

A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

The Impact of Accounting Information Systems On organizational Performance of Manufacturing Companies in Erbil

Faraidun Fatah Aziz

Department of Electronic Management, Bakrajo Technical Institute, Sulaimani Polytechnic University, Sulaimani, Kurdistan Region of Iraq faraidun.fatah@spu.edu.iq

ARTICLE INFO

Article History: Received: 3/11/2021 Accepted: 8/3/2022 Published: Winter 2022

Keywords:AccountingInformationSystems,Moderatingeffect,Performancemanagement,Strategicmanagement,Structuralequationmodelling.

Doi: 10.25212/lfu.qzj.7.4.54

ABSTRACT

The main objective of the study is to examine the impact of information systems onorganizational accounting performance. The study addresses problems linked to the unavailability of a consensus regarding the interaction between strategic management and organizational performance. As a result, a hypothesis was formulated thataccounting information systems have a significant positive effect on organizational performance. Meanwhile, it had remained to be tested using a structural equation model whether such a relationship can be moderated by other factors. As a result, questionnaires were distributed to a convenience sample of 96 manufacturing companies in Erbil Kurdistan. The collected data were analysed using a novel structural equation modelling approach with the aid of Smart PLS. The results reaffirmed suggestions made by previous studies denoting that accounting information system enhances organisations' strategic approach to business and organizational performance. The study is significant because it is was yet to be applied in the context of manufacturing companies in Kurdistan to explore this matter.

1. Introduction

Accounting Information Systems (AIS) is one of the key innovative developments that has been introduced in the accounting field. AIS is defined as a system of collecting, storing and processing financial and accounting data used by decision-makers



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

(Gelinas, Dull & Wheeler, 2014). Alternatively, Romney, Steinbart and Cushing (2015). consider AIS as a computer-based method for tracking accounting activity in conjunction with information technology resources. The importance of AIS is widely evident through its adoption in nations around the world and companies in Kurdistan are increasingly adopting AIS on a large scale. One of the key sectors in which AIS is witnessing massive adoption and increased use in Kurdistan is the manufacturing sector. That is, manufacturing companies, especially in Erbil are resorting to using applying AIS for reasons linked to accuracy (Gelinas, Dull & Wheeler, 2014), data security (Romney, Steinbart& Cushing, 2015), speed (Hall, 2015), and cost-effectiveness (Meiryani, Susanto&Warganegara, 2019).

There is high feasibility that AIS dimensions in the form of information input, storage, process and communications (Meiryani, Susanto&Warganegara, 2019), cancause positive changes in organisational performance. Studies reckon that the adoption of AIS enhances both organisational effectiveness and efficiency (Hall, 2015; Romney, Steinbart& Cushing, 2015). Such changes are a result of improvements in decision making through the timely provision of enhanced accurate information (Faccia, Mosteanu, Fahed&Capitanio, 2019) and organisation and utilisation of resources (Gelinas, Dull & Wheeler, 2014). As a result, AIS causes positive changes in organisational performance dimensions namely productivity, revenue inflow maximisation, cost minimisation etc. Hence, it is acceptable to consider at this stage that there is a positive interaction linking AIS with organisational performance.

Despite, the key benefits AIS is presumed to offer, critical issues regarding the use of AIS highlight that these benefits are conditional and subjective to various conditions that are still yet to be documented in academic research. For instance, Faccia, Mosteanu, Fahed and Capitanio (2019) assert that AIS is capable of enhancing organizational performance when augmented with the right and effective strategies targeting its four distinct dimensions (inputting, storage, processing and communication). Studies reckon that AIS is one of the approaches capable of enhancing the effective use of business resources, assets tools and strategies (Anyakoha, 2019; Gaturu et al., 2017; Velani, 2018). However, its role is still yet to be analysed in the context of manufacturing companies. Such is significantly important when such observations are applied in the context of manufacturing companies in



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

Kurdistan as studies are still yet to be conducted to explore this matter. Additionally, the relationship itself between accounting information systems and organizational performance is subject to unresolved contrasting arguments. For instance, Huy and Phuc (2020) contend that the effective capacity of AIS to enhance organizational performance is a mere theoretical suggestion requiring validation in any country or context in which it is applied. Other studies consider the effects as significant (Amusawi, Almagtome, & Shaker, 2019) while others denote the relationship as either positive (Ibrahim, Ali & Besar, 2020) or negative (AI-Delawi&Ramo, 2020). Given all these circumstantial issues, this study, therefore, seeks to:

- 1) Examine the nature and significance of the interaction between accounting information systems and organizational performance.
- 2) Offer suggestions on how best accounting information systems can be aligned to effectively boost organizational performance.

