP system on audit risk this objective can be achieved through a combination of the following mechanisms:

- A. Determining the impact of the application of the ERP system on audit risks and the extent to which there are fundamental differences between companies implementing the ERP system and companies not implementing it.
- B. Study and determination of audit risk closely related to ERP systems.
- C. Study and determine the role of ERP systems in reducing audit risk.
- D. Suggesting a framework for assessing audit risk in the ERP environment, including the factors affecting its efficiency and effectiveness

### 3. Study Importance

The importance of research can be divided into theoretical importance which shows the scientific addition in the field of determination characterization and analysis the audit risk in the ERP environment and applied importance which provides a proposed framework for defining the role of the ERP system in mitigating audit risk

### 4. Study methodology

The research relies on a balanced mix between the inductive and deductive approaches, where the inductive approach is used in preparing the theoretical part of the research and formulates hypotheses, while the deductive method is used to test research hypotheses of the research and formulates its implications and recommendations.

### 5. Theoretical framework of the research

### 5.1 Benefits of transformation from traditional audit to technology audit

Information technology has affected the audit profession in many ways, thus transforming the traditional audit process into a more technology-based audit. Information technology also influenced client acceptance, the planning phase, evidence collection, audit testing and report writing. Thus, this affected the skills and knowledge required auditors to conduct the audit (Tarek, et al., 2017:p.15). Technology incubators and science parks play an important role in supporting economic growth and sustainable development that the organization selects and develops general control activities over technology to support the achievement of objectives and contribute to mitigating risks to achieve objectives to acceptable levels (Wonglimpiyarat, 2017).

### 5.2 Features of audit on the computerized accounting information system

In the last twenty years, academic and the accounting profession have been given much attention to the demand and opportunity to conduct audits automatically, continuously and in near real time. Traditional auditing has been affected by the development of management information systems, thus creating a new set of audit issues and these recent advances in technologies can also be used for audits (Chiu, et al., 2014). A rapidly growing number of organizations conduct business and publish business and financial reports online and in real-time. Real-time financial reporting will likely necessitate continuous auditing to provide continuous assurance about the quality and reliability of the information provided (Rezaei, et al., 2018). So, auditors need to keep pace with the profession of auditing with this development and the importance of changing their traditional methods with innovative methods based on modern technological methods and analytical methods Advanced to implement process control efficiently and effectively and this imposes a new reality on the auditing profession.

### 5.3 ERP system and audit risk

The use of computers, electronic data processing, and electronic information communication is no longer an option but must do its job for individual practitioners. Accounting is one of the professions that has been affected by the introduction of advanced hardware and software technology in its practices in recent decades. The way accounting data is processed and communicated has changed dramatically (Yantian et al., 2017) The impact of changes in data quality, information quality, and management accountant tasks on accounting efficiency and effectiveness, and indirectly on changing management accounting after implementation in the ERP system, That time since ERP adoption is an important determinant of changes in management account technologies (Gullkvist, 2013). IT controls affect the control environment and its components. This improves managers' and auditors' awareness of the importance of this type of controls (Rubino, et al., 2017). Today's communication and information technology (IT) society is undergoing rapid change. Hence, accounting science is not an exception to this and has felt the need to adapt to these changes and use advanced information.

Nowadays, the volume of financial and operational transactions is increasing and increasing in complexity every day. In today's business environment, auditors and accountants must have knowledge of accounting and technology. The technical complexity of the ERP system has forced auditors and accountants to increase their knowledge of information technology. Companies must continuously input resources in the post-implementation period to reduce the risk of failure. No matter the implementation of the enterprise information system, attention should be paid to maintaining a sufficient number of IT personnel, understanding the capabilities of employees, adjusting the company's attitude, determining reasonable workload for employees, and maintaining high employee loyalty in order to ensure the stability of the organization and maintain normal operation of information systems The company (Ram et al., 2013).

The ERP system and the technical negotiations associated with it have been adversarial in nature, but in a globalized environment a 'win-win' approach based on trust and understanding is likely to produce better results Develop a list of companies able to provide the required ERP system, with an emphasis on capabilities Functional required ERP, experience in ERP projects, business strategy, previous performance and cross-cultural experience, and the establishment of effective communication channels between all parties (Jagoda al., 2017).

The ERP project team should consist of a well-chosen mix of employees with business, process and technical competence. Understanding the factors that affect

the success of an ERP upgrade has strong practical implications for related projects (Barth& Koch, 2019).

The characteristics of ERP are regrouped under three dimensions according to their classifications as described below:

- The technical dimension comprises complexity, openness, and adaptability. It speaks to how different ERP systems are from conventional systems in terms of their ability to support application development.
- Best practices, completeness, integration, and the change process are all part of the organisational dimension. It alludes to how the company has implemented its systems, which is the best indicator of how those systems have affected the business.
- A software programme pertaining to the caliber and use of the information provided by the system is included in the informational dimension (Zughoulet al., 2016)

The most important characteristics are the following: (Elsherif, 2013, Noureddine, 2014, Khalifa, 2017, Mohamed, Wahdan, Abd-Elwahab, 2020).

- 1) Integration and Flexibility.
- 2) Comprehensive ERP systems and Complex information systems.
- 3) Design of ERP systems get benefit from previous experience.
- 4) Increased risk: this result from the large number of users of information

from application of ERP systems that provide special information to inclusiveness of the decision maker.

ERP systems facilitate the automation of some control activities, reduce manual tasks and enable more stringent controls. ERP systems have increased the quality of information and communication between individuals and departments. ERP systems have enabled the reviewers of the ability to adjust the performance of the internal departments and monitor deviations before they occur. Moreover, the Internal Control system in ERP environment has a significant relationship with achieving competitive advantages. (Wahdan,M&Nassar,A2015).

