



## The Effect of Electronic Brainstorming on Irregular Auditing Practicespractices an Analytical Study of The Opinions of a Sample of Auditors in The City of Erbil

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### Abstract

The study aimed to identify the extent to which electronic brainstorming contributes to reducing the improvised audit, which occurs as a result of the non-implementation of audit procedures by the auditor and obtaining unreliable evidence in addition to the presence of several pressures on the auditor, and the research deals with the impact of electronic brainstorming sessions carried out by auditors in reducing the occurrence of improvised auditing, and for the purpose of achieving the research objective, the researchers organized the questionnaire form and distributed it to a sample of Auditors in the city of Erbil and analyzed through the statistical program (SPSS), the research has reached a number of conclusions, the most important of which is that it has a statistically significant impact in the application of electronic brainstorming on the planning stage of the audit process as well as in the stage of implementing audit procedures, and in the end the researchers recommend the application of electronic brainstorming sessions throughout the audit process by auditors, because it improves the performance of auditors and thus does not occur improvised audit.

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### About the Journal

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**Introduction:** The auditors cannot carry out the audit process and provide a report free of distortions and errors completely except through their reliance on methods that help them reach this level, which highlights the need to use modern methods and techniques, including electronic brainstorming sessions to avoid deficiencies in conducting the audit process and thus not fail the auditor in performing his task. It is noted that this is in line with the requirements of international and American auditing standards, as it requires members of the audit team to discuss at the beginning of the audit process about the client's company's exposure to fraud and potential distortions in the financial statements, as the standards required the auditors to hold a series of brainstorming sessions by relying on modern technology with the audit team during the integrated stages of the audit process, whether in the planning stages of the audit process or when implementing the process until the issuance of the audit report (Amirhim, 2021, :70), on the other hand, when carrying out a set of practices carried out by some levels in audit offices, including a defect in following the rules of conduct of the profession in light of a set of internal and external variables, some of which are related to the auditor's office, such as time pressure and other pressures related to the environment in which these offices operate, this behavior may lead to negative results that materially affect the results and outputs of the audit process, which is called Irregular auditing practices(Alkhazaleh and Marei, 2021: 2), given the important role that electronic brainstorming plays in reducing irregular scrutiny, researchers will address this topic through this research.

**Search problem :** The audit process is an integrated set of activities carried out by auditors, which depends not only on the skills and competence of the auditors, but also depends on the interaction between the members of the audit team consisting of these auditors, and then the success of the audit team in performing various audit activities, is directly affected by the effectiveness of interaction and integration between the members of this team in performing these activities, but sometimes the audit process is not conducted regularly, which It leads to the occurrence of so-called irregular auditing, which can be reduced through electronic brainstorming, and therefore the research problem can be raised through a key question, which is "Is there a role for electronic brainstorming in reducing irregular audit practices" ? The following sub-questions emerge from this main question:

1. Is there a statistically significant impact to the application of electronic brainstorming on irregular audit practices in the planning stage of the audit process?
2. Is there a statistically significant effect to the application of electronic brainstorming on irregular audit practices on the stage of implementing audit procedures?
3. Is there a statistically significant impact to the application of electronic brainstorming on irregular audit practices in the stage of preparing the auditor's report?

**Research hypotheses:** To answer the main question and sub-questions raised in this research, the following hypotheses were relied upon:

1. There is no statistically significant effect of applying electronic brainstorming on irregular audit practices.
2. There is no statistically significant effect of applying electronic brainstorming on irregular audit practices at the audit planning stage.
3. There is no statistically significant effect of applying electronic brainstorming on irregular audit practices at the stage of implementing audit procedures.
4. There is no statistically significant effect of applying electronic brainstorming on irregular audit practices at the stage of preparing the report.

**Research Objective:** The main objective of the research is to identify the contribution of electronic brainstorming in reducing irregular scrutiny, and this goal can be achieved through the following sub-objectives:

1. Identify the nature of electronic brainstorming by presenting its concept, importance, and steps to conduct it.
2. Addressing irregular audit practices by addressing its concept and linking it to audit risks and causes of occurrence.
3. Know how electronic brainstorming affects Irregular auditing practicespractices throughout the stages of the audit process.

**Importance of research :** The importance of the research is highlighted in that it is an attempt to keep pace with the developments flowing in modern technologies to improve the ability of auditors to avoid Irregular auditing practices through the use of electronic brainstorming sessions, and this thus affects the reliability of financial information, which can be relied upon by tax authorities, banks and others, and despite the increasing interest in research that dealt with the subject of brainstorming and the subject of joint auditing recently, but according to the knowledge of researchers there are no studies and research that Addressed the role of electronic brainstorming sessions for auditors in reducing irregular auditing.

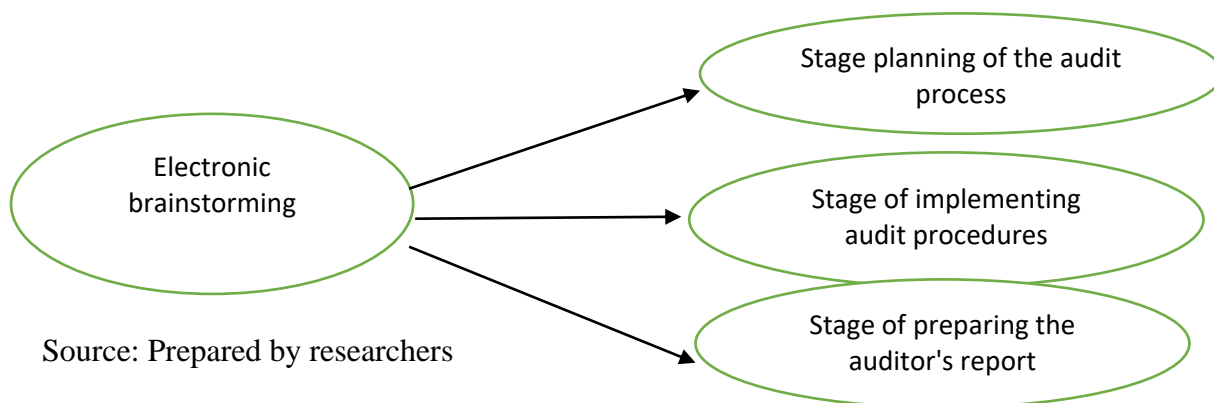
**Research Methodology:** To achieve the objectives and hypotheses of the research, the research methodology was based on the descriptive approach in determining the theoretical framework of the research by relying on university theses and periodicals dealing with the subject of research, both Arab and foreign.

In addition, the analytical approach was relied on in analyzing the results of the field study based on the opinions of a sample of auditors in the city of Erbil and according to the five-point scale of the card, and the statistical program (SPSS) was adopted in analyzing the respondents' answers.

**The research model:** The following figure shows the search variables:

Independent variable  
Electronic brainstorming

Dependent variable  
Irregular auditing practicespractices



**Research divisions :** In light of the reliance on the research methodology and the objectives and importance of the research, the researchers will address the concept, importance and steps of carrying out electronic brainstorming, as well as the concept and risks of auditing and the reasons for carrying out the practice of irregular auditing, as well as how to narrow irregular audit practices throughout the stages of the audit process through the use of electronic brainstorming, in addition to that, the field study was conducted to test the role of electronic brainstorming in narrowing irregular audit practices, and in the end, the researchers will present The most important findings along with the most important recommendations As follows.