The study is vital for enhancing understanding of the strategic use of AIS in enhancing organizational performance. Moreover, it also sheds light concerning how manufacturing companies can effectively use AIS to enhance their competitive position and transparency in disclosure of information, and foster solid corporate governance practices.

2. Literature review

The relevance and theoretical underpinnings of AIS and organisational performance Hall(2015) defines AISas a structure that organisations utilise to collect, store, manage, process, retrieve, and report their financial data. Such a definition entails that AIS aims to improve methods and activities related to the way financial information is collected, stored, managed, processed, retrieved, and reported. Thus, AIS tracks both information technology resources and accounting activities using traditional accounting methods. While it remains to be established further, studies contend that AIS seeks to manage data related to expenses, revenue, customer information, tax and customer information (Amusawi, Almagtome, & Shaker, 2019; Romney, Steinbart& Cushing, 2015). It is vital to note that these aspects are key indicators of organisational performance. Hence, improvements in the management



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

of such aspects will lead to significant improvements in organisational performance. The importance of AIS in addressing issues affecting organisational performance is another important aspect of information technology. For instance, a study by Gelinas, Dull and Wheeler(2014) highlights that AIS can be used to manage data about purchase requisitions, sales orders as well as managing trial balance, payroll, inventory and other financial statements. The management of such organisational activities and financial aspects of the business is crucial for improving organisational performance.

There are limited theoretical bases connecting AIS to organisational performance. Besides, the available theories do not provide a direct illustration of how AIS affects organisational performance. For instance, the Technology Acceptance Model (TAM) considers that technology and information systems are adopted based on their perceived ease of use and perceived usefulness of a technological influences its acceptance (Surendran,2012). Though the TAM centres on the acceptance of technology, it does offer ideas regarding how the AIS should perform in terms of the benefits and ease of use. Such are ideas become part of the necessary needed for improving organisational performance. This implies that the AIS should perform better and offer substantial benefits concerning the collection, storage, management, processing, retrieval and reporting of financial information in organisations.

Theoretically, AIS will cause improvements in organisational performance through improvements in aspects like productivity, efficiency and effectiveness. For instance, AIS improves data inputting, storage processing and reporting and these aspects, in turn, enhance operational activities' effectiveness and efficiency (Al-Delawi&Ramo, 2020; Ibrahim, Ali &Besar, 2020). In some studies, the connection between AIS and organisational performance is presumed to emanate from improved decisions making (Amusawi, Almagtome, & Shaker, 2019; Gelinas, Dull & Wheeler, 2014; Romney, Steinbart& Cushing, 2015). Meanwhile, manufacturing companies' perceptions of AIS influence whether they will adopt the AIS and integrate them with their systems. Nevertheless, the quality of information produced using AIS is presumed to be high to such an act that it enables them to make rational decisions (Phuc, 2020). There are also other supporting studies contending that the connection between AIS and organisational is positively connected by the improved use and management of



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

organisational resources (Hall, 2015; Phuc, 2020).All these ideas tend to support the idea that there are both direct and indirect connections linking AIS' potential capacity to enhance both employees', departmental and overall organisational performance. However, much is needed to explore the exact ways through which information systems like AIS can be used to improve organisational performance. Hence, the purpose of this study is to explore further AIS' influence on organisational performance.

Empirical literature review and hypothesis development

The subject matter of AIS is widely covered in academic studies (Amusawi, Almagtome, & Shaker, 2019; Faccia et al., 2019). As such studies contend that AIS is vital for reasons ranging from accuracyof accounting information (Gelinas, Dull & Wheeler, 2014), enhancing data security (Romney, Steinbart& Cushing, 2015), the speed at which information is processed (Hall, 2015), and is cost-effectiveness (Meiryani, Susanto&Warganegara, 2019). However, it is imperative to establish that the benefits of AIS are not limited to these benefits and more benefits can be tested when AIS is connected to other subject matters. Hence, the study aims to explore voids that AIS has not been linked to.

