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The Influence of Digital Auditing on Enhancing Tax Compliance: Accountants and Auditors' Perspectives

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Abstract

Taxes represent an essential part of financial policy. Each individual undertakes paying taxes in accordance with the rules and laws in force. Studies reveal that taxes are considered important tools of financial policy. The importance of taxes is not limited to the financial role only, but it involves commercial, political, and social objectives in light of the concept of modern state. At the forefront of such objectives is to achieve commercial and social balance. Paying taxes accelerates the development process, manages income redistribution, addresses the commercial cycles, and stimulates savings and investments through achieving tax compliance. Hence, taxes represent a key source of general incomes that help the state cover general expenditures and achieve commercial and social development. Compliance with tax laws is an essential pillar of ensuring sustainability of incomes. Moreover, taxes play a pivotal role on the commercial, social, and political levels in all countries through tax policies that aim to achieve various aims, such as increasing state incomes, achieving commercial stability, and enhancing growth

Digital auditing is considered an outcome of adopting the digital technology in the field of auditing. It significantly contributes to enhancing all activities by enhancing auditing quality and reducing costs using data analysis, data mining, and cloud computing. evasion. administrative corruption, and enhances tax incomes

Keywords : Digital Auditing; Tax Compliance

1.1 Problem Statement

Tax compliance is the most important factor in the general budget incomes of the state. They are implemented in developing public sectors, establishing infrastructures, creating budget supporting projects, and maintaining public good. Therefore, tax compliance reflects the level of incomes that fund the public good and provide positive results in carrying out projects for the citizens. In light of the digital development, the information and communication technology has become a decisive feature of many important issues. This change appears through adopting the digital practices that expand to all sectors, transactions, and state decisions all over compliance from accountants' perspectives**.** This question is further subdivided into the following sub questions:

1. What is the extent of digital auditing in all its dimensions that include data analysis, data mining, and cloud computing from accountants' perspectives?

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2. What is the extent of tax compliance from accountants' perspectives?
3. What is the effect of data mining on tax compliance from accountants and auditors' perspectives?
4. What is the effect of data analysis on tax compliance from accountants and auditors' perspectives?
5. What is the effect of cloud computing on tax compliance from accountants and auditors' perspectives?

1.1. The Objectives

The main objective of the present study is to reveal how digital auditing, with its various dimensions that include data analysis, data mining, and cloud computing can have an effect on enhancing tax compliance. This main objective can be further sub-divided into a set of sub-objectives, including:

1. Determining the level of digital auditing with its different dimensions of data analysis, data mining, and cloud computing.
2. Assessing the degree of tax compliance.
3. Demonstrating the role of data analysis in enhancing tax compliance.
4. Demonstrating how data mining could be applied to enhance tax compliance.
5. Revealing how cloud computing can enhance tax compliance.

1.2. The Significance

The significance of the present study is identified based on two central aspects. Scientifically, the focus is on the concept of digital auditing and its effects on tax compliance. The contribution of the significant improvements witnessed in information technology, therefore, facilitates an expedited audit process to increase the effectiveness of audits. In addition, the research calls for accountants to make use of such tools so as to reduce costs and improve the appropriateness of audit procedures. The second factor is that it provides findings and recommendations for tax professionals and every other stakeholder deemed relevant. These findings, based on analytical and statistical analysis, shall strive to enhance tax knowledge and improve the compliance level among taxpayers in general.

1.3. The Hypotheses

The main Hypothesis of the present study indicates that there is no statistically significant effect at the level of digital auditing and its dimensions that include data analysis, data mining, and cloud computing, on the enhancement of tax compliance. In this respect, the sub-hypotheses are as follows:

1. There is no statistically significant effect on enhancing tax compliance at the level of data analysis.
2. There is no statistically significant effect at the level of data mining on enhancing tax compliance.
3. There is no statistically significant effect at the level of cloud computing on enhancing tax compliance.

1.4. The Scope

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Spatially, the present study is limited to Iraqi accountants. Temporally, the present study is limited to 2024.

