



---

## **Factors Influencing the Application of Accounting Systems Among Small to Medium Enterprises (SMEs) in Kurdistan**

### **Rebin Bilal Mohammed**

Department of Accounting and Finance, College of Administration and Economics, Lebanese French University, Erbil, Kurdistan Region of Iraq

[rebin.bilal@lfu.edu.krd](mailto:rebin.bilal@lfu.edu.krd)

### **Sardar Jalal Braim**

Department of Accounting and Finance, College of Administration and Economics, Lebanese French University, Erbil, Kurdistan Region of Iraq

[sardar.jalal@lfu.edu.krd](mailto:sardar.jalal@lfu.edu.krd)

---

#### **ARTICLE INFO**

##### **Article History:**

Received: 8/1/2022

Accepted: 3/4/2022

Published: Summer 2022

**Keywords:** *Accounting Systems, business activities, accounting systems costs, ease of use, accounting systems reporting and security features.*

##### **Doi:**

10.25212/lfu.qzj.7.2.41

---

#### **ABSTRACT**

The study identifies and analyses factors influencing the application of accounting systems among SMEs to find ways of improving the adoption of accounting systems matching the situational context and needs of SMEs. 196 responses collected from SMEs in Erbil, Kurdistan were analyzed using multiple regression to ascertain the relationship and magnitude of effects posed by identified five factors on the application of accounting systems. The results showed that perceived business activities, accounting systems perceived ease of use, accounting systems reporting features, and accounting systems security features had positive effects on the application of accounting systems. Accounting systems costs had insignificant effects on the application of accounting systems. It was suggested that accounting systems developers must develop accounting programs that are easy to use and are specifically designed to cater for the needs of SMEs. Additionally, SMEs were encouraged to apply cost minimization and revenue maximization strategies to guard against the increase in costs posed by accounting systems acquisition, installation, and maintenance costs.

## **1. Introduction**

It is undoubtedly significant that accounting systems have grown to be an essential aspect of a business. As such, companies are increasingly adopting new, better and



innovative accounting systems capable of providing the required information concerning the business' financial status and position. The importance of using accounting systems is well documented in academic studies, For instance, Putra (2019) contends that accounting systems are essential for making rational decisions essential for boosting business performance. Cheng (2018) asserts that benefits like having improved internal control and the application of modern business management practices are some of the key advantages businesses can obtain from using accounting systems. A study by Gamayuni (2019) shows that accounting systems have been and still continue to play an instrumental role in corporate governance and auditing as they enhance auditing effectiveness and efficiency.

Nevertheless, not all companies find it easy and affordable to use accounting systems. This is because the decision to use accounting systems is influenced by several factors such as company size, the nature of transactions, and the business activities involved (Mihadi, 2019). This is a common feature, especially among Small to Medium Enterprises (SMEs) because some of them only have fewer transactions of smaller magnitude to account for and hence, might find it not important to adopt accounting information systems (Othman & Saud, 2015). As a result, they may opt to use manual systems that they will find as cost-effective and possibly less complicated to use. SMEs are defined as businesses that have between 10 to 50 employees and revenue inflow between US\$100 000 and US\$ 3 000 000 for small businesses and 50 to 300 employees and revenue inflow between US\$3 000 000 and US\$ 15 000 000 for small businesses (Abdullah & Othman, 2019; World Bank, n.d in International Finance Corporation<sup>1</sup>).

The researchers observed similar issues in Kurdistan and hence, attempt to explore further the reasons influencing the application of accounting systems in SMEs. The motivation behind this study is guided by the following problems;

---

<sup>1</sup>International Fiance Corporation (n.d). Assessing Private Sector Contributions To Job Creation: Ifc Open Source Study. Available at <https://documents1.worldbank.org/curated/en/602291468183841622/pdf/819960BRI0Meas00Box379851B00PUBLIC0.pdf>.

- 1) Lack of related studies exploring concerns regarding the application of accounting systems in SMEs in Kurdistan.
- 2) To identify which accounting systems are preferable and used by SMEs in Kurdistan.
- 3) To identify factors influencing the application of accounting systems in SMEs in Kurdistan. Notably, regarding factors like business activities, ease of use, cost, reporting, and security (Mihadi, 2019).
- 4) The lack of attempts to find the required measures needed to promote the application of accounting systems by SMEs.

Given the above, four mentioned research gaps, this study, therefore seeks to find ways of improving the adoption of accounting systems matching the situational context and needs of SMEs.

The study offers several significant theoretical and practical benefits. Firstly, the study improves understanding regarding the theoretical implications of accounting systems in business. Secondly, it serves to enhance awareness about accounting systems and how small businesses can benefit from using accounting systems. Thirdly, ideas provided in this study are crucial for designing specific accounting systems that match the Kurdish business environment as well as meeting the needs of SMEs.