This calls for similar studies to explore the implications of AIS on organizational aspects. Additionally, much is required to extend examinations of the benefits and implications of AIS on other organizational aspects. Notably, strategic management whose benefits and significance in organizations is highly acknowledged, especially when integrated with AIS (Anyakoha,2019; Gaturu et al., 2017; Velani, 2018). Strategic management refers to the ongoing planning, monitoring, analysis and assessment of all necessities an organization needs to meet its goals and objectives (Anyakoha, 2019).

The integration of AIS and organisational performance a rare phenomenon that is still yet to be explored in various economic contents like Kurdistan. Hence, this study argues that the integration of these two precepts is instrumental in providing detailed insights about the use of organizational resources and the organization's approach to business activities. Such is important as strategic management is connected to various



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

benefits linked to competitive advantage (Maina, 2018), industrial growth (Gaturu, 2018), product development (Zainal et al., 2018), etc.

It is empirically fit at this state to argue that integrating AIS with strategic management of manufacturing companies' operational activities is vital for enhancing their organizational performance. The study's novelty and originality are engraved in this notion. Such follows limited examinations providing details and empirical support regarding the structural connections between these variables.

Studies have long hinted that AIS is essential and that its adoption is critical for enhancing organizational performance (AI-Delawi&Ramo, 2020; Ibrahim, Ali, &Besar, 2020). Supporting evidence shows that AIS is instrumental for improving the accuracy of accounting information (Gelinas, Dull & Wheeler, 2014), enhancing data security (Romney, Steinbart& Cushing, 2015), the speed at which information is processed (Hall, 2015), and is cost-effectiveness (Meiryani, Susanto&Warganegara, 2019). Such benefits are in turn considered as key elements that enhance organizational performance (Rikhardsson, 2017). Therefore, this study seeks to extend 's ideas and apply them in the context of manufacturing companies in Erbil, Kurdistan, where academic coverage is still at the infancy stages. Thus, the following hypothesis will be used for accomplishing such a purpose;

• H₁: Accounting information systems has a significant positive effect on organizational performance.

In light of the aforementioned hypotheses, the following conceptual model will be used to test the impact of accounting information systems on performance management moderated by strategic management.

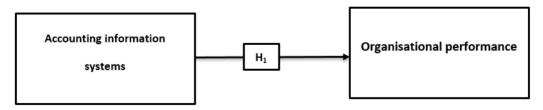


Figure 1: Conceptual framework



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022

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

3. Research methodology

One of the key concerns or problems regarding the connection between AIS andorganisational performance is the application of robust empirical methods capable of analysing the underlying structural connections. Hence, the adopted Structural Equation Modelling (SEM) approach is capable of addressing such issues. SEM is important for examining the variables factor loadings and relationships (Sarstedt, Ringle& Hair, 2017). Hence, SEM uses similar ordinary least squares assumptions regarding the linear association between the variables, normality, serial correlation, multicollinearity and heteroscedasticity that are integrated into model fitness criteria (Ali et al., 2018; Sarstedt, Ringle& Hair, 2017). The subsequent sections provide a detailed examination of the procedures carried out in applying the SEM and arriving at study conclusions.

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 (Brannen,2017). In particular, the study uses the Structural Equation Modelling approach in analysing the impact of AIS on performance management moderated by strategic management. SEM is vital for analysing structural connections between the model variables (Sarstedt, Ringle& Hair, 2017). Furthermore, Ali et al. (2018) reiterate the importance of using SEM citing that it is vital for establishing both mediating and moderating effects.

3.2Data analysis procedures

The initial process involved determining the variables' factor loading using factor analysis (Sarstedt, Ringle& Hair, 2017). Then study proceeded to use the selected variables with factor loadings of at least 0.70 in conducting validity and internal consistency tests (Sarstedt, Ringle& Hair, 2017).Eventually, a structural model was estimated and the extent to which the model is capable of answering questions related to the impact of AIS on performance management was moderated by strategic management using model fitness tests. Smart PLS was used to conduct the entire data analysis procedure.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022

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

3.3Data collection

The data was collected using a questionnaire that was developed using related empirical studies about AIS (Khasawneh, 2018) and organizational performance (Khasawneh, 2018). Both variables had an equal number of 15 variable elements that were measured using a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=not sure, 4=agree, 5=strongly agree).