### **First: the concept of electronic brainstorming**

The brainstorming technique was invented by Osborne. F Alex in the late thirties of the twentieth century as an idea he sought to apply in his work in the field of advertising, and because of his frustration with the inability of his employees to generate new creative ideas, he began to develop new ways to solve problems that were focused on the team-based work approach, so he began to host group thinking sessions and discovered that this method led to a significant increase in the quantity and quality of new ideas. (Rashid and Ephraim, 2022: 3), where listening to the ideas of other members can activate the relevant idea in the mind of the listener, which in turn can stimulate the listener to generate more new ideas related to the topic being discussed (Li, et al, 2020: 1108), and as for electronic brainstorming, it is an effective method of sharing ideas between a group of parties or people, and it is a form of virtual communication to generate ideas through the use of electronic means. And remote communication, including e-mail, chat, social media platforms, video conferencing, and others. (Baruah and Paulus, 2016: 333)

When looking at the literature on electronic brainstorming, we notice that there are several definitions of it, as it was defined (Karamsh, 2018: 103) as "an educational and training method whereby a group of individuals, under the supervision of a president, are encouraged to generate the largest possible number of diverse innovative ideas spontaneously, freely and in an open and non-critical atmosphere that does not limit the launch of these ideas that concern solutions to a particular problem.

It is also defined as "a method of creative thinking that aims to provoke thinking, mug the mind, innovate and adopt ideas, and propose multiple solutions in its electronic environment, a technique used by a group of individuals to find a solution to a specific problem, by collecting ideas that individuals have in mind spontaneously." (Younis, 2017: 22)

It was also defined as "a collective method of creativity by generating new ideas that contribute to finding solutions to a particular problem" (Kanokngamwitroj and Phongspatha, 2018: 151).

It was also defined as "a method of solving problems or generating new ideas to improve work through sessions held electronically by those interested in solving those problems or those interested in generating new ideas" (Mohammed, 2022: 48).

It was also defined as "a scientific method based on modern technologies of information technology used by a group of individuals governed by a set of principles, components, and rules, working according to a plan aimed at generating the largest possible number of creative ideas through which it is expected to contribute to facing a specific problem or problems and then reaching a solution through discussion and exchange of views (Ghali, 2016: 445).

Therefore, researchers can define electronic brainstorming as a collective method to generate ideas and find solutions to the problems posed by relying on modern technological techniques.

### **Second: The importance of electronic brainstorming**

The importance of brainstorming is that it is one of the most methods that contribute to generating ideas as solutions to the problems posed and has become the attention of senior management to develop strategic thinking and find solutions to problems, whether economic, social, political and other problems, as brainstorming is of intuitive importance as the deferred judgment for the issuance of ideas allows the basic creative climate when there is no criticism or intervention, which creates a free climate for intuitive attractiveness to a large extent (Al-Kaabi and Al-Ani, 2020: 504), and (Al-Shabani, 2017: 1164) believes that electronic brainstorming sessions are an easy tool to transfer knowledge between members of the audit team on identifying risks related to the audit process, and it also encourages increasing the quality and quality of ideas and thus contribute to the promotion of more creative ideas, and the use of modern communication technology methods facilitates the performance of the tasks of the audit team in generating the largest number of ideas, regardless of the quality of those

ideas that are exchanged between auditors, and through which auditors can take The appropriate decisions, as soon as possible and confidentially, in addition to that, the importance of electronic brainstorming compared to traditional brainstorming lies in the following: (Hassanein, 2018: 224)

1. Electronic brainstorming is a proliferation tool for geographically multi-company companies, as it is a wave for an unlimited number of session participants, which allows the company to produce more innovative ideas not only on a local scale but also on a global scale.
2. Electronic brainstorming reduces the costs of distributing information on the topic under discussion. The company avoids the costs associated with printing and distributing information to specialists in the session in the event of traditional storming, as well as limiting the time associated with distributing information to the organizers of the session and increasing the opportunities to propose creative ideas.
3. Improving the transparency of information access by the session organizers with less speed and effort, unlike traditional storming, which requires more effort and less accurate results.
4. Electronic brainstorming allows the beneficiaries of the financial statements to access specific information for the various alternatives available to them quickly and effortlessly, as well as processing that information in the event of accounting errors before they occur.
5. This method is characterized by electronic communication through the technology of integrating talents, experience, and knowledge of the direct transfer of the session organizers via the Internet.

In addition to the above points, the researchers believe that electronic brainstorming will contribute to saving time for session participants, as they may not have time in the specified place and on time.

For the success of the electronic brainstorming sessions, it is necessary to refrain from criticizing ideas, as well as encouraging participants to express all ideas, as well as generating the largest number of ideas, as well as merge ideas to form an integrated idea. (Maaravi, et al, 2020, P 1435)

### **Third: Electronic brainstorming steps**

Electronic brainstorming sessions go through several steps that must be accurately performed as required to ensure the success of the session, and the steps of electronic brainstorming can be summarized as follows: (Maliki, 2016: 20)

1. Identify and discuss the problem: Sometimes some participants have full knowledge of the details of the problem while others have a simple idea about it, and in this case, the session moderator must give the participants the minimum information about the problem because giving more information may limit their thinking and limit it to narrow areas specific only plans and broad features of the problem.
2. Reformulate the problem: At this stage, participants are asked to go outside the scope of the problem and as it was defined and to identify its various aspects and dimensions again, the topic may have other aspects, and it is not required at this stage to propose solutions, but rather to reformulate the problem through questions related to it.
3. Creating an atmosphere of creativity and brainstorming: Participants in the electronic storming session need to create a creative atmosphere, which lasts up to five minutes, during which participants practice answering one or more questions thrown by the session administrator.
4. Brainstorming: The session moderator writes the question or questions that have been chosen by reformulating the problem that was identified in the second stage and asks the participants to present their ideas freely, provided that the note writer quickly writes them down in a prominent place for everyone with the ideas numbered according to the sequence of their receipt, and the session administrator can then invite the participants to reflect on the ideas presented and generate more of them.



5. Identify the strangest idea: When the ideas are about to run out for the participants in the session, the person in charge of the session can invite the participants to choose the strangest ideas presented and the most distant from the ideas received on the topic and ask them to think about how these ideas can be transformed into a useful practical idea, and the goal is to present more ideas for evaluation later.

6. Evaluation session: The goal of this session is to evaluate ideas and determine what can be taken, and sometimes good ideas are very clear and prominent, but often good ideas are buried and difficult to identify and fear of neglect amid dozens of less important ideas, and the evaluation process needs a kind of contractionary thinking that begins with dozens of ideas and summarizes them until they reach the good few.

#### **Fourth: The concept of irregular auditing**

Auditing, like other professions, faced many pressures that led to a violation of its standards and principles, some related to time and others related to the auditor himself, in addition to pressures related to work methods, and as a result of these pressures and defects in the auditing profession, the so-called "irregular auditing" appeared, as this term refers to a set of practices carried out by some levels in audit offices, including a defect in following the rules of conduct of the profession in light of a set of internal and external variables, some of which relate to This behavior may lead to negative results that materially affect the results and outputs of the audit process and the reliability of accounting information and decisions taken accordingly, where when the auditor performs the audit, which includes an independent third-party verification of the company's accounts and highlighting any concerns that may exist regarding the company's affairs, and in the event that an incorrect opinion is issued as it is In an irregular audit, users of financial statements can be misled in their valuation of the company and this may result in economic losses for users. (Coram, et al, 2008: 132), and many studies have shown a link between these behaviors and irregular auditing, including time budget pressure, fee pressure, and pressure to report time spent on audit procedures (Smith and Emerson, 2017: 2).

Irregular auditing practices has been defined as "the failure of auditors to perform the steps of conducting the audit process in a sound scientific manner that leads to obtaining evidence that is not reliable or insufficient in terms of quantity or quality." (Anugerah, et al., 2016: 342)

It was also defined as "the actions taken by the auditor in carrying out an audit that leads to the unreliable collection of evidence. (Kasigwa, et al., 2013: 26)

It also defined Irregular auditing practices as "a procedure taken by the auditor when implementing an audit program that reduces the effectiveness of the evidence collected throughout the audit." (Kasigwa, 2014: 22)

In light of the above definitions, irregular audit can be defined as the failure to perform audit procedures by the auditor that resulted in the acquisition of unreliable evidence.

