

## The impact of planning the audit process in the light of big data environment in the Egyptian environment (field study)

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### **Abstract:**

The study dealt with planning the audit process in the light of the big data environment and its impact on improving the performance of the external audit in the Egyptian environment. On some of the Egyptian auditing companies, the study recommends the need to pay attention to planning the external audit process in light of the big data environment, in order to help the auditors improve the performance of their business tasks.

**مستخلص:**

تناولت الدراسة تخطيط عملية المراجعة في ظل بيئة البيانات الضخمة واثّر ذلك على تحسين أداء المراجعة الخارجية بالبيئة المصرية، حيث تعرضت مشكلة الدراسة وأهمية الدراسة الى التحديات التي تواجه مهنة المراجعة والخاصة بتخطيط عملية المراجعة للتعامل مع بيئة البيانات الضخمة، وقام الباحث بدراسة ميدانية من خلال توزيع استبانة على بعض من شركات المراجعة المصرية، وتوصى الدراسة بضرورة الاهتمام بتخطيط عملية المراجعة الخارجية في ظل بيئة البيانات الضخمة بما يساعد المراجعين في تحسين أداء مهام أعمالهم.

### **First: the general framework of the study:**

#### **1/1 Introduction:**

The development of communication systems and information technology had clear and prominent effects among the various types of sciences. There is a big revolution in the field of communications, technology and information circulation, in which the economies of countries have turned into a knowledge-based economy, which means that knowledge plays the main role in achieving economic growth and the backbone of success in competition between enterprises, data is defined as a set of notes and facts that can be collected, recorded, stored and processed in order to obtain information that helps in the decision-making process. The huge amount of data that is being produced, stored, and made available from multiple locations is a source of strength for societies and enterprises based on Knowledge, especially with the emergence of artificial intelligence, the Internet, social networking sites, and developments in the field of digital computing and data science, which has been called processing and analyzing big data. This big data, if properly managed, can contribute significantly to achieving competitive advantages for enterprises and success in the short and long term, and to be able to provide products and services of high quality and at a low cost to suit the needs of customers and at the desired time.

### **1/2 Nature of the problem:**

Despite the great opportunities offered by big data for enterprises, it also represents a great challenge for many jobs, including the audit function, which faces great challenges not only because of the rapid financial, economic and legal developments and changes, but also because of the challenges resulting from the successive changes in information technology. Planning and implementation of audit process is the function most affected by big data. External audit in particular is the only party that can access the various data of the enterprises, whether financial or non-financial, quantitative or qualitative data related to the various divisions, departments and functions within the enterprises, which requires those in charge of auditing affairs adaptation and compatibility with developments through good planning and implementation to deal with such changes.

**In this sense, the study problem can be summarized and presented through a number of important questions, which are as follows:**

- 1- What are the requirements for the scientific and practical qualification of the auditor for using the big data environment to improve the performance of the external audit?
- 2- What are the challenges facing the audit profession related to planning the audit process to deal with the big data environment?

### **1/3 The importance of the study:**

The importance of the study is represented by a set of contributions that it tries to make, which are as follows:

- 1- An attempt to identify, diagnose and analyze the problems facing the accounting and auditing profession resulting from the use of big data in the Egyptian environment, whether they were dealt with in literature review in the accounting literature or not, and then the scientific basis for them.
- 2- Attempting to identify, diagnose and analyze the planning of the audit process in light of the use of the big data environment.

### **1/4 Study hypotheses:**

In light of the nature of the problem and the objectives of the study, the researcher can formulate the following main study hypotheses:

#### **Main hypothesis:**

“There is no statistically significant relationship between the use of big data in planning the audit process and the improvement of the performance of the external audit”.

### **Second: Theoretical framework of the study:**

#### **2/1 Planning the Audit process in light of the big data environment:**

The main objective of the audit process is for the external auditor to reach a neutral technical opinion on the extent of the fairness of the financial statements, to carry out all stages of the audit efficiently and effectively, and to communicate the results to interested

users. But first, planning for the audit process must be carried out to ensure the issuance of an impartial opinion on the fairness of the financial statements, and This is what was included in the international auditing standards, by approving a special standard for audit planning, in which the basic points of audit planning were identified in terms of an understanding of the client's business under audit, whether through previous experience or from available sources of knowledge and others. (Taha, 2018, p. 91)

**Therefore, the researcher believes** that planning means that we predict what may happen in terms of change and development in the future, and we try to control the amount or direction of this development. This is what the modern environment is witnessing in terms of developments in technology, the most important of which is the emergence of modern analytics, including the big data environment.

