

THE IMPACT OF BIG DATA ON INCREASING THE EFFECTIVENESS OF THE QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION FROM THE POINT OF VIEW OF INTERNAL AUDITORS IN JORDANIAN COMMERCIAL BANKS

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ABSTRACT

The study aimed to identify the impact of the use of big data on the effectiveness of the qualitative characteristics of accounting information from the point of view of internal auditors in Jordanian commercial banks. The study relied on the questionnaire to obtain the primary information. Statistical methods such as mean, standard deviation, normalization test, and q test were used. Among the most important results of the study: there is an effect of big data on the primary characteristics of accounting information, and there is an effect of big data on the secondary characteristics of accounting information in commercial banks. Among its most important recommendations: the need to train internal auditors to deal with social media tools, and the need to know how to deal with big data to achieve corporate goals in general.

Keywords: Big Data, Accounting Information, Internal Auditor, Commercial Banks

INTRODUCTION

Big data is one of the results of using social media tools, as information technology tools are the main source for them, and big data is one of the main pillars of the accounting, financial and economic decision-making process in general. Big data has an impact on all aspects of economic life, especially accounting, as it is considered the primary material for accountability in any facility, especially with the emergence of artificial intelligence, information security and social networking sites, and big data needs special technological tools to be based on receiving and processing Big data and determining what is appropriate or inappropriate for making decisions in general, and this means that big data has added new elements to the company's expenses, which means that it is necessary to employ it well to achieve the company's profit and non-profit goals. The Internal Audit Department is also considered as a database for all parties to the company and all administrative levels, which makes the internal audit the most influential and affected parties in big data, and the possibility of determining the appropriate ones for accounting information in a way that is more accurate and appropriate to the needs of the administration. Therefore, this study came to examine the impact of the use of big data on increasing the efficiency of the qualitative characteristics of accounting information from the point of view of internal auditors.

The Study Problem

Jordanian commercial banks deal with all segments of society, and this makes them the most affected sectors by the data that is on social media tools in terms of receiving information, how to process it and how to use it to achieve the objectives of the banks. The quality of accounting information needs to be enhanced and increased by the various parties benefiting

from it so that it can be relied upon by the parties inside or outside the bank. In order for there to be a degree of integration in the credibility of the accounting data, it must be possible to know the opinions of the beneficiaries from means outside the administrative scope or from the public dealing with banks, and this is the source of the big data or the data that are present on the databases of social communication tools, so this study discusses the following questions

- 1) What is the effect of big data on increasing the efficiency of the primary characteristics of accounting information from the point of view of internal auditors in Jordanian commercial banks?
- 2) What is the impact of big data on increasing the efficiency of secondary characteristics of accounting information from the point of view of internal auditors in Jordanian commercial banks?

The Importance of Studying

The use of big data in accounting information may give it an additional value of the degree of credibility, as the big data gives the opinions of specialists and non-specialists on the credibility of the financial statements, and this means that big data gives a positive indication of giving additional value in the quality and credibility of the financial statements.

The use of big data also helps in improving the content of the financial statements and financial reports, and it also helps to understand the nature of the business of commercial banks so that it is more understandable by the different segments of stakeholders in the different financial reports.

Big data has a positive impact in dealing with future risks on the company and determining the levels of expected growth by obtaining the large volume of information from inside or outside the banks and helps in obtaining a good degree of integration between the data inside and outside the bank.

The internal audit in commercial banks is considered a database for the various parties inside and outside the bank, which makes them the most device within the bank dealing with big data, and it is also the body responsible for increasing the quality and quality of accounting information.

Objectives of the Study

The study aims to achieve the following

- 1) Determining the effect of using big data on increasing the quality of secondary and basic qualitative characteristics of accounting information.
- 2) Determining the role of internal audit in how to deal with big data and determining its positive impact on increasing the quality of accounting information.
- 3) Coming up with a theoretical and practical framework on how to determine the impact of big data on the nature of internal audit work and identifying new tasks for internal audit in light of the use of big data.