## **2. Literature review**

The theoretical aspects of this study are based on propositions provided by the Technology Acceptance Model (TAM) of information systems as a base for building arguments concerning the application of accounting systems by SMEs. This is because the TAM contends that there are specific factors that influence the adoption and acceptance of technology in an organization (Fatah, N. A., 2021). Proponents of this theory consider the TAM as an information systems theory that models how users come to accept and use technology (Lee, Kozar & Larsen, 2003; Marangunic & Granic, 2015). It is in this regard that this study's arguments are established and suggestions are inferred that there are factors influencing the adoption and/or application of accounting systems by SMEs. The TAM considers that individuals' attitudes and behavior towards new technological systems are influenced by a combination of

factors such as perceived ease-of-use (PEOU). Hamad, H. A. defined PEOU as "the degree to which a person believes that using a particular system would be free from effort" (Hamad, H. A.,2021). That is, if the technology is easy to use, then the barriers are conquered. If it is not easy to use and the interface is complicated, no one has a positive attitude towards it. Secondly, the TAM asserts that perceived usefulness (PU) is the extent to which a person believes that using a particular system would enhance their job performance. Though PEOU and PU are essential determinants influencing the application of accounting systems, there are various factors not captured by the TAM. Such factors were disclosed in Mihadi's (2019) study as encompassing business activities, costs, and, reporting and security features. Hence, the study contributes to the existing literature by combining ideas proposed by the TAM and Mihadi to build a conceptual model that will be used in addressing the identified empirical gaps.

Building on (Yaba, T. K, 2021) ideas highlighting that SMEs are limited in terms of the number of employees, business activities, size, and revenue inflows, we argued that the application of accounting systems is positively linked to these activities. This aligns with's study findings denoting that the need for accounting systems and programs by smaller businesses hinges on the amount and nature of business activities undertaken. As a result, the greater the perceived business activities, the more businesses will apply accounting systems. Therefore, this study extends Yaba's ideas and applies them to analyze the application of accounting systems by SMEs in Erbil, Kurdistan, where academic coverage is still in the infancy stages. Thus, the following hypothesis will be used for accomplishing such a purpose;

- **H<sub>1</sub>**: Perceived business activities have a significant positive influence on the application of accounting systems.

According to the TAM, businesses will adopt any form of a technological system when its perceived ease of use is relatively high (Marangunic & Granic, 2015). The same notion applies to accounting systems and an improvement in their ease of use will aid in removing complexities demanding more time, effort, training, and costs. Alternatively, improvements in accounting systems perceived ease are important for addressing complexities, expensive, time, training, and effort demanding challenges associated with accounting systems. Purwati and Suparlinah (2017) contend that the

ability to deal with such challenges is responsible for causing an increase in the application of accounting systems by business organizations. The ability to deal with such challenges is responsible for causing an increase in the application of accounting systems by business organizations. As a result, the effect was illustrated using the following hypothesis;

- **H<sub>2</sub>:** Accounting systems' perceived ease of use has a significant positive influence on the application of accounting systems.

Costs are a major obstacle that hinders business performance as they consume a sizeable chunk of the business' profits. Hence, a business will avoid incurring costs in the best way possible by reducing activities or related expenses. The TAM's propositions and related studies depict that the application of accounting systems will decrease when they adopted expensive accounting systems (Maharseni, 2018; Mihadi, 2019; Purwati & Suparlinah, 2017). This denotes a negative interaction between accounting systems costs and the application of accounting systems that can be represented by the following hypothesis;

- **H<sub>3</sub>:** Accounting system costs have a significant negative influence on the application of accounting systems.

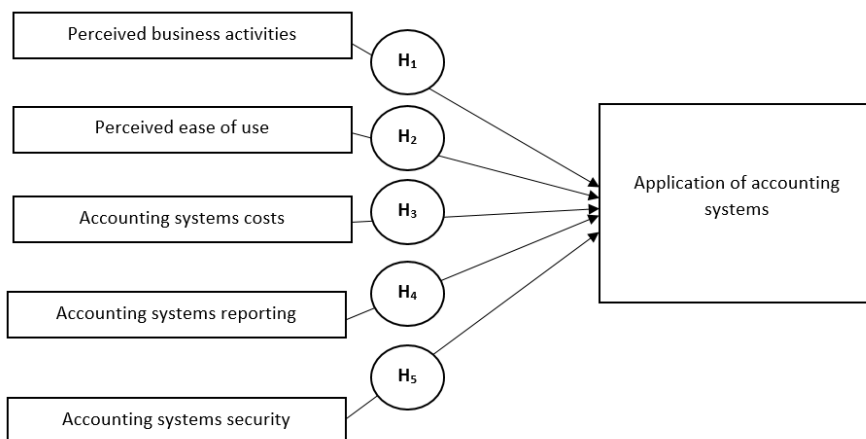
Studies evidently suggest that accounting systems serve to improve the reporting of financial information (Mihadi, 2019; Romney, Steinbart & Cushing, 2015). In other words, they consider that the essence of using accounting systems is to report information about the business operating activities. Other studies regard accounting systems as instrumental for specifically reporting the business' performance and financial status (Susanto, 2013). However, it remains vital that businesses will adopt accounting systems that enhance their reporting capability and obtain a better insight into the business and strategically implement rational decisions (Khan and Nawzad, 2019). This evidently shows the positive influence of accounting systems reporting features on the application of accounting systems expressible in the form of a hypothesis as follows;

- **H<sub>4</sub>:** Accounting system reporting features have a significant positive influence on the application of accounting systems.