There are several behaviors carried out by auditors during the irregular audit process, including pre-signing the report without actually carrying out the required procedures, accepting the client's explanations as evidence, conducting superficial reviews of the records and documents of the company under audit, not following up on questionable elements, insufficient dissemination of accounting principles, resorting to biased samples, etc. (Purnamasari, 2019: 203)

#### **Fifth: Audit risks under irregular audit practices**

Irregular auditing practices in the conventional sense is a violation of one or more of the international standards on auditing, and the termination of the audit steps, but the completion of the process by neglecting to take some steps that the auditor deems unimportant or unnecessary, in other words, the auditor's failure to adhere to the audit program that has been planned, designed and put into practice leads to a functional defect in the audit procedures and

thus the risks of the audit process increase and can be explained as follows: (Ramadan, 2015: 47-49)

1. **Discovery Risk:** This type of risk occurs as a result of the failure of the audit team to discover material errors in the financial statements, due to the failure to include the accounts or transactions that contain errors for the sample that it examined, or because of the failure to discover material errors in the financial statements as a result of the inefficiency of the procedures used by him in collecting evidence, and the auditor's practices for irregular audit work may result in maximizing the risk of discovery when failing to follow up on doubtful items, Or the wrong termination of the required audit steps, or the superficial audit of the client's documents and others.

2. **Inherent risks:** The inherent risks are one of the most important risks that must be accurately estimated and this requires a great effort from the auditor, if the auditor defaults and neglects his responsibilities, such as ignoring some items that are not important in his view, shortening the audit time, choosing unbalanced samples of items, or overlooking some distortions in favor of the client, all of this will increase the risk of discovery.

3. **Control risks:** The auditor's assessment of this type of risk depends on his tests of compliance with the internal control system of the company under audit, and that irregular audit practices have a role in maximizing the risk of control, considering that the auditor's determination of internal control risks depends to a large degree on personal judgment, where when time balancing or the desire for customer satisfaction or the auditor's desire to continue working for the client's company or any unprofessional behavior to do With adequate and adequate tests necessary to examine the compliance of the company's control system with standards and controls, the risks of the process will rise, in other words, the more irregular audit practices and unprofessional behavior by auditors, this will increase the risk of control in the client's company, as the relationship between Irregular auditing practices and control risks is positive.

### **Sixth: Reasons for Conducting Irregular Auditing**

Some reasons push auditors to resort to Irregular auditing practices when carrying out the audit process, and when reviewing the literature on this subject, it became clear to researchers that there are several reasons behind carrying out irregular auditing, which can be summarized as follows: (Awad, 2008: 24-31)

1. **Time pressure:** Time budget pressure arises when the company allocates insufficient time required by the auditors to complete specific procedures when carrying out the audit process and this leads to a decrease in the accuracy of performance here should focus on important and necessary information, or when it is difficult for auditors to complete the work on the required deadline, which is usually determined by external parties and which has a negative impact The contents of the auditor's report, and the studies that have been conducted have proven On auditors, the practice of Irregular auditing practices has been recognized as a response to time pressures. (Gundry and Liyanarachchi, 2007: 130)

Timing pressure affects the quality of auditors' judgments, as the time pressures to which the auditor's members are exposed may lead to a decrease in the incentive towards operating information in an orderly manner, which may lead to a decrease in the effectiveness of the audit process, but the auditor can overcome the negative effects resulting from time pressures by applying electronic brainstorming sessions at the planning stage of the audit process, as holding brainstorming sessions at this stage will positively affect On judgments issued by auditors (Abdulrahman, 2015: 799)

2. **Fee pressure:** Due to competition and the presence of several offices to carry out the audit process, some customers pressure the auditors to reduce their fees to match the level of fees prevailing in the market, and many studies that dealt with the possible reasons for the change of the auditor have found that reducing fees was one of the main reasons behind this, and this indicates that some customers may not look at the nature and quality of service provided by

the auditor and therefore resort to changing it with another auditor who receives fees less to save on fees, suggesting that this category of customers views the audit as a mandatory legal requirement or as a formal requirement rather than a protection for the entity and continuity of the company.

3. Commercial pressures: Commercial pressures are one of the issues that raise controversy in the field of the auditing profession, and the auditor's access to material or moral compensation is an incentive that pushes him to make more effort to obtain more benefits, and some believe that the level of auditors' performance decreases in the atmosphere that does not prevail in competition, the availability of such an atmosphere will lead to the emergence of the best levels of performance for each member of the working group within the audit team This will have the effect of reducing irregular auditing.

4. Low ethical commitment of the auditor: The ethical behavior of the auditor is affected by a set of factors related to his family and personal composition, religious values, personal standards, individual needs, financial requirements, and others push to low moral commitment, moral values that give light to integrity, justice, dignity, integrity and self-respect provide pillars for auditors to support them when making a decision and make it more correct, even if the surrounding circumstances are unclear or ambiguous and great pressures, and this in turn also has an impact on Reduce irregular auditing.

### **Seventh: Narrowing down Irregular scrutiny practices through electronic brainstorming**

The participation of auditors in brainstorming sessions leads to a similar increase in the diversity and exchange of information, which leads to an increase in the quality of brainstorming sessions and then the quality of auditors' judgments related to the audit process from planning and implementing its procedures and preparing a report on the results of the audit process, and here we will explain the role of electronic brainstorming in reducing Irregular auditing practices during the basic stages of the audit process as follows:

1. Planning the audit process: The auditor should plan what he will do when starting the audit process, and the appropriate planning is to write his instructions for the work that must be done with a statement of the steps of its performance, as the good performance of the service cannot be achieved without planning and supervision of all steps of the audit process, for example, the auditor must determine the examination work that he will perform, and what is the number of assistants appropriate to perform the work, and what are the experience and professional ability that It must be available in them, and how much time is needed to perform each step of work.

2. Auditing standards require auditors to conduct brainstorming sessions as part of the audit process, as the American Auditing Standard (SAS 99) requires the auditor to brainstorm, what is meant here is to conduct brainstorming sessions, which is an outlet for experienced auditors with less experienced auditors to exchange ideas from their previous experiences with the client by understanding and evaluating the client's risk and weaknesses. Electronic brainstorming at this stage contributes to understanding the client's business and environment in addition to identifying the areas most vulnerable to distortions that need further examination, assessing the relative importance and audit risks in addition to evaluating the company's controls to determine the extent to which they can be relied upon if as well as determining the nature, timing and extent of audit procedures, which in turn leads to improving the quality of the professional judgment of the auditor at this stage and thus reducing irregular auditing.

3. Preparation of a report: The auditor's report is a written document issued by a professional who is qualified to express a neutral and honest professional opinion on the accounting data contained in the records and books about the company's operations during a certain period and whether the financial statements prepared by the company give an honest and fair picture of the financial position and the results of its work in the financial year under audit.



Electronic brainstorming sessions are used to assist in evaluating the results of the audit process in general, in evaluating audit judgments related to errors of erroneous rejection of financial reports, in evaluating accurate judgments related to misstatements of financial reports, assisting in the examination of conditional liabilities and assisting in the examination of events occurring after the date of preparation of the financial statements, as well as assisting in the preparation and evaluation of the final illness of the audit report. Supporting the auditor's opinion on the results reached (Ghali, 2016: 464), in addition, electronic brainstorming has a role in ensuring that the audit report issued by the auditor is more accurate than the quality of the auditor's report issued by the auditor without resorting to brainstorming through the exchange of ideas about the contents of this report and its components.

According to the previous data, the implementation of electronic brainstorming sessions throughout the audit process gives the auditor the driving force in obtaining an integrated system of updated creative ideas throughout the audit stages, which gives the auditor confidence in supporting the opinion he reaches and reducing irregular auditing.