Study Hypotheses

Based on the study problem, the study hypotheses can be formulated as follows

- 1) There is no effect of big data on increasing the efficiency of the primary characteristics of accounting information from the point of view of internal auditors in Jordanian commercial banks?
- 2) There is no effect of big data on increasing the efficiency of secondary characteristics of accounting information from the point of view of internal auditors in Jordanian commercial banks?

Terminology of Study

- 1) Big data: The huge amount of data owned by a particular facility and it needs very advanced information technology tools to perform the functions of analyzing, storing and retrieval to convert it into information useful for decision-making (Al Aklaby, 2018).

- 2) Internal audit: An independent and objective confirmatory and advisory activity designed to enrich and develop the management's operations by helping it to achieve its objectives in a systematic and structured manner to evaluate and develop the effectiveness of its risk management, controls and institutional procedures (Al Hasan, 2009).
- 3) Qualitative characteristics of accounting information: they are the characteristics that help accounting information to achieve the desired benefit from it. Therefore, it must be characterized by a set of qualities that give it qualitative standards, during which this information can be adopted as means and tools for making various decisions (Khaled, 2016).
- 4) Primary characteristics of accounting information: a set of characteristics that differentiate between useful information, and information that is not useful, or of little use, and that does not serve the work of management in decision-making (Wegant, 2017).
- 5) Secondary characteristics of accounting information: It is one of the characteristics that are considered additional to the primary characteristics, and has an important role in determining the quality of accounting information, and its function depends on providing support for primary information in order to help formulate the decision in a correct manner (Wegant, 2017).
- 6) Accounting information: it is a set of information that must be provided to management in order to be able to make decisions correctly. It is also known as information that contributes to the direct impact on administrative functions (Abu Dalbough, 2018).

Sources for Obtaining Information

- 1) Primary sources by designing a questionnaire that includes the study variables to obtain the results and recommendations of the study.
- 2) Secondary sources: Through books, references and scientific research related to the topic of study.

Previous Studies

- 1) Abdul Qader study (2020) the impact of the use of big data on the quality of external auditing: A theoretical review
The study aimed to find the effect of using big data on the quality of external audits and to determine its impact on the new tasks of external auditing. The study relied on books and references to obtain the primary data for the study. One of the most important results of the study is that there is a positive impact from the use of big data on the work of the external auditor, and that there are new tasks that have emerged for the external auditor from the use of big data in terms of collecting evidence and the scope of the audit process. administrative levels.
- 2) An international study (2021) the effect of using big data in reducing audit risks
The study aimed to determine the impact of the use of big data on audit risks from the point of view of external auditors in the State of Kuwait. It also aimed to determine the methods of security protection for accounting data when using big data. The study relied on the questionnaire as a primary source for obtaining data. Statistical methods of regression coefficient and Cronbach's alpha test were used. Among the most important results of the study: the use of big data has become a phenomenon that must be dealt with in the field of auditing in general, and the use of big data has a positive impact on reducing audit risks. Among its most important recommendations: the need to take into account audit risks from the internal audit and the need to write a report from the internal auditor on the impact of using big data on the company, and the need to make a special report on the impact of big data on financial reports.
- 3) A study (Deniz et al., 2018) entitled:
Securing Big Data Provenance for Auditors: The Big Data Provenance Black Box as Reliable Evidence
The study aimed to demonstrate the impact of the internal environment factors on the audit profession in terms of opportunities and threats related to big data, and also aimed to show the challenges facing the audit process in the event of conducting various analyzes of big data in telecommunications companies in the United States. For external audit in the presence of big data, it also showed that the use of financial ratios helps in analyzing large financial data and statistical methods such as correlation. Among its most important recommendations: the need to apply extensive tests and analyzes in external audits, and the need to link audit programs with social media tools, as they are the most important source of big data.
- 4) (Emily et al., 2018) study titled