Section Two

The Theoretical Framework

2.1. Tax Compliance

2.1.1. The Concept of Tax

The concept of tax has evolved with the evolution of commercial, political, and social systems over time. In light of the huge global commercial crisis, the economist (John Minard Kinz) indicates that state interference in the commercial affairs is mandatory. Hence, tax has become of many aims in order to cover state expenses through compulsory deduction. In this regard, tax is defined as a sum of money that is imposed by law or local authorities on a compulsory basis without compensation in order to cover state expenses and achieve commercial and social goals (Abu Nassar and Hamidat, 2020). It is also defined as one important source of state incomes. It is imposed on taxpayers in a form of cash amount (Al-Hasnawi and Hanan, 2017(. Another definition of tax is that it is a sum of money imposed by state on taxpayers and partners in a common policy to provide services that are of a public nature. Financers have no other choices than paying taxes so that they can obtain the contract (Mukhtar, 2019). It is also defined as a financial obligation imposed by the tax authority on a compulsory basis on taxpayers without any specific compensation. It is transferred to the state budget according to objective and predetermined criteria and principles to achieve the state's commercial, social, and political goals in accordance with the state's philosophy and policy (Al-Kharsan, 2020). In light of the abovementioned definitions, the researcher concludes that tax compliance is one of the state's sources of public revenue, collected in cash by force from income and profits, regardless of personal benefits, and transferred as funds to be spent on developing the public sector, infrastructure, and public services for citizens.

2.1.2. Tax Importance and Objectives

Historically, taxes have played a pivotal and crucial role in the functioning of the state. Taxes represent the main source of finance for state activities and budgets and are part of the direction of the national economy. Their significance is enveloped in the realms of fiscal policy and the political and social philosophy of the state; they play a vital role in financing state services for the coming year according to the government budget. These services include expenditure on public administration, internal security, justice, education, health, and social affairs. An increase in the volume and cost of services calls for more taxes to be imposed in order to finance them. The prevailing goal of taxation is to provide the financial returns that the state treasury needed in order to yield sufficient returns to cover public expenditures. The objective of the tax system has changed with the development and change in the concept of the function of the modern state. The functions have enlarged to include social, economic, and political objectives. Nowadays, the tasks of taxes are to achieve economic and social balance, push towards development, redistribute income, and stimulate investment. These objectives are encapsulated below (Abu Nassar, 2020):

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Decreasing the income gap between members of the society.
Imposing taxes is considered to attain and encourage social solidarity by allowing exemptions for donations and aid given to charitable and religious associations.
Imposing taxes is actually believed to eliminate inflation or economic recession, attract capital from abroad, and encourage investment in financial markets through the exemption of capital gains and the abolition of tax on trading.
Furthermore, imposing high taxes results in the reduction of bad social phenomena.
Imposing taxes is also used as a tool to guide the economy with its direct effects on the society.

2.1.3. Tax Types

States impose various tax types. Tax types vary according to tax objectives as taxes vary in terms of importance and commercial and social effects. However, tax types can be classified into direct and indirect taxes. Each type can be further classified into sub-types as follows (Abu Nassar and Hamidat, 2020:)

First; Direct Taxes

A direct tax is a tax that is paid to the tax collection authority directly by the individual, police force, or institution. It cannot be transferred to another entity due to the existence of set laws governing and regulating it. It is generally based on the principle of ability to pay, an economic principle stating that persons with high incomes have a greater tax burden (Income Tax Department Website, 2024). They are taxes imposed directly on capital and assets. They are distinguished by the inability to transfer the burden to others. Examples include:

1. Income Taxes; They are taxes that are deducted from the income earned by a legal or natural person.
2. Capital Taxes; Taxes based on capital include fixed assets and securities like stocks and bonds.
3. Wealth Taxes; They are imposed on wealth or a portion thereof. They are characterized by their low value.
4. Exceptional Capital Taxes; They are imposed at a higher rate to address urgent financial needs.
5. Inheritance Taxes; They are imposed upon the death of the owner of the estate, whether on the total estate or on each heir's share.

Second; Indirect Taxes

They are taxes that are borne directly by the individual. They are characterized by their ease of collection and the possibility of shifting the burden to others. They include:

1. Taxes on Transactions and Consumption; They include taxes on consumption and spending.
2. Customs Duties; They are taxes imposed on goods passing through the country's borders, whether imported or exported.
3. Transaction Taxes; They are imposed on tangible assets at the time of their transfer, such as real estate, between individuals or institutions.

2.1.4. Defining Tax Compliance

Tax compliance can be defined as the readiness of taxpayers and other antities undergoing taxes

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to pay due taxes according to the laws in force. In this respect, taxpayers register in the system and duely provide information about due taxes. Taxpayers are commited to providing accuarate and complete information, including maintaining good records and duely paying due taxes.)Al-Zaqeba et al., 2018). As for tax-base, it is defined as the task of determining the base upon which statee taxes are imposed. Such taxes include the added value tax, corporate taxes, income tax, registration rights tax, stamp fee tax, employment tax, housing tax, and service taxes.

