

The Mediating Effect of COVID 19 - Pandemic on the Nexus between Accounting Information Systems Reliability and E-Commerce: From the Perception of Documentary Credit Employees

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Abstract: In this paper, we discuss the mediating effect of COVID 19 - pandemic on the nexus between accounting information systems reliability and e-commerce: from the perception of documentary credit employees. To test this nexus, a 38-item questionnaire was developed and sent to respondents who are working in the documentary credit department at Jordanian commercial banks. Only 230 questionnaires were returned. The findings show a positive and significant nexus between Accounting Information System Reliability (Security, Availability, Processing Integrity, Privacy, and Confidentiality) and e-commerce. And also, the results of regression illustrated that COVID 19 has a mediating effect in the nexus between Accounting Information System Reliability and E-Commerce.

Keywords: COVID 19, Accounting Information Systems Reliability, E-Commerce.

1 Introduction

Globalization Coronavirus has changed the way we live completely within two years schools and universities become closed, millions of people in the whole world will lose their jobs and all general gatherings will be suspended [1]. In Jordan, as in most Arab societies, COVID-19 has influenced most aspects of one's life. COVID-19 has increased poverty and suffering. The pandemic also has affected educational and religious systems worldwide. According to data released by UNESCO, also schools, university, Churches, Mosques, Malls, Gyms, Restaurants, Bars and places of worship have closed, the list is endless. [2] Accounting information systems reliability (AISR) received a lot of attention, with the beginning of the digital revolution, especially after noting the growing positive role of them in avoiding making wrong decisions, and the need for accounting information systems reliability increased with the increase in the benefits arising from the uses of information technology in many institutions. [3] E-commerce is considered one of the benefits and advantages of AISR and the use of information technology, whether through documentary credits or collection policies and others. The American Institute of Certified Public Accountants and the Canadian Institute of Certified Public Accountants have issued what is known as the systems reliability (SysTrust) as a professional work guide that illustrate the testing and verifying possibility the levels of reliability of the work of accounting information systems (AISs). (AICPA/CICA, 2001).

It has become among the tasks of the chartered accountant to issue the so-called (SysTrust) certificate. This certificate indicates the companies' commitment to achieving information security controls, and thus providing the level of information security specified in light of those standards [4].

Jordanian commercial banks have an important and vital role in backing the national economy on several levels through e-commerce or through traditional commerce. [5, 6] so, the term electronic commerce appeared after 1994, because it was associated with the emergence of the Internet. Electronic commerce is the management of commercial activities and the implementation of operations related to goods and services by transferring data through the Internet [7, 8]. [3] defined electronic commerce as a system that enables the sale and purchase of goods, services and information via the Internet.

1.1 Accounting Information Systems Reliability

Accounting Information Systems Reliability is defined as independent professional services that aim to verify the reliability and content of information for decision-making purposes [8-10]. [11] that includes five principles: System security principle is a good security levels of the accounting information system and are a tool to reduce threats related to illegal physical use. Includes theft and intentional damage to some system elements [9, 12, 13]. Also, Confidentiality principle known as a number of procedures that participate in processing which contribute to maintaining the

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confidentiality of the company's information, whether in the process of collecting, processing, or storing it [14]. As well as, Privacy principle is a set of steps that guarantee the privacy of the information of individuals dealing with the company's systems, by setting a set of levels to protect the information of each of the company's customers on one hand, and users of the system on the other hand [15]. Also, Processing Integrity principle is the degree of accuracy, and legitimacy, timeliness, and completeness of data processing operations in the AIS. The integrity of the AIS is often described as being good if it is able to implement the planned series of processing operations during the time schedules set on the one hand, while ensuring that no illegal use or access of the processing resources occurs [7, 8]. And the Availability principle is the extent to which the end user is able during the appropriate time to use the system to implement work requirements of the business organization. This concept implies the ability to carry out the data processing cycle of activities of input, processing, storage, and reporting as efficiently as possible [10, 16, 17].

1.2 Electronic Commerce

The emergence of e-commerce has grown where it has become very important for established business processes. [18, 19] therefore, e-commerce payment system defined is a e-payment either through payment cards or by credit cards and the most used method in e-commerce or through e-money or what is known as the e-wallet, so that the customer can use this wallet to make purchase or sale operations or conversion. [20] therefore, e-commerce aimed to achieve a set of goals, such as increasing the market space by transcending geographical and regional borders, reducing and minimizing production, marketing and distribution costs, and carrying out marketing, selling and buying operations via the Internet. E-commerce was characterized by increasing sales and reducing costs [21]. [22] show that electronic commerce is characterized by the fact that money is digital money, and the seller does not meet the buyer and the market isn't clear.