Big Data Information Governance by Accountant

The study aimed to highlight the role of big data on the accounting function, and it also aimed to determine the role of accountants in dealing with big data and how to convert it into useful information for decision-making. The study relied on books, references and previous studies to suggest a role for accountants in dealing with big data and converting it into

information that can be disclosed in an accounting manner, as the proposal was built on the governance of big data and the risks that can be faced when dealing with big data by accountants. Among the most important results: accountants have little understanding of the subject of big data, and access to convergence points in the possibility of investing big data and converting it into useful information for decision-making. Among its most important recommendations: the need to invest the capabilities of accountants in analyzing big data, and the need to rehabilitate accountants scientifically and technically on how to control big data and determine its effects on financial statements.

The Current Study Differs from Previous Studies

- 1) This study focuses on the role of internal auditing in dealing with big data
- 2) This study depends on the questionnaire in obtaining primary data to know the effect of big data on the characteristics of accounting information
- 3) Because this study is based on linking big data with the characteristics of accounting information through the study sample represented by internal auditors
- 4) It is a field study on Jordanian commercial banks

Theoretical Framework for the Study

Big Data

The concept of big data: Big data is defined as the huge amount of structured data and unstructured data that is produced within the company and is modified daily, and what is important in the topic of big data is how to use all of the data to achieve full benefit to achieve the company's goals (Oza, 2018).

Big Data Features

There are the following characteristics of big data (Youssef, 2018):

- 1) Size: As big data is characterized by its large size and the need for information technology tools to help in absorbing that data.
- 2) Speed: Big data needs a great speed to deal with in terms of receiving and processing it through advanced technology
- 3) Diversity: As big data is diverse and manifold on different topics, it requires experts to be able to analyze it for the needs of use.
- 4) Honesty: since big data has credibility if it is from a reliable source so that the quality of the information can be ascertained by the stakeholders in it.

Steps to Convert Big Data into Useful Data for Decision Making

In order to benefit from big data, the following steps must be followed: (Al-Masrawy, 2019)

- 1) There is great competition in finding innovative tools for dealing with big data and harnessing it for the benefit of the enterprise.
- 2) Excavation of big data using the latest developments in modern information technology tools in terms of sorting, storage, processing and retrieval.
- 3) The use of ordinary citizens in collecting big data, as they are part of the components of big data through social media tools.
- 4) Forming gathering points for big data from different sources that can absorb the huge amount of big data.
- 5) Start by analyzing the small data or the data most understood by the largest segment of stakeholders so that it can be relied upon to interpret other data cumulatively

Services Provided by Internal Audit

The internal audit assists the administration in carrying out its responsibilities by providing it with the following services: (Hamayza 2016)

- Determining the adequacy and effectiveness of the internal control system in the facility.
- Determining the reliability of the information.
- Achieving the protection of assets from theft, fire and illegal actions.
- Enable compliance with the established procedures.
- Achieving goals and objectives, and the auditor must ensure that the programs or operational processes have been implemented as planned.

The Importance of Big Data on Financial Reports

The existence of big data has a pivotal role that led to the following (Al-Maghazi, 2018).

- 1) It led to an increase in the quality of the financial statements through the presence of many data that contributed to the degree of credibility of the financial statements
- 2) Big data contributed to increasing the degree of accounting disclosure in the financial statements to a degree that helps stakeholders take appropriate decisions
- 3) Contributed to support the accounting methods and policies used in preparing the financial statements
- 4) Contributed to increasing the degree of integration in administrative brainstorming with huge databases
- 5) Big data contributed to obtaining degrees of integration in accounting information in terms of its reliability and source

Areas of Use of Big Data by the Internal Auditor

The use of big data by the internal auditor achieves the following (Yousef, 2018).