### **Eighth: The field aspect**

To obtain data, the researchers used the questionnaire form, which was distributed randomly to a sample of the research community through (Google form), 62 respondents filled out the questionnaire form the auditors who represent the research community, and when analyzing the answers, the five-point card was relied upon, whose value ranges from (one degree = 1), which represents an answer (I strongly disagree) to (five degrees = 5), which represents (strongly agree), and table (1) shows the coding of the variables of the form The questionnaire is as shown below:

Table (1)				
Shows the variables of the questionnaire				
Study axes and their dimensions		Symbols used in the body of the research		
		Theme	Dimension	Paragraph
Stages of irregular auditing	Planning stage	Y	Y1	Y1.1-Y1.7
	Audit Implementation stage		Y2	Y2.1-Y2.7
	Report Preparation stage		Y3	Y3.1-Y3.7
Electronic brainstorming in the field of auditing		X		X1-X7
Source: Prepared by researchers based on the (SPSS) program				

After analyzing the data, the following results were obtained:

### **1. Description of personality variables:**

Table (2) shows the distribution of respondents according to personal information, and through the table, it is clear as follows:

A. In general, the more years of experience the members of the research sample of the respondents, the greater the degree of reliability on opinions, in other words, the increase in the quality of information and thus the quality of the results, through the aforementioned table, we find that the above percentage of participation was within the two categories (11-15) and (6-10) years of experience with a participation rate of (%39.68) and (%38.10) respectively, where it came in the first place of importance and came in second place the participants, whose years of experience fall within the two categories (16 years and over) and (1-5 years) Where their percentage was equal in terms of participation, reaching (%11.11), and the researchers conclude from the previous information that the opinions and answers are

somewhat of quality, reliable and credible because the majority of respondents have years of accumulated experience.

B. Through the distribution of respondents according to the respondents' knowledge of the subject of electronic brainstorming, it became clear that the majority of the respondents do not have any knowledge of the subject of electronic brainstorming and the percentage of respondents participating (%55.56) while the percentage of individuals of the respondents who knew the subject has reached (%44.44) and in general it is clear that the two percentages of respondents are somewhat close.

C. Finally, concerning the distribution of the respondents' individuals according to the state of familiarity with the subject of irregular auditing, it was found that the majority of the respondents, which were (%88.89) the individuals, had knowledge of the subject of Irregular auditing practices compared to a small percentage of individuals among the respondents, which did not have knowledge and familiarity with the subject in question, which was (%11.11), and therefore the answers and opinions are accurate and of somewhat high quality because the majority of the respondents were knowledgeable and well-versed. Relatively on the subject of irregular auditing.

Table (2)			
Description of respondents' personal information variables			
Variable	Variable Categories	Frequency	Percentage
Years of Experience	1-5	7	%11,11
	6-10	24	%38.10
	11-15	25	%39.68
	16 =>	7	%11,11
	Total	63	%100
Do you know the subject of electronic brainstorming?	Yes	28	%44,44
	No	35	%55.56
	Total	63	%100
Do you know the subject of Irregular auditing?	Yes	56	%88,89
	No	7	%11,11
	Total	63	%100

Source: Prepared by researchers based on the (SPSS) program

## 2. Description of the research axes (variables):

The research variables were described, which include opinions and answers about questions and paragraphs, which were collected by the members of the research sample, where statistical methods were used, including frequency distribution, percentages, arithmetic media, standard deviations, and agreement ratios, and it should be noted here that the direction of opinions is determined in terms of levels of approval, based on the arithmetic average (weighted) of questions or phrases, according to the five-point Likert scale used in the current field study, where the five scores of the scale were divided into five categories as shown in the table below:

Table 3			
Estimated balance according to the Likert pentameter			
Response	Weighted average	length of the period	level
I strongly disagree	1 to 1.79	0.79	Low
I don't agree	From 1.80 to 2.59	0.79	
neutral	From 2.60 to 3.39	0.79	Medium
agree	From 3.40 to 4.19	0.79	
I completely agree	From 4.20 to 5	0.8	

Source: Prepared by researchers based on the (SPSS) program

Based on the above table, if the arithmetic mean falls within the category from one degree to 1.79 degrees, the opinions and answers mean disagreeing strongly (not completely agree), but if they fall within the category (1.80-2.59), the opinions are considered disagreeing with what is included in the phrase in question, and so on, and in general, if the weighted or weighted arithmetic mean of the paragraph or phrase falls between one degree to 2.59 degrees, the degree of agreement towards that phrase is low (disagreement) and if it falls within the category (2.60-3.39). This means that the opinions tend towards neutrality or the degree of agreement is medium and finally, if the weighted or weighted arithmetic means of opinions range between 3.40 units and 5 units, this means that the degree of approval was high, meaning that the answers were in agreement on what the statement in question means.

### **2-1: Description of the theme “Electronic brainstorming in the field of auditing”:**

Table (4) represents the descriptive statistics of the paragraphs of the theme of “electronic brainstorming in the field of auditing”, which was represented by (7) paragraphs, and through the results it is clear that the opinions of the respondents for the theme as a whole tend to agree by (%88.66) compared to (%11.34) of the non-neutral on the theme mentioned and it was also found that there were no cases of non-approval of the phrases of the theme of the concerned individual and collective, and that the answers and opinions of the theme tend towards approval and at good levels, and the percentage of importance was on The theme as a whole (%79.64) That is, the opinions are moving towards the importance of the presence of electronic brainstorming in the field of auditing, according to the opinions of the respondents, and this is confirmed by the value of the arithmetic mean (3.98), which was located within the extent of acceptance, which came from the scale of the five-year card adopted in the research. As for the phrases mentioned individually, it turns out that the phrases (X1, X2, X3) represented by (contribute to the exchange of ideas between auditors using software technology as soon as possible, helps in improving and exchanging experiences between auditors, recording ideas electronically makes auditors have electronic documents related to ideas and opinions on a particular problem that can be resorted to in cases when needed) then the opinions are more agreeable, meaning that the degree of agreement when the three phrases mentioned were high, based on The values of the arithmetic mean of the three equal statements, amounting to (4.11) and the percentage of agreement (relative importance) (%82.22). As for the statement (X3), represented by (leads to avoiding legal accountability by reducing the possibility of making mistakes), the opinions were agreeing, but to a lesser extent, meaning that the opinions and answers were less in agreement compared to the rest of the statements, but the degree of approval is considered high, based on the value of the arithmetic mean and the percentage of agreement, which is (3.79) and (%75.87) respectively. We conclude that the statements mentioned were a high degree of consensus where the values of the arithmetic means ranged between (4.11) as the highest value and (3.79) as the lowest value and that this range falls within the high degrees of agreement based on Table (3). With regard to the standard deviation values mentioned in the table below, its value indicates the extent of homogeneity and divergence of opinions from each other for phrases or paragraphs, and it has been shown that the statement (X7) represented by (the use of electronic brainstorming sessions contributes to improving the professional judgments of auditors during the stages of the audit process) has the lowest value of the standard deviation of (0) and therefore the opinions and answers when the said statement was absolutely homogeneous, whatever the respondents had the same opinion and answer, i.e. they agreed Completely towards the phrase in question, while the statement (X5) represented by (improving the performance of auditors by avoiding bottlenecks at peak times) was the answers of the members of the research sample less homogeneous, meaning more distant from each other and had the largest value of the standard deviation of (0.76) and can not take the opinions of the respondents somewhat because they were less homogeneous any difference in opinions relatively.