1.3. Coronavirus Pandemic

Starting from the beginning of 2020, almost every country, including Jordan, has dealt with the Covid-19 pandemic. The outbreak of the Covid-19 in Indonesia affects the financial stability of SMEs. [23] Also, the coronavirus pandemic COVID-19 has contributed to reducing e-commerce and reducing the use of accounting information system by firms in all over the world. [24].

Recent studies have identified a number of factors that might influence e-commerce [18, 24, 25] and from the previously identified factors. This study came to investigate the moderating effect of coronavirus pandemic in the nexus between the accounting information systems reliability and e-commerce, from the perception of documentary credit employees.

2 Literature Review and Hypotheses Development

Many researchers found that there is an essential role for AISR on electronic commerce, the current study seeks to compare it with many studies through the following hypotheses:

[26, 27] Found that accounting information system had improved efficiency and positive effect on e-commerce in firms.

Therefore, based on the previous discussion the literature reviews most studies found there a nexus between accounting information systems reliability (security principle, confidentiality, privacy, processing integrity, and availability principle) and electronic commerce, thus, the following first major hypothesis is formulated as:

H01: First major hypotheses: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect for accounting information systems reliability on electronic commerce in Jordanian commercial banks.

2.1. Security principle in accounting information systems reliability

[26, 28] [18] found that there is an effect for AIS development on e-commerce in the public Firms and Petrochemical Industry through security and protection. As well as [29] found that a positive significant nexus between electronic commerce and AISs at banks of Jordan. Also, [30] Found that they agree that hotels depend on E-Commerce and customers get orders by using websites, and they have positive attitudes towards security. And [26] It is found that Database in State Bank of India is more security under application of Accounting Information on Electronic.

To sum up, based on the above literature review most studies found there is a nexus between security principle and electronic commerce, hence, the following hypothesis is formulated as follows:

H01.1: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect of the system security principle on electronic commerce in Jordanian commercial banks.

2.2. Confidentiality principle in accounting information systems reliability

The AIS has mediating effect on e-commerce toward management and financial performance [19]. As well as [31] AIS reliability is based on the implementation of Sys Trust's framework has a significant nexus. And [32] found that high level about confidentiality principle in AISs on indicators in Commercial Banks of Jordan. Also, [29] found that a positive effect between e-commerce and Confidentiality at banks of Jordan.

Thus, the above as a literature review most studies found there is a nexus between confidentiality principle and electronic commerce, hence, the following hypothesis is formulated as follows:

H01.2: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect of the principle of information confidentiality on electronic commerce in Jordanian commercial banks.

2.3. Privacy principle in accounting information systems reliability

[32] found that there is high level about privacy principle in AISs on indicators in Commercial Banks of Jordan. And [33] Found that there is an effect for AIS development on e-commerce in the public Firms. As well as, Duties and responsibilities were not separated as well, which reflected on the efficiency and effectiveness of confidentiality and privacy of data and information.

Therefore, based on the literature review most studies found there is a nexus between privacy principle and electronic commerce, thus, the following hypothesis is formulated as:

H01.3: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect of the principle of information privacy on electronic commerce in Jordanian commercial banks.

2.4. Principle of processing integrity in accounting information systems reliability

[32] found that there is high level about processing integrity principle in AISs on indicators in Commercial Banks of Jordan. Also, [34] Found that the Duties and responsibilities were not separated well, which reflected on the efficiency and effectiveness of confidentiality and privacy of data and information.

To sum up, based on the above literature review most studies found there is a nexus between the principle of processing integrity and electronic commerce, hence, the following hypothesis is formulated as follows:

H01.4: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect for the principle of processing integrity on electronic commerce in Jordanian commercial banks.

2.5. Availability principle in accounting information systems reliability

[18, 33] Found that for AIS development on e-commerce in the public Firms there is an effect. Also [32] found that their high level about availability principle in AISs on indicators in Commercial Banks of Jordan. And [25, 32] Found that there is an effect on the AISR in availability on industrial companies of Jordan in Amman Stock Exchange.