- 1) Transition to the era of accounting data analysis, risk management and electronic report writing using information technology tools
- 2) Get more training opportunities for accountants and auditors on how to deal with big data and achieve auditing and accounting objectives
- 3) Specializing in cloud accounting, which depends on the era of informatics and big data.

The Impact of Big Data on the Audit Process

The presence of big data contributed to the audit process with the following (Sarens, 2017).

- Helping the auditors to obtain a greater amount of information, which helped the auditors to obtain a comprehensive view of the financial statements.
- Through big data analysis and control testing, auditors can track the documentation processes of documents, record pending transactions, and verify them through the presence of big data.
- The possibility of using IT tools to determine the size of audit samples and expand audit tests, and this helped increase the credibility of the audit report.
- Increase the information for auditors, increase their skills, and acquire skills in knowing the quality of data useful for the audit process.

Incentives for the External Auditor to Use Big Data

There are some things that encourage the internal auditor to use big data, which are: (Allense, 2016).

- Clients of audit offices use big data in making their decisions and the judgments or estimates they adopt in making their decisions, which have an important impact on their financial statements.
- Auditors' feeling the use of big data has an impact on the process of estimating and identifying risks of all kinds.

- Big data has become a reality that auditors must live with, and that it has become part of the audit environment.
- The international auditing organizations show a clear interest in issuing special instructions for dealing with big data.
- It has become one of the audit evidence that is sometimes relied upon to prove financial operations.

The Impact of Big Data on the Quality of Financial Statements

There are the following effects of big data on accounting information, which can be summarized as follows: (Irene, 2019)

- 1) The effect of big data and its relationship to the ability to understand financial data, through Improving the quality of financial data and improving its content.
 - Helps to find other ways to understand the financial statements through the presence of additional sources of data
 - Improving the understanding of the company's performance as a whole.
 - The relationship of big data with the feature of the comparison process to find an honest representation of the items of the financial statements through:
 - Improving the forecasting of future profits.
 - Improving the means of predicting future growth business and future sales business.
 - Improving the future performance of the company in general
- 2) The relationship of big data with honest representation of financial events in accounting information through:
 - There is an integration process in accounting information
 - Improving the anticipation of risks and the mechanisms of dealing with them in the future
 - Improving the credibility of the financial statements

Qualitative Characteristics of Accounting Information

1) Primary Characteristics, Including (IFAC, 2015)

- Suitability: It is the matching of accounting information with the functions required of it, and thus it is able to influence the final results of administrative work, and also contributes to assisting users of accounting systems in carrying out accounting operations in an accurate manner, and it depends on a set of accurate documented information, and there is no doubt from by the auditors.
- Reliability: It provides accuracy and credibility in accounting information so that it becomes appropriate to rely on it, as a means of measuring events, and economic and financial activities associated with it, that is, that it contains all credible information in order to achieve integration between paper-recorded accounting activities, which occurred in Indeed.

2) Secondary Characteristics Include

- Comparability: It is the ability to determine the compatibility and differences between accounting information, especially when using more than one accounting strategy in evaluating the role of information, and sometimes this thing may lead to difficulty in comparing financial results, so it is the duty of the accountant, or the person who He analyzes the accounting systems, prepares a comparison between the previous and current information, and thus he can express his opinion in determining the best strategy that provides accounting information of accurate quality, suitable for evaluating the work of the facility.
- Consistency and consistency: It is the principle that depends directly on comparability, as one of the means used in applying accounting strategies. Losses, and the choice between continuing with the current strategy, or moving to a new accounting strategy.

3) Study Tool Stability

The stability of the study's resolution means the stability of the results if it is applied more than once in similar conditions, according to the internal consistency coefficient (Cronbach Alpha) as shown in Table (1). The high values of Cronbach's alpha indicate the high level of

stability and its values range between (0-1) So that these values are acceptable at the stability coefficient ratio (0.70) and above (Sekaran, 2014).