### **2/1/1 Principles of audit planning:**

Planning has important principles that make it an integrated tool to achieve a specific goal, and these principles are summarized in the following: (Rawan, 2019, pp. 13-14)

- 1- Flexibility:** means the plan's ability to be continuously modified in light of the changing circumstances and in the light of the results of the implementation of the plan.
- 2- Comprehensiveness:** It means that planning includes all aspects of activity in enterprises. The presence of sub-plans linked to the master plan leads to unification of efforts towards common general goals in order to avoid imbalance and distance from the main goal.
- 3- Realism:** This is so that the plan is drawn within the limits required by the real conditions that are characterized by successful implementation.
- 4- Scientific:** It means that planning is applied on the basis of a full understanding of all the elements and factors contained in the boundaries of enterprise. so that planning at the level of the enterprise cannot be achieved without conscious understanding and in-depth analysis of the reality of the enterprise and then applying scientific methods derived from all sciences.
- 5- Continuity:** Planning is an endless activity for the planner. When a plan is put into practice, the changes that occur in circumstances require continuous adjustments to avoid the occurrence of any situation that may be an obstacle to achieving the desired goal.

As for the planning steps necessary to perform the audit process, when the auditor is entrusted with auditing the accounts of a particular enterprise for the first time, he adequately plans the audit process by taking several steps, which some call the preliminary steps for the new audits, but if the current auditor is the auditor of the company for the past year or years, it follows the same steps, focusing only on the changes that occurred in it, and these steps are: (Kamel Ashmawy, 2019, p. 83)

- 1- Obtaining the engagement letter in case of approval of the audit.
- 2- Understanding the client's business and industry.
- 3- Performing initial analytical procedures.
- 4- Setting materiality limits and estimating audit risks.
- 5- Studying and evaluating internal control and assessing control risk.
- 6- Preparing the general audit plan and the audit programmer.

**The researcher can address in detail these steps:**

### **2/1/2 Steps for planning the audit process:**

The planning process for the audit includes a number of events and successive steps in order to finally set a general plan for the audit and an integrated program that represents the nature of the existing work in the enterprise under audit, as mentioned above, which is: (Al-Jabali, 2014, p. 19)

**First:** Pre-planning activities for accepting new clients or continuing with old clients, in addition to finding out the reasons for the client's request for an audit, and then obtaining an engagement letter in the event that the audit is approved for this client, so that the first step ends with the appointment of the audit team.

**Second:** Obtaining information from the client, as understanding the work and industry of the client and the activity in which he works and reaching knowledge of the company's operations is essential to perform the audit appropriately, in addition to obtaining information about the client's legal obligations from the company's contract and its main system, in addition to the contracts. .

**Third:** Implementation of analytical procedures. The purpose of implementing them lies in understanding the client's field of work and estimating the possibility of continuing with him, in addition to referring to potential misrepresentations, and thus reducing detailed tests.

**Fourth:** Estimating materiality and risk, as International Auditing Standard No. 320 focus on the need of the auditor to take into account the concept of materiality when planning the audit process and when Implementing it and evaluating the financial statements and their fairness, as information is of relative importance when its deletion or misstatement in the financial statements affects economic decisions taken on the basis of these statements.

**Fifth:** Understanding internal control and assessing control risk, as the second criterion of generally accepted auditing standards stipulates that internal control must be adequately understood in order to reach an audit plan and determine the nature, extent and timing of the tests that will be implemented.

**Sixth:** Developing the general plan for the audit and the audit program, as the audit program used to carry out its procedures must be in the form of a written plan, because the main objective of the audit is to carry out a sound examination, and therefore setting

of a sound plan is about discovering the auditor's environment (the surrounding factors, whether internal or external) that will be audited.

**In sum, the researcher believes** that the completion of the first five steps is considered a basis for paving the auditor's procedures and assisting him in the last and most important step to produce a comprehensive audit plan characterized by efficiency and effectiveness in designing the audit planning program.