It is interestingly evident in various studies that accounting systems security is essential for curbing fraud (Mihadi, 2019; Romney, Steinbart & Cushing, 2015; Susanto, 2013). Accounting information has to be stored in secure places that are out of reach of unauthorized individuals and free from manipulations of any source. Such is an instrumental aspect of auditing and hence, the application of accounting systems will presumably increase following an improvement in their security features. It is in this regard that we propose a hypothesis highlighting the influence of accounting systems security on the application of accounting systems by SMEs as follows;

- **H<sub>5</sub>:** Accounting system security features have a significant positive influence on the application of accounting systems.

After having established the connections linking the application of accounting systems in SMEs with perceived business activities, perceived ease of use, accounting systems costs, accounting systems reporting features, and accounting systems security features, we used the formulated hypotheses to develop a conceptual model shown by Figure 1.



**Figure 1:** Conceptual framework



The independent variables (perceived business activities, perceived ease of use, accounting systems costs, accounting systems reporting features, and accounting systems security features) effects on the dependent variable (application of accounting systems) are shown by arrows stretching from right to left. The concept forms a foundation for developing an econometric model capable of analyzing such effects. Hence, the next section looks at the applied procedures used to conduct this study and arrives at the necessary study conclusions and suggestions.

### **3. Research methodology**

Given the inadequacy of empirical studies analyzing both the influence and magnitude of effects posed by factors influencing the adoption of accounting systems by SMEs, adopting a multiple regression approach was highly desirable. Furthermore, such was crucial in testing the influence of business activities, ease of use, costs, reporting, and security on the application of accounting systems by SMEs in Kurdistan. Such a method and the identified variables were still yet to be applied to address accounting issues faced by businesses in Kurdistan. Hence, this denotes the study's originality as the findings are tailored for such a country and come when other studies are focusing on developed economies like India (Mihadi, 2019) and a few African countries like Kenya (Mwangi, 2011).

#### **3.1 Research approach**

The study applied 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 (Watson, 2015). Consequently, a multiple regression analysis was used in examining the determinants of applying accounting systems in SMEs as related studies used a deductive approach and were yet to model the related effects (Karagiorgos, Alexandra, Ignatious & Katsi, 2020; Katsi, 2015; Mihadi, 2019; Mwangi, 2011). The reasons for using multiple regression analysis in this study were guided by ideas provided by Kleinbaum, Kupper, Nizam, and Rosenberg (2013) contending that regression analysis is essential for analyzing the effects of independent variables on a dependent variable. Additionally, the second reason was to analyze the magnitude of impact between the application of accounting systems

and its underlying factors (see Uyanik & Güler, 2013). It is to the authors’ knowledge that such attempts have not been made before, especially in the context of SMEs in Kurdistan.

### **3.2 Data analysis procedures**

Given ideas suggesting that factors like business activities, ease of use, cost, reporting, and security are notable determinants influencing the application of any accounting system (Hamza, P. A, 2022), our study sought to test the validity of such notions in the context of Kurdistan’ SMEs. As a result, we presumed that the application of accounting systems (AAS) is a function of perceived business activities (BA), accounting systems perceived ease of use (EU), accounting systems costs (CO), accounting systems reporting features (REP), and accounting systems security features (SEC) and this was expressed as follows;

$$\text{AAS} = F(\text{BA}, \text{EU}, \text{CO}, \text{REP}, \text{SEC}) \dots\dots\dots (1).$$

Regression analysis precepts were introduced into expression (1) resulting in the following model;

$$\text{AAS} = \alpha + \beta_1\text{BA} + \beta_2\text{EU} + \beta_3\text{CO} + \beta_4\text{REP} + \beta_5\text{SEC} + \mu \dots\dots\dots (2).$$

Where  $\alpha$  is the constant,  $\beta_1$  to  $\beta_5$ , and  $\mu$  is the error term. Additionally, descriptive statistics in the form of mean and standard deviation were used to analyze the model variables. Pearson correlation coefficient test was applied in analyzing the correlation between the variables AAS, BA, EU, CO, REP, and SEC. meanwhile, Cronbach’s alpha test was used in determining the reliability of the constructed model variables.

After having outlined the connections or relationships between the application of accounting systems (dependent variable) and the independent variables (accounting systems perceived ease of use, accounting systems costs, accounting systems reporting features, and accounting systems security features), Figure 1 was used to diagrammatically express such linkages. This resulted in the formulation of the related hypotheses denoting the expected impact. Table 1 provides a summary of the variable type, expected impact, and supporting studies.