Thus, the above as a literature review most studies found there is a nexus between availability principle and electronic commerce, hence, the following hypothesis is formulated as follows:

H01.5: at the significance level ($\alpha \geq 0.05$) there is no statistically significant effect of the availability principle on electronic commerce in Jordanian commercial banks.

2.6. Mediating effect for COVID-19 pandemic on the nexus of accounting information systems reliability and electronic commerce.

[18, 26, 28] Found that there is an influence for AIS on e-commerce in the Firms and Petrochemical Industry. Therefore, few researchers have taken the effect of COVID - 19 on the nexus between accounting information systems and electronic commerce. Such as, [24] Found the Coronavirus pandemic has participated to the reduce of SMEs revenues. And found there is an importance of adopting e-commerce and AISs for decline the adverse effect of the corona pandemic on SMEs' revenues. Therefore, my research came to take this dimension. Therefore, based on a little literature review the studies found there is a moderating effect for coronavirus pandemic on the nexus of AISR and electronic commerce, thus, the following hypothesis is formulated as

H02: Second major hypotheses: There is no statistically significant mediating effect at the significance level ($0.05 \geq \alpha$) in light of the COVID-19 pandemic on the nexus between AISR and electronic commerce in Jordanian commercial banks.

Study Model

The study model consists of independent variable accounting information systems reliability with its basic principles (system security principle, information confidentiality principle, information privacy principle, processing integrity principle, availability principle), and the dependent variable (electronic commerce). As for the mediating variable, it is represented by: (Coronavirus Pandemic). Figure (1) shows the current study model.

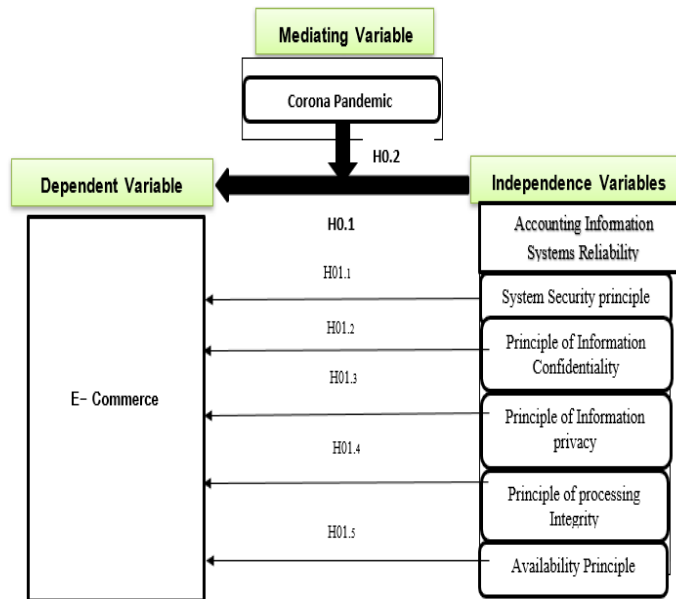


Figure (1-1): Study Model

Figure (1) shows the current study model.

Source: Prepared by the researcher based on studies [18, 24, 25].

3 Methodology and Procedures:

First: The study methodology

In order to analyze the impact of AISR on e-commerce using the Corona pandemic as a mediating variable, the current study relies on the descriptive analytical approach and employs the field method in data collection via questionnaire and statistical analysis. This allows for a more in-depth exploration of the phenomenon being studied, as well as the examination of its constituent parts through the lens of All.

Second: population and sample of the study

The study population consists of the whole employees working in the documentary credits department in Jordanian commercial banks, whose number is (360) employees according to the human resources department in the surveyed banks for the year (2021), Consequently, the researcher will select a random subset of the community to examine based on two factors: the size of the community as a whole and the margin of error. Using the table for finding the necessary sample size [35], we may set our margin of error at (0.05). Consequently, a survey was sent out to a total of 230 people.

Third: Sources of all data

Two sources will be used to collect the data:

1. Primary sources: A questionnaire will be developed for the purposes of collecting data from the individuals surveyed, as it will includes a number of paragraphs with the aim of analyzing the mediating effect of the Corona pandemic on the nexus between AISR and electronic commerce in Jordanian commercial banks.
2. Secondary sources: The researcher will refer to books, written and published scientific sources and references, university research, master's theses, published and unpublished theses, statistics and official annual reports issued by the competent authorities to prepare the theoretical framework.