### **2/1/3 The impact of big data on audit planning:**

The rapid and successive developments in information technology have contributed to the impact on the administrative and accounting systems of companies, and this has entailed a fundamental change in the methodology, methods and systems of auditing and internal and external control. The researcher reviews the extent of the impact and analysis of the relationship between big data and audit planning, as follows:

#### **First: Acceptance of the appointment and obtaining the engagement letter:**

The decision to accept the engagement is one of difficult decisions due to the conflicting pressures between programming considerations and the professional considerations necessary to make the decision, and then the auditor faces the risks of accepting the engagement. (Mousa, 2018, p. 19)

The methods of auditing electronic information systems help the auditor to reduce these risks, and there are a set of conditions for the auditor to accept the engagement or not, the most important of which are the following:

- The auditor's ability to collect sufficient and appropriate evidence to support his conclusions regarding management's assertions.
- The extent to which the auditor has a work team that includes people who have sufficient and appropriate experience in all technical matters related to the field of engagement, in addition to the necessity of initial knowledge of the nature of the work activity.

#### **Big data affects the acceptance of appointment and obtaining the engagement letter in terms of:**

- It allows the auditor to collect and study databases from various sources, and to use smart information systems to confirm the reliability of the data to analyze the initial risks, which contributes to providing information about the contract terms in advance to complete the contracts between the two parties.
- The auditor can use experience systems or decision support systems to make a decision to approve or reject the engagement due to the ability of these systems to provide results in light of the expected risks, which helps the auditor to make an objective decision to accept or reject the assignment. (Ali, 2019, p. 1)

**Second: Big data affects the understanding of the client's business and industry in terms of:**

- It provides the auditor with all information about the current economic conditions about the client's business and industry, which helps in analyzing risks from multiple angles. This information may also include the characteristics of the industry in which the client works, which plays an important role. These characteristics include seasonal conditions, labor or capital intensity, degree of competition in the industry, technology and modern applications.
- The auditor is able to obtain business information about the nature of the business and the risks surrounding it, and maintain the appropriate level of professional skepticism about changing the information environment.
- The use of modern techniques for analyzing big data in the audit process allows the auditor to invest a lot of his time in aspects of the analysis that require a more professional judgment and expand the extent of his awareness and provide a greater degree of assurance on the effectiveness and controls of transactions, which leads to reducing the time and costs of the audit process. (Al-Jabali, 2018, p. 54)

**Third: Big data affects the initial analytical procedures in terms of: (Al-Feqi, 2019, p. 31)**

- The big data environment helps enable the auditor to perform better and more accurate analytical procedures necessary to detect fraud, especially with the use of modern technologies to support the decision in collecting evidence, where several analytical procedures can be implemented and data extracted from the files of the electronic accounting system and then display the results in the form of maps or charts.
- Compliance and substantive tests are performed simultaneously, based on real-time sampling, and performed through electronic tools and information technology.
- The auditor was able to expand the conduct of tests on a large number of files, and assist in rationalizing his decisions, by using general audit programs, special audit programs, decision support systems, and microcomputer programs, to verify the validity of account balances and transaction details.
- Modern technologies in highly efficient data processing, management and analysis, identifying the appropriate technology from data mining or blockchain tools, and working to benefit from storage, cloud computing and data transfer through protected networks such as virtual technologies systems and the Internet of Things.9 -26)

**Fourth: Big data affects setting the limits of materiality in terms of: (Kend, 2020, p.15)**

- Big data analytics helps the auditor determine the level of materiality by creating patterns, trends, and opportunities to navigate the data at a faster rate, which gives him a more accurate perception of the risks associated with the audit process.

- The data mining process contributes to extracting high-quality information from words or texts, which supports the relative importance in planning the review process.
- The importance of using auditing methods has increased, as it is possible to use expert systems that possess the required expertise with the ability of logical reasoning, in order to enable the auditor to study the levels of relative importance and evaluate the accounting estimates more fairly.
- The huge database supports the analysis at the level of the financial statements by examining the final accounts programs, and it is supported by the direct analysis of the big data using modern technologies.
- Ease of evaluating the relationship between audit risk and the detection error limit by measuring and analyzing items of relative importance using information technology.