3.4Population and sampling procedures

One of the key issues affecting the development of scientific research in Kurdistan is the lack of data. As such, there are no current official statistics that have been reported over the past 10 years regarding the number of registered manufacturing companies in Erbil. Additionally, due to limitations posed by Covid 19and the inability of some manufacturing companies to apply AIS. As a result, the study resorted to focusing on manufacturing companies using AIS that are closely situated to the researcher and were strictly observing Covid 19 healthy and safety protocols. Thus, a convenience sampling approach was deemed as necessary for accomplishing the study purposes and a convenience sample of 120 manufacturing companies in Erbil was selected. Besides, Sharma (2017) supports the decision to use convenience sampling in such cases citing that it provides qualitative information and results quickly.

4. Results

The results were collected from 96 manufacturing companies composed of 63 male employees and 33 male employees. 33 employees were operating in the field of apparel and textiles, 7 oil and chemicals, 18 plastics, computers and gadgets, 10 transportation, 21food production, 7 metal manufacturing. 21 employees were between 18-25 years, 49 employees were between 26-33 years, 11 employees were between 34-41 years, and 9 employees were between 42-49 years, 6 employees were 50 years and above. 88 of the employees agreed that AIS is of significant importance to manufacturing companies while 8 employees contrasted with this idea.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022

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

4.1 Factor analysis

The selected variable elements shown in Table 1 shows that all the selected variables had factor loading above 0.70 (Sarstedt, Ringle& Hair, 2017). Hence, the variables were considered valid in explaining the impact of AIS on performance management moderated by strategic management.

Variable elements	Factor loadings	Variable elements	Factor loadings			
AIS 1	0.798	OP 7	0.709			
AIS 2	0.790	OP 10	0.801			
AIS 4	0.742	OP 11	0.798			
AIS 5	0.713	OP 12	0.781			
AIS 8	0.746	OP 14	0.785			

Table 1: Factor analysis results

Where **AIS** = Accounting information system; **OP** = Organizational performance

The Fornell-Larcker criterion was used in determining the variables' discriminant validity. The diagonal correlation values provided in Table 2 exceed their respective underneath correlations coefficients values (Sarstedt, Ringle& Hair, 2017). Hence, discriminant validity is established.

AIS OP					
AIS	0.765				
OP	0.724	0.766			

Table 2: Discriminant validity

Where AIS = Accounting information system; OP = Organizationalperformance

Cronbach's alpha values exceeded 0.70 and this implies that the variables AIS (0.822), and OP (0.859) were highly reliable. Additionally, Rho_A (AIS=0.826; OP=0.864) and composite reliability(AIS=0.876 and OP=0.895) were above 0.70 indicating that the constructs were reliable (Sarstedt, Ringle& Hair, 2017). Furthermore, average variance values were above 0.50 and this shows that the variables had the required construct validity levels (see Table 3 and Sarstedt, Ringle& Hair, 2017).

Table 5: Construct reliability and validity							
	Cronbach's alpha	Rho_A	Composite reliability	Average variance			
AIS	0.822	0.826	0.876	0.586			
OP	0.859	0.864	0.895	0.587			

Table 3: Construct reliability and validity

Where **AIS** = Accounting information system; **OP** = Organizationalperformance



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022

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

The estimated SEM perfectly fitted as supported by the NFI values that exceeded 0.70, a significant Chi-square value of 0.755, D_G and D_ULS that were lower than the related confidence interval and an SRMR value exceeding 0.080 (see Sarstedt, Ringle& Hair, 2017). Hence, it is inferred that there are no misspecifications that affect the model and there is an exact fit (see Table 4).

	NFI	Chi-Square	D_G	D_ULS	SRMR
Saturated model	0.754	214.832*	0.419	1.055	0.083
Estimated model	0.754	214.832*	0.419	1.055	0.083

Table 4: Model fit summary

Where **SRMR**= Standardized Root Mean Square Residual;**d_ULS**= the squared Euclidean distance) and **d_G**= the geodesic distance.

Path analysis was applied as part of the procedures carried out to ascertain the relationship between AIS and performance management. The results shown in Figure 2 shows that there is a significant positive interaction between AIS and organization performance of 0.331. Thus, we accept hypothesis 1 and contend that AIS is instrumental for improving the accuracy of accounting information, enhancing data security, the speed at which information is processed, the use and organisation of resources, and the quality of decisions made (see Gelinas, Dull & Wheeler, 2014; Hall, 2015; Romney, Steinbart& Cushing, 2015). It is through improvements that organisations will observe positive changes in organisational performance. This aligns with Rikhardsson's (2017) propositions contending that AIS is cost-effective and results in the adoption of better management practices that help in boosting organizational performance (see Figure 2).