2.1.5 The Importance of Tax Compliance

Perhaps the most important reason why tax compliance matters to a taxpayer relates to the avoidance of penalties under the relevant requirements. A taxpayer can avoid the usual penalties associated with partial or complete failure to file or pay (Trifan et al., 2023). On the contrary, the revenue authorities are always working toward the ultimate level of compliance by the taxpayer to achieve their different goals. They do so by creating awareness about taxation, helping the taxpayers, issuing guidance manuals, and so forth. These authorities study and investigate the taxpayer's records based on risk profiling criteria and categorize the taxpayers in classes based on defined risk levels, which indicate their conduct and compliance level. They also put fines and penalties and criminalize certain acts that are done with an element of intent to evade tax (Cechovsky, 2018).

2.1.6. Objectives of Tax Compliance

Tax compliance involves various objectives as follows (Al-Samarrai, 2020):

1. Reducing Tax Gap; This is represented in enhancing factors influencing tax compliance by completely applying tax rules.
2. Enhancing Tresury Financial Abilities; This aspect enables the government to cover the required public expenditures.
3. Achieving Social Justice; The government tax programs are directed to maintain social justice.
4. Applying Tax Systems Requirements; This is done through activating and motivating factors enhancing tax compliance.
5. Expanding the tax base and increasing public revenues by including different types of income for natural and legal persons in the tax, in accordance with an economic philosophy adopted by the state.

2.1.7. Tax Compliance Parties

Parties of tax compliance are as follows (Abdulbaqi, 2020):

Tax Management; It is the relevant authority that carries out policies and administrative and legal procedures related to tax collection that include reviewing and assessing taxes, tightening tax controls, and maintaining tax fairness. This authority also follows up the application of the tax law to maintain its soundness and carry out its rules. It maintains the state's as well as tax[payers' rights and proposes tax amendments and legislations that help the state achieve its commercial, political, and social goals.

Taxpayer; It is the second party in the tax relationship. The taxpayer undertakes the tax law obligations and pays taxes accordingly. The taxpayer is determined based on the obligation imposed by the tax law on the addressees. Therefore, any person committed to paying tax is a taxpayer.

Section Three

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Digital Auditing

3.1. The Concept of Digital Auditing

Digital auditing is defined as the procedure of collecting and evaluating data to determine to what extent the utilization of an electronic computer system contributes to attaining the necessary objectives and predefined administrative goals, such as protecting the organization's assets, achieving its goals effectively, and using its resources efficiently and effectively (Sanusi et al., 2022). Digital auditing is also defined as the procedure of using audit systems through information technology, which contributes to completing the audit process efficiently, effectively, and as quickly as possible, and to expressing an opinion on the fairness of financial statements (Mubarak et al., 2019). The researcher has previously defined it as a set of procedures applied digitally in conducting a comprehensive review of the organization's assets, its performance in achieving business and revenue goals, identifying areas of excellence, and pinpointing gaps, quick wins, and areas that require improvement in its operational performance strategy.

3.1.2. Objectives of Digital Auditing

The scope of a digital auditing is to audit and check internal controls protecting the system. As such, in performing the auditing process, the auditor has to check that the desired conditions and securities exist in putting the computer system, software, communications, and data from unauthorized access, alteration, or corruption. This will include ensuring that software is developed and purchased only upon management authorization, that software modification is carried out only upon its approval by management, that original data are processed in accordance with approved management policies, and lastly, that the computer data files are accurate, complete, and reliable (Abbas, 2023). In modern digital audits, organizational goals should be effectively achieved with the efficient utilization of resources. These include information systems, business solutions, system development, and business continuity. Thus, in reviewing the controls of IT, the digital audit identifies gaps in business processes, internal controls, and the accounting system to improve them accordingly. It has also been identified that information technology has shifted the working culture towards success and excellence . Thus, for competition in the modern era, it is considered as the prime factor.