Table (4)  
Description of the theme “Electronic brainstorming in the field of auditing”

Phrases	#	I strongly disagree	I don't agree	Neutral	I agree	I strongly agree	Arithmetic mean	Standard deviation	Agreement Ratio
		1	2	3	4	5			
X1	Iteration	0	0	0	56	7	4.11	0.32	%82.22
	%	%0.00	%0.00	%0.00	%88.89	%11.11			
X2	Iteration	0	0	0	56	7	4.11	0.32	%82.22
	%	%0.00	%0.00	%0.00	%88.89	%11.11			
X3	Iteration	0	0	13	50	0	3.79	0.41	%75.87
	%	%0.00	%0.00	%20.63	%79.37	%0.00			
X4	Iteration	0	0	7	56	0	3.89	0.32	%77.78
	%	%0.00	%0.00	%11.11	%88.89	%0.00			
X5	Iteration	0	0	23	26	14	3.86	0.76	%77.14
	%	%0.00	%0.00	%36.51	%41.27	%22.22			
X6	Iteration	0	0	7	42	14	4.11	0.57	%82.22
	%	%0.00	%0.00	%11.11	%66.67	%22.22			
X7	Iteration	0	0	0	63	0	4.00	0.00	80.00%
	%	%0.00	%0.00	%0.00	%100.00	%0.00			
Weighted rate	Iteration	0	0	50	349	42	3.98	0.25	%79.64
	%	%0.00	%0.00	%11.34	%79.14	%9.52			
		%0.00			%88.66				

Source: Prepared by researchers based on the (SPSS) program

## 2-2: Description of the theme “The impact of electronic brainstorming on the stages of irregular auditing”:

### 2.2.1 In the planning stage:

Through Table (5), which represents the descriptive statistics of the paragraphs of the dimension "planning stage", where it was represented by (7) paragraphs, it was shown through the results that the respondents' opinions for the dimension as a whole tend to agree, by (%85.94) compared to (%2.04) of those who do not agree on the mentioned dimension, while the percentage of opinions, which were neutral, amounted to (%12.02), and the percentage of importance on the dimension as a whole was (%78.68), meaning that the opinions tend towards the existence of levels of the planning stage, according to the opinions of the respondents from The auditors are among the members of the research sample, and this is confirmed by the value of the arithmetic mean of (3.93), which was within the period of acceptance, which came from the scale of the five-ball approved in the research.

Concerning the statements mentioned individually, it was found that the statements (Y1.4) represented (preparing an efficient audit program to carry out the audit process) then the opinions are more agreeing, meaning that the degree of agreement when the mentioned statements were high, based on the value of the weighted arithmetic mean of (4.33) and the percentage of agreement (relative importance) (%86.67), as for the statement (Y1.7) represented by (identifying the areas of improvised auditing), the opinions were in agreement, but to a lesser extent, that is, the opinions and answers were less in agreement compared to the rest of the statements, but The approval score is considered high based on the value of the arithmetic mean and the agreement ratio of (3.75) and (%74.92) respectively.

We conclude that the aforementioned theme statements were a high degree of consensus where the values of the arithmetic means ranged between (4.33) as the highest value and

(3.75) as the lowest value and that this range falls within the high degrees of agreement based on Table (3).

Concerning the standard deviation values mentioned in the table below, it was clear that the statement (Y1.5) represented by (determining the initial judgment of the relative importance of the elements of the financial statements) has the lowest value of the standard deviation of (0) and therefore the opinions and answers when the said statement was homogeneous, i.e. the respondents had the same opinion and answer, i.e. they were in full agreement with the statement in question. While the statement (Y1.6) represented by (identify the reasons that lead to improvised audit efficiently and addressed) the answers to the individuals of the research sample were less homogeneous, meaning more distant from each other and had the largest value of the standard deviation of (0.81) and can not take the opinions of the respondents somewhat because they were less homogeneous any difference in opinions relatively.

Table (5)  
The effect of electronic storming on Irregular auditing practices in the planning stage

Phrases	#	I strongly disagree	I don't agree	Neutral	I agree	I strongly agree	Arithmetic mean	Standard deviation	Agreement Ratio
		1	2	3	4	5			
Y1.1	Iteration	0	0	6	57	0	3.90	0.30	%78.10
	%	%0.00	%0.00	%9.52	%90.48	%0.00			
Y1.2	Iteration	0	0	16	33	14	3.97	0.69	%79.37
	%	%0.00	%0.00	%25.40	%52.38	%22.22			
Y1.3	Iteration	0	0	15	48	0	3.76	0.43	%75.24
	%	%0.00	%0.00	%23.81	%76.19	%0.00			
Y1.4	Iteration	0	0	0	42	21	4,33	0.48	%86.67
	%	%0.00	%0.00	%0.00	%66.67	%33.33			
Y1.5	Iteration	0	0	0	63	0	4.00	0.00	%80.00
	%	%0.00	%0.00	%0.00	%100.00	%0.00			
Y1.6	Iteration	0	9	0	47	7	3.83	0.81	%76.51
	%	%0.00	%14.2	%0.00	%74.60	%11.11			
Y1.7	Iteration	0	0	16	47	0	3.75	0.44	%74.92
	%	%0.00	%0.00	%25.40	%74.60	%0.00			
Weighted rate	Iteration	0	9	53	337	42	3.93	0.34	%78.68
	%	%0.00	%2.04	%11.34	%79.14	%9.52			
		%2.04		%12.02	%85.94				
Source: Prepared by researchers based on the (SPSS) program									

Source: Prepared by researchers based on the (SPSS) program

### 2.2.2 At the stage of the implementation of the audit process:

Table (6), represents the descriptive statistics of the paragraphs of the dimension "the stage of implementation of the audit process", where was represented by (7) paragraphs, and it was shown through the results that the opinions of the respondents for the dimension as a whole tend to agree, by (88.89%) compared to (%3.63) of those who do not agree on the mentioned dimension, while the percentage of opinions, which were neutral, amounted to (%7.48), and the percentage of importance on the dimension as a whole was (%78.73), meaning that the opinions tend towards the existence of levels of the stages of implementation of the audit process. According to the opinions of the respondents from the auditors from among the members of the research sample, this is confirmed by the value of the arithmetic mean of (3.94), which was located within the period of acceptance, which came from the scale of the five-card approved in the research.



For the statements mentioned separately, it was found that the statements (Y2.7) represented by (carrying out analytical procedures by the auditors) then the opinions are more agreeable, i.e. the degree of agreement at the said statements was high, based on the weighted arithmetic mean value of (4.14) and the percentage of agreement (relative importance) (%82.86). As for the statement (Y2.1), represented by (assisting the auditors in exercising professional doubt during this stage), the opinions were in agreement, but to a lesser extent, meaning that the opinions and answers were less in agreement compared to the rest of the statements, but the degree of approval is considered high, based on the value of the arithmetic mean and the percentage of agreement, which is (3.71) and (%74.29) respectively.

We conclude that the statements of the aforementioned theme were a high degree of consensus where the values of the arithmetic mean ranged between (4.14) as the highest value and (3.71) as the lowest value and that this range falls within the high degrees of agreement based on Table (3).

Concerning the standard deviation values referred to in the table below, it is clear that the statement (Y2.4) represented by (evaluation of the internal control system applied in the company under audit) has the lowest value of the standard deviation of (0) and therefore the opinions and answers when the said statement was homogeneous, i.e. the respondents had the same opinion and answer, i.e. they were in full agreement with the statement in question, while the statement (Y2.1) represented by (assisting auditors in exercising professional doubt during this stage) was The answers to the individuals of the research sample are less homogeneous, meaning more distant from each other and had the largest value of the standard deviation of (0.71) and the opinions of the respondents cannot be taken somewhat because they were less homogeneous, i.e. there is a difference in opinions relatively.

