L F U

QALAAI ZANISTSCIENTIFIC JOURNAL

A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

Financial Visibility And Error Minimisation Roles Of Accounting Information Systems In Enhancing The Information Value Of Financial Statements

Mohammed Khalid Mustafa

Ministry of higher education and Scientific Research, Financial Control Directorate. mohammedkhalid8282@gmail.com

ARTICLE INFO

Article History:

Received: 29/2/2023 Accepted: 4/4/2023 Published: Summer 2024

Keywords:

Error minimisation, financial accounting systems, financial statements, financial visibility, information value.

Doi:

10.25212/lfu.qzj.9.2.37

ABSTRACT

The study analyses the financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements. Two hundred questionnaire responses were collected from employees of five medium and five large real estate companies in Erbil, Kurdistan, and were analyzed using a multiple regression analysis approach. The study's findings revealed that both the financial visibility and error minimization features of accounting information systems have a significant impact on improving the information value of financial statements. It is inferred from the study that the interactive benefits of the error minimisation and financial visibility roles of AIS in improving the information value of financial statements are very significant. The study recommends that companies improve the effectiveness of financial statements by minimizing errors and enhancing financial visibility. This will increase the information value of accounting information systems and help prevent fraud and other corporate misconduct practices.

1. Introduction

The adoption of innovative accounting systems is widely encouraged and serves to provide numerous benefits. Academic studies are in agreement that accounting systems such as Accounting Information Systems (AIS) are vital and confer numerous



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

benefits to an organisation. For instance, Gelinas et al. (2017) argue that AIS reduces delays in computing financial details leading to timeous decision-making. In other related situations, Fenyves et al. (2018) underscore the importance of AIS in reducing errors while Gardi et al. (2021) credit AIS for enhancing the quality of the information provided by financial statements. Though studies emphasize the crucial role of AIS in facilitating decision-making by providing timely and accurate information, there is limited research linking these aspects to two significant roles of AIS (error minimization and financial visibility). However, research has documented that the error minimization and financial visibility roles of financial statements are crucial attributes that facilitate informed decision-making for investors, shareholders, and stakeholders (Carraher & Van Auken, 2013; Gardi et al., 2021). Consequently, these two roles contribute to improving the information value of financial statements and many benefits are inclined to be obtained by adopting AIS, especially in sectors like the real estate sector of Kurdistan which has been booming over the past few years. Besides, observed activities made by the researcher in Kurdistan's real estate industries show that real estate companies are increasingly adopting AIS with the goal of improving the information value of financial statements.

However, the topic of how the financial visibility and error minimization functions of accounting information systems can improve the informative value of financial statements has not gained significant momentum in academic research. As such, existing studies are much inclined to examine the role of AIS in improving the quality of decisions made (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Hence, it is to be uncovered as to what exact roles AIS play in enhancing the information value of financial statements. Additionally, the limited examination of these interactive connections clouds judgements and approaches aimed at improving AIS use in businesses. That is, it remains to be ascertained of the nature and magnitude of relationships between financial visibility and error minimisation roles and the information value of financial statements. Based on these discoveries, this study seeks to examine how the financial visibility and error minimization functions



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

of accounting information systems can improve the informative value of financial statements. This will provide insight into the following questions:

- 1) To what extent do the interactive benefits of the error minimization role of AIS contribute to improving the informative value of financial statements?
- 2) To what extent do the interactive benefits of the financial visibility role of AIS contribute to improving the informative value of financial statements?

The study's findings revealed that both the financial visibility and error minimization features of accounting information systems have a significant impact on improving the informative value of financial statements. Based on these findings, the study adds to the current body of literature by introducing new constructs that assess the roles of AIS in minimizing errors and improving financial visibility, and their impact on the informative value of financial statements. The new error minimisation and financial visibility constructs were developed using a process called operationalization that involved defining the variables in question and then specifying observable indicators or measurements that can represent the variable. The author ensured that the new instrument has adequate validity and reliability (it accurately measures the intended construct and consistently produces similar results over time and across different situations). Additionally, the study enhances the understanding of probable measures and strategies required in improving the effective use of AIS in disclosing vital information essential for making rational decisions. The study's practical implications demand additional improvements concerning the ability of accounting information systems to minimise errors and enhance the financial visibility of disclosed financial details of the company. Consequently, this places managers, investors, stakeholders and shareholders in a better position to make informed decisions.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