**Table 1:** Summary of the variable type, expected impact, and supporting studies

Type of variable	Variable	Expected impact	Supporting studies
Dependent variable	Application of accounting systems (AAS)	-	
Independent variables	Perceived business activities (BA)	(+)	Mihadi’s (2019)
	Perceived ease of use (EU)	(+)	Purwati and Suparlinah (2017)
	Systems costs (CO)	(-)	(Maharseni, 2018; Mihadi, 2019; Purwati & Suparlinah, 2017).
	Systems reporting features (REP)	(+)	(Mihadi, 2019; Romney, Steinbart & Cushing, 2015; Susanto, 2013)
	Accounting systems security features (SEC)	(+)	

### 3.4 Data collection

A questionnaire was used in collecting the required data and the questionnaire was developed using related empirical studies (Mihadi, 2019). The variable AAS was composed of 8 items, while BA had 7 items, EU=9 items, CO=6 items, REP=8 items, and SEC=8 items. Additional ideas were introduced to ensure that the questionnaire is capable of addressing contemporary research concerns thereby enhancing its validity. A focus group involving 4 SME managers was used to test the designed questionnaire and both individuals indicated their total satisfaction with the research instrument’s ability to gather the required data. Both the dependent variable and independent variables were measured using a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=not sure, 4=agree, 5=strongly agree).

### 3.4 Population and sampling procedures

The study opted to use convenience sampling in determining the study sample because of the lack of contemporary statistics about the number of SMEs in Erbil. Hence, the application of sampling methods suitable for dealing with problems affecting the effective determination of appropriate sample size is called for (see suggested arguments by Etikan, Musa & Alkassim, 2016). Moreover, the existing structural problems posed by Covid 19 made it difficult to reach a wide number of SMEs as some of them did not have access to online platforms. Therefore, we selected a convenient sample of 200 SMEs in Erbil and the questionnaires were randomly distributed to ensure that each of the SMEs had an equal chance of being selected (Etikan & Bala, 2017).

## 4. Results

### 4.1 Demographic analysis

196 questionnaires were collected back from the issued 200 questionnaires. The employee respondents were composed of 103 male employees and 93 female employees and 44 respondents had no educational qualifications, 33 had diplomas, 89 employee respondents had bachelor’s degrees, and 30 employees had master’s degrees. 78 SMEs were operating food retailing businesses, 48 computer and hardware stores, 23 transport businesses, 17 clothing businesses, 18 marketing businesses and 12 restaurant businesses (see Table 2).

**Table 2: Demographic analysis results**

Variable	Description	Frequency	Percentage
Gender	Male	103	52.55
	Female	93	47.55
	<b>Total</b>	<b>196</b>	<b>100</b>
Educational qualification	No qualification	44	22.45
	Diploma	33	16.84
	Bachelor’s degree	89	45.41
	Master’s degree	30	15.30
	<b>Total</b>	<b>196</b>	<b>100</b>
Type of business	Food retailing	78	39.80
	Computer	48	24.49
	Transport	23	11.73
	Clothing	17	8.67
	Marketing	18	10.65

	Restaurants	12	
	<b>Total</b>	<b>196</b>	<b>100</b>
Number of employees	Medium-sized (50-500)	59	30.10
	Small (10-50)	137	69.90
	<b>Total</b>	<b>196</b>	<b>100</b>
Revenue	Medium sized (US\$3 million < US\$15 million)	43	21.94
	Small (US\$100,000 < US\$3 million)	153	78.06
	<b>Total</b>	<b>196</b>	<b>100</b>

30.10% of the were classifiable under the adopted World Bank definition of medium enterprises according to the number of employees ranging between 50 to 500 employees. 69.90% were classified as small enterprises because they had a total number of employees between 10 to 50 employees. On the other hand, relatively different results were obtained when revenue was used to classify the SMEs. That is, 43 medium enterprises had annual revenue inflows of between US\$3 million and US\$15 million while 153 small enterprises using revenue had annual revenue inflows of between US\$3 million (see Table 2).

**4.2 Descriptive analysis**

Mean and standard deviation values were computed to obtain a better description of the variables’ distribution and responsiveness. The computed statistics show that there was a relatively high consensus gravitating toward the application of accounting systems (mean=4.125) and business activities (mean=3.615) compared to ease of use (mean=2.247), cost (mean=1.849) reporting (mean=1.458), and security (mean=1.573). This possibly suggests high concerns among the SMEs regarding the application of accounting systems and the nature of their business activities compared to other factors. Additionally, the findings show that the variable’s application of accounting systems and business activities were highly responsive as noted by their high standard deviations of 1.113 and 1.088, respectively. Low responsiveness was observed on the variables ease of use, cost, reporting, and security as reported by their low standard deviation values of 0.766, 0.165, 0.689, and 0.413, respectively.

**Table 2:** Descriptive analysis

	Mean	Standard deviation
Application of accounting systems	4.125	1.113
Business activities	3.615	1.088
Ease of use	2.247	0.766
Cost	1.849	0.165
Reporting	1.458	0.689
Security	1.573	0.413

### 4.3 Correlation coefficient test

We applied the Pearson correlation coefficient test to analyze correlations between the application of accounting systems, business activities, ease of use, cost, reporting, and security. Foremost, the application of accounting systems was positively correlated with all the variables (Corr. AAS = 0.846; Corr. BA = 0.533; Corr. EU = 0.533; Corr. CO = 0.617; Corr. REP = 0.812; Corr. SEC = 0.491). This implies that improvements in any of these factors will possibly be associated with similar increases in the application of accounting systems in SMEs. Secondly, the established results depict that all the factors (BA, EU, CO, REP, SEC) were positively correlated with each other. Thus, improvements in any one of the factors will be linked with improvements in the other factors. Lastly, high correlations were observed between AAS and BA (Corr. = 0.846) AAS and REP (Corr. = 0.812), and AAS and CO (Corr.=0.617) entailing those high significant improvements were linked with BA, REP and CO compared to other variables (see Table 3).