There are the benefits resulting from the implementation of ERP systems such as: growth in the size of the business the establishment as a result of cost management, improving customer services, Improving quality, increasing productivity, reducing costs and reducing the operating cycle (Fouad ,2017). ERP systems extend to the whole organization, but focus on the main business function, processes, not only the

production related operations. Moreover, ERP systems provide centralized data storage and integration hub between the several departments within organizations (Elragal al., 2012). Realizing the benefits from these implementations has proven challenging and a great deal of variation has been observed in the extent of the value generated for client and vendor firms. They develop hypotheses relating resource cospecialization with two indicators of success in implementing enterprise software: (1) success of the exchange (2) growth of the firm. (Kim et al., 2019)

The ERP system is developed to collect and disseminate information in a timely manner to managers, thus it improves the ability of the managers to process and analyze accounting information. The aim of implementing an ERP system is to provide information that enables management to have a whole view of the company's financial condition at all time and results in managers' ability to access, process, analyze and disseminate accounting information to external users quickly (Aryani, 2014). After implementing the ERP system, the performance of companies improved significantly that the ERP system is a very important information technology (IT) resource (Chang et al., 2015). Currently, many organizations are aiming to support their operations with process-aware information systems such as enterprise resource planning (ERP) (Pajk, 2012). The main objectives of ERP indicate how a large organization can plan to make the best use of its large resources.

### 5.4 The impact of ERP systems on auditing of the american Will to hear the

ERP systems include general counsel ,accounts receivable ,accounts payable, asset management, resource flow, product cost accounting and performance analysis , facilizing performance of the financial accountant as well as the management accountant .The management accountant focuses on analyzing information used by ERP systems that added value to company and decision-making process (Wahdan, 2012, 2020).

Also, computerized accounting system has a positive effect on the auditing risk management in the companies, as risk management audit includes elements of internal risk management the control risk management and the detection risk management, and the use of computerized accounting system has a positive impact on these three areas and causes improvements (Azadi& Larry2015).ERP system functionality enhances audit quality. This indicates that auditors are using ERP capabilities in audit functions and that the ERP is valuable for auditors. It provides timely access, assessment, and reporting of data and information in ERP environment (Rezaei, 2013).In today's competitive market, auditors must continuously develop new ERP audit methods and procedures. The ERP system also enhances auditors to learn new audit tools to take advantage of system features.

Thus, it can be concluded that there is a significant difference between the auditing tools used in an ERP and non-ERP implementing company.

The use of the information system increased the level of security and reduced the manipulation of profit and loss or the balance sheet. In other words the use of the computerized accounting systems reduced internal control weaknesses, reduced inherent risks, reduced the risk of sampling in internal control system tests and provided appropriate methods for assessing the assessment of the inherent risks(Azadi&Larry2015). Supporting the implementation of ERP system, regardless of cost burden leads to solutions to audit risk to reduce the deviations and manipulations in financial statements, and increase its accuracy and efficiency.

Using ERP, as a single system, can reduce training requirements and increase the skills gained by end-users, as it gathers data and users into one individual learning process. It can also improve data security and quality by allowing data to be shared between stakeholders, enhancing data quality (Alsharari ,et al., 2020). Given that the auditing risk management includes the elements of internal risk management, control risk management, detection risk management and the use of a computerized accounting system has a positive impact on these three areas and causes improvements, so it can be concluded that the computerized accounting system improves the management of accounting risk and has a positive effect on (Azadi&Larry2015).

### 5.5 Objectives of using ERP systems on auditing

The continuous development of internet information is working to popularize the accounting information system between companies, which derives the accounting information system audit that is different from the traditional manual audit, we need to develop the accounting data, internal control, audit environment and other aspects to achieve the goal of reducing audit risks of accounting information system (Liu, 2018). The implementation of the Enterprise system leads to the engineering of the audit process and increases the need of continuous monitoring of transactions. The presence of IT auditors becomes critical, while financial auditors are required to enhance their skills so that they can conduct effective audit tests (Kanellou, &Spathis, 2011).

The external auditor relies on the work of the internal auditor in evaluating the internal control under the ERP system. It leads to an understanding of the internal control system when auditing the financial statements under audit. It also leads to the possibility of investigating the ability of the internal control system to prevent or reduce any errors in the ERP system (Al-Bawana, et al., 2015). The implementation of ERP affects the level of substantive testing that is performed in

the audit process. It found that auditors conduct more quality, substantive tests in ERP implementing organizations compared to non-ERP implementing organizations(Rezaei, 2013). The ERP system automatically performs all updating, reporting and checking transactions in an organization, which increases the speed of the audit also.

### 5.6 Problems of audit technology in ERP systems

There are many factors that contribute to reducing the reliability of the quality of accounting information such as the quality of auditors who do not have sufficient ERP knowledge (Krismiaji and Aryani, 2014). Enterprise Resource Planning (ERP) systems increase knowledge processing capabilities and the success of organizations if used effectively. Real life practice shows that not all companies have successful ERP implementation systems, and ERP systems are not used effectively. For this reason, companies focus their attention on Critical Success Factors (CSFs) in order to reduce the chance of failure in ERP implementation. (Baykasoğlu and Gölcük, 2017).

### 5.7 Needs for successful implementation of ERP systems on auditing

In order to conduct a post-ERP implementation audit, auditors had to develop traditional audit procedures, and as more businesses adopt ERP systems, there is a need for auditors to be technically prepared to handle upcoming issues (Nwankpa and Datta, 2012). Auditor understanding of the systems, business processes, control environment, risk-response activities, and internal control systems is necessary for successful and efficient auditing in an ERP environment. As a result, the deployment of new technology will improve the effectiveness of internal control systems and audits in firms (Soral and Jain, 2011). Before they can successfully exert internal control over the ERP system, auditors and inspectors must first comprehend its fundamental architecture (Chang, et al.,2014). If the auditor has the correct understanding of the ERP system and audit trail, they can do fast auditing.