**Fifth: Big data affects the evaluation of internal control and the assessment of control risk in terms of:**

- Increasing control risks due to: the expansion of the scope of internal control objectives to also include safety and security of information, work to protect the security of ready-made programs and electronic documents and work to exercise preventive control, the need to protect the company's website on the Internet and the need to perform general control, application control and real-time control together.
- The level of inherent risk increases due to the complexity of the environment of electronic accounting information systems and the risks surrounding it, and the difficulty of trusting the safety and security of information.
- There are new variables that affect the three audit risk components, including: systems dependence on each other, significant overlap between the company's transactions, the possibility of losing transaction data, and the specific characteristics of big data create new types of risks.
- Enables the auditor to formulate more consistent and objective personal judgments and estimates, especially the inherent risk and control risk, as big data analytics provide information to build his estimates regarding the inherent risk and control risk that are difficult to measure quantitatively.
- The big data environment can contribute to reducing the audit risk, as the auditor relies on continuous audit methods, controlling the final audit risk, using modern techniques in analyzing big data, increasing the level of professional skepticism, and real time analysis of data.

**Sixth: Big data affects the setting of the general and final plan for the audit in terms of:**

- The general audit plan provides a general description of the expected audit work, the most important expected problems, and the possible solutions to these problems. The auditor takes into account the integration between the traditional audit procedures defined by the standards and guidelines, the commitment to integrity and ethical

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standards, and the procedures for dealing with the technological dimension in the big data environment.

- The auditor can apply big data analytics techniques in the various stages of audit, which helps in stability on the most important items and works that need careful examination, and ease of tracking balances and the accounting cycle by relying on electronic verification programs such as (Azure) program, and judging the integrity of the balances from manipulation.
- Helps the auditor to use the understanding of the accounting information processed, stored and converted into added values through cloud computing and benefit from it when formulating and deriving the results of the audit process.

**In sum, the researcher believes** that planning the audit process must be developed using big data, which requires training external auditors and providing them with some skills necessary to analyze this data. Audit offices may need some big data analysis scientists to train their auditors to analyze that data, which may increase of the external auditor's fees.

In light of the previous presentation, the researcher can draw up a table showing the importance of the impact of big data on planning the audit process, as follows:

Table No. (4)

Stages of the Audit	The aim of the stage	The impact of big data on the stage
<b>Audit planning stage</b>	<ul style="list-style-type: none"> <li>- Gaining initial knowledge of the client, the nature of his activity, his accounting and financial policy,</li> <li>- Estimating the risks associated with the client.</li> </ul>	<ul style="list-style-type: none"> <li>- It allows the auditor to collect and study databases from various sources, and to use smart information systems to confirm the reliability of the data to analyze the initial risks, which contributes to providing information about the contract terms in advance to complete the contracts between the two parties.</li> <li>- It provides the auditor with all information about the current economic conditions about the client's business and industry, which helps in analyzing risks from multiple angles. capital, the degree of competition in the industry, technology and modern applications).</li> <li>- The big data environment helps enable the auditor to perform better and more accurate analytical procedures necessary to detect fraud, especially with the use of modern technologies to support the decision in</li> </ul>



		<p>collecting evidence, where several analytical procedures can be implemented and data extracted from the files of the electronic accounting system, and then the results are displayed in the form of maps or charts.</p> <ul style="list-style-type: none"> <li>- Big data analytics helps the auditor determine the level of materiality by creating patterns, trends, and opportunities to navigate the data at a faster rate, which gives him a more accurate perception of the risks associated with the audit process.</li> <li>- The general audit plan provides a general description of the expected audit work, the most important expected problems, and the possible solutions to these problems. The auditor takes into account the integration between the traditional audit procedures defined by the standards and guidelines, the commitment to integrity and ethical standards, and the procedures for dealing with the technological dimension in the big data environment.</li> </ul>
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### **Third: Field Study:**

#### **3/1 Factor analysis:**

##### **▪ Factor analysis of the focus of planning the review process:**

Table No. (8) Factor analysis of the audit planning axis

<b>Item</b>	<b>Factor analysis</b>
When planning the audit process, the auditor must take into account the method used by the enterprise in processing data, which leads to improving the quality of the audit process.	.684
Big data analytics gives auditors more time to response and the ability to incorporate potential problems directly into additional audit planning.	.811
Accurate identification of audit procedures and methods in the light of big data enables immediate detection of errors and thus reduces deviations during audit planning.	.766
The process of ensuring control procedures on programs and files to ensure the safety of operation and complete confidentiality of data helps in the accuracy of planning and implementation of the audit process.	.775
The commitment of field work standards in the light of big data helps in	.663

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planning, managing and examining the work carried out.	
Sample adequacy test (Kaiser-Meyer-Olkin (KMO))	.705
Bartlett's test (Chi-squared test)	731.931**
degrees of freedom	10
Significance	.000
Average Variance Explained (AVE).	55.038

\*\*Significant at 1% level.