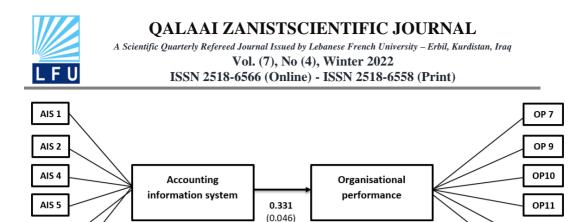


Figure 2: Path analysis

OP12

OP13

Conclusion

AIS 8

AIS 8

The study was aimed an analysis the impact of accounting information systems on performance management moderated by strategic management. This followed a series of practical and academic observations denoting that the relationship itself between accounting information systems and organizational performance is subject to unresolved contrasting arguments. Other studies consider the effects as significant while others denote the relationship as either positive (Ibrahim, Ali &Besar, 2020) or negative. Additionally, the role of AIS was still yet to be analysed in the context of manufacturing companies. Such is significantly important when such observations are applied in the context of manufacturing companies in Kurdistan as studies are still yet to be conducted to explore this matter.

The information established from the structural equation modelling results denoted that the adoption of AIS increases organizational performance. This aligns with previous related studies and suggests that AIS is instrumental for improving the accuracy of accounting information, enhancing data security, the speed at which information is processed, and is cost-effective. This is also possibly because AIS provides detailed information about themanufacturing companies' strategic use of resources and operational activities. Such information is vital for developing effective and efficient strategic approaches to business activities capable of boosting organisational performance. Besides, cost minimisation and revenue maximisation strategies are linked to the quality of information processed using AIS through sales



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

accounts, income statements, cash flows statements etc. Moreover, AIS plays a vital role in organising and managing organisational resources leading to improved productivity levels. Additionally, the quality of decisions made using AIS is often higher compared to situations where organisations rely on traditional accounting systems incapable of processing financial information into understandable and insightful details. All these benefits and aspects will work towards improving organisational performance.

However, it is vital to acknowledge that the adoption of AIS can be costly in terms of training and effort spent trying to teach employees how to familiarise themselves with AIS. This aligns with previous suggestions contending that performance can be better enhanced from this level training employees how to use AIS and dealing with challenges undermining the effective use of AIS in organizations.

Insights provided in this study calls for manufacturing managers to enhance the effective use of their strategic approach to business by integrating other strategic management aspects like competitive, industry and market analysis to boost organizational performance. This is because organizational performance is not solely determined by internal factors but is influenced by a combination of both internal and external factors that must be integrated to effectively enhance performance. Moreover, organizations need to apply other non-financial indicators to further assess the implications of their strategic approach and adoption of AIS on both employees' performance and organizational performance. Lastly, the study also recommends that managers introduce training programs to improve employees' knowledge and practical use of AIS and deal with related challenges undermining the effective use of AIS in their organizations.

Due to limitations posed by Covid 19, which in turn restricted the use of a large sample size, future studies are implored to apply stratified random sampling of notable regions with a high concentration of manufacturing companies. Additionally, innovative changes caused by Covid 19 demand the integration of the innovation variable in related future examinations.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022

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

References:

- Agwu, M. E. (2018). Analysis of the impact of strategic management on the business performance of SMEs in Nigeria. *Academy of Strategic Management Journal*, 17(1), 1-20.
- Al-Delawi, A. S., &Ramo, W. M. (2020). The impact of accounting information system on performance management. *Polish Journal of Management Studies*, 21.
- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*.
- Amusawi, E. G., Almagtome, A. H., & Shaker, A. S. (2019). Impact of Lean Accounting Information on The Financial performance of the Healthcare Institutions: A Case study. *Journal of Engineering and Applied Sciences*, 14(2), 589-399.
- Anyakoha, C. (2019). Strategic management practice and micro-small enterprises financial performance in Imo, south east Nigeria. *ActaOeconomicaUniversitatisSelye*, 8(1), 41-52.
- Brannen, J. (2017). Combining qualitative and quantitative approaches: an overview. *Mixing methods: Qualitative and quantitative research*, 3-37.
- Brecht, H. D., & Martin, M. P. (1996). Accounting information systems: The challenge of extending their scope to business and information strategy. *Accounting Horizons*, *10*(4), 16.
- Faccia, A., Mosteanu, N. R., Fahed, M., &Capitanio, F. (2019, August). Accounting Information Systems and ERP in the UAE: An Assessment of the Current and Future Challenges to Handle Big Data. In Proceedings of the 2019 3rd International Conference on Cloud and Big Data Computing (pp. 90-94).
- Gaturu, P. M. (2018). *Influence of Strategic Management Practices on Organizational Performance of Mission Hospitals in Kenya* (Doctoral dissertation, JKUAT-COHRED).
- Gaturu, P., Waiganjo, E., Bichang'a, W., &Oigo, D. (2017). Influence of Strategic Control on Organizational Performance of Mission Hospitals in Kenya. *International Journal of Innovative Research & Development*, 6(6), 163-167.
- Gelinas, U. J., Dull, R. B., & Wheeler, P. (2014). Accounting information systems. Cengage learning.