### 5.8 The role of auditors in audit risk positing of hydrogen and monthly loopings?

According to their evaluations of the client's inherent risk and control risk, auditors must modify the allowed degree of detection risk. Therefore, auditors must lower the permissible threshold of detection risk when the client's inherent risk and control risk rise during a financial crisis to prevent further audit failures (Chen, et al., 2019).

Therefore, more time, staff, and effort are needed. In order to lower detection risk, auditors must work longer hours, create more thorough working papers, and

test more samples. As a result, auditors raise fees to make up for the extra labour they put in to maintain a reasonable audit risk level (Chen, et al., 2019). To prevent missing material misstatements, auditors must thoroughly analyse clients' choices for the timing and measurement of such items (Chen, et al., 2019). Thus, it can be said that audit firms are trying to move toward relying on experienced auditing personnel to perform analytical procedures for audit clients to mitigate risk during periods of unstable economic climate. By assigning performance of analytical procedures to audit personnel who have good experience with the audit process in general and sufficient knowledge of the audit client's industry and business environment, audit firms reduce the risk that a material misstatement would go uncovered in the financial statements of an audit client (Awadallah&Elsaid2020).

Therefore, before implementing an ERP projection large-scale, it is first necessary to evaluate the workloads of the employee. Enough employees should be hired before the project starts to avoid increasing work related stress, as this will enable employees to focus on their work and achieve more reliable results (Changet al., 2015: P.1063). Consequently, recent trends in the fields of financial and accounting, auditing aims to intensify the use of information and communications technology to reduce errors.

Companies with IT capabilities could cope better with external shocks, including new audit or accounting regulations; than companies that lack strong IT capabilities (Hoffman, et al., 2018:P.72). During the last 20 years, many organizations have implemented ERP systems and are forced to keep their system up to date and make ERP upgrades in times of rapidly changing business environments, technological enhancements and increasing pressure of competition(Barth & Koch 2019:P.670). Transformation processes are shaped by the interaction between the members of the target organizations and the interaction between the key individuals in the organizations and trainers or consultants. The relative power of these different agents determines the form and content of an accounting-based ERP implementation process (Hassan&Mouakket2018: p.481). As the audit profession and auditors resort to this development and change their traditional methods with innovative methods that rely on computerized accounting information system.

### 5.9 The successful implementation of ERP systems to reduce risk

An audit team with the necessary degree of expertise will be assembled by audit companies with the help of a proper examination of ERP systems. Such audits must be performed in such difficult conditions (Rao, 2014). Therefore, compared to financial auditors, computer audit specialists are better able to identify and evaluate audit risks in an ERP context. Auditors are unable to identify the inherent risk and

the enhanced control risks, and those who feel themselves to have a higher level of experience in ERP systems are better equipped to create effective processes to address risks associated to the ERP system (Kanellou&Spathis, 2011). As a result, numerous businesses worldwide have adopted the ERP system and goals that guarantee businesses' positions.

### 5.10 Techniques of ERP systems for mitigating audit risk

Internal audit gives periodic input on the effectiveness of those activities together with ideas for improvement (Haapamäki Sihvonen 2019). Information security staff designs, implements, and uses a variety of methods and technologies to protect the organization's information resources. The groundwork for the effective installation of the ERP system can be laid by initially limiting and minimizing significant business risks. Therefore, the organisation should direct business processes, develop detailed requirements specifications, conduct system testing prior to system implementation, and closely monitor system performance in order to reduce the risks related to the lack of alignment between the ERP system and business processes)Grabski, et al., 2001).

As a result, creating a steering committee, getting senior managers' support, selecting a project sponsor, creating a thorough implementation plan, project management, having a team with the right skills, and involving both consultants and internal audit are all important factors in reducing risks related to project complexity (Grabski et al., 2001). It is preferable for an auditor to ascertain how the management's enterprise risk management activity will utilize the audit results. For auditors to be effective at all levels, including those in developing nations, they must be aware of how information technology is used, the risks associated with it, and how to use it as a resource (Tarek, et al., 2017:p. 238).

Thus ,The ERP system contributes to planning to avoid risks that have a high probability of affecting both financial loss and damage, increasing the predictive occurrence of risks, automatically detect risks in real time, and the steps that are taken prior to the event occurring to reduce adversity.

### 6. ERP system and audit risk literature review

The effects of computerised accounting systems on risk management auditing in public organizations: the case of Kenya's Kisumu County (Polo and Oima, 2013). Examining how computerised accounting systems affect audit risk management in public firms in Kisumu County was the study's main goal. The

connection between computerised accounting systems and audit risk management was determined using Pearson correlation analysis.

The results lead to the initial conclusion that computerised accounting systems and audit risk management in public institutions have a significant link. Second, it was observed that there is a substantial relationship between computerised accounting systems and audit risk management in public institutions. The second goal attempted to ascertain the impact of computerised accounting systems on audit control and risk management evaluation. Finally, it became evident that there was a statistically significant correlation between employees' attitudes and perceptions about the use of computerised accounting systems.

2014's Ariani the effect of implementing an ERP system on the accuracy of accounting data for businesses listed on the Indonesian Stock Exchange. An ERP system is designed to gather and provide information to managers in a timely way, which enhances managers' capacity to process and evaluate accounting data. The purpose of putting in place an ERP system is to give management access to data that allows them to have a thorough understanding of the business's financial situation at all times. By removing the barrier of cross-functionality, this integrated system enables managers to easily access, process, analyse, and share accounting information with external users.

The population of this study is all companies listed on the Indonesian stock exchange that have implemented an enterprise resource planning (ERP) system. The sampling method in this study is purposive sampling. The sample in this study is the company that meets specific criteria, such as having complete financial statements before and three years after implementing the ERP system; Obtain ERP implementation data. It can be concluded from the result that the implementation of an ERP system increases the discretionary entitlement (reducing loyal representation). Regarding the importance of accounting information, this study found that companies that intend to increase the timing of earnings reports can reduce the reporting delay after implementing an ERP.