3.1.3. Importance of Digital Auditing

Digital auditing is important for organizations willing to optimize their digital opportunity and the effectiveness of their digital marketing initiatives. It gives a health check of the digital ecosystem, instills confidence and a baseline for strategic growth, and incorporates areas for improvement on technical issues, audience profiling, search engine optimization, digital advertising, and social media. Besides, digital auditing ensures data collection methodologies are consistent and accurate. Thus, companies are confident in making informed decisions based on valid data insights (Al-Samarrai, 2020). Digital auditing makes it possible to focus audits on areas to guarantee everything works without review. The weaknesses, shortcomings, and problems would go unnoticed and eventually worsen with time. Digital auditing also helps organizations be ahead of the game pertaining to industry trends and best practices, as well as

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enabling all the benefits associated with the digital environment (Arlin, 2020).

3.1.4. Approaches to Digital Auditing

Three approaches to digital auditing are listed (Khalid, 2017):

1. Computer-Access Auditing; This approach involves verifying inputs and outputs without concern for how data has been processed by the computer, relying on the efficiency of operational control systems. It is a low-cost method and does not require profound knowledge of computers. However, it becomes more effective when organizations increasingly use more sophisticated processing systems, increasing the potential for manipulation and fraud, making it hard to detect.

2. Computer-Instrumental Auditing; This approach involves examining the data processing within the computer in addition to the inputs and outputs. The auditor verifies the accuracy of data input and processing by the client, and the accuracy of the outputs.

3. Computer-Aided Auditing; The auditor uses auxiliary software, which requires computer skills and experience. Methods include:

Balanced Simulation Approach; The auditor processes samples of the organization's data using software similar to that used by the client, then compares the results with the client's. The selected samples should be representative of the company's data.

Test Data; This is done to ensure that the client's software works fine. In this, dummy data is prepared and then input into the client's system for the verification of its correct processing.

Auditing Software; It is designed to support the auditor's work. It is divided into specialized software serving specific audit tasks linked to clients' systems, and general auditing software that is used to support an auditor in several applications with multiple different clients.

3.1.5. Stages of Digital Auditing

The electronic auditing process can be performed in the following stages (Sanusi et al., 2022):

1. Organizational Auditing Stage; This is the first stage of auditing of the system. It depends on the identification of the elements of this system; it includes equipment, documents, personnel, procedures, instructions, functions, and reports.

2. Applied Auditing Stage; It is the stage that follows the organizational auditing stage. The steps of developing the accounting information system are reviewed to ascertain whether the system has achieved its aims and requirements in all its technical, economic, operational, and legal aspects. Moreover, it ensures whether the transition from the old to the new system has been smoothly executed without compromising the existing one.

3. Detailed Auditing Stage; The significance of this stage is in the auditing of accounting software that processes transaction data within an accounting information system. This is done through the verification of integrity and accuracy for inputs and their processing being subjected to effective and independent control.

3.1.6. Dimensions of Digital Auditing

These three digital auditing dimensions are represented in the study model: data analysis, data mining, and cloud computing.

First; Data Analysis

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It is an important process in digital auditing, which includes the use of modern digital methods and techniques in order to examine and process large quantities. This type of analysis aims to reveal the necessary information that helps in understanding activities and functions, allowing the prediction of future events based on this information. Data analysis also includes processing metadata in order to discover patterns, unknown correlations, and important information that cannot be analyzed by traditional auditing tools. The types of data analysis are as follows:

Descriptive Analysis; This is an analysis of data based on the past to understand future data. It relies on metadata from previous years to reach conclusions about current and future business operations. It normally serves to determine the level of application of digital auditing in the future.

Diagnostic Analysis; It is a diagnostic process in which the analysis of the diagnostic data is done to understand why something, either positive or negative, happened for comprehending how that happened. The causes and factors surrounding it would be pinpointed, and their prevention or repetition of the process can be done by the digital auditing specialist to attain the situation or state regarding tax compliance (Shalabi, 2022).

Predictive Analysis; Predictive data analytics seeks to look at the future of digital auditing using metadata. Digital auditing allows the use of Statistics and past figures can be used to predict what will happen in the next quarter or year. Predictive analytics models can be used for everything from market trends to current profits by looking ahead. Government agencies and institutions can also assess potential risks in the supply chain before problems arise (Obaid, 2023).

Second; Data Mining

The concept of data mining in digital auditing includes a set of modern digital techniques which permit finding large inputs of integrated data for discovering unexpected information or patterns. Data mining is an analytical process connected with artificial intelligence as well as statistics techniques. It aims to find logical relationships that summarize data in a modern and useful way for auditing firms (Al-Shatnawi, 2019). Data mining is an essential element in any effective analytics program that an organization or institution implements. The process of knowledge gathering has a range of applications, including the building of customer confidence, discovering new streams of revenue and retaining customers who return more often. Efficient data mining also supports various business planning and operations management areas (Vanani and Majidian ,2019).