2. Literature review

2.1 Theoretical framework

Studies highlight that one of the key reasons behind the use of financial statements is to provide information essential for improving decision-making (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Along similar lines, the integration of AIS serves to enhance the availability and reliability of information supplied and the quality of the decisions made. Hence, by application, financial statements in conjunction with AIS, play an important role in dealing with information asymmetry problems hindering effective signalling of courses of action in decision-making. This, therefore, shows that there are signalling theory theoretical ideas embedded in these explanations. Despite its potential relevance, the use of signalling theory in addressing important issues related to the role of accounting information systems in enhancing the informative value of financial statements through financial visibility and error minimization has been relatively neglected in academic research (Carraher & Van Auken, 2013; Gardi et al., 2021). Moreover, it is to the researcher's knowledge that the application of the signalling theory in this regard is the first of its kind. Meanwhile, Spence's (1976) signalling theory asserts that there is information asymmetry that hinders the effective signalling of courses of action in decisionmaking (Brown-Liburd, Cohen & Zamora, 2018). Due to complexities posed by information asymmetry challenges, companies signal certain information to shareholders and stakeholders to show that they are better than other companies in the market to attract investments and enhance a favourable reputation (Yasar, Martin & Kiessling, 2020). The disclosure of financial information using financial statements with the aid of AIS is one of the signalling means, where companies would disclose more information, they are better (Bergh et al., 2014). Such information is also essential in dealing with fraudulent activities and supports the application of the principal-agent theory in regulating financial misconducts like fraud and financial scandals. As a result, the signalling theory was applied in analysing the financial visibility and error minimisation roles of accounting information systems in enhancing

the information value of financial statements.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

2.2 Accounting information systems

According to Hall (2015), an Accounting Information System (AIS) can be defined as an accounting system where the financial data of the organization is maintained. Notable examples include QuickBooks Online, AvidXchange; Tipalti Approve; Gusto, NetSuite ERP and FreshBooks. The importance of AIS in companies is widely documented in academic studies. According to Gelinas et al. (2017), AIS is critical in educating and supporting companies in the task of managing their financial accounts. Others contend that it plays a vital bookkeeping role in making a financial record of business transactions and preparing statements concerning the assets, liabilities, and operating results of a business (Awosejo et al., 2013; Gelinas et al., 2017). Awosejo et al. (2013) assert that by providing information to support and supervise companies in a dynamic and competitive environment, AIS helps business units and managers solve long-term problems in the final price, cost and cash flow, as well as integrating companies and operational considerations for profit. Benefits such as decisionmaking (Malíková & Brabec, 2012) and improving the quality of control and security processes (Turner, Weickgenannt & Copeland, 2022) have also been linked to AIS. Consequently, these reviewed insights denote the vital importance of AIS. However, not much has been done to explore which roles AIS plays and how each of those roles contribute to improving the information value of financial statements. As result, this study extends these examinations to real estate companies by covering these identified empirical gaps. Thus, the next section of the study explores the related previous examinations.

2.3 Related studies and hypothesis development

Due to the fact that this study is the first of its kind, there are nascent ideas about the roles played by AIS in improving the information value of financial statements. However, dwelling on Gelinas et al.'s (2017) propositions, AIS is viewed as having an instrumental practical role in businesses and encourages its adoption. It is, therefore, an interesting inquiry that extending and assessing Gelinas and others' proposition demands validation, especially in the context of real estate companies in Kurdistan



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

that has been empirically sidelined in academic studies. Besides, traces of evidence are widely concentrated in areas such as manufacturing firms (Mensah, 2021) and public corporations (Jacob & Madu, 2009).

Fenyves et al. (2018) conducted a study aimed at analysing the role of financial statements in corporate decision-making. Their findings denoted that financial statements have information parts necessary for disclosing and the appropriate interpretation of the income statement and balance sheet to obtain a better understanding of the business's financial position and status. The feasibility of attaining such objectives is limited, especially when there are no accounting systems such as AIS that are capable of enhancing financial visibility and minimising errors.

Gardi et al. (2021) in a study aimed at determining factors affecting the quality of financial statements on investment decision-making, listed quality control as having a significant positive effect on the quality of financial statements and investment decision-making. Thus, by analysing deeper the term quality control more, it becomes apparent that aspects aimed at reducing errors and improving the visibility of disclosed information are essential elements of quality control. Hence, this reinforces this study's arguments about the significance of financial visibility and error minimisation roles of AIS in improving the information value of financial statements.

Pebrina et al. (2022) used a descriptive qualitative method to investigate the role of accounting information systems in the industrial revolution 4.0 Era. Interestingly, they uncovered that technological developments contribute towards enhancing value to humans. Hence, in that aspect, AIS can be integrated into that discussion, but such value as outlined by the signalling theory assists in making rational decisions. Thus, by supporting the adoption of AIS in business, the significance of financial visibility and error minimisation roles of AIS in improving the information value of financial statements will be called amid calls to improve decision-making (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). These propositions are synonymous with propositions laid in a book entitled 'Accounting information systems: controls and processes' by Turner, Weickgenannt and Copeland



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

(2022). Hence, this further supports the inclusion of the significance of financial visibility and error minimisation roles of AIS in improving the information value of financial statements.