(T.RAO, 2014) sought to determine the impact of assignments on audit risk in accounting information systems, a case study of Navision ERP systems installed in Nairobi County, Kenya. The study relied on a quantitative and descriptive design. The research included a case study of companies that applied the Navision ERP system and collected primary data using questionnaires. The results here suggested that in order to reduce control risk due to insufficient audit team, the following should be put in place during assignment: Internal auditors should be familiar with the ERP systems and business process of the assigned organization. In addition, all required system customizations must be routed through the audit

team first, which can then forward to programmers upon evaluation. When finished, this should be forwarded to the users through the audit team. This will also help ensure that the proper level of documentation is achieved before an issue is closed so that anyone in the future can point to the same if any change is required.

(Wahdan and Nassar, 2015) aimed at trying to shed light on evaluating the impact of internal control in ERP systems environment on creating new competitive advantages: With an application to Egyptian Post Sector to achieve this goal, the questionnaire was conducted on (23) companies selected in the Egyptian postal sector; It consists of several sets of questions about the role and the impact of internal control ERP environment on increasing competitive advantages. This research is survey based. One of the most common ways of collecting data in the survey method which has been used in the current study is personal interviews and questionnaire. The questionnaire consists of various items and has been organized for 7 different parts of the considered organization, that includes all the questions (control environment-risk assessment - control activities - information and communications - monitoring - ERP - competitive advantages ). The results of the study indicated that Internal Control System in ERP environment has a significant relationship with achieving competitive advantages. Furthermore, Internal Control system has been affected after using ERP. Moreover, competitive advantages have been affected after using ERP. The absence of a strong system of internal controls results in poor performance of the enterprises and operational efficiency and reduces their competitiveness, since the establishment of effective internal control is to be able to manage risks. In ERP Environment, enterprise would have a clearer responsibility division and more efficient internal control. ERP has methods to prevent illegal access and destroying documents, reports and assets. ERP systems have led to the prevention of fraudulent behavior and reduce risks through the availability of control and mutual check mechanisms, and prevention of errors at the source. ERP systems facilitate the automation of some control activities, reduce manual tasks and enable stricter controls. ERP systems have led to an increase in the quality of information and communication between individuals and departments. ERP systems have enabled the reviewers of the ability to adjust the performance of the internal departments and monitor deviations before they occur. Moreover, the Internal Control System in ERP environment has a significant relationship with achieving competitive advantages.

(Zakot, 2016) with the aim of recognizing the effect of using the red flags index in improving the effectiveness of auditing to detect financial fraud, by

inferring audit red flags related to employees, management, financial reports, and misuse of assets. To achieve the objectives of the research, the analytical method used in the questionnaire was designed and distributed to the research community of 23 audit offices, while the preliminary results were analyzed using SPSS (Statistical Package for Social Sciences) and the appropriate statistical software and tests. This research concluded some results and the most important results that deserve to be provided provide warning signs of the possibility of fraud, and this is the reason the auditor gives it more care, examination and analysis. Audit offices also agreed on the effective role of audit marks to detect financial fraud and to avoid the risks that the establishment may be exposed to as a result of this fraud.

(2017) Tarek et al. This study was carried out in a setting of a developing nation. The reality of the day is that information technology is used and important. However, as there have not been many studies investigating the usage and significance of information technology in auditing in developing nations, it is important to understand it better through this study. At all levels, even those in developing nations, auditor success depends on their ability to use information technology as a resource and their understanding of the hazards associated with its usage. Both quantitative and qualitative data are used in this investigation. To gather primary data, 112 auditors representing three of Egypt's top four audit firms and ten local audit companies completed a survey. Semi-structured interviews were then conducted to gather pertinent qualitative information.

The results of this study revealed that auditors' perception regarding the complexity of a client's IT is significantly influenced by the use of IT professionals and the auditors' experience in the field of IT. Furthermore, they are of the opinion that the relevance and extent of new audit applications are influenced by the auditors' IT experience. The results also reveal that auditors' perception of a client's IT is not affected by the control risk assessment. However, auditors find that customer information technology is significantly affected by electronic data retention policies. The results also indicate that auditors' perception of the importance of new audit applications is not affected by the type of client industry. Auditors find that the uses of audit applications as well as their IT experience are not significantly affected by the size of the audit firm. However, they are of the opinion that the complexity of a client's IT as well as the extent to which IT professionals are used are affected by the size of the audit firm. Auditors must prioritize the causes of risk and manage them with a clear understanding of who receives them, how they are communicated with and what action needs to be taken in a particular community/community. In particular, it is desirable for the auditor to specify how the results of the audit will be used in the management's enterprise

risk management activity. In addition, privacy has many implications for the audit, and therefore it must be reflected in the audit program and planning as well as handling task files and reports. Similarly, keeping electronic evidence for a limited period may require the auditor to select samples multiple times during the audit period rather than just at the end of the year.

(El-Gabaly, 2018) the study aimed at identifying the impact of the use of information technology on the auditors' assessment of the reviewed risks in light of the increasing use of information technology and how this impact has affected the qualification of references and the procedures and methods of auditing. Which made the process of detecting fraud, errors and manipulation more difficult, which led to increased risk of audit, which requires the reference to do more to be able to control the activities of technology and the collection of evidence in support of his opinion to reach the Acceptable level of risk and the achievement of the objectives of the audit. The results of this research show that the use of information technology affects practitioner Accounting and Auditing and the use of information technology affects an estimate Reviewers of audit risks.

(Abdullah et al.) 2019 In order to maintain the audit committee's effectiveness as a corporate governance mechanism, this pilot study set out to investigate two topics: first, the characteristics of the committee and how they relate to corporate financial crime; and second, the effectiveness of having a risk committee separate from the audit committee in preventing such crimes. While conclusions are not supported by audit committee characteristics, the results of this empirical research, which used a web-based dataset of corporate financial crime cases, do show a substantial correlation between the existence of a stand-alone risk committee and corporate financial crime. The study's findings were used as an empirical indicator by the corporation as it considered whether to put in place stand-alone

risk committee from its audit committee.