By studying the factor analysis of those paragraphs and the extent to which they represent the axis of planning the audit process, the results showed that the coefficient of the sampling adequacy test amounted to 0.705, which is greater than 0.50.

Also, The results also showed the significance of Chi-squared test at a confidence level of 99%, where the test value was 731.93, which indicates that there is a correlation between the phrases and each other, and therefore the factor analysis test should be performed. The results also confirmed that the applied coefficient for each of the paragraphs of the axis ranged between 0.663 and 0.811, and all of them were greater than 0.50. Therefore, these paragraphs express strongly the axis of planning the audit process, and the average explained variation reached 55.04%, which is greater than 50%. Hence, the available phrases strongly express the axis of planning the audit process, and none of these paragraphs can be deleted.

### 3/2 Descriptive statistics of research variables:

In the next part, the researcher deals with the analysis of the descriptive statistical measures of the research variables. the data of the tables showed the axes dimensions, and phrases that have the highest degrees of importance, and those with the lowest degrees of importance are shown according to the responses of the study sample, and then the general trend of the responses of the study sample at the level each of the research axes. Descriptive statistics include the arithmetic mean, the standard deviation, the standard deviation coefficient (standard deviation ÷ the arithmetic mean x 100), and the t-test at a point, which is shown in tables (14) to (19) related to the study axes as follows:

Table No. (14) Description of the sample trends for the axis of planning the audit process

Items	Arithmetic mean	Standard deviation	Coefficient of variation	t-test
When planning the audit process, the auditor must take into account the method used by the enterprise in processing data, which leads to	3.982	1.362	34.20	-.259

improving the quality of the audit process.				
Big data analytics gives auditors more response time and the ability to incorporate potential problems directly into planning of additional audit process.	3.949	1.333	33.77	-.757
Accurate identification of audit procedures and methods in light of big data enables immediate detection of errors and thus reduces deviations during audit planning.	4.013	1.034	25.76	.244
The process of ensuring control procedures on programs and files to ensure the safety of operation and complete confidentiality of data helps in the accuracy of planning and implementation of the audit process.	3.832	1.259	32.84	-2.645
The commitment of field work standards in the light of big data helps in planning, managing and examining the work carried out.	3.351	1.301	38.82	-9.887
<b>Planning the Audit process</b>	<b>3.825</b>	<b>0.930</b>	<b>24.32</b>	<b>-3.719</b>

**The previous table No. (14) showed:**

- The sample of the study tended towards approval of the axis of planning the audit process, with a standard deviation of 0.930 and a coefficient of variation of 24.32%, as the arithmetic mean value of this variable was 3.825, and it differs positively and strongly from the test point of the five-point Likert scale (4), and then the There is a significant difference between the average responses of those surveyed (the actual average) and what is expected, as the absolute value of the calculated t-test was 3.719, which is greater than the tabular value of 2.58 at a level of confidence of 99%. The results indicate that there is a homogeneity between the opinions of the research sample and the study by approving the axis of planning the audit process by 75.68%.
- It is also clear that the response towards the paragraph (accurate identification of audit procedures and methods in light of the big data enables the immediate discovery of errors and thus reducing deviations during the planning of the audit process). In the opinion of the study sample, it is considered one of the important points that the offices emphasize on paying attention to as one of the paragraphs of the axis of planning the review process, as it came in first place with an arithmetic mean, which reached the five-point Likert scale by 4,013 with a coefficient of difference of 25.76%, which differs from the test point of the five-point Likert scale (4), which indicates the fit and homogeneity among opinions by 74.24% towards the

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possibility of accurately defining audit procedures and methods in light of the huge data of immediate detection of errors and thus minimizing deviations during the planning of the audit process.

The results showed that the paragraph (accurate identification of audit procedures and methods in the light of big data can enable immediate discovery of errors and thus reduce deviations during the planning of the audit process) is the most homogeneous among them with a degree of dispersion of 25.76%, while the paragraph (the commitment of field-work standards in the light of big data helps in planning, managing and examining the work carried out), is the least homogeneous, with a dispersion rate of 38.82%.