In their attempt to analyse the effectiveness of accounting information systems, Sajady, Dastgir and Nejad (2012) outlined that AIS is effective when it contributes to the quality of decisions made. With quality decisions being related to information that is error-free and provides an accurate description of the business, one can contend that there are error minimisation and financial visibility features of AIS. However, it remains to be tested as to how these attributes contribute to improving the information value of financial statements. Therefore, novel ideas will be extended further to develop a model to test these connections. This follows prior suggestions denoting those quality decisions are made on the verge of more accurate decisions being disclosed (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Thus, by implication, this reinforces the financial visibility and error minimisation roles of AIS. Hence, the study contributes to existing studies by extending these ideas and testing their effects on the information value of financial statements. Given these insights, it, therefore, becomes apparent that AIS contributes towards reducing errors affecting financial statements and disclosed information. Nonetheless, not much has been done to explore further the effects of AIS' error minimisation role in enhancing the information value of financial statements. Therefore, bearing in mind such ideas, it is evident that minimising errors enhances the information value of financial statements. As a result, this study intends to test the validity of such propositions by formulating the following hypotheses;

Hypothesis 1: The error minimisation role of accounting information systems
has a significant positive effect on the information value of financial
statements.

Malíková and Brabec (2012) conducted a study aimed at assessing the influence of a different accounting system on the information value of selected financial ratios. Their findings indicated that AIS serves to enhance the availability of quality

L F U

QALAAI ZANISTSCIENTIFIC JOURNAL

A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

information available for decision-making. As a result, they argued with limited empirical validation that the information value of selected financial ratios improves following the adoption of AIS yet studies highlight that AIS enhance the quality of decisions made in a company (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Despite these observations, it was necessary to investigate the precise impact of financial visibility on the information value of financial statements. Therefore, the following hypothesis was developed to cater for such attempts;

Hypothesis 2: The financial visibility role of accounting information systems
has a significant positive effect on the information value of financial
statements.

The above-formulated hypotheses were integrated to graphically illustrate their underlying connections using a conceptual framework provided in Figure 1.

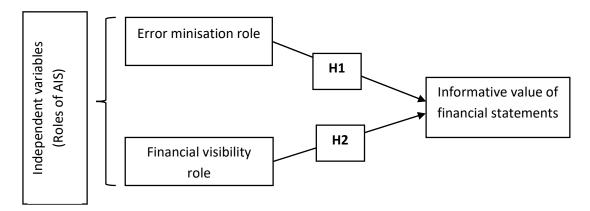


Figure 1: Conceptual framework



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

3. Research methodology

Studies on accounting information systems are barely applied in the context of the real estate industry. Traces of evidence are widely concentrated in areas such as manufacturing firms (Mensah, 2021) and public corporations (Jacob & Madu, 2009). Furthermore, the study is the first of its kind that analyses financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements in Kurdistan. Relatively similar studies, especially those on accounting information systems have been restricted to countries Australia (Kober, Lee & Ng, 2010) and India (Saeidi & Prasad, 2014).

3.1 Method

The study applies a quantitative approach, which by definition involves numerical analysis where data is collected, classified and then computed for specific findings using a set of statistical methods applied in attaining the stated study objective. Upon coding the data, a factor analysis technique, which serves as a data reduction method was utilised in determining related constructs on the premise that variables with factor loadings of at least 0.60 are reliable (Cureton & D'Agostino, 2013; Williams, Onsman & Brown, 2010). The selected benchmark exceeds the suggested factor loading benchmarks of 0.050 (Williams, Onsman & Brown, 2010).

With reference to the established conceptual framework, the study presumed that Information Value (IV) is a function of Financial Visibility (FV) and Error Minimisation (EM). Such a presumption was expressed in a functional form as follows;

The model parameters represented by β_1 to β_2 and the error term by μ were integrated into expression (1) resulting in a multivariate model expressed in expression (2) being used as a key platform on which the study analysed the financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

$$IV = \alpha + \beta_1 FV + \beta_2 + \mu$$
.....(2).

The entire data analysis was carried out using Statistical Package for Social Sciences (SPSS) version 24. Other tests such as descriptive statistics were applied to shed more light on the collected data. Additionally, reliability tests involving Cronbach's alpha test were used in determining the reliability of the constructed model variables under the guideline that constructs with Cronbach's alpha values of at least 0.70 are reliable and have a higher internal consistency (Bujang, Omar & Baharum, 2018).

3.2 Data analysis procedures

To examine the roles of financial visibility and error minimization in enhancing the information value of financial statements, the study utilized multiple regression analysis. This method was chosen over others such as qualitative analysis (Malíková & Brabec, 2012) and descriptive analysis (Pebrina et al., 2022), which have been the focus of many related studies. This created a solid ground upon which the reliability of this study's findings can be analysed in relation to other similar studies. Besides, the application of a multivariate model, in this case, is empirically supported because of reasons linked to the determination of the nature and size of effects between model variables (Murtagh & Heck, 2012), thus representing the study's novelty.