Table (6)									
The effect of electronic storming on Irregular auditing practicesin the implementation of the audit process									
Phrases	#	I strongly disagree	I don't agree	Neutral	I agree	I strongly agree	Arithmetic mean	Standard deviation	Agreement Ratio
		1	2	3	4	5			
Y2.1	Iteration	0	9	0	54	0	3.71	0.71	%74.29
	%	%0.00	%14.2	%0.00	%85.71	%0.00			
Y2.2	Iteration	0	0	6	43	14	4.13	0.55	%82.54
	%	%0.00	%0.00	%9.52	%68.25	%22.22			
Y2.3	Iteration	0	0	13	36	14	4.02	0.66	%80.32
	%	%0.00	%0.00	%20.63	%57.14	%22.22			
Y2.4	Iteration	0	0	0	63	0	4,00	0.00	%80.00
	%	%0.00	%0.00	%0.00	%100.00	%0.00			
Y2.5	Iteration	0	0	14	49	0	3.78	0.42	%75.56
	%	%0.00	%0.00	%22.22	%77.78	%0.00			
Y2.6	Iteration	0	7	0	56	0	3.78	0.63	%75.56
	%	%0.00	%14.2	%0.00	%88.89	%0.00			
Y2.7	Iteration	0	0	0	54	9	4.14	0.35	%82.86
	%	%0.00	%0.00	%0.00	%85.71	%14.29			
Weighted rate	Iteration	0	16	33	355	37	3.94	0.19	%78.73
	%	%0.00	%3.63	%7.48	%80.50	%8.39			
	%3.63				%88.89				
Source: Prepared by researchers based on the (SPSS) program									

### 2.2.3 At the stage of preparing the report:

Table (7), which represents the descriptive statistics of the paragraphs of the dimension "the stage of preparing the report", which was represented by (7) paragraphs, and it was shown through the results that the opinions of the respondents for the dimension as a whole tend to agree by (%90.02) compared to (%3.17) of those who do not agree on the mentioned dimension, while the percentage of opinions, which were neutral, amounted to (%6.80), and the percentage of importance on the dimension as a whole was (%78.59), meaning that the opinions tend towards the existence of different levels in the stages of preparing the report, according to the opinions of The respondents from the auditors are among the members of the research sample, and this is confirmed by the value of the arithmetic mean of (3.93), which was located within the period of acceptance, which came from the scale of the five-card approved in the research.

As for the statements mentioned individually, it was found that the phrase (Y3.1) represented by (the order of the items contained in the auditor's report in the light of the International Standards on Auditing) then the opinions are more agreed, meaning that the degree of agreement at the said statement was high, based on the value of the weighted arithmetic mean of (4.37) and the percentage of agreement (materiality) (%87.30), as for the statement (Y3.2) represented by (forming an opinion about the continuity of the company or not with ease and ease), the opinions were agreeing, but to a degree Less that is, the opinions and answers were less in agreement compared to the rest of the statements, but the degree of approval is considered high, based on the value of the arithmetic mean and the percentage of agreement, which is (3.48) and (%69.52) respectively.

We conclude from this that the statements mentioned theme was the degree of consensus is high, as the values of the arithmetic means ranged between (4.14) as the highest value and (3.71) as the lowest value, and that this range falls within the high degrees of agreement, based on Table (3), and with regard to the standard deviation values mentioned in the table below, it turned out that the three statements (Y3.4, Y3.5, Y3.6) represented in (evaluation of the final presentation of the audit report and control its contents, issuance of a report in an easy and flexible manner, saving time when preparing the audit report. by the auditors) have the lowest value of the standard deviation of (0.32) for the three statements and therefore the opinions and answers when the mentioned statements were more convergent and homogeneous and less different, meaning that the opinions were consistent and homogeneous and close to each other, i.e. there is a great agreement by the respondents towards the phrases concerned, while the phrase (Y3.2) represented by (forming an opinion about the continuity of the company or not with ease and ease) The answers to the members of the research sample were less homogeneous, meaning more divergent From each other, where the value of the standard deviation (1.38) and the opinions of the respondents cannot be taken somewhat because they were less homogeneous, i.e. there is a difference in opinions relatively.

Table (7)									
The effect of electronic brainstorming on Irregular auditing practicesat the stage of preparing the report									
Phrases	#	I strongly disagree	I don't agree	Neutral	I agree	I strongly agree	Arithmetic mean	Standard deviation	Agreement Ratio
		1	2	3	4	5			
Y3.1	Iteration	0	0	0	40	23	4.37	0.49	%87.30
	%	%0.00	%0.00	%0.00	%63.49	%36.51			
Y3.2	Iteration	14	0	0	40	9	3.48	1.38	%69.52
	%	%22.22	%0.00	%0.00	%63.49	%14.29			
Y3.3	Iteration	0	0	9	54	0	3.86	0.35	%77.14
	%	%0.00	%0.00	%14.29	%85.71	%0.00			
Y3.4	Iteration	0	0	7	56	0	3.89	0.32	%77.78

	%	%0.00	%0.00	%11.11	%88.89	%0.00			
Y3.5	Iteration	0	0	7	56	0	3.89	0.32	%77.78
	%	%0.00	%0.00	%11.11	%88.89	%0.00			
Y3.6	Iteration	0	0	7	56	0	3.89	0.32	%77.78
	%	%0.00	%0.00	%11.11	%88.89	%0.00			
Y3.7	Iteration	0	0	0	54	9	4.14	0.35	%82.86
	%	%0.00	%0.00	%0.00	%85.71	%14.29			
Weighted rate	Iteration	14	0	30	356	41	3.93	0.23	%78.59
	%	%3.17	%0.00	%6.80	%80.73	%9.30			
		%3.17			%90.02				
Source: Prepared by researchers based on the (SPSS) program									

### 3. Testing research hypotheses:

**The first hypothesis:** There is a statistically significant effect in the application of electronic brainstorming on the stages of irregular auditing.

For the purpose of testing the impact relationship of the electronic brainstorming variable as an independent variable in the approved variable, represented by the stages of Irregular auditing practices in its three dimensions, which include: the planning stage of the audit process, the stage of implementing audit procedures and the stage of preparing the report grouped as an approved variable and through the results shown in Table (8), where it was found that there is a significant effect of the electronic brainstorming variable in the variable of irregular audit stages, depending on the value of the level of statistical significance of the model, based on the (F) test of ( 0.00), which was less than the level of statistical significance assumed in the study concerned of (0.05) and also through the calculated value of the test (F) of (34.26), which was greater than its tabular value of (3.99) at the degrees of freedom (61) and the level of statistical significance assumed of (0.05) in other words the acceptance of the first hypothesis that came out of the current study.

Through the regression model, we also find that the values of the regression coefficient were also statistically significant, based on the level of statistical significance of the parameters of the model, where their values were respectively (0.00) for each of the two parameters less than the level of statistical significance assumed in the current study of (0.05) In other words, when there is no electronic brainstorming, the stages of Irregular auditing practices are present in a fixed amount of (2.21), as well as when the levels of electronic brainstorming change by one unit, the levels of the audit stages The irregular changes by (0.43) and in the same direction. Through the coefficient of determination (R<sup>2</sup>), it was found that electronic brainstorming explains the changes that occur in the stages of Irregular auditing practices by (%35.97), while the remaining percentage (%64.03) is due to other variables that affect the variable of the irregular audit stages that are not included in the model.

Table (8)					
The effect of applying electronic brainstorming in the stages of irregular auditing					
Independent variable \ Dependent variable	Electronic Brainstorming Application (X)			F	
	B0	B1	R2	Calculated	Tabular
Stages of irregular audit (Y)	2.21	0.43	%35.97	34.26	3.99
Morale level (Sig.)	0.00	0.00		0.00	
Source: Prepared by researchers based on the (SPSS) program					

**Second hypothesis:** There is a statistically significant effect in the application of electronic brainstorming on the planning stage of the audit process.

To test the impact relationship of the electronic brainstorming variable as an independent variable in the approved variable, represented by the dimension of the planning stage of the audit process as an approved variable and through the results shown in Table (9), where it was found that there is a significant impact of the electronic brainstorming variable on the planning of the audit process, depending on the value of the level of statistical significance of the model, based on the (F) test of (0.00), which was less than the level of statistical significance assumed in the study in question, which amounted to (0.05) and also through the calculated value of the test (F) of (58.47), which was greater than its tabular value of (3.99) at degrees of freedom (61) and the level of assumed statistical significance of (0.05), in other words, acceptance of the second hypothesis, which came out of the current study.