**3/3 Hypothesis Analysis:**

- "There is no statistically significant relationship between the use of big data in planning the audit process and improving the performance of the external audit"

**□ Explanatory ability – the quality of fit:**

Table No. (21) Parameters of the model and the quality of conformance to the regression model of planning the audit process

items	Non-standard transactions		Standard transactions	t-test	Significant level
	B	standard error	beta		
Constant	-.174	.366		-.477	.634
Planning the audit process	.483	.110	.475	4.386	.000
Use of big data	.885	.120	.911	7.388	.000
Planning the Audit process* Use of big data	.084	.032	.516	2.622	.009
overall correlation coefficient	R		.761**		
The coefficient of determination	R Square		.580		
Modified coefficient of determination	Adjusted R Square		.576		
degrees of freedom	DF		3 / 389		
F test	F		178.792		
Significant level	Sig.		.000		

\*\* Significant correlation at 1% level.

- **Overall correlation coefficient (R):** The results showed a statistically significant relationship between audit planning and the use of big data, as well as the joint interaction between the two variables on the one hand, and improving the performance of the external audit process on the other hand, at a confidence level of 99%, and the correlation value was 0.761. , which is a strong positive correlation, and then we can study the effect of planning the audit process and using big data on the level of improving the performance of the external audit process through the multiple linear regression model.
- **Determination coefficient (R<sup>2</sup>):** The value of the determination coefficient for the model was (0.580), which indicates that the planning of the audit process and the use of big data explain 58.0% of any change in the level of improvement in the performance of the external audit process. As for the unexplained percentage, it can be attributed to the random error or other independent variables were not taken into account.
- **Testing the significance of the fit quality of the regression model:** The F-test was used to test the significance of the variables of the model as a whole, with a value of (792,178) at a confidence level of 99%, which indicates to the quality of the regression model with a match between the actual values and the estimated values of the improvement level of the performance of the external audit process of the model, and thus the validity of the dependence on the result of the model and the prediction of future values.
- **Testing the significance of each independent variable separately:** Using the T-test, we find that the beta coefficient for the dimension of planning the audit process and the use of big data, along with the joint interaction between them, is statistically significant in the multiple regression model, at a confidence level of 99%, where the calculated T-test values ranged between 2.622 and 7.388 and they are greater than the tabular value of 2.58, which indicates that the non-normative Beta values for those variables, which amounted to 0.483, 0.885 and 0.084, respectively, are different from zero and that they have a real impact on the level of improving the performance of the external audit process.

**Model Equation:** The regression model equation is as follows:

Improvement of the external audit process performance = -0.174 + 0.483 (planning the audit process) + 0.885 (using of big data) + 0.084 (planning the audit process \* using of big data)

It is clear from the previous equation that if the application level of planning the audit process increases by one unit, the level of improving the performance of the external audit process increases by 0.483, while if the level of using big data increases, then the level of improving the performance of the external audit process increases by 0.885, and it also increases by 0.084 with an increase the level of mutual interaction between the two

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variables, and then the process of using big data supported the strength of the relationship between planning the audit process and improving the performance of the external audit process.

**Hence, the null hypothesis was rejected and the alternative hypothesis was accepted, "There is a statistically significant relationship between the use of big data in planning the audit process and improving the performance of the external audit."**

**Study summary:**

1. The application of big data meets the need for the external audit profession to move towards big data analysis and auditing. The application of the big data environment in audit methodology is full of promising potential for improvements in audit quality and efficiency in the form of more accurate risk assessments.
2. The big data environment provides all data for the auditing profession during objective tests, which leads to improved detection of material errors and fraud indicators, as well as a greater understanding of the client's organization and its environment, which leads to achieving the quality of external auditing.
3. The big data environment allows the auditor to be able to analyze financial reports, identify fraud risks and operational business risks, and analyze their data to give a more accurate and relevant audit.

**Study recommendations:**

1. The need to pay attention to the study of improving the planning of the external audit process in the light of the big data environment, in order to help the auditors in performing their work tasks.
2. In general, audit firms should support the use of big data, by allocating financial and material investments to build their competencies and human resources, the most important of which is their external auditors.

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**The impact of planning the audit process in the light of big data environment in the Egyptian environment (field study)**

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