QALAAI ZANISTSCIENTIFIC JOURNAL A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

Hall, J. A. (2015). Accounting information systems. Cengage Learning.

- Huy, P. Q., &Phuc, V. K. (2020). The impact of public sector scorecard adoption on the effectiveness of accounting information systems towards the sustainable performance in public sector. *Cogent Business & Management*, 7(1), 1717718.
- Ibrahim, F., Ali, D. N. H., &Besar, N. S. A. (2020). Accounting information systems (AIS) in SMEs: Towards an integrated framework. *International Journal of Asian Business and Information Management (IJABIM)*, *11*(2), 51-67.
- Khasawneh, T. (2018). Accounting Information Systems Impact On Jordanian Banks Performance: The Moderating Role Of Training And Education. Master thesis. Available at http://docs.neu.edu.tr/library/6538707577.pdf
- Ladan Shagari, S., Abdullah, A., & Mat Saat, R. (2017). Accounting information systems effectiveness: Evidence from the Nigerian banking sector. *Interdisciplinary Journal of Information, Knowledge, and Management, 12*, 309-335.
- Maina, E. W. (2018). *Influence of Strategic Management Practices on Competitiveness of Kenyan Tea* (Doctoral dissertation, Jkuat-COHERED).
- Meiryani, M., Susanto, A., &Warganegara, D. L. (2019). The issues influencing of environmental accounting information systems: an empirical investigation of SMEs in Indonesia. *International Journal of Energy Economics and Policy*, 9(1), 282.
- Rikhardsson, P. M. (2017). Information systems for corporate environmental management accounting and performance measurement. In *Sustainable Measures* (pp. 132-150). Routledge.
- Romney, M. B., Steinbart, P. J., & Cushing, B. E. (2015). *Accounting information systems*. Boston, MA: Pearson.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of market research*, *26*(1), 1-40.
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International journal of applied research*, *3*(7), 749-752.
- Surendran, P. (2012). Technology acceptance model: A survey of literature. *International Journal of Business and Social Research*, 2(4), 175-178.



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

- Trabulsi, R. U. (2018). The Impact of Accounting Information Systems On Organizational Performance: The Context Of Saudi's SMEs. *International Review of Management and Marketing*, 8(2), 69-73.
- Velani, M. D. (2018). Influence of Strategic Management Strategies on Organizational Performance of Private Construction Firms in Nairobi County (Doctoral dissertation, United States International University-Africa).
- Zainal, H., Parinsi, K., Hasan, M., Said, F., &Akib, H. (2018). The influence of strategic assets and market orientation to the performance of family business in Makassar City, Indonesia. *Academy of Strategic Management Journal*, *17*(6).

کاریگەری سستمە زانیاریە ژمێریاریەکان لەسەر کارگێری ئەدا لەژێر چاودێری کارگێری ستراتیجی: کۆمپانیا بەرھەمھێنەرەکانی شاری ھەولێر بە نمونەیی

