



The Role Of Accounting Information Systems In Improving The Tax Accounting Process

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Abstract: The research aims to demonstrate the role of accounting information systems (AIS) in improving the tax assessment process, as well as to clarify the extent of their impact on this process. Sixty survey forms were distributed to study the opinions of the staff of the General Tax Authority and were statistically analyzed to test research theories. The researcher touched several deductions, the most significant being that the use of AIS by the tax administration will enhance trust between the parties involved in the tax assessment process, namely the taxpayer and the tax administration. Additionally, the relevance of accounting information helps increase the effectiveness, efficiency and diligence of assessors in ensuring the accuracy of the tax assessment process.

Keywords: Accounting Information Systems (AIS), Tax Accounting (TA).

Introduction

Taxes are considered the main pillar of the state's public revenues, as governments rely on them to finance public expenditure and achieve economic and social objectives (Challoumis, 2024). However, the tax system in Iraq faces challenges, the most prominent of which is the lack of trust between taxpayers and the tax administration, complicating tax accounting procedures and negatively affecting public budget revenues and development financing (Fatih, 2025). Tax accounting also plays a central role in the tax system, and this process continues to provoke debate in the Iraqi environment due to the dissatisfaction felt by taxpayers because of the ambiguity of procedures, which necessitates the development of the tax accounting process by improving accounting information systems to achieve taxable profit and increase trust among different parties in accordance with tax legislation (Idan & Ibrahim, 2024).

Tax accounting occupies a crucial role within the tax system, and its neglect or poor performance leads to serious consequences, manifested in distorting tax policy and wasting the intellectual principles and rules upon which tax thought is based (Kontkanen & Lindgren, 2022). The success of tax administration in implementing tax policy, which is translated into binding legislative provisions, is achieved through its management of the tax accounting system (Al-Kaabi & Al-Amiri, 2016). Tax accounting fundamentally relies on data and information in addition to accounting systems. Data is not only required from

taxpayers but must be available regularly and accurately through all state agencies, allowing the tax authority to control economic activity using the information (Nyombi et al., 2024).

Based on the above, the importance of the research can be highlighted in shedding light on the extent to which accountants use accounting information systems to improve the tax accounting process. The researcher recommended that making accounting information error-free increases the taxpayer's confidence in the tax accounting process, which fosters a sense of security. It is also necessary to pay attention to the relevance of accounting information as it facilitates the completion of the tax accounting process. Accordingly, the research consists of four parts: the first part deals with the research methodology, the second part addresses the theoretical aspect, the third part focuses on the practical aspect, and the fourth part presents the conclusions and recommendations.

Research Methodology

Research Problem:

The research difficult was signified by the following question: Do AIS play a role in improving the TA process?

The Objective of research:

The research has several objectives, the most important of which are:

- a. To classify the nature of both AIS and TA.
- b. To demonstrate the improvement of the TA process through the use of AIS.
- c. To clarify the extent of the impact of AIS on the TA process.

The importance of research:

The significance of the research is reflected in highlighting the degree to which the assessor uses AIS to improve the TA process.

Research Hypothesis:

The education is founded on the following hypotheses:

- a. There is a statistically important association between AIS and the improvement of the TA process.
- b. There is a statistically significant effect of AIS on the TA process.

Data Collection Methods:

The data group procedure is alienated into two shares:

- a. The theoretic feature of the investigation: Arab and foreign sources were relied upon, counting books, propositions, theses, and the Internet.
- b. The applied aspect of the research: Examination of the survey form related to the tax administration.

Theoretical Aspect

Accounting Information Systems

The Concept of AIS

AIS are a set of values and methods through which data and information within an organisation can be collected in a way that enables the achievement of managerial objectives. Through this scheme, economic transactions logged in leaflets, whether interior or outside, are financed in the form of values, then entered into records and internal statements according to exact rules and values, with the aim of procurement information in the form of accounting intelligences over consecutive eras for use in various purposes such as planning, control and decision-making (Helmy et al., 2020:20). AIS are also defined as an important factor that helps an economic unit achieve its various strategies. These systems specialise in collecting, classifying, processing, analysing and delivering appropriate information to all heights at appropriate time in a manner that meets supplies of contemporary business environment (Delalja & Hesham, 2021:127).

Characteristics of AIS

Several researchers have proposed several characteristics of AIS (Al-Asiri and Obaid, 2024:27).