Scope	Number of paragraph	Dimension	Cronbach's alpha
Primary characteristics of accounting information	1	Relevancy	0.849
	1	Predictive Value	0.861
	1	Confirmatory Value	0.834
	2	Faithfulness	0.824
	Total scope		0.937
Secondary characteristics of accounting information	1	Comparability	0.830
	1	Verifiability	0.838
	1	Timeliness	0.809
	2	Understandability	0.717
	Total scope		0.911

Table (1) shows the stability values of the study variables, which amounted to (0.937) for the field of primary characteristics of accounting information as a whole, and (0.911) for the field of secondary qualitative characteristics of accounting information as a whole. The above Cronbach indicators indicate that the study tool has, in general, a high stability coefficient and its ability to achieve the objectives of the study. It is clear from this that Cronbach's alpha values indicate a high degree of consistency between all dimensions of the study as a whole.

Normal Distribution

The normal distribution test for the data was performed as one of the assumptions before the linear regression analysis used to test the study hypotheses. Table (2) shows the results of the normal distribution and it is clear from it that all the study variables follow the normal distribution, by looking at the values of the Shapiro-Wilk test and the value of the level of significance accompanying it. Since all the values of the significance level in the table are greater than (0.05), the null hypothesis is accepted, which states that “there are no statistically significant differences between the distribution of the values of the variable and the normal distribution at the level of significance ($\alpha \leq 0.05$). This means that the values of the variables in the study. The current follows a normal distribution.

Scope	Dimension	Value test	Significant
Primary characteristics of accounting information	Relevancy	1.32	0.06
	Predictive Value	1.36	0.07
	Confirmatory Value	1.33	0.06
	Faithfulness	1.32	0.06
	Total scope		0.22
Secondary characteristics of accounting information	Comparability	1.07	0.23
	Verifiability	1.08	0.24
	Timeliness	1.09	0.25
	Understandability	1.22	0.11
	Total scope	1.23	0.10

Statistical Analysis

Preface

This section includes a presentation and discussion of the results that were reached and discussed, after the data were collected by means of a study questionnaire, "The effect of big data on increasing the effectiveness of qualitative characteristics on accounting information from the point of view of internal auditors in Jordanian commercial banks". Null hypotheses emerge from this hypothesis and were presented and discussed according to the study hypotheses.

Describe the Characteristics of the Study Sample

The study sample consisted of (126) internal auditors in Jordanian commercial banks, and Table (3) shows the distribution of sample members according to demographic and occupational data.

Title	Variable	Frequencies	Percentage
Qualification	Bachelor	91	72.1
	Post graduates	35	27.9
	Total	126	100.0
Years of Experience	Less than 6 years	27	20.8
	6-10 years	92	72.6
	11 years and more	7	6.6
	Total	126	100.0
Job title	Auditor	72	60
	chief auditor	42	30
	Auditing manager	12	10
	Total	126	100.0

It appears from Table (3) that:

The highest percentage of the distribution of the study sample members according to the educational level variable (72.1%) was for the educational level (bachelor), while the lowest percentage (27.9%) was for the educational level (intermediate diploma).

The highest percentage of the distribution of the study sample according to the variable of years of experience (72.6%) was for the level of experience (6-10 years), while the lowest percentage (6.6%) was for the level of experience (more than 11 years). This may have an impact Positive on the credibility of the results and recommendations of the study

The highest percentage of the distribution of the study sample according to the job title variable reached (60%) for the job title (field internal auditor), while the lowest percentage (30%) was for the job title (department manager).

Description of the Study Variables

This part includes a presentation of the results of the analysis according to the arithmetic averages and standard deviations, which is the level of approval of the study sample members on the paragraphs of each of the electronic data field on the characteristics of accounting information with its dimensions (primary characteristics, secondary characteristics, and the following is a presentation of these results).