### 7. The research hypotheses

- 1- There is no significant statistical difference between assessing audit risk in ERP system's environment and the traditional accounting information system.
  - 2- There is no significant statistical relationship between adopting ERP system and the assessment of audit risk.
  - 3- There is no significant statistical impact of adopting ERP system on the assessment of audit risk.

### 8. Analyzing the results of the applied study

a questionnaire was developed to collect data from the study sample, which is divided into subsamples (Internal Auditor, External Auditor, Financial Manager, Senior Management, Academic and other), through distribution of a questionnaire list, which are designed for this purpose. The data obtained were then analysed using appropriate statistical methods to achieve the study objectives and its hypotheses.

### 8.1 The Population and Sample

The researcher distributed the questionnaire lists in the selected audit firms, as these firms perform the auditing services for the companies that applied ERP systems on audit risk, various companies as well as the academics in the Egyptian universities.

The study sample consisted of (48) internal auditors with a percentage of (19.9%), (88) external auditors with a percentage of (36.5%), (9) of financial manager with a percentage of (3.7%), (20) of senior management with a percentage of (8.3%), (54) of academic with a percentage of (22.4%) and (22) other with a percentage of (9.1%). The final number of questionnaires lists totaled (241), so the response rate can be illustrated in table (1):

Table (1)Distribution of the study sample according to the job

	P. C.	Percent
category	Frequency	
Internal Auditor	48	19.9
External Auditor	88	36.5
Financial Manager	9	3.7
Senior Management	20	8.3
Academic	54	22.4
Other	22	9.1
Total	241	100.0

### 8.2 Analysis of the characteristics of the study sample.

The characteristics of the study sample can contribute to more precise data collection and play a significant role in explaining the study findings, allowing us to trust them. The degree to which the study sample understands the questions depends on a number of criteria, including (scientific qualifications, work experience, training courses).

Distribution of the study sample according to the scientific qualification.

Table (2)Distribution of the study sample according to the scientific qualification

Qualification	Frequency	Percent
BA	151	62.7
Postgraduate Diploma	14	5.8
Master's	27	11.2
Ph.D	49	20.3
Total	241	100.0

The table (3) illustrates that a big number of the respondents have a high level of education (BA) which represents 62.7 % of the respondents. on the other hand the (Diploma, MSc, and PhD), as they represent (37.8%) less than half of the respondents.

Distribution of the study sample according to years of experience in the academic and auditing field can be illustrated in table (3).

Table (3) Distribution of the study sample according to years of experience in the

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Years of experience	Frequency	Percent
Less than 5 years	78	32.4
from 5 years to 10 years	63	26.1
more than 10 years	100	41.5
Total	241	100.0

The table (4/5) shows that the high level of academic and auditing experience, as (41.5%) of the respondents have more than 10 years of experience and deal with their profession for a reasonable period.

Distribution of the study sample according to training courses will be illustrated in Table (4).

Table (4)Distribution of the study sample according to training courses

Training courses	Frequency	Percent
Attending courses on an ongoing basis	130	53.9
Did not take any courses	101	41.9
Other	10	4.1
Total	241	100.0

Table (4) shows the high level of training courses, with (53.9%) of the respondents attending courses on an ongoing basis. Through the previous presentation, it is possible to confirm the reliability of the results obtained because they are based on a high balance of experience and education.

### 8.3 Testing the validity and reliability of the questionnaire list

This test aims to assess the degree of stability and reliability of each axis in addition to its components so that the researcher can rely on the results of the statistical analysis of the questionnaire and circulate them to the study population. To determine the competency of the questionnaire list, the researcher can use Cronbach's Alpha test which measures the reliability and reliability of the survey. According to the statistical criteria, the value is accepted in the case of the desired limits (equal to or greater than 60%) to apply the results to the study population (Sekaran & Bougie, 2016). The following items may be considered.

### \* Reliability of Measurements in the Study

This means that the same measurement results will be given if they are redistributed at any time and under the same conditions. To test the reliability and reliability of the questionnaire, Cronbach's Alpha test is used.

### \* Validity of the Items in the Study

The dependability coefficient, one of the primary statistical techniques, verified the accuracy of any measurements. The validity coefficient, which must be within the required range (equal to or greater than 60%), is equal to Cronbach's alpha squared. In light of the information previously provided, Table No. 5 will present an examination of the validity and reliability of the survey's key variables.

Table (5) The reliability & validity of the basic variables in the survey

Basic Axes of the Questionnaire	Coding	Number of statements	Reliability coefficient	validity coefficient
Advantages of using ERP systems	X1	19	0.93	0.96
ERP Systems Success Factors	X2	9	0.88	0.94
Motives for using ERP systems	X3	8	0.84	0.92
Problems and challenges of ERP systems	X4	5	0.75	0.86
Characteristics of ERP systems	X5	7	0.90	0.95
ERP systems technology to detect and reduce audit risk	X6	7	0.87	0.93
Total Items of (X)		55	0.91	0.96

Basic Axes of the Questionnaire	Coding	Number of statements	Reliability	validity coefficient
Audit risk model	Y1	3	0.88	0.94
Advantages of using ERP related to audit risk	Y2	11.	0.85	0.92
Requirements and skills needed by the auditor	Y3	6	0.77	0.88
Total Items of (Y)		20	0.81	0.90
Total Items of (X & Y)		75	0.93	0.96

According to Table No. 5, the validity coefficient at the survey level overall is valued at (96.0%), which is a statistically sound result. All of the survey's questions and axes' validity coefficient values, which are (0.96, 0.94, 0.92, 0.86, 0.95, 0.93, 0.94, 0.92, and 0.88) are statistically sound. 60% or greater viability coefficient.