Fourth: the study tool

The purpose of the study's multi-paragraph questionnaire is to ascertain the moderating role of the Corona epidemic in

the connection between AISR and internet commerce in Jordanian commercial banks.. It consists of three dimensions:

In the first dimension, we'll collect information on the respondents' daily activities.

Second dimension: it will include sections that evaluate the dependability of accounting information systems in Jordanian commercial banks according to the principles of those systems (principle of System Security, principle of Information Confidentiality, principle of Information privacy, principle of processing Integrity, and principle of Availability).

The third dimension will consist of sections detailing the evaluation of electronic banking transactions at commercial banks in Jordan. The researcher will use a Likert Scale with five options and the following relative importance levels: Degrees of agreement ranged from five (strongly agree) to four (agree) to three (agree to a lesser extent) to two (disagree) to one (strongly disagree).

4 Analysis and Findings

The descriptive statistics and regression analysis shown here give insight into the data's dependability and consistency.

Correlations:

We extracted the correlation coefficients between the domains and the variables to which they belong, performed an in-depth analysis of the domains, and calculated the Pearson correlation coefficient for each domain; this provided an indication of the domains' validity. The data are shown in the table below.

Table 1. Matrix of correlations between domains and accounting information systems reliability

	Security	Availability	Processing Integrity	Privacy	Confidentiality	E-Commerce	Coronavirus Pandemic
Security	1						
Availability	.240**	1					
Processing Integrity	.004	.142*	1				
Privacy	.144*	.163*	.263**	1			
Confidentiality	.175**	.130*	.105	.177**	1		
E-Commerce	.247**	.286**	.219**	.261**	.291**	1	
Coronavirus Pandemic	.105	.160*	.120	.128	.227**	.283**	1

** . Correlation is significant at the 0.01 level

* . Correlation is significant at the 0.05 level

The dependability of accounting information systems was shown to have acceptable and statistically significant connections as shown by a matrix of these relationships.

Reliability

It refers to the degree to which the scale, when used repeatedly, produces relatively consistent readings. If the questionnaire is reapplied several times to the same sample, to what degree will the same findings be obtained? Since the oscillating instrument produces varied results when it is used more than once, there is a cause for worry and a lack of trust in the data it produces. Cronbach's alpha was used to determine the resolution's degree of internal consistency, and the table that follows presents the results of this analysis of the coefficients.

Table 2. Cronbach's internal consistency coefficient alpha

Variables	Cronbach's Alpha	No of Items
Security	.815	6
Availability	.752	5
Processing Integrity	.812	5
Privacy	.726	5
Confidentiality	.788	5
E-Commerce	.756	6

Coronavirus Pandemic	.749	6
All Variables	.846	38

The above table shows that there is a high degree of stability across all domains of the resolution, as all alpha values are greater than (0.60). This is an acceptable percentage for carrying out the study, as the Cronbach's alpha coefficient is between (1) and (0). If the alpha is below 0.4, the stability is poor; if it is between 0.4 and 0.7, the paragraphs have medium stability; and if it is more than 0.7, the stability is stronger than (0.7) (Al-Qahtani, 2015).

Descriptive Statistics

In order to assess the suitability and validity of the data and to evaluate the normal distribution, the researcher calculated the coefficients of kurtosis and Skewness for each domain and variable in the study. Kurtosis and Skewness values for each domain and research variable may be found in the tables below.

Table 3. Kurtosis and skewness coefficients to reveal the normal distribution of the data

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Security Coefficients ^a	230	3.00	5.00	4.6000	.40365	-1.422	.160
Availability	230	3.00	5.00	4.6113	.36104	-1.217	.160
Processing Integrity	230	3.00	5.00	4.6470	.38743	-1.383	.160
Privacy	230	3.80	5.00	4.6765	.33339	-.920	.160
Confidentiality	230	3.00	5.00	4.6678	.36376	-1.366	.160
E-Commerce	230	3.50	5.00	4.6783	.33313	-1.172	.160

Coronavirus Pandemic	230	3.83	5.00	4.7203	.30684	-1.316	.160	.815	.320
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The above table shows the coefficients of Kurtosis and Skewness all range within the acceptable minimum and upper limits of the normal distribution, where the value of Skewness ranges between (± 1.96), and the value of the Kurtosis coefficient ranges between (± 2.58), which indicates that the study data follow a normal distribution.