These characteristics are clarity (how easy it is to understand what to do to make the system work); ease of use (how easily operations can be applied and executed); accuracy (how free the system is from technical error inhibiting the correct execution of operations); speed (how quickly the system can provide information to beneficiaries and be useful in decision-making); flexibility (how easily the system can be modified to fit the needs and working conditions of the establishment); and suitability (how suitable the information that can be got from the scheme is to the main objective of the scheme). In addition to the ability to provide senior management with information that achieves control and evaluation of the company's economic activities, and the ability to provide senior management with information that helps them in the process of short, medium, and long-term planning, to achieve the company's strategic goals, AIS also must have the flexibility to update it to keep up with changes to the business environment if it is necessary to update it to keep up with changes to the business environment.

Objectives of Accounting Information Systems

There are numerous objects for an accounting information system, the most important of which are: (Boufarouh, 2022: 37).

- a. Data operation, which includes the following:
 - Recording operations according to appropriate documents.
 - Recording operations by specialized individuals.
 - Recording operations at specific periodic times.
 - Attach justification documents at appropriate times to facilitate the review process.

- b. Communicating information, which includes the following:
 - Communicating information to absorbed gatherings.
 - Communicating information in a timely way.
- c. Achieving trust in data, which includes the following:
 - Confirm that all dealings have been logged.
 - Confirm that dealings are logged at periodic intervals.
 - Deportation at periodic intervals.
 - Verify the accuracy of the balances.
- d. Achieving protection for assets, which includes the following:
 - Achieving accounting for assets at opinions of transmission and possession.
 - Separating the errands of books and asset possession.

Functions of AIS

There are two main functions of AIS: (Ismail and Heba, 2024: 55).

- a. Protecting the economic resources owned by the institution.
- b. Improving the level of efficiency with which the organization's business is managed.

Tax Accounting

The Concept of Tax Accounting

TA is the technical organization of the tax that deals with how the taxable item is established and the tax is linked and collected as a result of this establishment except for the provision of regular documents and books. The meaning of accounting in the language is the withholding of money or the tax equipment is the settlement of the account between taxes and taxpayers (Hijazi, 2013), and it is one of the components of the tax system that specializes in implementing the provisions of tax legislation. (AL-khurasan, 2020: 59)

The Importance of Tax Accounting

The rank of TA stems from the fact that it obliges the administration to have optimal independence of the available resources in an efficient manner and also forces it to conduct an analysis of the deviations resulting from the implementation of the plan, if any, and to identify the reasons that led to the failure to achieve the plan's objectives and work to address them quickly and efficiently. TA also enables public joint-stock companies in general and companies listed on the financial market in specific From working to direct its investments in areas that achieve tax savings. It is also important that it works to achieve the goals set by the state regarding encouraging investment and achieving economic development (Mansour & Elias, 2020, 186).

Objectives of Tax Accounting

There are several objectives of TA, the most important of which is (Hassan, 2018: 62-63).

- a. Following accepted accounting standards and principles.
- b. Following tax legislation and its implementing regulations.

- c. Follow the instructions of the General Tax Authority.

Elements of Tax Accounting

The basic elements of the TA system can be summarized as follows: (Idan&Ibrahim, 2024:266)

- a. **Legislative rules:** Most international laws have given special importance to taxes and surrounded them with special protection that regulates them. The constitutional principle has continued in developed countries that taxes can only be imposed by virtue of a law approved by the representatives of the people, and that the constitutional development of countries has led to a constitutional rule known as the legal tax rule. The basis of this rule is that the imposition, determination, cancellation and exemption of taxes can only be achieved by law. The legal provisions do not include the limits of the tax structure and the technical organization of the tax, but rather include everything related to the general rules for tax investigation and collection procedures and methods of appealing tax administration procedures, meaning that the legislative provisions that deal with TA procedures are what control the functions, activities and procedures performed by the TA system.
- b. **Tax Administration:** The Tax Administration is primarily responsible for the TA process. It is directly concerned with implementing the legal provisions referred to above. Within its scope, data and information related to taxpayers and their sources of income are processed and stored for the purpose of estimating and imposing the tax. It is also concerned with regulating the relationship between the tax authority and taxpayers. This is done through arbitrators who are the link between the Tax Administration and taxpayers.
- c. **Tax judiciary:** It refers to the competent judicial authority entrusted with deciding on disputes that arise between the taxpayer and the tax authority. In Iraq, a court is established on matters related to (estimating, imposing and collecting tax) in accordance with the principles of litigation principles.
- d. **Taxpayers:** Taxpayers are one of the elements of the TA process and they represent the persons who pay the tax, whether these persons are (natural, legal) and this is in accordance with the tax law. In other words, they are the persons specified by the law and obligated to pay the tax due on them. In other words, the dynamic element in the TA process that should be given the utmost importance is the taxpayers.