Additionally, Table No. 6 demonstrates that the dependability coefficient value at the survey level overall is (93.5%), which is statistically favourable. All survey list questions and data have reliability coefficient values that are statistically good (0.93, 0.88, 0.84, 0.75, 0.90, 0.87, 0.88, 0.85 and 0.77). There is at least a 60% dependability factor. The list of questions has a high level of internal consistency and dependability as a result, and the researcher may rely on it to accomplish the study's goals and generalize the findings.

### 8.4 Analysis the normal distribution of the data

The researcher uses the Kolmogorov-Smirnov one-sample test to assess whether the study data has a normal distribution or not, after which the researcher can select the best statistical tests to analyse the study data. The Kolmogorov-Smirnov test results for one sample are displayed in Table No. 6:

Table (6) The results of (Kolmogorov-Smirnov) test for the normal distribution of the data

Coding	Questionnaire Axes	Test Statistic	P-value
X1	Advantages of using ERP systems	0.155	.000
X2	ERP Systems Success Factors	0.219	.000
X3	Motives for using ERP systems	0.118	.000
X4	Problems and challenges of ERP systems	0.186	.000
X5	Characteristics of ERP systems	0.165	.000
X6	ERP systems technology To detect and reduce audit risk	0.143	.000
X	ERP systems	0.132	.000
Y1	Audit risk model	0.167	.000
Y2	Advantages of using ERP related to audit risk	0.247	.000

Coding	Questionnaire Axes	Test Statistic	P-value
¥3	Y3 Requirements and skills needed by the auditor		.000
Y	audit risk	0.148	.000

Table (6) shows that the data do not follow a normal distribution since the P-value (significant) for the test statistic in the Kolmogorov test is less than (0.05). However, in order to demonstrate the validity of the hypotheses and obtain more precise results, the researcher will rely on nonparametric tests.

### 8.5 Descriptive analysis of the study variables

The outcomes of a descriptive statistical analysis relating to the effect of ERP systems on audit risk are presented in this subsection. The sample's trends will be determined, along with the most and least significant assertions, using the descriptive statistical analysis that takes into account mean and standard deviation.

Table (7) Relative importance of standard means of the survey items

Standard Average	Proportional Importance
From 1 to 1.79	Very Little
From 1.8 to 2.59	independent little upmensburg
From 2.6 to 3.39	Average
From 3.4 to 4.19	High
From 4.2 to 5	Very High

Source: (Matell & Jacob, 1971)

The previous table (7) shows the relative importance of the questionnaire items is determined according to the scale and numbers in this table.

## The descriptive analysis of the sample responses for the independent variables (X) will be as follows:

The descriptive statistics of the research variables that data tables have the statements obtaining the highest approval score and the lowest approval score according to the sample responses of the study, and the following is illustrated the general direction of the sample responses according to the ratio of the coefficient of variation (standard deviation / Mean \* 100), The following table (8) shows a summary of descriptive statistical measures of the study statements:

Table (8) Summary of the descriptive statistical measures for independent variable

Variables	Mean	Standard Deviation	Coefficient of Variation	Ranking
Advantages of using ERP systems(X1)	4.18	0.47	83.62	3
ERP Systems Success Factors(X2)	4.24	0.49	84.78	1
Motives for using ERP systems(X3)	4.05	0.51	80.94	5
Problems and challenges of ERP systems(X4)	3.81	0.67	76.13	6
Characteristics of ERP systems(X5)	4.20	0.53	83.97	2
ERP systems technology To detect and reduce audit risk(X6)	4.13	0.50	82.64	4

According to the rank in table (8), in the range from the highest agreement to the lowest agreement, the researcher can consider the third independent variable (ERP Systems Success Factors) is the highest agreement one, with a coefficient of variation (84.78), followed by the second independent variable (Characteristics of ERP systems) with a coefficient of variation (83.97), the second independent variable (Advantages of using ERP systems) has a coefficient of variation (83.62), the first independent variable (Problems and challenges of ERP systems) is considered as the lowest agreement variable with a coefficient of variation (76.13).

Table (9)Summary of the descriptive statistical measures for dependent variable

Variables	Mean	Standard Deviation	Coefficient of Variation	Ranking
Audit risk model (Y1)	3.11	1.09	62.21	3
Advantages of using ERP related to audit risk (Y2)	3.88	0.53	77.53	2
Requirements and skills needed by the auditor (Y3)	4.21	0.50	84.15	1

According to the rank in table (9), in the range from the highest agreement to the lowest agreement, the researcher can consider the second dependent variable (Requirements and skills needed by the auditor) is the highest agreement one, with a coefficient of variation (84.15), followed by the third dependent variable (Advantages of using ERP related to audit risk) with a coefficient of variation (77.53), the first dependent variable (Audit risk model) is considered as the lowest agreement variable with a coefficient of variation (62.21).

### 8.6 Testing the study hypotheses and analyzing the results

This section shows the results of statistical tests related to the hypotheses as follows:

### 8.6.1 Testing the First Hypothesis

"There are no significant differences among the study categories about the impact of ERP systems on audit risk". To test this hypothesis, the researchers used (Kruskal-Wallis Test) which aims to test the significance of differences in the mean among participants of the study sample (BA, Postgraduate Diploma, Master's, PhD) about the impact of ERP systems on audit risk. This test shows if there are differences among the opinions of the sample participants on impact of ERP systems (X) and audit risk (Y).