Third; Cloud Computing

Cloud computing is a modern technology in which information can be disseminated across the internet through an advanced technology. It helps users access their data and services anytime, anywhere. It uses the internet to provide services that are stored in a digital cloud and makes them easily accessible, scalable, and measurable (Shalabi, 2022). Cloud computing and associated solutions provide a website through which taxpayers can calculate their tax obligations using the development tools, business applications, and computing services. Data storage and networking solutions are hosted in the data center of the software provider and are

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managed by the cloud provider or on-premises in the client's data center (Karima, 2021). Modern cloud computing solutions help organizations, institutions, government agencies, and public entities fulfill demands in the digital age. Solutions also help organizations respond in a timely manner to the challenging and rapidly changing business landscape instead of managing their own IT infrastructure (Abbas, 2023).

The Relationship Between Digital Auditing and Tax Compliance

Many previous studies indicated that digital auditing is important in facilitating procedures (Shalabi, 2022; Obaid, 2023). This contributes to the ease of following up the adopted processes. Hence, it is positively reflected on the level of tax compliance (Sanusi et al., 2022). Studies reveal that digital auditing enhances the quality and effectiveness of the auditing process. It also contributes to fulfilling tasks with less efforts, costs, and time. This leads to increasing the quality of auditing services and reducing potential risks in the auditing process. On the other hand, the quality of the auditing profession depends on the auditor autonomy in reporting mistakes and frod. It also depends on the auditor's autonomy in undertaking the professional criteria and profession attitude rules, which contributes to maintaining the interests of all users of the financial statements (Yakhluf and Turshi, 2020). The study also confirms that applying digital auditing may be more accurate, which is reflected positively on tax compliance.

Section Four

The Applied Part

First; Diagnosis of the Study Sample

In the framework of the applied study, the researcher depended on a questionnaire. The questionnaire began with an introduction that explained its purpose to the participants. This was followed by a section for personal data, which then preceded the items of the questionnaire. The latter consisted of a number of detailed questions directed at the participants, i.e., the individuals targeted by the research. The researcher used the five-point Likert scale to measure the responses to the questionnaire items (1 means strongly agree, 2 means agree, 3 means neutral, 4 means disagree, and 5 means strongly disagree).

First; The measurement of the reliability of the questionnaire via Cronbach's alpha

Table (1) Cronbach's Alpha Coefficient at the overall level of variables

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Paragraphs	Variable
0.901	0.895	31	**Specific questions**

It can be seen that all values of Cronbach's alpha are greater than 0.6 (60%) at the overall level for the problem and hypotheses-related questions. This suggests that at the overall level, the results for the questionnaire are statistically acceptable and reliable.

Second; Characterization of the Research Sample- Academic Qualification

Table (2) Distribution of the Study Sample According to Academic Qualification

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Standard Deviation	Mean	Percentage %	Frequency	Academic Qualification
0.9	2.5	15.0	9	**Diploma**
		31.7	19	**Bachelor**
		36.7	22	**Master**
		16.7	10	**Ph.D**
		100	**60**	**Total**

The majority of the study sample (36.7%) hold an MA degree, 31.7% hold a bachelor degree, 16.7% hold a Ph.D, and the remaining 15.0% (9 individuals) hold a diploma. This represents the total sample of 60 accountants in Iraq.

Years of Experience

Table (3) Distribution of the Study Sample According to Years of Experience

Standard Deviation	Mean	Percentage %	Frequency	Years of Experience
1.0	2.8	13.3	8	**Less than 5 years**
		21.7	13	**5-10 years**
		31.7	19	**11-15 years**
		33.3	20	**More than 15 years**
		100	**60**	**Total**

The majority of the study sample have more than 15 years of experience, with 33.3%. 31.7% have 11-15 years of experience. 21.7% have experience between 5 and 10 years. The remaining 13.3% have less than five years of experience.