3.3 Population and sampling procedures

The study population centres around medium and large real estate companies in Erbil, Kurdistan selected on the basis of their adoption and usage of any of the 5 widely known financial accounting systems, that is, QuickBooks Online, AvidXchange; Tipalti Approve; Gusto, NetSuite ERP and FreshBooks. Using the IMF's definition of medium and large companies, the study selected real estate companies with 50 to 249 employees inclusive of managers and categorised them as medium enterprises¹.

SMEs.html#:~:text=A%20majority%20of%20governments%2C%20namely,50%2D249%20employees) %20enterprises. on 13 September 20222.

¹ The Trade Facilitation Implementation Guide. (n.d). Definition of an SME. Retrieved from https://tfig.unece.org/contents/definition-statistics-



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

Another group of real estate companies with at least 250 employees and managers was also selected and categorised as large as per the International Monetary Fund's definition of large companies². For the purpose of this study, a judgmental sample of five medium companies and five large companies was selected, comprising a total of 273 financial accountants, financial managers, auditors, software developers, IT professionals, database administrators and other financial accounting systems-related employees from the medium companies, and 295 from the large companies, who are involved in financial reporting and analysis. The total number of participants denoted by N represents the number of study participants involved in using either QuickBooks Online, AvidXchange; Tipalti Approve; Gusto, NetSuite ERP or FreshBooks. Thus, the total population was 568 financial accounting systems-related employees and managers. Consequently, the sample size (n) was determined using Yamane's sample size determination formula as follows;

$$n = \frac{N}{1 + N(e)^2} \tag{1}$$

Where e = 0.05 margin of error. These values were inputted into Expression (1) resulting in Expression (2) providing a total of 234.71. As a result, 235 questionnaires were distributed to medium and large real estate companies in Erbil, Kurdistan.

3.4 Data collection

Data on financial visibility, error minimisation and information value was collected from the real estate company employees and managers using a questionnaire. The questionnaire was developed using newly constructed constructs using a combination of theoretical and empirical examinations on financial visibility and error minimisation. Since there are no specific studies on information value, the study used reviewed theoretical and empirical ideas into developing new constructs for measuring information value. A total of 45 equally allocated financial visibility, error minimisation and information constructs were measured on a 5-point Likert scale with values ranging from 1 (strongly disagree) to 5 (strongly agree).

_

 $^{^{\}rm 2}$ lbid, The Trade Facilitation Implementation Guide. (n.d).



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

A focus group exercise comprising 2 employees and 1 manager was used in evaluating the validity of the developed questionnaire prior to distributing it to the study participants. Upon satisfactory responses with a few improvements, the questionnaires were finally distributed to the participants between the period obtained and questionnaires were distributed to participants from the 4th of October to the 14th of September 2022.

Cronbach's alpha test was subsequently applied to ascertain the selected constructs' internal consistency (Bujang, Omar & Baharum, 2018). Consequently, financial visibility, error minimisation and information value constructs with factor loadings surpassing 0.70 were selected because of their high relatedness (Cureton & D'Agostino, 2013; Williams, Onsman & Brown, 2010). Along similar lines, the selected constructs had high internal consistency which denoted high reliability as evidenced by their underlying Cronbach's alpha values of at least 0.70 (Bujang, Omar & Baharum, 2018). This entailed that the selected constructs and modelled variables were well posed to provide reliable and valid explanations about the financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements. The obtained results are presented in Table 1.

Table 1. Factor analysis results

No.	Construct	Factor	Cronbach's
		loadings	Alpha
	Error minimisation	0.645	0.724
4	AIS makes it clear to identify errors.	0.787	0.840
7	Users can use AIS to correct errors.	0.785	0.800
9	Documents stored in AIS can be compared with other	0.700	0.702
	documents to locate errors.		
12	AIS can be trained to minimise accounting errors.	0.691	0.700
13	Managers have records and access to AIS and can easily	0.662	0.780
	identify errors.		