Discussing the Statistical Results

The arithmetic averages and standard deviations of the answers of the respondents were extracted from the paragraphs of the field of primary characteristics of accounting information (appropriateness, predictive value, confirmatory value, and honest representation), as shown in Table (4).

Table 4 ARITHMETIC AVERAGES AND STANDARD DEVIATIONS OF THE ANSWERS OF THE SAMPLE MEMBERS TO THE PARAGRAPHS OF THE FIELD OF THE IMPACT OF BIG DATA ON THE PRIMARY CHARACTERISTICS OF ACCOUNTING INFORMATION ARRANGED IN DESCENDING ORDER ACCORDING TO THE ARITHMETIC MEAN					
Rank	No	Title	Average	Standard deviation	Level
1	1	Big data has helped enhance the effectiveness of the relevance of accounting information	3.88	0.78	High
2	4	Big data has enhanced the effectiveness of the presented financial information and is appropriate for decision-making	3.74	0.79	High
3	5	Big data has helped to enhance the effectiveness of using the predictive value of accounting information	3.67	0.86	High
4	3	Big data has helped enhance the effectiveness of using the conformity value of accounting information	3.65	0.82	Medium
5	2	The effect of using big data on increasing the effectiveness of faithfulness representation of accounting information about financial events	3.56	0.82	Medium
Total			3.7	0.65	High

It appears from Table (4) that the arithmetic averages of the responses of the study sample members about the dimensions of the field of primary qualitative characteristics of the accounting information ranged between (3.56-3.88), came in the first place after the “appropriateness” with an arithmetic average (3.88) with a high evaluation degree, and this means There is a positive effect of big data on the suitability of accounting information for decision-making. In the second place, the “appropriateness of information” dimension came with an arithmetic mean (3.74) with a high evaluation degree, and then came in the third place after the “predictive value” with an arithmetic average (3.67) with a high evaluation degree, and this means There is an effect of big data on the presence of the appropriateness of accounting information in commercial banks, and it came in the fourth place after the “confirming value” with an arithmetic average (3.65) with a medium evaluation degree, and it is noted that the average of the entire variable is 3.7, and this indicates that the use of big data has an impact on Increasing the effectiveness of the qualitative characteristics of accounting information in Jordanian commercial banks.

Results related to the dimension of secondary qualitative characteristics of accounting information.

The arithmetic means and standard deviations of the answers of the respondents were extracted from the paragraphs of the secondary qualitative characteristics dimension, as shown in Table (5).

Rank	No	Title	Average	Standard deviation	Level
1	5	Effect of using big data on the comparability of accounting information in commercial banks	3.65	1.03	Medium
2	4	Effect of using big data on the verifiability of accounting information in commercial banks	3.60	1.07	Medium
3	1	Effect of the use of big data on the existence of the appropriate timing property of accounting information in commercial banks	3.58	0.99	Medium
4	3	Effect of using big data on enhancing the comprehensible property of information in commercial banks	3.50	1.03	Medium
5	2	Effect of using big data on enhancing the general assimilation feature of accounting information in commercial banks	3.48	0.97	Medium
Total			3.56	0.82	Medium

It appears from Table (5) that the arithmetic averages of the answers of the sample individuals about the paragraphs after the secondary characteristics of the accounting information ranged between (3.48-3.65), and the results showed that paragraph No. (5) and its text: “The effect of using big data on the comparability of accounting information in Commercial banks ranked first, while paragraph No. (2) stated: “The effect of using big data on the verifiability of accounting information in commercial banks” ranked last, and the arithmetic average of the dimension as a whole was (3.56) with a medium evaluation degree.

Study Hypotheses Test

H01: First Hypothesis: There is no effect of big data on increasing the effectiveness of the primary qualitative characteristics of accounting information in Jordanian commercial banks.