Second; Examining the Influence of Digital Auditing on Enhancing Tax Compliance

First; Distribution of Responses on Specific Questions

Table (5) Distribution of Participants' Responses on Specific Questions

	Question Trend	Never Agree	Disagree	Neutral	Agree	Strongly Agree	Paragraph or Question
	Independent Variable- First; Digital Auditing Data Analysis						
	Agree	7.1	13.8	18.9	24.1	36.1	Digital auditing helps explore and analyze data quickly and accurately.
	Agree	5.5	13.8	20.3	26.5	34.2	Digital auditing

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							contributes to processing massive amounts of data for forecasting and predicting the future of many decisions.
	Agree	3.6	11.9	21.2	27.4	35.9	Digital auditing can reveal information necessary to understand activities and functions and predict what will happen.
	Agree	6.1	12.2	20.7	26.3	34.7	Digital auditing helps analyze data to make economic decisions and avoid any risks or problems that may negatively affect its business.
	Agree	5.7	13.3	19.7	25.8	35.5	Auditing provides data analysis and relevant information that helps rationalize internal decisions.
	Agree	3.2	12.8	20.7	26.1	37.2	Digital auditing offers the ability to generate big data at a faster rate than traditional data.
	Agree	7.4	11.9	18.7	25.4	36.6	The data analysis process helps to ensure the accuracy and reliability of the data.

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	Agree	5.8	12.0	20.2	26.4	35.6	Digital auditing facilitates the electronic monitoring of financial data.

Second; Data Mining

Agree	7.0	11.9	21.3	24.4	35.7	The auditor determines the aim of data mining to identify current and potential clients' requirements
Agree	7.1	12.1	21.9	25.0	33.9	Data are prepared appropriately for mining
Agree	7.0	13.0	20.2	24.9	34.9	Data mining is among the processes that are adopted to solve problems facing digital auditing
Agree	8.5	11.9	20.1	24.3	35.2	Data mining is a modern technological tool that helps solve problems, analyze, plan, control, innovate, and diagnose.
Agree	5.1	12.1	21.2	25.3	36.3	The application of data mining is compatible with the efficiency of digital operating systems and their ability to absorb modern technologies.
Agree	3.4	12.5	20.8	26.1	37.2	Data mining users need high levels of experience and competence.
Agree	6.1	13.1	19.8	23.6	37.4	Data mining processes provide the correct and appropriate outputs for decision-making within a record time.
Third; Cloud Computing						
Agree	8.0	12.2	19.0	24.9	35.9	Cloud computing provides

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						the necessary information that the auditor needs during the auditing process for digital transactions.
Agree	5.9	11.8	20.6	25.6	36.1	Cloud computing helps auditors obtain the information they need quickly and at any time.
Agree	3.3	12.2	21.2	26.2	37.1	Cloud computing helps streamline the auditing process and achieve its objectives.
Agree	8.1	12.3	16.9	26.0	36.7	Cloud computing helps the auditor obtain the necessary digital documents and files for the auditing process, which are stored digitally.
Agree	7.0	10.1	17.8	27.1	38.0	Cloud computing requires the auditor to have high levels of expertise.
Agree	6.9	9.3	18.0	28.3	37.5	The auditor is committed to ensuring the security and protection requirements for data processed and stored in cloud computing.
Dependent Variable- Tax Compliance						
Agree	7.3	11.1	18.4	25.6	37.6	The taxpayer is obligated to pay taxes as the government spends tax revenue wisely.
Agree	7.2	10.6	17.8	26.3	38.1	Bad behaviors by tax auditors, such as corruption and fraud, encourage non-compliance with taxes.
Agree	7.2	11.3	18.0	25.8	37.7	Tax compliance stems from the taxpayer's conviction that there is a group benefiting from public spending.
Agree	7.2	11.3	18.5	25.5	37.5	The taxpayer is obligated to

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						pay the tax dues as they do not constitute a significant financial burden on them.
Agree	6.9	10.9	17.6	26.3	38.3	The taxpayer's monthly income level being commensurate with the tax due encourages them to comply with tax regulations.
Agree	8.1	11.1	18.2	25.8	36.8	The tax department enables taxpayers to know their full tax obligations, which encourages tax compliance.
Agree	3.6	12.1	20.1	26.6	37.6	The taxpayer pays the taxes due because of feeling that they are being imposed on them fairly.
Agree	4.5	12.2	18.7	27.8	36.8	The payment of taxes by other taxpayers encourages tax compliance.
Agree	4.9	11.4	18.6	27.5	37.6	Taxpayers do not evade taxes to avoid feeling disrespected by those who comply with the law.
Agree	2.4	12.0	19.3	28.1	38.2	Providing sufficient information from the tax department contributes to paying taxes without delay.