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) – ISSN 2518-6558 (Print)

15	It does not take much time to correct errors using AIS.	0.714	0.720
	Financial visibility	0.700	0.714
16	AIS helps to provide an accurate picture of the business'	0.701	0.718
	financial position.		
17	Information like liquidity can be established from the	0.712	0.720
	provided financial statements.		
18	More details about the company's capital levels can be	0.682	0.701
	revealed through well-prepared financial statements.		
19	Our company has increased the use of AIS in preparing	0.695	0.703
	financial statements.		
20	The company always takes new initiatives each year to	0.714	0.728
	improve the quality of information disclosed in its financial		
	statements.		
	Information value	0.700	0.717
32	Investors can use AIS-produced reports to make rational	0.682	0.821
	investment decisions.		
33	Stakeholders can use AIS-produced reports to determine	0.691	0.708
	their future business activities with companies.		
36	AIS reports tend to allow managers to have more options	0.700	0.730
	about strategies needed to improve the company's		
	performance.		
1			
37	AIS reports also provide additional information required by	0.701	0.852
37	AIS reports also provide additional information required by the company to deal with competition.	0.701	0.852
40		0.701	0.852
	the company to deal with competition.		
	the company to deal with competition. Better and more rational decisions are always made when		
	the company to deal with competition. Better and more rational decisions are always made when companies adopt AIS compared to companies that do not		
40	the company to deal with competition. Better and more rational decisions are always made when companies adopt AIS compared to companies that do not use AIS.	0.708	0.827
40	the company to deal with competition. Better and more rational decisions are always made when companies adopt AIS compared to companies that do not use AIS. Companies are bound to attract more investors and grow if	0.708	0.827

L F U

QALAAI ZANISTSCIENTIFIC JOURNAL

A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

4. Results and Discussion

4.1 Demographic analysis

200 questionnaires were retrieved from real estate company employees in Erbil City to provide details about financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements. 48.50% of the respondents worked for medium real estate companies while 51.50% were drawn from large real estate companies. Among the real estate company respondents, 62% of the respondents were male employees and 38% were female employees as shown in Table 2.

Table 2: Demographic analysis results

Variable	Description	Frequency	Percentage
Gender	Male	124	62.00
	Female	76	38.00
	Total	200	100
	Diploma	8	4.00
	Bachelor's degree	46	23.00
	Master's degree	136	68.00
	PhD degree	10	5.00
	Total	200	100
Number of employees	Medium	97	48.50
	Large	103	51.50
	Total	200	100

The author did not consider expertise and experience in research when analyzing data collected from respondents because the research questions or hypotheses being investigated did not require information on the respondents' expertise or experience. As a result, the author focused on other factors that are more relevant to the research question.

Drawing further, the demographic findings presented in Table 2 reveal that the real estate company respondents were highly qualified to a large extent. This is evidenced by the fact that 4 of the employees held diplomas, while 23% had bachelor's degrees, 68 % had master's degrees and 5% had PhD degrees. It is to the researcher's knowledge that the reason for a significant number of highly educated individuals working for real estate companies is due to the attractive wages, salaries, incentives,



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

and motivational packages that are not commonly offered in the educational sector. Nonetheless, it can be inferred that the employees were much posed to understand better the financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements. As a result, the established results are well posed to offer sound and solid examinations essential for improving the use of accounting information systems in real estate companies.

4.2 Descriptive analysis

Mean and standard deviation computations were applied as part of initiatives aimed at conducting a descriptive analysis of information value, error minimisation and financial visibility variables. Based on Table 3 findings, it can be noted that there are strong indications of agreement about the financial visibility (MN=4.327; SD=1.256) and error minimisation (MN=4.028; SD=0.973) roles of accounting information systems in enhancing the information value (MN=4.219; SD=1.607) of financial statements. The respective mean values are relatively high and above the value of 4, which corresponds to agreeing.

Table 3: Descriptive analysis

	Mean (MN)	Standard deviation (SD)
Information Value	4.219	1.607
Error Minimisation	4.028	0.973
Financial Visibility	4.327	1.256

The high standard deviation of 1.607 indicates that accounting information systems have a huge responsive effect on the information value of financial accounting systems. Consequently, a low standard deviation of 0.973 indicates that the error minimisation role of accounting information systems is less responsive. In that regard, the study proceeded further to determine the correlations between information value, error minimisation and financial visibility in the proceeding section.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

4.3 Correlation coefficient

Pearson correlation coefficient test was applied in this context to ascertain the correlations between the variables, information value, error minimisation and financial visibility. According to the results presented in Table 4, there is a strong positive correlation of 0.638 between information value and financial visibility. This entails that improvements in financial visibility are mostly likely to be associated with similar improvements in information value. Such establishments are similar to Malíková and Brabec's (2012) propositions denoting the existence of possible positive interaction connections between financial visibility and information value. Additionally, improvements in the companies' error minimisation can be mirrored as possibly linked to improvements in information value by 0.327. Most importantly, are the indications denoting that the error minimisation and financial visibility roles of accounting information systems have positive complementary features as denoted by a low significantly positive correlation of 0.209. In support of these findings Gardi et al. (2021), denoted that improvements in quality control (error minimisation role) contribute towards enhancing financial visibility.

Table 4: Correlation coefficients

	Information Value	Error Minimisation	Financial Visibility
Information Value	1		
Error Minimisation	0.327*	1	
Financial Visibility	0.638*	0.209*	1

^{*} Denote correlation is significant at 1% level.