پۆختە

ئەم لێكۆڵىنەوە تىشك دەخاتەسەر كارىگەرى سستمە زانياريە ژمێرياريەكان لەسەر كارگێرى ئەدا لەژێر چاودێرى كارگێرى ستراتيجى، بۆ ئەو مەبەستەش توێژەر 96 سامپڵى شياوى وەرگرتووە لەنێو كۆمپانياكانى شارى ھەولێر، بۆ شيكردنەوەى داتا كۆكراوەكان توێژينەوەكە بە ھاوكارى پرۆگرامى (SmartPLS) پشتى بەستووە بە ميتۆدى ھاوكێشەى چوارچێوەيى وەك ئامرازى شيكردنەوەى داتاكان. لە دەرئەنجامى ئەم توێژينەوەدا پشتراستى توێژينەوەكانى پێشوو كراوە كە تيشكيان خستوەتەسەر رۆڵى سستمى زانيارى ژمێريارى لە تۆكمەكردنى ئەو رێكارى ستراتيجيانەى دامەزراوە پشتيان پێ دەبەسێت بۆ باشكردنى كار و رێكخستنى دامەزراوەكە، ھەروەھا توێژينەوەكە جەخت لەوە دەكاتەوە كە كارگێرى ستراتيجى گرنگە بۆ تۆكمەكردنى ئەداى رێكخستن. لە كۆتاى ئەم توێژينەوەدا چەند پێنيارێك خراوەتەروو سەبارەت بەو رۆلەى ئەرێنيەى كارگێرى ستراتيجى دەگێريٽت لە پەيوەددى نيوان توێژينەوەيە پێويستى بە سەلماندن و تاقيكردنەو بوو. بە پلەى يەكەم گرنگى ئەم توێژينەوە لەم سستمى زانيارى ژمێريارى و ئەداى رێكخستنى دامەزراوەكان، ئەمە پاش ئەوەى ئەم رۆلە بەر لەم پێنيارێك خراوەتەرپوو سەبارەت بەو رۆلەى ئەرێنيەي كارگێرى ستراتيجى دەگێريت لە پەيوەدا چەند توێژينەوەيە پڼويستى بە سەلماندن و تاقيكردنەيە بود. بە پلەي يەكەم گرنگى ئەم توێژينەوە لەم سەرلەم بىينيارۆك ئورو سەبارەت بەورىرىكۈردى سەرايەرى يەرەرىيەرى ئەم توێژينەوددا چەند مەستمى زانيارى ژمێريارى و ئەداى رێكخستنى دامەزراوەكان، ئەمە پاش ئەوەى ئەم رۆلە بەر لەم پېزينەوەيە پيويستى بە سەلماندن و تاقيكردنەمى بەردى يەريەيەدە گرنگى ئەم توێژينەوە لەودايە مەرزىيەيەرىيە يەكەر بەرىزە بەرەرى يەستەرە بود. بە پەرى يەكەم گرنگى ئەم توێژينەوە لەم رەر كەي پېيىتى بەر لەم بەتى يەكلا بەريەرەيەرەن يەنھا پێشنيارێكەريەي لە سىتىمى (AIS) بەدى دەكرێت بۆ تۆكمەكردنى ئەداى رێكخستى تەنھا پێشنيارێكە و پۆيستى بە سەلماندى و



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

پشتڕاستکردنەوەيە، لە ديدى دروستکردنى کاريگەرى خاڵێکى گرنگە، بەلاى پەيوەنديەکە ئەرێنيە، بەڵام لە ديدى نەرێنيە. لە سۆنگەى ھەموو ئەم گرفتانەى چواردەور، ئەم توێژينەوە ھەوڵ دەدات:

- لێکۆڵینهوه بکات لهسهر سروشت و گرنگی پهیوهندی نێوان سستمی زانیاری ژمێریاری و ئهدای رێکخستن.
- تیشك بخاتهسهر ئهو فاكتهرانهى له رێگهيانهوه كارگێرى ستراتيجى كار دەكاتهسهر پهيوەندى نێوان سستمى زانيارى ژمێريارى و ئەداى رێكخستن.
- 3. پێشنیازکردن سهبارهت به چۆنیهتی ئامادهکردنی باشترین سستمی زانیاری ژمێریاری بۆ تۆکمهکردنی ئهدای رێکخستن.

زیندویٚتی نُهم تویٚژینهوه لهوهدا دهردهکهویٚت که دهتوانیّت ڕونکردنهوه بدات لهسهر باشترین بهکارهیّنانی سستمی (AIS) که بتوانریّت بهکاربیّت بۆ تۆکمهکردنی نُهدای ریّکخستن، له ڕوویهکی ترهوه بهکهڵکه بۆ ڕیٚنیشاندان بۆ کۆمپانیا بهرههمهیّنهرهکان تاکو سستمی (AIS) بهو شیّوه بهکار بهیّنن که پیّگهی کۆمپانیاکه لهنیّو رکابهرهکاندا بپاریّزیّت و له ههمان کاتدا شهفافیهت لهکاتی دهرخستهکانی زانیاریهکاندا پیاده بکات

کلیله ووشه: سیستمی زانیاری ژمێریاری،کاریگەری ناوەند،کارگێڕی ئەدا،کارگێڕی ستراتیجی، میتۆدی هاوکێشەی چوارچێوەیی.