Table 4. Results of multiple linear regression analysis

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.290	.439		2.942	.004		
	Security	.121	.051	.147	2.363	.019	.910	1.099
	Availability	.168	.057	.182	2.936	.004	.909	1.100
	Processing	.116	.053	.135	2.174	.031	.914	1.094
	Privacy	.138	.063	.138	2.198	.029	.887	1.127
	Confidentiality	.186	.056	.203	3.322	.001	.937	1.067

Regression Results

H1: There is a nexus between security and e-commerce at Jordanian commercial banks.

The above table shows that B value is 0.121 (Sig. = 0.019). This means that security has a significance and positive nexus with e-commerce, ($t = 2.363, p = .019$). This means for each unit increase in security there is an expected increase in e-commerce of 0.147. Based on this result, the first hypothesis is supported.

H2: There is a nexus between availability and accounting information systems reliability.

The results of a regression between availability and e-commerce show that the B value is 0.168 (Sig. =0.004). This means that availability has a significant nexus with e-commerce. ($t = 2.936$, $p = 0.004$). Hence, the second hypothesis is also supported.

H3: There is a nexus between processing integrity and e-commerce at Jordanian commercial banks.

The above table shows that the B value is 0.116 (Sig. = 0.031). This means that processing integrity has a significant nexus with e-commerce. ($t = 2.174$, $p = 0.031$). Hence, the third hypothesis is supported.

H4: There is a nexus between privacy and e-commerce at Jordanian commercial banks.

The above Table shows a positive and significant relationship between privacy and e-commerce, in which privacy increased by one unit, e-commerce will increase by .138. $t = 2.198$ significant level = 0.029. Thus, the fourth hypothesis is supported.

H5: There is a nexus between Confidentiality and e-commerce at Jordanian commercial banks. The results of regression show that Confidentiality is positively and significantly related to e-commerce. The above table shows the B value is 0.186, $t = 3.322$ and sig = 0.001. This means whichever unit increases in Confidentiality, e-commerce will increase by 0.203. Hence, the fifth hypothesis is supported.

H6: There is a mediating effect for COVID 19 in the nexus between AISR and E- Commerce.

To test the mediating effect for COVID 19 in the nexus between AISR and E-Commerce, the results of regression that illustrated R2 became 0.213 F = 29.878 Sig .000. This means that COVID 19 has a mediating effect in the nexus between AISR and E-Commerce. Thus, the sixth hypothesis is supported.

5 Conclusion and Contribution

The results of this study showed that COVID 19 plays an important effect in the nexus between AISR and E-Commerce. Therefore, the findings showed a positive and significant nexus between AISR (security, availability, processing integrity, privacy, Confidentiality) and E-Commerce. These results came in line with previous studies that highlighted the important effect of COVID 19 in enhancing E-commerce. In this matter, [29] found that a positive nexus between electronic commerce and AISs at banks of Jordan. Also, [30] Found that they agree that hotels depend on E-Commerce and customers get orders by using websites. Additionally, [26] it is found that the Database in State Bank of India is safer under application of Accounting Information on Electronic. Moreover, the results of confidentiality found a positive nexus with electronic commerce, [32] found that their high level about confidentiality principle in AISs on indicators in Commercial Banks of Jordan. Also, [29] found that a positive effect between e-commerce and Confidentiality at banks of Jordan. Also, [32] found that there is a high level about privacy principle in AISs on indicators in Commercial Banks. Also, [34] Found that the Duties and responsibilities were not separated well, which reflected on the efficiency and effectiveness of confidentiality and privacy of data and information. And [25, 32] Found that there is an effect on the AISR in availability on industrial companies of Jordan in Amman Stock Exchange. Therefore, few researchers have taken the effect of COVID - 19 on the nexus between accounting information systems and electronic commerce. My study found that COVID 19 has a mediating effect in the nexus between AISR and E-Commerce. Therefore, our research came to take this dimension.

Theoretical and Practical implications

Theoretical implications

From theoretical perspective, this study provides evidence for the theory and literature of accounting information systems reliability (AISR), and the impact of (AISR) in enhancing e-commerce of banks. Because this study contributes to the literature regarding (AISR) theory, it can be used as an academic teaching tool regarding the (AISR) of banks because of its important, effective and influential role in banks and their e-commerce. This study is considered an extension of previous studies on the (AISR) and its role in banks that enrich Literature and knowledge of the subject of (AISR).