**Table 3:** Correlation coefficient test

	AAS	BA	EU	CO	REP	SEC
AAS	<b>1</b>					
BA	0.846*	<b>1</b>				
EU	0.533*	0.123*	<b>1</b>			
CO	0.617*	0.488*	0.734*	<b>1</b>		
REP	0.812*	0.118*	0.630*	0.570*	<b>1</b>	
SEC	0.491*	0.375*	0.129*	0.414*		<b>1</b>

*AAS=Application of Accounting Systems, BA=Business Activities, EU=Ease of Use, CO=Cost, REP=Reporting and SEC=Security*

\* and \*\* Denote correlation is significant at 1% and 5% significantly respectively.

### 4.4 Reliability analysis results

Cronbach’s alpha values exceeded 0.70 and this implies that the variables AAS (0.812), business activities (0.826), ease of use (0.833), and security (0.783) were highly reliable, while the variable costs (0.721) and security (0.783) were relatively reliable.

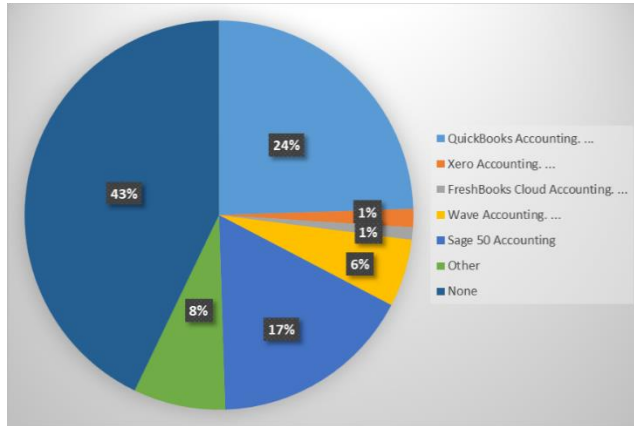
**Table 4:** Reliability results

	<b>Cronbach’s alpha</b>
Application of accounting systems	0.812
Business activities	0.826
Ease of use	0.833
Costs	0.721
Reporting	0.882
Security	0.783
<b>Overall model Cronbach’s alpha value</b>	<b>0.810</b>

The overall model had an alpha value of 0.810 and this implies that all the model variables were highly reliable in providing answers related to the application of accounting systems by Kurdistan’s SMEs (see Table 4).

#### **4.5 Accounting systems used by SMEs**

The SME respondents were asked through the provided questionnaires which type of accounting system they use for accounting purposes. The application of accounting systems among the SMEs was 24% Desktop QuickBooks Accounting, 1% Xero Accounting, 1% FreshBooks Cloud Accounting, 6% Wave Accounting, 17% Sage 50 Accounting, 8% other, and 43% were not using any accounting system (see Figure 1). This depicts the study gap and efforts were subsequently placed to determine the factor influencing the application of accounting systems in SMEs. This probably resonates with the nature of business activities, ease of use, cost, reporting, and security factors, especially when related to the number of employees and annual revenue inflows. Related studies also support this observation and show that implementation and maintenance costs are key limiting factors undermining the use of AIS (Mihadi, 2019; Purwati & Suparlinah, 2017).



**Figure 1.** Accounting systems used by SMEs

#### 4.6 Regression analysis

The decision to apply is motivated by the need to examine how each of the identified five factors influences the application of accounting systems in SMEs. Additionally, this was inspired by the importance of identifying the magnitude of impact between the variables (Uyanık & Güler, 2013). The findings showed that an increase in perceived business activities undertaken by the SMEs causes them to apply accounting systems as evidenced by a positive relationship of 0.872, which is significant at 1% as shown in Table 5. Supporting studies show that this is because an increase in the intensity of activities requires accounting systems capable of enhancing accountability, recording, and processing of effective (Marangunic & Granic, 2015; Mihadi, 2019). Hence, the application of accounting systems becomes a huge necessity. Thus, hypothesis 1 asserting that perceived business activities have a significant positive impact on the application of accounting systems was accepted at 1% (see Table 5).

The findings show that accounting systems' perceived ease of use has a positive effect on the application of an accounting system of 0.213. This aligns with propositions given by Purwati and Suparlinah (2017) showing that improvements in the ease of using accounting systems enhance the application of accounting systems. This also aligns with propositions suggested by the TAM that individuals' will develop positive attitudes and behavior towards new technological systems when it is free from effort and enhance their job performance (Marangunic & Granic, 2015). This is because ease

of use reduces both the complexity of using accounting systems, the training and time required to use the accounting systems. Therefore, we accepted hypothesis two outlining that accounting systems' perceived ease of use has a significant positive influence on the application of accounting systems.