Nonetheless, attempts to uncover the exact relationship between information value, error minimisation and financial visibility require the application of robust and detailed methods. It is in this regard that a multivariate analysis in the form of a regression analysis model was applied.

A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

4.4 Regression analysis

 $R^2 = 0.7435$

Following the computation of the variables' correlations, the study proceeded to determine the integrative connections linking the error minimisation and financial visibility roles of AIS in enhancing the information value of financial statements. The findings show that there is a positive effect spanning from error minimisation to an information value of 0.437. Sajady, Dastgir, and Nejad's established findings from 2012 highlight that AIS is effective when it contributes to the quality of decisions made. This is in line with the current observation. With quality decisions being related to information that is error-free and provides an accurate description of the business, one can contend that there are error minimisation and financial visibility features of AIS. These ideas are also supported by studies analysing the role of AIS in decision making highlighting the role of AIS in providing essential and high-quality information needed in making rational decisions (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Moreover, this supports the application of the principal-agent theory's ideas in controlling and monitoring managers' activities to reduce fraud and errors (Schnader, Bedard & Cannon, 2015).

Table 5: Regression analysis results

	В	Std. Error	Beta	t	Sig.
Constant	0.301	0.143		2.106	0.036
Error Minimisation	0.837	0.050	0.749	16.815	0.000
Financial Visibility	0.239	0.059	0.244	3.593	0.000
Dependent Variable: Fina Model summary:	ancial reporting	quality			

F-stat. = 4.318

F-stat. prob. = 0.000

Adjusted $R^2 = 0.7394$

Results in Table 5 show that improvements in the financial visibility role of AIS contribute to improvements in the information value of financial statements by 0.654. Such findings are supported by Malíková and Brabec's (2012) prior insights highlighting that AIS serves to enhance the availability of quality information available for decision-making. Similarly, other studies highlight that AIS enhance the quality of



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

decisions made in a company (Akhtar & Liu, 2018; Carraher & Van Auken, 2013; Fenyves et al., 2018). Additionally, this echoes sentiments laid by the signalling theory contending that by application, financial statements in conjunction with AIS, play an important role in dealing with information asymmetry problems hindering effective signalling of courses of action in decision-making (Brown-Liburd, Cohen & Zamora, 2018).

Table 5 shows that 74.35% of the changes in the information value of real estate companies' accounting information systems are explained by the error minimisation and financial visibility roles of financial accounting systems. This entails that 25.65% of the changes are explained by other variables external to the model. The F-statistic value of 4.318 is associated with a probability value of 0.000, which is significant at 1% and indicates that the regression model is correctly specified.

4.5 Hypotheses testing

At this stage, the ANOVA test was applied to test the specific connections between financial visibility and the error minimisation and information value roles of financial statements. That is, ANOVA test results were used to buttress the regression results and validate the established hypotheses results. According to Table 6, it can be accepted that the error minimisation (F-stat=1.203: probability = 0.000) and financial visibility (F-stat=1.187 probability = 0.000) roles of accounting information systems have valid significant positive effects on the information value of financial statements. Amid such discoveries, the next section of the study was dedicated to inferring conclusions, recommendations and suggestions about financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

Table 6: Hypotheses analysis results

Hypothesis	F.stat. (prob)	Decision
The error minimisation role of accounting information systems has a significant positive effect on the information value of financial statements.	1.203 (0.000)	Accept
The financial visibility role of accounting information systems has a significant positive effect on the information value of financial statements.	1.187 (0.000)	Accept

^{*} Significant at 1%

Conclusion

The primary aim of the study was to analyse the financial visibility and error minimisation roles of accounting information systems in enhancing the information value of financial statements. As such, the study accomplished its aims to cover gaps and empirical voids concerning limited coverage of the interactive connections between error minimisation, financial visibility and information value attributes of financial accounting systems. Consequently, the study addressed empirical challenges about the lack of consensus about such interactive connections. As a result, the following conclusions were drawn;

Foremost, the hypothesis 1 findings uphold that error minimisation attributes of accounting information systems have a significant influence on the information value of financial statements. Such findings support initiatives advocated for by the principal agent theory to foster corporate governance practices necessary for controlling and monitoring managers' activities to avert corporate misconducts like fraud and scandals. As a result, the study's theoretical implications significantly underscore the importance of incorporating accounting disclosure and corporate governance practices to boost the information value of financial statements in combating fraud and other corporate misconduct practices.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

- Secondly, concerning hypothesis 2, the study validates uncovered arguments and propositions asserting that the financial visibility role of accounting information systems contributes to enhancing the information value of financial statements. Such examinations had been empirically sidelined but mirrored prior studies' propositions about the role of accounting information systems in enhancing information availability and the ability of users to make informed decisions as suggested by the signalling theory. Consequently, this study infers that using accounting information systems to enhance the financial visibility of financial statements is instrumental in enhancing the information value of financial accounting systems.
- In overall, It is inferred from the study that the interactive benefits of the error minimisation and financial visibility roles of AIS in improving the information value of financial statements are very significant.