Through the regression model, it was found that the regression constant parameter represented by (B0) was non-significant, i.e. it does not have any statistical significance, based on the significance level value of (0.75), which was greater than the assumed significance level value of (0.05) in the current field study, and this confirms that in the absence of electronic brainstorming levels, the planning stage of the audit process does not change. As for the regression inclination parameter, represented by (B1), it was found that it was statistically significant, based on the value of the statistical significance level of (0.00), which in turn was less than the value of the assumed significance level of (0.05), which means that when the levels of electronic brainstorming change by one unit, the levels of the planning stage of the audit process change by (0.95) and in the same direction. Through the coefficient of determination (R2), it was found that electronic brainstorming explains the changes that occur in the planning stage of the audit process by (%48.94), while the remaining percentage (%51.06) is due to other variables that affect the variable of the planning stage of the audit process that are not included in the model.

Table (9)					
The effect of applying electronic brainstorming on the planning stage of the audit process					
Independent variable \ Dependent variable	Electronic Brainstorming Application (X)			F	
	B0	B1	R2	Calculated	Tabular
Stages of irregular audit (Y)	0.16	0.95	%48.94	58.47	3.99
Morale level (Sig.)	0.75	0.00		0.00	
Source: Prepared by researchers based on the (SPSS) program					

**Third hypothesis:** There is a statistically significant effect in the application of electronic brainstorming on the stage of implementing audit procedures.

To test the impact relationship of the electronic brainstorming variable as an independent variable in the approved variable, represented by the stage of implementing audit procedures as an approved variable, and through the results shown in Table (10), where it was found that there is a significant effect of the electronic brainstorming variable in the variable of the stage of implementing audit procedures, depending on the value of the level of statistical significance of the model, based on the (F) test of (0.00), which was less than the level of statistical significance assumed in the study concerned of (0.05) and also through the calculated value For the test (F) of (18.72), which was greater than its tabular value of (3.99) at degrees of freedom (61) and the level of statistical significance assumed of (0.05), in other words, acceptance of the third hypothesis that came out of the current study.

Through the regression model, we also find that the values of the regression coefficient were statistically significant as well, based on the level of statistical significance of the parameters of the model, where their values were respectively (0.00) for each of the two parameters less

than the level of statistical significance assumed in the current study of (0.05) In other words, when there is no electronic brainstorming, the stage of implementing audit procedures is present by a fixed amount of (2.49), as well as when the levels of electronic brainstorming change by one unit, the levels of the implementation stage Audit procedures change by (0.36) and in the same direction. Through the coefficient of determination ( $R^2$ ), it was found that electronic brainstorming explains the changes that occur in the stage of implementing audit procedures by (%23.48), while the remaining percentage (%76.52) is due to other variables that affect the variable of the stage of implementation of audit procedures that are not included in the model.

Table (10)					
The effect of applying electronic brainstorming at the stage of implementing audit procedures					
<div>Independent variable</div>	Electronic Brainstorming Application (X)			F	
	B0	B1	R2	Calculated	Tabular
Dependent variable					
Stages of irregular audit (Y)	2.49	0.36	%23.48	18.72	3.99
Morale level (Sig.)	0.00	0.00		0.00	
Source: Prepared by researchers based on the (SPSS) program					

**Fourth hypothesis:** There is a statistically significant effect in the application of electronic brainstorming on the stage of preparing the report.

Through Table (11), which represents the result of analyzing the impact relationship of the electronic brainstorming variable as an independent variable on the approved variable, represented by the stage of preparing the report, which represents one of the dimensions, which measures the variable of the stages of irregular auditing, and it became clear through the table the lack of significance of the effect based on the value of the level of statistical significance of the model through the test (F) used, which amounted to (0.01), which in turn was less than the tabular value of the test of (3.99) at the degrees of freedom (61) and the level of statistical significance used and the amount of ( 0.05) or depending on the level of statistical significance of the model and its value (0.93), where it was greater than the value of the level of statistical significance assumed and of (0.05) and therefore conclude the lack of significance of the impact in other words that the electronic brainstorming does not affect the stage of reporting, meaning that the changes that may occur in the levels of the stage of reporting are not due to the change in the levels of electronic brainstorming, meaning that the latter does not explain the stage of reporting, according to the opinions of the research sample of observers Calculations Thus, we conclude that the researcher's claim is rejected, i.e. brainstorming does not affect the reporting stage.

Looking at the information related to the model parameters, it was also clear that the regression tendency parameter is not significant, which indicates that the independent variable represented by electronic brainstorming does not affect the reporting stage, meaning that there is no relationship between electronic brainstorming and the reporting stage, and the value of the level of statistical significance of the test of the mentioned parameter was based on its value (0.93), which in turn was greater than the value of the assumed statistical significance level of (0.05).



Table (11)					
The effect of applying electronic brainstorming on the stage of preparing the report					
Independent variable	Electronic Brainstorming Application (X)			F	
Dependent variable	B0	B1	R2	Calculated	Tabular
Stages of irregular audit (Y)	3.97	-0.01	%0.00	0.01	3.99
Morale level (Sig.)	0.00	0.93		0.93	
Source: Prepared by researchers based on the (SPSS) program					

**Conclusions:** Through research and study, the research reached the following conclusions:

1. Electronic brainstorming sessions are an easy tool to transfer knowledge among the audit team members on identifying risks related to the audit process, and they also encourage increasing the quality of ideas and thus contribute to the promotion of more creative ideas.
2. The auditor's failure to adhere to the audit program that has been planned, designed, and put into practice leads to dysfunction in the audit procedures and thus the increased risks of the audit process and the occurrence of irregular auditing, in addition to that, there are several reasons behind the occurrence of irregular audit, including time pressures, fees pressures, commercial pressures and low ethical commitment of the auditor.
3. Electronic brainstorming sessions contribute to avoiding deficiencies in conducting the audit process and thus not failing the auditor in performing his task, and this is in line with the requirements of international and American auditing standards.
4. There was great agreement among the respondents' opinions about the importance of electronic brainstorming in the field of auditing, where the values of the arithmetic media ranged between (4.11) as the highest value and (3.79) as the lowest value, and that this range falls within the high degrees of agreement.
5. There is a statistically significant effect of the application of electronic brainstorming on the planning stage of the audit process as well as in the stage of implementing audit procedures, while there is no effect of applying electronic brainstorming on the stage of preparing the report.

**Recommendations:** Based on the conclusions of the research, the researchers recommend the following:

1. Electronic brainstorming sessions should be applied throughout the audit process by the auditors from the beginning of the planning of the audit process to the issuance of the final report because they improve the performance of the auditors.
2. Auditors adhere to the audit program that has been planned and implemented to ensure to some extent that irregular audits do not occur and that they stay away from time pressures, fees, and commercial pressures.
3. The need for the attention of the competent academic authorities represented by universities and institutes to add new topics within their curricula, including the subject of Irregular auditing practice to graduate and form new competencies aware of this subject.

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## Questionnaire Form

Dear Auditors,

Greetings.....

We put in your hands the questionnaire form for the tagged research (the effect of electronic brainstorming on irregular auditing, an analytical study of the opinions of a sample of auditors in the city of Erbil) hoping to answer its questions with objectivity and impartiality to obtain results that would enrich the research and achieve its goals.

Thank you for your cooperation with us in the service of the scientific march

### Note:-

Please tick (✓) in the box that represents your answer and if you have any comments or opinions, they can be added to the last field of the questionnaire.

This information is used for scientific research purposes only.