Table (10) illustrates the results of Kruskal-Wallis Test as follow:

Table (10)Kruskal-Wallis test results related to the Academic value

	Mean Rank						l-Wallis est
Axes		BA Postgraduate Diploma		Master's	Master's PhD		P- value
Y	audit risk	101.39	133.21	147.98	163.08	Square 34.28	0.000
Y1	Audit risk model	101.72	136.82	141.48	164.61	34.26	0.000
Y2	Advantages of using ERP related to audit risk	113.75	116.96	147.83	129.71	6.47	0.09
Y3	Requirements and skills needed by the auditor	115.59	124.11	135.57	128.74	2.76	0.43
X	ERP systems	115.28	118.11	135.57	131.41	3.31	0.35
X1	Advantages of using ERP systems	119.14	110.43	134.09	122.53	1.41	0.70
X2	ERP Systems Success Factors	119.25	117.29	132.56	121.07	0.89	0.83
Х3	Motives for using ERP systems	114.24	116.86	147.26	128.55	5.94	0.11
X4	Problems and challenges of ERP systems	109.31	141.00	119.81	151.95	15.39	0.000
X5	Characteristics of ERP systems	121.35	99.96	131.52	120.12	1.94	0.59
X6	ERP systems technology To detect and reduce audit risk	118.81	111.89	130.28	125.24	1.07	0.78

➤ The results of Kruskal-Wallis test according to table (10) illustrate that there are no differences among the sample members around (Advantages of using ERP related to audit risk, Requirements and skills needed by the auditor, ERP systems, Advantages of using ERP systems, ERP Systems Success Factors, Motives for using ERP systems, Characteristics of ERP systems, ERP systems technology to detect and reduce audit risk) because the significance level is more than 5%.

Table (11) Kruskal-Wallis test results according to job

		Mean Rank						Kruskal-Wallis Test	
Axes		Internal Auditor	External Auditor	Financial Manager	Senior Management	Acadimic	Other	Chi- Square	P- value
Y	audit risk	124.18	103.12	119.11	108.03	159.76	103.02	24.74	0.000
Yl	Audit risk model	128.84	108.76	110.61	96.70	159.32	85.11	28.50	0.000
Y2	Advantages of using ERP related to audit risk	101.40	111.80	113.56	153.33	131.75	147.84	14.33	0.01
<b>Y</b> 3	Requirements and skills needed by the auditor	126.89	112.73	131.33	114.70	130.73	118.84	3.05	0.69
X	ERP systems	113.46	117.88	151.33	111.60	127.86	129.23	3.63	0.60
X1	Advantages of using ERP systems	113.46	114.32	150.39	133.15	120.34	142.70	5.73	0.33
X2	ERP Systems Success Factors	113.06	119.11	147.39	127.75	119.46	132.73	2.84	0.72
Х3	Motives for using ERP systems	110.11	121.82	155.94	108.55	122.76	134.16	4.95	0.42
X4	Problems and challenges of ERP systems	123.53	116.22	113.78	96.98	146.54	96.70	13.15	0.02
X5	Characteristics of ERP systems	112.74	122.19	153.11	105.45	119.36	139.30	5.25	0.39
Х6	ERP systems technology To detect and reduce audit risk	102.59	126.44	149.39	108.65	125.40	128.20	6.57	0.25

Table 11 demonstrates that there are no differences in the sample opinions based on the variables (requirements and skills for the auditor, ERP systems, benefits of using ERP systems, success factors for ERP systems, reasons for using ERP systems, characteristics of ERP systems, and ERP systems technology) that are relevant to science. Except for the variables (audit risk, Audit risk model, Advantages of using ERP related to audit risk, Problems and challenges of ERP systems), for which the significance level is greater than 5%, there are discrepancies between the sample opinions in terms of their scientific validity because their p-values are all less than 5%.

Table (12)Kruskal-Wallis test results according to years of experience

		Mean Rank			Kruskal-Wallis Test	
	Axes	Less than 5 years	Between 5-10 years	More than10 years	Chi- Square	P- value
Y	audit risk	108.99	94.15	147.28	25.87	0.000
Y1	Audit risk model	108.99	94.15	147.28	22.69	0.000
Y2	Advantages of using ERP related to audit risk	125.63	103.05	128.70	5.76	0.06
Y3	Requirements and skills needed by the auditor	122.16	104.71	130.36	5.33	0.07
X	ERP systems	118.17	106.10	132.60	5.78	0.06
X1	Advantages of using ERP systems	122.74	107.44	128.19	3.50	0.17
X2	ERP Systems Success Factors	116.79	117.54	126.46	1.06	0.59
X3	Motives for using ERP systems	124.94	105.69	127.58	4.22	0.12
X4	Problems and challenges of ERP systems	104.78	112.71	138.88	11.94	0.000
X5	Characteristics of ERP systems	124.53	115.48	121.72	0.62	0.73
X6	ERP systems technology To detect and reduce audit risk	123.84	105.57	128.51	4.46	0.11

Table 12's findings show that there are no differences in the study sample's years of experience when it comes to the variables (advantages of using ERP related to audit risk, requirements and skills needed by the auditor, advantages of using ERP systems, success factors for using ERP systems, reasons for using ERP systems, characteristics of ERP systems, and technology used by ERP systems). As the significance level is greater than 5%, to identify and minimize audit risk. There are discrepancies between the sample opinions according to the scientific qualification because p-values for all of them are less than 5%, with the exception of the variables (audit risk, Audit risk model, Problems and challenges of ERP systems).

8.6.2 Testing the association between the ERP systems and audit risk

The following table checks the hypothesis that " There is no significant association between applying ERP systems and audit risk"

Table (13) Matrix correlation coefficients between the basic Variables (X & Y)

	Statistics	ERP systems (X)	audit risk (Y)
ERP systems (X)	Correlation coefficient (Spearman)	1	.401**
	Significance level		0.000
audit risk (Y)	Correlation coefficient (Spearman)	.401**	1
	Significance level	0.000	
	Significance level (0.01)	TR Page 1	

The correlation coefficient is (.401\*\*) per Person's correlation, and at a significance level of, the table (13) may show the strong positive correlation between the fundamental variables (X, Y) (ERP systems and audit risk) (0.000). The correctness of the statements that can be used to measure the research variables is also acknowledged, and as a result, the basic variables (X, Y) are actually correlated.