**Table 5: Regression analysis results**

	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
<b>(Constant)</b>	0.080	0.193		0.417	0.678
BA	0.872	0.067	0.790	13.047	0.000*
EU	0.213	0.059	0.244	3.593	0.001**
CO	-0.474	0.208	-0.414	2.279	0.001**
REP	0.027	0.060	0.019	0.450	0.655
SEC	0.371	0.223	0.352	1.664	0.101

*Dependent Variable: Financial reporting credibility*  
Notes: \* = significant at 10%, \*\* = significant at 5% and \*\*\* = significant at 1%.

An increase in accounting systems costs by 1 unit can be seen as having a significant negative effect on the application of accounting systems by 0.474. This aligns with a previous study by Purwati and Suparlinah's (2017) denoting that an increase in accounting systems acquisition and installation costs dissuade businesses from using such systems as such costs may reduce company profits. With the size of the SMEs, additional costs that can reduce profitability are undesirable and thus, demotivate them from using accounting systems. Therefore, we accepted hypothesis three asserting that accounting system costs have a significant negative impact on the application of accounting systems.

Improvements in accounting systems reporting and security features have insignificant positive effects of 0.027 and 0.371, respectively. This can be supported by Romney, Steinbart, and Cushing's (2015) established findings highlighting that improvements in reporting and security features of accounting essential are essential for auditing purposes as they avert fraud. Hence, SMEs are inclined to apply accounting systems with better reporting and security features so as to improve accountability and integrity as well as the quality of the reported financial information (see also Mihadi, 2019; Susanto, 2013). Alternative hypotheses four and five were

rejected because of their insignificant influence on the application of accounting systems (see Table 5). Given the established results denoting both the relationship and impacts between the application of the accounting system and its determinants (BA, EU, CO, REP, SEC), a summary of the accepted and rejected hypotheses is shown in Table 6.

**Table 6:** Summary of the hypothesis results

Null hypothesis (H <sub>0</sub> )	Regression result	Decision
Perceived business activities have a significant positive influence on the application of accounting systems.	0.000	Reject H <sub>1</sub>
Accounting systems' perceived ease of use has a significant positive influence on the application of accounting systems.	0.001	Reject H <sub>1</sub>
Accounting system costs have a significant negative influence on the application of accounting systems.	0.001	Reject H <sub>1</sub>
Accounting system reporting features have a significant positive influence on the application of accounting systems.	0.655	Accept H <sub>1</sub>
Accounting system security features have a significant positive influence on the application of accounting systems	0.101	Accept H <sub>1</sub>

## Conclusion

The study aimed to identify factors influencing the application of accounting systems among SMEs. Such was necessitated by significant empirical concerns about the identification of the exact factors influencing the application of accounting systems in SMEs in Kurdistan. The application of AIS significantly affects companies and its application offers substantial benefits to companies like SMEs. Notable benefits linked to the application of AIS include improved financial reporting quality, sound auditing, and corporate governance practices. However, the adoption and/or application of accounting systems are subject to the influence of essential factors.

Firstly, the greater the companies' perceived business activities, the greater the chances of such companies adopting accounting systems. Related evidence supported such findings and this is attributed to an increase in burdens posed by the huge amount of time and effort to enhance accountability, recording, and processing of financial information. This is possible because of the increase in burdens posed by the huge amount of time and effort to enhance accountability, recording, and processing of financial information. Therefore, adopting accounting systems serves to





reduce both the burden and complexities of handling vast business activities and financial information.

Secondly, an improvement in accounting systems' perceived ease of use reduces both the complexity of using accounting systems, the training and time required to use the accounting systems. This observed effect is similar to what has been established in previous related examinations. Nevertheless, this is an important feature or factor some companies, especially SMEs may lack the necessary skills and resources to use the required accounting systems. Therefore, the availability of accounting systems that are easy to use encourages more companies to adopt accounting systems.

Thirdly, the study results have provided novel ideas about how costs influence the adoption of accounting systems by SMEs. As such, it has been proven that accounting systems acquisition, installation, and maintenance costs hinder the adoption of AIS by SMEs. This is because acquisition, installation, and maintenance costs tend to reduce company profits, and hence, companies may avoid adopting accounting systems so as to keep profit levels high.

Fourthly, accounting systems security proves to be an insignificant aspect in determining the adoption of accounting systems by SMEs. Chances of committing fraudulent activities in SMEs can be below because it can be easy to discover cases of fraud to due low transaction volume. Related studies support such propositions and highlighted that SMEs have low transaction volumes compared with large companies. Hence, their concerns to have accounting systems with improved security features can be lower.

Lastly, our findings depicted that improvements in accounting systems reporting and security features are instrumental auditing aspects contributing to reinforcing efforts aimed at reducing corporate fraud. This implies that SMEs benefit substantially from applying AIS and these benefits extend to include several benefits linked to auditing and good corporate governance practices.