اثر نظم المعلومات المحاسبية على ادارة الاداء في ظل الادارة الاستراتيجية دراسة تطبيقية على أثر نظم المعلومات التصنيع في اربيل

الملخص:

تسعى هذه الدراسة الى تسليط الضوء على اثر نظم المعلومات المحاسبية على ادارة الاداء في ظل الادارة الاستراتيجية، ولتحديد معالم هذا التأثير، اعتمدت الدراسة على عينة مناسبة من 96 شركة مصنعة قائمة في مدينة اربيل التابعة لأقليم كوردستان، استعانت هذه الدراسة بمنهج نمذجة المعادلات الهيكلية كوحدة احصائية لتحليل البيانات التي تم جمعها مستعيناً ببرنامج التحليل (SmartPLS). اكدت النتائج ما تم طرحها في الدراسات السابقة مسلطاً الضوء على الدور الذي يلعبه نظام المعلومات المحاسبية في تعزيز النهج الاستراتيجية لتعزيز قبل المنظمة على نطاقي الاداء الوظيفي والتنظيمي، واكدت الدراسة ايضاً ضرورة الادارة الاستراتيجية لتعزيز الاداء التنظيمي. وفي ختام الدراسة تم طرح العديد من التوصيات فيما يتعلق بالاثار الايجابية التي تلعبها الادارة الاستراتيجية على العلاقة بين نظم المعلومات المحاسبية ويضاً ضرورة الادارة الاستراتيجية لتعزيز الاداء التنظيمي. وفي ختام الدراسة تم طرح العديد من التوصيات فيما يتعلق بالاثار الايجابية التي تلعبها الادارة الاستراتيجية على العلاقة بين نظم المعلومات المحاسبية والاداء الانتراتيجية لتعزيز الاداء التنظيمي. وفي ختام الدراسة تم طرح العديد من التوصيات فيما يتعلق بالاثار الايجابية التي تلعبها الادارة الاستراتيجية على العلاقة بين نظم المعلومات المحاسبية والاداء التنظيمي بعد ان كانت تفتقر الى الفاعلية الاستراتيجية. وتظهر اهمية هذه الدراسة في المقام الاول من حيث عدم تطبيقها على ارض الشركات الصناعية في



A Scientific Quarterly Refereed Journal Issued by Lebanese French University – Erbil, Kurdistan, Iraq Vol. (7), No (4), Winter 2022 ISSN 2518-6566 (Online) - ISSN 2518-6558 (Print)

كور دستان لمعرفة الحقائق ورفع الغموض المطروحة حولها. على سبيل المثال، من وجهة نظر ان الفعالية التي يتميز بها نظام تحديد الهوية الآلي (AIS) لتعزيز الاداء التنظيمي لا يخرج عن كون مقترح نظري بحاجة الى التحقق اينما تم تطبيقه، بينما يرى اخرون بأن الاثار عامل ضروري لابد منه، في حين تعتبر العلاقة عند البعض ايجابية او سلبية. وفي ظل وجود جميع هذه العوائق العرضية، تسعى هذه الدراسة الى تحقيق ما يلي:

- دراسة طبيعة وأهمية العلاقة القائمة بين نظم المعلومات المحاسبية والاداء التنظيمي.
- 2- تسليط الضوء على العوامل التي تؤثر بها الادارة الاستراتيجية على العلاقة بين نظم المعلومات المحاسبية والاداء التنظيمي.

3- طرح مقترحات حول كيفية اعداد افضل نظم المعلومات المحاسبية لتعزيز الاداء التنظيمي بصورة فعالة.

وتعتبر هذه الدراسة حيوية من حيث قدرتها على توضيح الاستخدام الاستراتيجي لنظام تحديد الهوية الألي (AIS) بصورة تحسن الاداء التنظيمي. ومن جهة اخرى تفيد هذه الدراسة في توجيه شركات التصنيع لاستخدام نظام (AIS) بشكل تضمن مركزها التنافسي من جهة وشفافيتها في الكشف على المعلومات من جهة اخرى.

الكلمات الرئيسية: نظم المعلومات المحاسبية ، التأثير الوسيط ، إدارة الأداء ، الإدارة الإستراتيجية ، نمذجة المعادلات الهيكلية.