8.6.3 Testing the impact of ERP systems and audit risk

"There is no significant impact of applying ERP systems on audit risk". The table (14) illustrates the results of multiple regression analysis as follows:

Table (14) The results of multiple regression test related to the most important variables affecting audit risk

Symbol	Variables	Unstandardized coefficients		Standardized	T	P-value	TOL	VIF		
		В	Std. Error	Coefficients						
XI	Advantages of using ERP systems	0.820	0.260	-0.355	3.15	0.002	0.291	3.436		
X2	ERP Systems Success Factors	0.032	0.230	0.014	0.137	0.891	0.346	2.890		
Х3	Motives for using ERP systems	0.623	0.223	0.294	2.788	0.006	0.332	3.009		
X4	Problems and challenges of ERP systems	0.322	0.110	0.198	2.921	0.004	0.805	1.243		
X5	Characteristics of ERP systems	-0.370	0.216	-0.181	1.710	0.089	0.329	3.036		
X6	ERP systems technology To detect and reduce audit risk	0.145	0.223	0.067	0.654	0.514	0.347	2.886		
	Constant	zulder	a John to S	Limeterschill	3.61	2	Ba(3)	neasu		
Correlation coefficient (R)				.370°						
Determination Coefficient (R2)				0.137						
Adjusted determination coefficient (Adj.R2)				0.115						
F-test				6.175						
P-value				<.001 <sup>b</sup>						

The significance of the model is explained in Table 14 by the F-test and P-value, which demonstrate that the model is valid for predicting the value of the dependent variable (Y) and the results have statistical significance because the significance level is (0.000) less than (5%), which aids us in making the decision. Additionally, there is no multi-collinearity among the explanatory variables as evidenced by the variance inflation factor (VIF) for each variable being less than (10) and tolerance (T) being greater than (0.1) for each variable. As a result, the researcher can depend on the model's conclusions.

The independent factors in the previous table have a strong correlation (.370) with the dependent variable (Y: audit risk), and the determination coefficient (R2) shows that the explanatory variables are helping to account for 13.7% of the variation in the dependent variable (Y). According to the findings, the independent variable (Y: audit risk) is positively impacted by the variables (Advantages of using ERP systems, Motives for using ERP systems, Problems and challenges of ERP systems) at a 5% significant level. How little of an effect the variables (X2: ERP

Systems Success Factors, ERP Systems Technology to Detect and Reduce Audit Risk) have on (Y) audit risk.

The obvious main result can be illustrated using the following equation:

#### Y=3.612+0.820X1+0.032X2+0.623X3+0.322X4-0.370X5+0.145X6

Therefore, we can refuse the third hypothesis: "There is no significant impact of ERP systems on audit risk "and accept the alternative hypothesis that there is a significant statistical impact of ERP systems on audit risk

### 9. Study Results and Implications

The results indicated that the first hypothesis "There is no significant statistical difference between assessing audit risk in ERP system's environment and the traditional accounting information system" was rejected. The results show the strong positive correlation between the variables ERP systems and audit risk, as the correlation coefficient shows that there is significant correlation, according to the correlation of spearman coefficient at 1% significance level. It is also noted that there is an assurance related to the validity of the statements that can be used to measure the study variables, therefore the basic variables are really correlated.

The results indicated that the second hypothesis "There is no significant statistical relationship between adopting ERP system and the assessment of audit risk." was rejected. As, there is a strong positive correlation between:

- The audit risk model and advantages of using ERP systems have a positive correlation between the two variables. In the same context, the audit risk model has positive significant correlation with problems and challenges of ERP systems with significant positive correlation coefficient.
- The Advantages of using ERP related to audit risk and all independent variables advantages of using ERP systems leading to ERP systems success factors and motives for using ERP systems. Problems and challenges of ERP systems and their characteristics of ERP systems, ERP systems technology is to detect and reduce audit risk that has positive significant correlation coefficient at 1% significance level.
- The requirements and skills needed by the auditor with all independent variables advantages of using ERP systems, ERP systems success factors, motives for using ERP systems, problems and challenges of ERP systems, characteristics of ERP systems, ERP systems technology to detect and reduce audit risk have a positive significant correlation coefficient at 1% significance level.
- The results indicated that the first hypothesis "There is no significant statistical impact of adopting ERP system on the assessment of audit risk" was rejected.

The results show that the variables (Advantages of using ERP systems, Motives for using ERP systems, Problems and challenges of ERP systems) have a positive impact on the dependent variable audit risk at 5% significance level. Whether the variables ERP Systems Success Factors, Characteristics of ERP systems, ERP systems technology to detect and reduce audit risk have insignificant impact on audit risk.

### 10. Study Recommendations

In light of the study's implications and results, the following recommendations can be stated in several aspects:

- Encouraging companies on the importance of advantages for using ERP systems that companies need to improve the most general agreement in the views of the sample is that the highest dimension to achieve this variable is (Integration of all functions, flexibility in data circulation, and the possibility of comparison with previous years) followed by providing an integrated information base for quick access to various accounting data.
- Creating continual training and qualification courses for auditors to help them improve their technology abilities and acquire skills relevant to new computerized and electronic information systems, which will help them facilitate and regulate the audit process.
- Encouraging companies on the importance of motives for using ERP systems that companies need to be improved. The most general agreement in the views of the sample that the highest dimension to achieve this variable is (Achieving production and operational efficiency in an ERP environment), followed by preparing reliable financial statements with accurate and appropriate content.

### 11. Proposed Future Studies

The study suggests further research into the following points:

- The impact of using extensive business reporting language (XBRL) in improving the effectiveness of audit risk technology in ERP system
- Measure the quality of using audit technology in ERP system on the accuracy of risk prediction.
- The impact of the integration of ERP systems and audit risk on the firm's competitive performance.
- Study the impact of using audit technology in ERP system on the reduce of audit risk.

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