There are several vital theoretical and practical contributions embedded in this study. Firstly, the study outlines and emphasizes the importance of addressing key issues affecting the use of accounting systems not by business organizations. Secondly, it lays a framework upon which the determinants of accounting systems can theoretically be examined in various business contexts either small or large. Ideas

provided in this study are instrumental for improving auditing and corporate governance aspects, and financial reporting quality in SMEs.

Based on the above-given conclusions, the following recommendations will be made so as to provide ideas necessary for developing new and effective accounting systems capable of enhancing financial reporting quality;

- It is important for companies to introduce training and development programs so as to improve their employees' knowledge and understanding of accounting systems. Additionally, this will in turn results in increased efficiency and productivity, and financial reporting outcomes.
- SMEs are encouraged to apply cost minimization and revenue maximization strategies to guard against the increase in costs posed by accounting systems acquisition, installation, and maintenance costs.
- Accounting systems developers must develop accounting programs that are easy to use and are specifically designed to cater for the needs of SMEs. Furthermore, such developers are encouraged to develop accounting programs with improved security and auditing features so as to prevent corporate fraud. Such efforts are vital for improving accountability, integrity, and the quality of the reported financial information.

Nevertheless, the study was limited to the application of accounting systems in SMEs and hence, its findings are not generalizable to large business organizations. Furthermore, actual SME statistics are essential for determining the appropriate sample sizes and should be used in future studies. It is also important to cover other regions as the study was confined to SMEs in Erbil, Kurdistan.

## **References:**

- Abdullah, N. N., & Othman, M. B. (2019). Examining the effects of intellectual capital on the performance of Malaysian food and beverage small and medium-sized enterprises. *Technology (IJCIET)*, 10(2), 135-143.
- Cheng, F. (2018). Internal Control of Modern Management Accounting Information System under IT Environment. In *International Conference on Educational Research, Economics, Management and Social Sciences (EREMS 2018)*.



- Demski, J. S. (2008). *Managerial uses of accounting information* (Vol. 2). New York: Springer.
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 00149.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Fatah, N. A., Hamad, H. A., & Qader, K. S. (2021). The Role of Internal Audit on Financial Performance Under IIA Standards: A Survey Study of Selected Iraqi Banks. *QALAAI ZANIST JOURNAL*, 6(2), 1028-1048.
- Gamayuni, R. R. (2019). The Effect Of Management Accounting Information System Application on Information Quality and Its Implication on Good Government Governance.
- Hamad, H. A., Mhammad, A. O., Mahmood, W. R., & Khzir, H. H. (2021). The Effect of Board Characteristics on Financial Performance: Case of Erbil. *QALAAI ZANIST JOURNAL*, 6(4), 1031-1054.
- Hamza, P. A., Othman, R. N., Qader, K. S., Anwer, S. A., Hamad, H. A., Gardi, B., & Ibrahim, H. K. (2022). Financial crisis: Non-monetary factors influencing Employee performance at banking sectors.
- Karagiorgos, A., Alexandra, G., Ignatiou, O., & Terzidou, A. (2020). Role and contribution of administrative accounting to small and very small businesses. *Journal of Accounting and Taxation*, 12(2), 75-84.
- Karagiorgos, A., Alexandra, G., Ignatiou, O., & Terzidou, A. (2020). Role and contribution of administrative accounting to small and very small businesses. *Journal of Accounting and Taxation*, 12(2), 75-84.
- Khan S. I and Nawzad N.A (2019). The Effect of Atm Service Quality on Customer's Satisfaction And Loyalty: An Empirical Analysis. *Russian Journal of Agricultural and Socio-Economic Sciences*, 5 (89), 227 – 235.
- Khan S.I (2021). Impact of spirituality at workplace on organizational commitment in private banks of Nagpur, India. *Entrepreneur's Guide*, 14(4), 184-189.
- Kleinbaum, D. G., Kupper, L. L., Nizam, A., & Rosenberg, E. S. (2013). *Applied regression analysis and other multivariable methods*. Cengage Learning.
- Maharseni, N. W. R. (2018). Analysis of Acceptance Level Factors and Use of Android-Based Accounting Applications using the Technology Acceptance Model Approach. *Technology Acceptance Model*.

- Mwangi, B. W. (2011). Accounting systems in small and micro enterprises in Kenya. *Journal of Language, Technology & Entrepreneurship in Africa*, 3(1), 78-98.
- Othman, M., & Saud, M. B. (2015). Intellectual Capital in Small and Medium Enterprises: Case study of Malaysian Manufacturing SMEs. *Advances in Global Business Research*, 12 (1).
- Purwati, A. S., & Suparlinah, I. (2017). Factors Affecting the Benefits of Using the DEA Accounting Application to Prepare Financial Statements. *Sustainable Competitive Advantage-7 (SCA-7)*, 7(1), 411-420.
- Putra, Y. M. (2019). Analysis of factors affecting the interests of SMEs using accounting applications. *Journal of Economics and Business*, 2(3), 818-826.
- Romney, M. B., Steinbart, P. J., & Cushing, B. E. (2015). *Accounting Information Systems* (13th ed., Vol. 13th). Prentice-Hall Upper Saddle River, NJ.
- Susanto, A. (2013). *Accounting information system*. Bandung: Lingga Jaya.
- Uyanik, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia-Social and Behavioral Sciences*, 106, 234-240.
- Watson, R. (2015). Quantitative research. *Nursing Standard (2014+)*, 29(31), 44.
- Yaba, T. K., Ahmed, A. K., & Hamad, K. Q. (2021). COVID-19'S Impact on Brand, Campaigning and Marketing Creativity: A Social Marketing Theoretical Approach. *QALAAI ZANIST JOURNAL*, 6(4), 944-954.