Researchers

### Section I. Personal data:

Years of Experience: a. From 1 To 5 Years ( ) b. From 6 To 10 Years ( ) c. From 11 To 15 Years ( ) D.16 Years & Above ( )

Do you know the subject of electronic brainstorming: A. Yes ( ) No ( )

Do you know the subject of irregular auditing: a. Yes ( ) No ( )

### Section 2. Procedural definitions

Electronic brainstorming: It is a collective method to generate ideas and find solutions to the problems posed by relying on modern technological techniques.

Irregular auditing: It is the failure of the auditors to perform the steps of conducting the audit process in a sound scientific manner, which leads to obtaining evidence that is not reliable or insufficient in terms of quantity or quality.

### Section 3. Questionnaire axes:

The first theme: electronic brainstorming in the field of auditing						
S	Paragraphs	I strongly agree	agree	neutral	I don't agree	I don't agree completely
1.	Contributes to the exchange of ideas between auditors using software technology as soon as possible.					
2.	Helps in improving and exchanging experiences between auditors.					
3.	It avoids legal accountability by reducing the likelihood of mistakes.					
4.	It stimulates the individual creativity of the participants, which helps the auditors to exchange experiences.					
5.	Improving the performance of auditors by avoiding bottlenecks at peak times.					
6.	Recording ideas electronically gives auditors electronic documents related to ideas and opinions on a particular problem that can be resorted to in cases when needed.					
7.	The use of electronic brainstorming					

	sessions contributes to improving the professional judgments of auditors during the stages of the audit process.					
The second theme: the effect of electronic brainstorming on the stages of irregular auditing First: Planning stage: Electronic brainstorming helps to reduce Irregular auditing practices at this stage through:						
8.	Expressing ideas and formulating them correctly, has a role in not doing irregular auditing.					
9.	Providing information about the nature of the company's activity and identifying the weaknesses of the accounting system in the company.					
10.	Estimate the complexity of the client's business and the size of the risks to which he is exposed at this stage.					
11.	Preparing an efficient audit program to carry out the audit process.					
12.	Determine the initial judgment of the relative importance of the elements of the financial statements.					
13.	Identify and address the causes that lead to Irregular auditing practices efficiently.					
14.	Identify areas and areas of irregular auditing.					
Second: The stage of implementing the audit process: Electronic brainstorming helps to reduce Irregular auditing practices at this stage through:						
15.	Assist auditors in exercising professional doubt during this phase.					
16.	Determine the type of evidence that the audit team should collect and thus prevent irregular auditing.					
17.	Assess audit risk more efficiently by auditors.					
18.	Evaluate the internal control system applied in the audited company.					
19.	Discuss and evaluate the results of the audit process efficiently by the auditors.					
20.	It helps in predicting any conditions and problems that appear during the implementation of the audit process and dealing with them.					
21.	Carrying out analytical procedures by auditors.					

Third: The stage of preparing the report: Electronic brainstorming helps to reduce Irregular auditing practices at this stage through:					
22.	Arrange the items contained in the auditor's report in light of International Standards on Auditing.				
23.	Forming an opinion about the continuity of the company or not with ease and ease.				
24.	Access to a unified professional opinion by the auditors.				
25.	Evaluate the final presentation of the audit report and adjust its contents.				
26.	Easy and flexible report generation.				
27.	Save time when preparing the audit report by the auditors.				
28.	Improve the quality of the auditor's report and narrow the expectations gap.				



## کاریگه‌ری بیرکردنه‌وه‌ی میثکی ئەلیکترۆنی لەسەر شتوازه نارێکه‌کانی وردیینی، لیکۆئینه‌وه‌یه‌کی شیکارییه له بۆچوونی نمونه‌یه‌کی وردیینه‌که‌رانی شاری هه‌ولێر

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### پوخته

ئامانجی توێژینه‌وه‌که دیاریکردنی ئاستی بیرکردنه‌وه‌ی میثکی ئەلیکترۆنی له که‌مکردنه‌وه‌ی وردیینی نارێک، که له ئەنجامی جێبه‌جێنه‌کردنی پێکاره‌کانی وردیینی له‌لایه‌ن وردیینه‌که‌ره‌وه پووده‌دات و به‌ده‌سته‌ینانی به‌لگه‌ی متمانه‌پێنه‌کراو ئەمه جگه له بوونی چه‌ندین فشار له‌سەر وردیینه‌که‌ر، توێژینه‌وه‌که باس له کاریگه‌ری دانیشته‌کانی بیرکردنه‌وه‌ی میثک ده‌کات که له‌لایه‌ن وردیینه‌که‌رانه‌وه ئەنجامدرا بۆ که‌مکردنه‌وه‌ی پوودانی وردیینی نارێک، و به‌مه‌به‌ستی گه‌یشتن به ئامانجی توێژینه‌وه‌که توێژه‌ران فۆرمیکی پرسپارنامه‌یان پێکخست و به‌سەر نمونه‌یه‌ک له وردیینه‌که‌ره‌کاندا دابه‌شیان کرد له شاری هه‌ولێر و شیکارییان بۆ کردووه له پێگه‌ی پرۆگرامی ئاماری (SPSS) وه، توێژینه‌وه‌که گه‌یشته کۆمه‌لێک ئەنجام که گرنگترینان بریتین له: کاریگه‌رییه‌کی ئاماری به‌رچاوی هه‌یه له‌سەر به‌کاره‌ینانی بیرکردنه‌وه‌ی میثکی ئەلیکترۆنی له‌سەر قوئاغی پلاندانانی وردیینه‌که‌ر له کۆتاییدا توێژه‌ران پێشنیاری جێبه‌جێکردنی کۆبوونه‌وه‌کانی کۆکردنه‌وه‌ی میثکی ئەلیکترۆنی ده‌که‌ن به درێژایی پرۆسه‌ی وردیینی له‌لایه‌ن وردیینه‌که‌رانه‌وه چونکه کارده‌کات بۆ باشتکردنی ئەدای وردیینه‌که‌ران و به‌مجۆره ناینته هۆی پوودانی وردیینی نارێک

**وشه‌ی سه‌ره‌تاییه‌کان:** بیرکردنه‌وه‌ی میثکی ئەلیکترۆنی، وردیینی نارێک، به‌رنامه‌ی وردیینی

**أثر العصف الذهني الالكتروني على ممارسات التدقيق غير المنتظم دراسة تحليلية لآراء عينة من مراقبي الحسابات في مدينة أربيل**

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### مخلص

ه‌دفت الدراسة الى التعرف على مدى مساهمة العصف الذهني الالكتروني في الحد من التدقيق غير المنتظم والذي يحدث نتيجة عدم تنفيذ اجراءات التدقيق من قبل مراقب الحسابات والحصول على أدلة أثبات لا يمكن الاعتماد عليها الى جانب وجود ضغوطات عدة على مراقب الحسابات، ويتناول البحث اثر جلسات العصف الذهني الالكتروني التي يقوم بها مراقبي الحسابات في الحد من حدوث التدقيق غير المنتظم ، ولغرض تحقيق هدف البحث قام الباحثون بتنظيم استمارة الاستبانة و توزيعها على عينة من مراقبي الحسابات في مدينة أربيل وتحليلها من خلال البرنامج الاحصائي (SPSS)، وقد توصل البحث الى جملة من الاستنتاجات من أهمها انه اثر ذات دلالة إحصائية في تطبيق العصف الذهني الالكتروني على مرحلة التخطيط لعملية التدقيق وكذلك في مرحلة تنفيذ اجراءات التدقيق، وفي النهاية يوصي الباحثون بتطبيق جلسات العصف الذهني الالكتروني على مدار العملية التدقيقية من قبل مراقبي الحسابات وذلك بسبب أنها تعمل على تحسين أداء مراقبي الحسابات وبالتالي عدم حدوث التدقيق غير المنتظم .

**الكلمات المفتاحية :** العصف الذهني الالكتروني، التدقيق غير المنتظم ، برنامج التدقيق.