The practical aspect

Research population and sample:

Study population: General Tax Expert.

Study sample: Employees of the General Tax Expert represented by the following: director, assistant director, division official, guesser, and auditor.

Data collection:

A set of forms, amounting to (70) questionnaire forms, were distributed to employees of the General Tax Authority, and (60) questionnaire forms were received, valid for analysis at a rate of (86%).

Percentages of the academic qualification variable.

After analyzing the forms, a difference was obtained in the distribution of the scientific qualification variable among the sample members, and the result was shown in Table (1):

Table 1. Percentages of the academic qualification variable.

Academic Qualification	NO.	%
PhD	12	%20
Master's	16	%27
Bachelor's	14	%23
Other	18	%30
Total	60	%100

Percentages of the job title variable.

After analyzing the forms, a difference was obtained in the distribution of the job title variable among the sample members, and the result was shown in Table (2):

Table 2. Percentages of the job title variable

Job Title	NO.	%
Department Manager	7	%12
Department Assistant	9	%15
Division Head	11	%18
Assessor	18	%30
Auditor	15	%25
Total	60	%100

Percentages of the scientific specialization variable.

After analyzing the forms, a difference was obtained in the distribution of the sample members for the scientific specialization variable, and the result was shown in Table 3.

Table 3. Percentages of the scientific specialization variable

Academic Specialization	NO.	%
Accounting	19	%32
Business Administration	14	%23
Economics	6	%10
Finance and Banking	9	%15
Other	12	%20
Total	60	%100

Frequencies and percentages: -

Table 4. Repetitions and percentages

NO.		scale	completely agree	agree	am neutral	Disagree	completely disagree	mean	standard deviation (S.D)
S.D1	Keeping pace with development through the use of AIS instills confidence in the information held by both taxpayers and assessors.	F	21	34	4	1	-	4.25	0.654
		%	%35	%56	%7	%2	-		
2	Having a database based on AIS serves as the primary reference for the TA process.	F	10	41	7	2	-	3.93	0.651
		%	%17	%68	%12	%3	-		
3	AIS provide flexibility in delivering information to users in an easy and simplified manner.	F	12	40	6	2	-	4.03	0.663
		%	%20	%67	%10	%3			
4	AIS provide indicators of compliance and adherence to TA procedures.	F	22	17	12	7	2	3.83	1.152
		%	%37	%28	%20	%12	%3		
5	The use of AIS by tax assessors increases the accuracy and integrity of TA.	F	15	26	10	7	2	3.75	1.068
		%	%25	%43	%17	%12	%3		
6	The use of AIS leads to the preservation of taxpayers' TA records.	F	23	25	8	3	1	4.10	0.933
		%	%38	%42	%13	%5	%2		
7	TA procedures are characterized by speed through	F	13	32	9	3	3	3.82	1.00
		%	%22	%53	%15	%5	%5		

	reliance on AIS.								
8	The tax authority is keen to establish training programs for assessors to develop their technological capabilities in information, including the TA process.	F	17	23	9	9	2	3.73	1.133
		%	%29	%38	%15	%15	%3		
9	The TA process reduces effort and costs through the use of AIS.	F	13	29	10	7	1	3.77	0.981
		%	%22	%47	%17	%12	%2		
10	The tax authority gains a firm conviction in reducing administrative and financial corruption through the use of AIS.	F	11	26	14	3	6	3.55	1.156
		%	%19	%43	%23	%5	%10		
Total								3.873	0.939

Result and Discussion

Ten queries were ready, and Table (4) demonstrations the values of the mean, S.D, frequency, and fractions. The survey items are clarified below:

1. Respondents to item (1) agree, with a percentage ranging from agreement to strong agreement, at a rate of (91%), with the statement: "Keeping pace with development through the use of AIS makes the taxpayer and the assessor feel confident in the information." This is confirmed by the mean, which amounted to (4.25), and a S.D of (0.654).85% of respondents to item
2. agree or strongly agree that "Having a database based on AIS serves as the primary reference for the TA process." This is supported by the mean score of 3.93 and a S.D of 0.651.