The study's practical implications demand additional improvements concerning accounting information systems' ability to minimise errors and enhance the visibility of the disclosed financial details. Consequently, this places managers, investors, stakeholders and shareholders in a better position to make informed decisions. Additionally, enhancing the information value of financial statements serves to promote good corporate governance practices leading to an improved corporate image and reputation of the company.

Nonetheless, the study is not void of limitations. In particular, the findings are confined to the examination of medium and large real estate companies in Kurdistan. As a result, it is practically challenging to generalise the findings to other companies, sectors and governorates in Erbil as well as other countries. Therefore, to avoid clouding judgements, future studies can extend similar examinations to other companies and sectors. Of paramount importance, future studies can examine the underlying differences, if not, then similarities about the error minimisation and information value roles of accounting information systems between companies in two or more sectors.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

References:

- 1. Akhtar, S., & Liu, Y. (2018). SMEs' use of financial statements for decision making: Evidence from Pakistan. *Journal of Applied Business Research* (*JABR*), 34(2), 381-392.
- 2. Allwood, C. M. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality & Quantity*, 46(5), 1417-1429.
- 3. Awosejo, O. J., Kekwaletswe, R. M., Pretorius, P., & Zuva, T. (2013). The effect of accounting information systems in accounting. *International Journal of Advanced Computer Research*, *3*(3), 142.
- Bergh, D. D., Connelly, B. L., Ketchen Jr, D. J., & Shannon, L. M. (2014).
 Signalling theory and equilibrium in strategic management research: An assessment and a research agenda. *Journal of management studies*, 51(8), 1334-1360.
- 5. Brown-Liburd, H., Cohen, J., & Zamora, V. L. (2018). CSR disclosure items used as fairness heuristics in the investment decision. *Journal of Business Ethics*, 152(1), 275-289.
- 6. Bujang, M. A., Omar, E. D., & Baharum, N. A. (2018). A review on sample size determination for Cronbach's alpha test: a simple guide for researchers. *The Malaysian journal of medical sciences: MJMS*, 25(6), 85.
- 7. Carraher, S., & Van Auken, H. (2013). The use of financial statements for decision-making by small firms. *Journal of Small Business & Entrepreneurship*, 26(3), 323-336.
- 8. Cureton, E. E., & D'Agostino, R. B. (2013). *Factor analysis: An applied approach*. Psychology press.
- 9. Fenyves, V., Bács, Z., Zéman, Z., Böcskei, E., & Tarnóczi, T. (2018). The role of the notes to the financial statements in corporate decision-making. *Corporate Ownership & Control*, 15(4), 138-148.
- Gardi, B., Hamza, P. A., Qader, K. S., Anwar, H., Hamad, D., & Anwar, G. (2021). Factors affecting the quality of financial statements on investment decision making. *International Journal of English Literature and Social Sciences*, 224-235.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

- 11. Gelinas, U. J., Dull, R. B., Wheeler, P., & Hill, M. C. (2017). *Accounting information systems*. Cengage learning.
- 12. Gelinas, U. J., Dull, R. B., Wheeler, P., & Hill, M. C. (2017). *Accounting information systems*. Cengage learning.
- 13. Hair, J. F. (2011). Multivariate data analysis: An overview. *International encyclopedia of statistical science*, 904-907.
- 14. Jacob, R. A., & Madu, C. N. (2009). International financial reporting standards: an indicator of high quality?. *International journal of quality & reliability management*.
- 15. Kober, R., Lee, J., & Ng, J. (2010). Mind your accruals: Perceived usefulness of financial information in the Australian public sector under different accounting systems. *Financial Accountability & Management*, *26*(3), 267-298.
- 16. Malíková, O., & Brabec, Z. (2012). The influence of a different accounting system on informative value of selected financial ratios. *Technological and economic development of economy*, *18*(1), 149-163.
- 17. Mensah, E. (2021). The effect of IFRS adoption on financial reporting quality: Evidence from listed manufacturing firms in Ghana. *Economic Research-Ekonomska Istraživanja*, 34(1), 2890-2905.
- 18. Møller, S. F., von Frese, J., & Bro, R. (2005). Robust methods for multivariate data analysis. *Journal of Chemometrics: A Journal of the Chemometrics Society*, *19*(10), 549-563.
- 19. Murtagh, F., & Heck, A. (2012). *Multivariate data analysis* (Vol. 131). Springer Science & Business Media.
- 20. Pebrina, E. T., Novitasari, D., Sukriyah, S., Firmawati, Y., & Tsoraya, N. D. (2022). The Role of Accounting Information Systems in the Industrial Revolution 4.0 Era. *Edumaspul: Jurnal Pendidikan*, *6*(2), 2409-2412.
- 21. Saeidi, H., & Prasad, B. (2014). Impact of accounting information systems (AIS) on organizational performance: A case study of TATA consultancy services (TCS)-India. *Journal of Management and Accounting Studies*, 2(03), 54-60.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024
ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