## هۆکاره کانی کاریگه‌ری له سه‌ر به کارهینانی سیستمی ژمیریاری له نیوان کۆمپانیا

### بچووکه کان بۆ ناوه‌ند له کوردستان

تویژینه‌وه‌که هۆکاره کانی کاریگه‌ری له سه‌ر به کارهینانی سیستمی ژمیریاری له نیوان کۆمپانیا له نیوان کۆمپانیا دا دیاری ده‌کات و شی ده‌کاته‌وه بۆ دۆزینه‌وه‌ی رێگاگانی باشتکردنی گرتنه‌به‌ری سیستمی ژمیریاری له‌گه‌ڵ چوارچێوه‌ی بار و پێداویستیه‌کانی ئێس ئیم ئیس. 196 وه‌لام کۆکراوه‌ته‌وه له ئێس ئیم ئیس له شاری هه‌ولێر له کوردستان به به‌کارهینانی وه‌شانی 25 ی ئیم ئیس پی ئیس بۆ دنیابوون له په‌یوه‌ندی و گه‌وره‌یی کاریگه‌ریه‌کان که له لایه‌ن پینچ فاکتیره‌ی دیاریکراوه‌وه له سه‌ر به‌کارهینانی سیستمی ژمیریاری دروست کراوه ئه‌نجامه‌کان ده‌ریانخست که چالاکیه‌ی بازرگانیه‌ هه‌ستپیکراوه‌کان، سیستمی ژمیریاری هه‌ستیان به ئاسانی به‌کارهینان، تاییه‌تمه‌ندیه‌کانی راپۆرتکردنی سیستمه‌کانی

ژمیریاری کرد، وه تاییه تمه ندیه کانی ئاسایشی ژمیریاری کاریگه ری ئه رینیان هه بوو له سه ره به کارهینانی سیستمی ژمیریاری. تیچووی سیستمی ژمیریاری کاریگه ری نه رینی بیایه خی هه بوو له سه ره به کارهینانی سیستمی ژمیریاری. پیشیار کرا که شه پیده رانی سیستمی ژمیریاری ده بیت په ره به بهرنامه کانی ژمیریاری بدن که ئاسانن بو به کارهینان و به تاییه تی دیزاین کراون بو دابین کردنی پیداویستیه کانی ئیس ئیم ئیس. سه ره رای ئه وهش، ئیس ئیم ئیس هان درا بو جیه جی کردنی که مکردنه وهی تیچوونه کان و ستراتیجیه کانی زیاد کردنی داهات بو پارێزگاری کردن له دژی زیادبوونی تیچوونه کان که له لایهن سیستمی ژمیریاری ده سته وتن، دامه زرانن و خه رجیه کانی چاکردنه وه.

## **العوامل المؤثرة على تطبيق أنظمة المحاسبة بين المؤسسات الصغيرة والمتوسطة في كردستان**

تحدد الدراسة وتحلل العوامل المؤثرة في تطبيق أنظمة المحاسبة بين الشركات الصغيرة والمتوسطة لإيجاد أحسن طرق تحسين اعتماد أنظمة المحاسبة المطابقة للظرفية واحتياجات الشركات الصغيرة والمتوسطة. تم جمع 196 إجابة من الشركات الصغيرة والمتوسطة في مدينة أربيل في كردستان باستخدام الإصدار 25 للتأكد من العلاقة وحجم الآثار التي تشكلها العوامل الخمسة المحددة على تطبيق أنظمة المحاسبة. وأظهرت النتائج أن الأنشطة التجارية المتصورة، وأنظمة المحاسبة المتصورة سهولة الاستخدام، وخصائص إعداد تقارير الأنظمة المحاسبية، وميزات أمان أنظمة المحاسبة كان لها آثار إيجابية على تطبيق أنظمة المحاسبة. لم يكن لتكاليف النظم المحاسبية آثار سلبية كبيرة على تطبيق النظم المحاسبية. تم اقتراح أنه يجب على مطوري أنظمة المحاسبة تطوير برامج محاسبة سهلة الاستخدام ومصممة خصيصًا لتلبية احتياجات الشركات الصغيرة والمتوسطة. بالإضافة إلى ذلك، تم تشجيع الشركات الصغيرة والمتوسطة على تطبيق استراتيجيات الحد من التكاليف وتعظيم الإيرادات للحماية من الزيادة في التكاليف الناجمة عن اقتناء أنظمة المحاسبة وتكاليف التركيب والصيانة.