3. 87% of respondents to item (3) agree or strongly agree that "AIS provide flexibility in delivering information to the user in an easy and simplified manner." This is supported by the mean score of 4.03 and a S.D of 0.663.
4. 65% of respondents to item (4) agreed or strongly agreed that "AIS provide indicators of compliance and adherence to TA procedures." This is supported by the mean of 3.83 and a S.D of 1.152.
5. 68% of respondents to item (5) agreed or strongly agreed that "The use of AIS by tax assessors increases the accuracy and integrity of TA." This is supported by the mean of 3.75 and a S.D of 1.068.
6. 80% of respondents to item (6) agree or strongly agree with the statement: "The use of AIS leads to the preservation of taxpayers' TA processes." This is confirmed by the mean of 4.10 and a S.D of 0.933.
7. 75% of respondents to item (7) agree or strongly agree with the statement: "TA procedures are characterized by speed through reliance on AIS." This is confirmed by the mean of 3.82 and a S.D of 1.00.
8. 67% of respondents to item (8) agreed or strongly agreed with the statement: "The tax administration is keen to establish training programs for assessors to develop their technological capabilities in information technology, including the TA process." This is confirmed by the mean of 3.73 and a S.D of 1.133.
9. 69% of respondents to item (9) agreed or strongly agreed with the statement: "The TA process reduces effort and costs through the use of AIS." This is long-established by the mean of 3.77 and a S.D of 0.981.
- 10- The respondents to paragraph (10) agree between agreement and complete agreement on the percentage of (62%) "The tax administration is fully convinced of the reduction of administrative and financial corruption through the use of AIS", and this is long-established by the mean, which affected a value of (3.55) and a S.D of (1.156).

By observing the results presented in Table (5), which shows the frequencies and percentages, it is evident that the first section of the survey has the highest mean (4.25) with a S.D of (0.654), whereas the tenth section has the lowermost mean (3.55) with a S.D of (1.156), indicating that there is no important dispersal of responses from their mean.

Proving research hypotheses through hypothesis testing:

Testing the first hypothesis, the correlation hypothesis:

By analyzing the correlation test between the two axes, whether significant or non-significant is discovered, as follows:

H₀: There is no important correlation between AIS and TA process.

H₁: There is a important correlation between AIS and TA process.

After calculating the correlation coefficient between AIS and the TA process, we obtained the following results, as shown in the table below:

Table 5. Correlation coefficient between variables

Correlation coefficient between AIS and the TA process		
	AIS	TA
Pearson Correlation	0.708**	1
Sig.(2-tailed)	0.000	

From the table above, it is clear that there is a direct and moral correlation relationship below the significance level (1%) between AIS and the TA process, and this calls us to receive the alternative hypothesis that there is a morally significant correlation relationship between AIS and the TA process.

Testing the second hypothesis, the effect hypothesis:

By analyzing the coefficient of determination test between the two axes, whether significant or non-significant is discovered, as follows:

H₀: There is no significant impact relationship between AIS and the TA process.

H₁: There is a important impact relationship between AIS and the TA process.

After calculating the coefficient of determination between AIS and the TA process, we obtained the following results, as shown in the table below:

Table 6. Coefficient of determination between variables

Impact factor of AIS on the TA process		
Correlation coefficient	R ²	Corrected coefficient of determination
0.708	0.501	0.499

Conclusions:

The research results showed that there is a positive relationship between accounting information systems and the tax accounting process. This indicates that the use of accounting information systems by the tax administration will enhance trust between the parties involved in the tax accounting process, namely between the taxpayer and the tax administration.

The results also showed that the credibility of accounting information helps improve the tax accounting process. In addition, the relevance of accounting information helps increase the effectiveness, efficiency, and diligence of estimators in the accuracy of the tax accounting process.

On the other hand, the results showed that the tax accounting procedures in use are hybrid, meaning they still suffer from a lack of modern technologies that connect the General Tax Authority with its subsidiary bodies or relevant departments.

Recommendations:

Based on the research findings and given the positive relationship between accounting information systems and the tax accounting process, the tax administration should ensure the training and qualification of financial information staff, which reflects the quality of service provided to accounting information users.

Efforts should be made to ensure that accounting information is free from errors, as this increases the taxpayer's confidence in the tax accounting process, i.e. the sense of security. In addition, it is necessary to provide credible accounting information that achieves tax objectives, as credible information makes the taxpayer feel that what they are dealing with is trustworthy.

Based on the proposed recommendations, the surveyed sample should adopt future-oriented approaches aimed at ensuring the relevance of accounting information, as this facilitates the ease of completing the tax accounting process. Relying on accounting information systems has a positive impact on tax calculation, moving away from manual calculations, and linking the General Tax Authority with its subordinate agencies or related departments.

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