- 22. Sajady, H., Dastgir, M., & Nejad, H. H. (2012). Evaluation of the effectiveness of accounting information systems. *International Journal of Information Science and Management (IJISM)*, *6*(2), 49-59.
- 23. Schnader, A. L., Bedard, J. C., & Cannon, N. (2015). The principal-agent dilemma: Reframing the auditor's role using stakeholder theory. *Accounting and the Public Interest*, *15*(1), 22-26.
- 24. Schnader, A. L., Bedard, J. C., & Cannon, N. (2015). The principal-agent dilemma: Reframing the auditor's role using stakeholder theory. *Accounting and the Public Interest*, *15*(1), 22-26.
- 25. Turner, L., Weickgenannt, A. B., & Copeland, M. K. (2022). *Accounting information systems: controls and processes*. John Wiley & Sons.
- 26. Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian journal of paramedicine*, 8(3).
- 27. Yasar, B., Martin, T., & Kiessling, T. (2020). An empirical test of signalling theory. *Management Research Review*, 43(11), 1309-1335.

رۆڵی بینینی دارایی و کهمکردنهوهی ههڵهی سیستهمی زانیاری ژمێریاری له بهرزکردنهوهی بههای زانیاری بهیاننامه داراییهکان

پوخته:

توێژینهوهکه شیکاری بۆ بینینی دارایی و ڕۆڵی کهمکردنهوهی ههڵهی سیستهمی زانیاری ژمێریاری دهکات له بهرزکردنهوهی بههای زانیاری بهیاننامه داراییهکان. دوو سهد وهڵامی پرسیارنامه له کارمهندانی پێنج کۆمپانیای مامناوهند و پێنج کۆمپانیای گهورهی خانووبهره له ههولێری کوردستان کۆکرایهوه و به بهکارهێنانی ڕێبازی شیکاری پاشهکشهی فره شیکاری کرا. دۆزینهوهکانی توێژینهوهکه دهریانخستووه که ههردوو تایبهتمهندی بینینی دارایی و کهمکردنهوهی ههڵهی سیستهمی زانیاری ژمێریاری کاریگهرییهکی بهرچاویان لهسهر باشترکردنی بههای زانیارییهکانی بهیاننامه داراییهکان ههیه. له توێژینهوهکهدا دهردهکهوێت که سووده کارلێکهکانی کهمکردنهوهی ههڵه و ڕوٚڵی بینینی دارایی AIS له باشترکردنی بههای زانیارییهکان زوٚر گرنگن. توێژینهوهکه



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq
Vol. (9), No (2), Summer 2024

ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

پیّشنیاری ئەوە دەكات كە كۆمپانیاكان كاریگەری بەیاننامە داراییەكان باشتر بكەن بە كەمكردنەوەی ھەڵە و بەرزكردنەوەی بینینی دارایی. ئەمەش بەھای زانیاری سیستەمی زانیاری ژمیّریاری زیاد دەكات و یارمەتی ریّگریكردن لە ساختەكاری و شیّوازەكانی تری ھەڵسوكەوتی نادروستی كۆمپانیاكان دەدات .

أدوار الرؤية المالية وتقليل الأخطاء لنظم المعلومات المحاسبية في تحسين قيمة المعلومات في البيانات المالية

الملخص:

تحلل الدراسة أدوار الرؤية المالية وتقليل الأخطاء لنظم المعلومات المحاسبية في تعزيز القيمة المعلوماتية للقوائم المالية. تم جمع مائتي إجابة على الاستبيان من موظفي خمس شركات عقارية متوسطة وخمس شركات عقارية كبيرة في أربيل - كردستان ، وتم تحليلها باستخدام نهج تحليل الانحدار المتعدد. كشفت نتائج الدراسة أن كل من ميزات الرؤية المالية وتقليل الأخطاء لأنظمة المعلومات المحاسبية لها تأثير كبير على تحسين قيمة المعلومات في البيانات المالية له أن الفوائد التفاعلية لتقليل الأخطاء وأدوار الرؤية المالية له AIS في تحسين قيمة معلومات البيانات المالية مهمة للغاية. توصي الدراسة الشركات بتحسين فعالية البيانات المالية من خلال تقليل الأخطاء وتعزيز الرؤية المالية. سيؤدي ذلك إلى زيادة قيمة المعلومات لأنظمة المعلومات المحاسبية والمساعدة في منع الاحتيال وممارسات سوء السلوك الأخرى في الشركة.