Dimension	B	T	significant	R	R ²	R adjusted	F value
Relevancy	0.11	1.88	0.06	0.76	0.578	0.568	60.2
Predictive value	0.16	2.48	0.01				
Conformity value	0.27	4.11	0.00				
Faithfulness' representative	0.17	2.72	0.01				

Results related to the first hypothesis: There is a statistically significant effect at the significance level (α 0.05) for the effect of big data on the primary qualitative characteristics on accounting information (appropriateness, predictive value, confirmatory value, and honest representation), as the value of the correlation coefficient (R) reached (0.760), which is a statistically significant value that indicates the degree of correlation between the independent

variables and the dependent variable. The value of (R-square) is (0.578), which is a statistically significant value. This indicates that the use of big data explains what its value is (57.8%) of the change in the basic qualitative characteristics of accounting information in commercial banks, and the test value was (F) (60.267) with a statistical significance (0.00), which is a statistically significant value that indicates a discrepancy in the ability of the independent variables to influence the dependent variable, thus rejecting the first hypothesis.

H02: Second Hypothesis: There is no effect of big data on increasing the effectiveness of secondary qualitative characteristics of accounting information in Jordanian commercial banks.

Dimension	B	T	significant	R	R²	R adjusted	F value
Comparability	0.14	2.25	0.06	0.67	0.44	0.48	40.2
Verifiability	0.18	1.49	0.02				
Timeliness	0.29	5.19	0.03				
Understandability	0.31	1.72	0.05				

Results related to the second hypothesis: There is a statistically significant effect at the significance level (α 0.05) of the effect of big data on secondary qualitative characteristics on accounting information (comparability, verifiability, appropriate timing, and comprehension), as the value of the correlation coefficient (R) (0.0.67), which is a statistically significant value that indicates the degree of statistically significant correlation between the independent variables and the dependent variable. The value of (R-square) is (0.0.44), which is a statistically significant value. This indicates that the use of big data explains its value (0.44%) of the change in the secondary qualitative characteristics of accounting information in commercial banks, and the test value was (F) (40.2) with a statistical significance (0.00), which is a statistically significant value that indicates a discrepancy in the ability of the independent variables to influence the dependent variable, thus rejecting the second hypothesis.

FINDINGS AND RECOMMENDATIONS

Results

- 1) There is a positive effect of using big data on increasing the effectiveness of the qualitative characteristics of accounting information in commercial banks, as follows:
 - The use of big data has helped to increase the appropriateness of accounting information for stakeholders to take various types of decisions.
 - The use of big data, uh, affected the enhancement of the concept of the predictive value of the accounting information vocabulary, which helps in the presence of realistic estimates from various parties inside and outside the bank.
 - The use of big data has an impact on enhancing the concept of honest representation of the financial statements about the nature of the actual events that took place in the bank.

- 2) There is an effect of using big data on increasing the effectiveness of secondary qualitative characteristics of accounting information in commercial banks in terms of
 - The use of big data helped in making the financial statements comparable with other banks, in addition to having the opinion of parties outside the bank
 - The use of big data has a positive impact on enhancing that accounting information is verifiable from more than one source, through the presence of an element of integration in opinions about the credibility and stability of accounting information.
 - The use of big data helped to increase the effectiveness of the appropriate timing in obtaining accounting information, and this helped to make the right administrative decisions.

Recommendations

Based on the results of the study, the following recommendations can be formulated

- 1) The necessity of verifying the correctness of the information on social networks and its reliability.
- 2) The necessity of having a cadre specialized in the subject of big data in general and the presence of a specialized accounting and financial cadre to study big data to determine the useful ones to increase the credibility of accounting information.
- 3) The need to realize that the use of big data in accounting and auditing has become a reality that must be dealt with, and try to reduce its risks and use methods that help exploit it to increase the profits of banks
- 4) The necessity of qualifying the internal auditors in theory and practice with big data and how to deal with it in terms of reception, storage and processing and how to employ it to achieve the objectives of commercial banks.

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