Practical implications

From practical perspective, this study seeks to provide evidence of effect of COVID 19 - pandemic on the nexus between accounting information systems reliability and e-commerce: from the perception of documentary credit employees, as the study links theory and practice to create a deeper understanding among employees of Jordanian banks of the importance of support and develop (AISR) in their banks. Where the study clearly showed the important effect of COVID 19 - pandemic on the nexus between accounting information systems reliability and e-commerce. Thus, this study indicates that banks in general and commercial banks in particular in Jordan must have awareness, care and

management of each element of (AISR) efficiently and skillfully, work on increasing documentary credit in (e-commerce) and making full use of it, educating and training employees on documentary credit according to business needs and creating a suitable environment for this because of the essential role that (AISR) plays in enhancing e-commerce during COVID 19 - pandemic.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

References

- [1] Jawabreh, O., et al., Electronic Learning Platforms and Their Impact on Education Quality at Faculties of Tourism and Hospitality during Corona Pandemic. *Applied Mathematics & Information Sciences (AMIS)*, 2023. 17(1): p. 153-160.
- [2] Jawabreh, O., Innovation management in hotels industry in aqaba special economic zone authority; hotel classification and administration as a moderator. *Geo Journal of Tourism and Geosites*, 2020. 32(4): p. 1362-1369.
- [3] Salameh, A., et al., From Citizens Overview: Which Antecedents' Can Assist to Increase Their Satisfaction Towards the Ubiquity of Mobile Commerce Applications? *International Journal of Interactive Mobile Technologies (IJIM)* 2020. 14(17): p. 45-55.
- [4] Boritz, J. E. and J. Kearns, 1999 Symposium on IS Assurance Panel Discussion on SysTrust. *Journal of Information Systems*, 2000. 14(s-1): p. 163-176.
- [5] Nor, M. Z. B. M. and C.T.B.M. Ismail, Risks and Remedy in Islamic and Conventional Letter of Credit: Jordanian Practices. *International Journal of Islamic Economics*, 2020. 2(01): p. 54-68.
- [6] Alrabei, A. M., et al., The Impact of Mobile Payment on the Financial Inclusion Rates. *Information Sciences Letters*, 2022. 11(4): p. 1033-1044.
- [7] Shniekat, N., et al., Influence of Management Information System Dimensions on Institutional Performance. *Information Sciences Letters*, 2022. 11(5): p. 435-1443.
- [8] Shan, R., et al., The influence of accounting computer information processing technology on enterprise internal control under panel data simultaneous equation. *Applied Mathematics and Nonlinear Sciences*, 2022. aop(aop): p. 1-9.
- [9] Al tarawneh, E., et al., The Impact of the Efficiency and Effectiveness of Electronic Accounting Information Systems on the Quality of Accounting Information. *Information Sciences Letters*, 2023. 12(3): p. 1685-1692.
- [10] Ali, B. J. and M. S. Oudat, Accounting information system and financial sustainability of commercial and islamic banks: A review of the literature. *Journal of Management Information & Decision Sciences*, 2021. 24(5): p. 1-17.
- [11] Alrabei, A. M., A. Abu-Haija, and L. Al-Aryan, The mediating effect of information technology on the relationship between organizational culture and accounting information system. *International Journal of Advanced Science and Technology*, 2020. 29: p. 1085-1095.
- [12] Al-Rawashdeh, O.M., O. Jawabreh, and B.J. Ali, Supply Chain Management and Organizational Performance: The Moderating Effect of Supply Chain Complexity. *Information Sciences Letters*, 2023. 12(3): p. 1673-1684.
- [13] Alananzeh, O.A., et al., The Impact of Job Stability, Work Environment, Administration, Salary and Incentives, Functional Justice, and Employee Expectation on the Security Staff's Desire to Continue Working at the Hotel. *Journal of Statistics Applications & Probability* 2023. 12(2): p. 425-439.
- [14] Wang, Y. Research on security of accounting information system in the era of big data. in *Journal of Physics: Conference Series*. 2021. IOP Publishing.
- [15] Al-Fatlawi, Q.A., D.S. Al Farttoosi, and A.H. Almagtome, Accounting information security and it governance under cobit 5 framework: A case study. *Webology*, 2021. 18(Special Issue on Information Retrieval and Web Search): p. 294-310.
- [16] Jawabreh, O., et al., The strategic deployment of information systems attributes and financial performance in the hospitality industry. *Information Sciences Letters*, 2022. 11(5): p. 110504.
- [17] Alawamleh, H. A., et al., The challenges, barriers and advantages of management information system