The above table shows that all the questions related to the study hypotheses tend toward agreement. Respondents concentrated their answers on the strongly agree and agree options, while responses to the other options were few.

Third; Testing the Study Hypotheses

Testing the First Hypothesis

There is no statistically significant effect at the (0.05) level of data analysis on enhancing tax compliance.

As a result of analyzing the eight questions from the first part of the questionnaire (First: Data Analysis), along with the last ten questions of the questionnaire (dependent variable: tax obligations), the results are as follows:

Table (6) Simple Linear Regression Test- First Hypothesis

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ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	51.285	1	51.285	52.871	.000[a]
	Residual	56.263	58	.970		
	Total	107.548	59			

The above table shows the results of the simple linear regression test for the first hypothesis, obtained using the SPSS. The statistical significance level (Sig = 0.000) for this first hypothesis is less than the significance level (α = 0.05). Furthermore, the tabular F-value is 52.87, which is statistically acceptable. Therefore, the positive hypothesis is confirmed, and the negative hypothesis is rejected. Accordingly, there is a statistically significant effect at the (0.05) level of data mining on enhancing tax compliance.

Testing the Second Hypothesis

There is no statistically significant effect at the (0.05) level of data mining on enhancing tax compliance.

The analysis of the seven questions from the first part of the questionnaire (Second: Data Mining), along with the last ten questions (dependent variable: tax compliance), yield the following results.

Table (7) Simple Linear Regression Test- The Second Hypothesis

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	54.632	1	54.632	67.697	.000[a]
	Residual	46.862	58	.807		
	Total	101.494	59			

The above table shows the results of the simple linear regression test for the second hypothesis, extracted from the SPSS. Regarding the first hypothesis of the study, the statistical function value (Sig = 0.000) is less than the significance level (α = 0.05). Furthermore, the tabular F-value is 67.697, which is statistically acceptable. Therefore, the positive hypothesis is confirmed, and the negative hypothesis is rejected. Accordingly, there is a statistically significant effect at the (0.05) level for data mining in enhancing tax compliance.

Testing the third hypothesis

There is no statistically significant effect at the (0.05) level for cloud computing in enhancing tax compliance.

As a result of analyzing the six questions from the first part of the questionnaire (Third: Cloud Computing) with the last ten questions of the questionnaire (dependent variable: tax

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compliance), the results are as follows:

Table (8) Simple Linear Regression Test- Third Hypothesis

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	53.542	1	53.542	66.74	.000[a]
	Residual	46.529	58	.802		
	Total	100.07	59			

The above table presents the result of the simple linear regression test of the third hypothesis, extracted from the SPSS. In regard to the first hypothesis of the study, the statistical function value (Sig = 0.000) is less than the significant level (α= 0.05). Besides, the tabular F-value is 66.74, which is statistically acceptable. As a result, the positive hypothesis is confirmed and the negative hypothesis is rejected. Consequently:

There is a statistically significant effect at the level of 0.05 concerning cloud computing effect on improving tax compliance.

Conclusion

In light of the confirmation of the three sub-hypotheses, each representing a dimension of digital auditing, the general conclusion is as follows:

Digital auditing, with its three dimensions, including data analysis, data mining, and cloud computing, leads to an increase in tax compliance.

The Results

There is a statistically significant effect of data analysis on increasing tax compliance, $p < 0.05$.

There is a statistically significant effect of data mining in improving tax compliance, $p < 0.05$.

There is a statistically significant effect of cloud computing on improving tax compliance, $p < 0.05$.

There is an effect of digital auditing-with its three dimensions of data analysis, data mining, and cloud computing-on the improvement of tax compliance.

Recommendations

The following recommendations could be made based on the identification of weaknesses within the theoretical and practical elements of the research:

1. Auditors should be aware of the importance of digital auditing techniques in offering technical auditing services, and their role in attaining quality within the IT environment.
2. It is highly necessary to improve the professional performance of auditors in the field of digital auditing, planning, gathering evidence, and preparing reports through specialized training courses.
3. Auditors should register in training courses that specialize in information technology and its uses in auditing.

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4. Accounting systems should be integrated with government tax platforms by encouraging or demanding that companies use accounting software that functions in accordance with an electronic tax system so as to transfer financial data smoothly and transparently.
5. Digital auditing legislation should be enhanced and the tax laws should be updated to include reliance on electronic evidence, criminalize digital manipulation, and provide clear criteria to accept digital outputs in tax auditing proceedings. Tax awareness for taxpayers should be enhanced and campaigns on the benefits of compliance with taxes and utilizing digital mechanisms should be conducted, outlining the legal risk of manipulation or concealment under digital scrutiny.