- development: Comprehensive review. *Academy of Strategic Management Journal*, 2021. 20(5): p. 1-8.
- [18] El-dalabeeh, A.e.-R. K., The impact of accounting information systems development on improving e-commerce in the Jordanian public shareholding industrial companies. *Academy of Accounting and Financial Studies Journal*, 2019. 23(2): p. 1-11.
- [19] Ardiansah, M.N., A. Chariri, and S. Raharja. Does E-Commerce Impact on Accounting Information System and Organizations Performance? in 2nd Annual Conference on blended learning, educational technology and Innovation (ACBLETI 2020). 2021. Atlantis Press.
- [20] Al-Serafy, M., *Information Technology Management*. Dar Al-Fikr Al-Jami, First Edition, Alexandria, 2009.
- [21] Yang, M., Green investment and e-commerce sales mode selection strategies with cap-and-trade regulation. *Computers & Industrial Engineering*, 2023. 177: p. 109036.
- [22] Xin, B., Y. Hao, and L. Xie, Strategic product showcasing mode of E-commerce live streaming. *Journal of Retailing and Consumer Services*, 2023. 73: p. 103360.
- [23] Rahmah, I., M.E. Kaukab, and W. Yuwono, Peran Pemerintah dalam Meningkatkan Pendapatan UMKM. *JURNAL CAPITAL: Kebijakan Ekonomi, Manajemen dan Akuntansi*, 2020. 2(2): p. 30-50.
- [24] Puspitaningtyas, S.A., P.D.I. Kusuma, and U. Pratiwi, The Effect of the Use of E-Commerce and Accounting Information System on SMEs Revenues. *Sustainable Competitive Advantage (SCA)*, 2022. 11(1).
- [25] Syaaid, T.A., The Effect of the Reliability of Accounting Information Systems on Electronic Disclosures on the Stock Prices: Applied Study on Industrial Companies Listed on Amman Stock Exchange. *International Journal of Economics and Finance*, 2019. 11(8): p. 1-14.
- [26] Hu, Y. Computerized Accounting System of E-commerce Platform. in 2021 International Conference on Applications and Techniques in Cyber Intelligence: Applications and Techniques in Cyber Intelligence (ATCI 2021) Volume 1. 2021. Springer.
- [27] Moqbel, M.A., The impact of accounting information systems (AIS) On e-commerce analytical study-service sector. *Jordan ASE. International Journal of Scientific and Technology Research*, 2014. 3(1): p. 211-215.
- [28] Badrani, B. and S. Siadat, Examination of the Factors Affecting Accounting Information Systems in Reaching Security, Assurance, and Reliability in the Light of E-Commerce (Case Study: Assaluyeh Petrochemical Industry). *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 2021. 12(13): p. 8133-8144-8133-8144.
- [29] Qataweh, A.M., The effect of electronic commerce on the accounting information system of Jordanian banks. *International Business Research*, 2012. 5(5): p. 158.
- [30] Alsharayri, M.A., The E-Commerce impact on improving accounting information system in Jordanian Hotels. *International Research Journal of Finance and Economics*, 2011. 75: p. 14-23.
- [31] Al-Dmour, A., The impact of the reliability of the accounting information system upon the business performance via the mediating role of the quality of financial reporting. *The International Journal of Accounting and Business Society*, 2018. 26(1): p. 78-111.
- [32] Mansour, E., W. AL Salamat, and W. Masadeh, The impact of reliability elements on performance indicators of Jordanian commercial banks. *The International Journal of Business and Finance Research*, 2017. 11(1): p. 87-107.
- [33] Ahmad, M.A., F.H. Zawaideh, and A. Bisher, The Relation between E-Commerce and AIS in Medium Scale Organizations. *Oriental Journal of Computer Science and Technology*, 2014. 7(1): p. 1-8.
- [34] Felsch, M. and M. Wählisch, *Lebanon and the Arab uprisings: in the eye of the hurricane*. 2016: Routledge.
- [35] Sekaran, U. and R. Bougie, *Research methods for business: A skill building approach*. 2016: John Wiley & Sons.