References

1- Abbas, K. (2023). The Influence of Digital Transformation on Activating the Role of Internal Auditing to Achieve Sustainable Development Goals: A Field Study: Scientific Journal of Commercial Research and Studies, 37 (2) 1565-1627.
2- Abdulbaqi, H. (2022). The Influence of Digital Transformation on Tax Compliance in Light of the Global Coronavirus Crisis: A Field Study. The Sixth Scientific Conference of the Faculty of Commerce, Special Issue (1), 110-197.
3- Abu Nassar, M. and Hamidat, J. (2020). International Accounting and Financial Reporting Standards, 1st Edition, Dar Wael Publishing, Amman, Jordan.
4- Al-Hasnawi, H. (2017). Legal Mechanisms for the Compulsory Collection of Taxes under the Law of Collection Procedures (An Unpublished MA Thesis), Ziane Achour University, Algeria.
5- Al-Kharsan, M. (2020). Applications of Tax Accounting under the Legislation in Force in Iraq, Al-Ghadir Printing and Publishing Company Limited, Basra, Iraq.
6- Al-Mashhadani, T. Ismail, D. Al-Ali, M. Yaqoub, M. and Faris, G. (2023). The Role of Digital Transformation Technologies in Activating Continuous Auditing: A Field Study of the Opinions of a Sample of Academics and Auditors in the Public Sector in Iraq. Anbar University Journal of Economic Sciences, 15(2), 330-355.
7- Al-Samarrai, A. (2020). The Role of Artificial Intelligence Technologies Using Digital Auditing in Achieving Auditing Quality and Supporting Strategy from the Perspective of Auditors: A Field Study in Auditing Firms in the Kingdom of Bahrain. International Journal of Economics and Business, 8(1), 31-51.
8- Al-Sayyid, M. Al-Naghi, H. and Kamal, A. (2023). The Influence of Tax Auditing Performance Levels on Auditing Quality under Governance: A Field Study, Egyptian Journal of Commercial Studies 47 (3), 1-31.
9- Al-Zaqeba, M. and Hamid, M. (2018). Tax Compliance of Individual Taxpayers: A Systematic Literature Review, International Journal of Management and Applied Science, 4(6), 1-11.
10- Arab, F. and Mostefaoui, S. (2023). The Effect of Digitizing the Tax Administration on Both the Tax Collection Process and Taxpayers' Commitment: Empirical Evidence from the Tax Administration in Bechar-Algeria. Al Bashaer Economic Journal, 9(1).

University of Thi-Qar Journal

ISSN (print): 2706- 6908, ISSN (online): 2706-6894

Vol.21 No.1 Mar 2026

11- Cechovsky, N. (2018). The Importance of Tax Knowledge for Tax Compliance: A Study on the Literacy of Vocational Business Students, Vocational Education and Training Network, 10-16.
12- Ibrahim, A. (2019). Tax Evasion and Means of Combating It, Journal of Sharia and Legal Sciences (1), pp. 152-172.
13- Karima, D. (2021). The Influence of Cloud Computing on the Quality of Accounting Information and its Reflection on International Financial Reporting Standards, Journal of Accounting Thought 25 (1) 360-408.
14- Mubarak, M. Haikh, F. and Mubarak, M. (2019). The Influence of Digital Transformation on Business Performance: A Study of Pakistani SME, Engineering, Technology, and Applied Science Research, Vol. 9, No. 6, 5056-5061 5056.
15- Mukhtar, A. (2019). Tax Accounting: Theory and Application, University of Shendi, Sudan.
16- Nassir, A. (2018). The Role of Taxes in Enhancing Public Budget Revenues in Iraq, Journal of the Faculty of Administration and Economics for Economic, Administrative, and Financial Studies, University of Babylon, Vol. 10, Issue 3.
17- Obaid, A. (2023). The Influence of Electronic Auditing Procedures on the Quality of Reports in Jordanian Commercial Banks under Corporate Governance, An Unpublished MA Thesis, Al al-Bayt University, Mafraq, Jordan.
18- Raouf, S. and Al-Shafi'i, A. (2021). The Reality of the Tax System in Iraq and the Possibility of Development: Journal of the Faculty of Administration and Economics, Al-Mustansiriya University, Issue 127.