

# BUSINESS REVIEW

## INFORMATION TECHNOLOGY AND ITS ROLE IN IMPROVING THE QUALITY OF FINANCIAL CONTROL DUE TO CORONA PANDEMIC: THE JORDANIAN INCOME TAX AS A CASE STUDY

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#### **ARTICLE INFO**

**Article history:** 

Received 31 January 2023

Accepted 10 April 2023

#### **Keywords:**

Information Technology; Quality of Financial Control;

Corona Pandemic;

Equipment;

Software:

Networks;

Databases;

Jordanian Income Tax.



#### **ABSTRACT**

**Purpose:** This study aims to examine the impact of information technology aspects and its role in improving the quality of personal income tax financial control in Jordan due to the corona pandemic

**Design/ methodology/ approach:** The sample of the study consists of (166) tax auditors and programmers from the Jordanian Income and Sales Tax Department, and a questionnaire is prepared and delivered to the study sample to accomplish the study's objectives. Improving the quality of financial control for the Jordanian income tax, and the results also indicate that the region is not a modified variable for the function of technical equipment and software in enhancing financial control quality.

**Findings:** As a result of the Corona epidemic's spread on the Jordanian income tax. While the area is a modified variable to reflect the role of networks and databases in improving the quality of financial control due to the Corona pandemic's influence on Jordan's income tax, the center has the biggest impact, followed by the north and then the south.

**Originality:** This study extends the use of data science technology, big data, and artificial intelligence, as these are required and effective tools for enhancing the quality of financial control and contribute significantly to attaining the fundamental goals of containing, stopping, and controlling the epidemic.

Doi: https://doi.org/10.26668/businessreview/2023.v8i4.1568

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## A TECNOLOGIA DA INFORMAÇÃO E SEU PAPEL NA MELHORIA DA QUALIDADE DO CONTROLE FINANCEIRO DEVIDO À PANDEMIA DE CORONA: O IMPOSTO DE RENDA JORDANIANO COMO ESTUDO DE CASO

#### **RESUMO**

**Objetivo:** Este estudo tem como objetivo examinar o impacto dos aspectos da tecnologia da informação e seu papel na melhoria da qualidade do controle financeiro do imposto de renda pessoal na Jordânia devido à pandemia de corona

**Desenho/metodologia/abordagem:** A amostra do estudo consiste em (166) auditores fiscais e programadores do Departamento de Imposto de Renda e Vendas da Jordânia, e um questionário é preparado e entregue à amostra do estudo para atingir os objetivos do estudo. Melhorando a qualidade do controle financeiro para o imposto de renda da Jordânia, e os resultados também indicam que a região não é uma variável modificada para a função de equipamento técnico e software na melhoria da qualidade do controle financeiro.

**Resultados:** Como resultado da propagação da epidemia de Corona no imposto de renda da Jordânia. Embora a área seja uma variável modificada para refletir o papel das redes e bancos de dados na melhoria da qualidade do controle financeiro devido à influência da pandemia de Corona no imposto de renda da Jordânia, o centro tem o maior impacto, seguido pelo norte e depois pelo sul.

**Originalidade:** este estudo amplia o uso da tecnologia de ciência de dados, big data e inteligência artificial, pois são ferramentas necessárias e eficazes para melhorar a qualidade do controle financeiro e contribuir significativamente para atingir os objetivos fundamentais de conter, parar e controlar a epidemia.

**Palavras-chave:** Tecnologia da Informação, Qualidade do Controle Financeiro, Corona Pandemia, Equipamentos, Software, Redes, Bancos de Dados, Imposto de Renda da Jordânia.

## LA TECNOLOGÍA DE LA INFORMACIÓN Y SU PAPEL EN LA MEJORA DE LA CALIDAD DEL CONTROL FINANCIERO DEBIDO A LA PANDEMIA DEL CORONAVIRUS: EL IMPUESTO SOBRE LA RENTA JORDANO COMO ESTUDIO DE CASO

#### RESUMEN

**Propósito:** Este estudio tiene como objetivo examinar el impacto de los aspectos de la tecnología de la información y su papel en la mejora de la calidad del control financiero del impuesto sobre la renta de las personas físicas en Jordania debido a la pandemia del coronavirus.

**Diseño/ metodología/ enfoque:** La muestra del estudio consta de (166) auditores fiscales y programadores del Departamento de Impuestos sobre la Renta y las Ventas de Jordania, y se prepara y entrega un cuestionario a la muestra del estudio para lograr los objetivos del estudio. Mejorar la calidad del control financiero para el impuesto sobre la renta jordano, y los resultados también indican que la región no es una variable modificada para la función del equipo técnico y el software en la mejora de la calidad del control financiero.

**Hallazgos:** como resultado de la propagación de la epidemia de Corona en el impuesto sobre la renta jordano. Si bien el área es una variable modificada para reflejar el papel de las redes y las bases de datos en la mejora de la calidad del control financiero debido a la influencia de la pandemia de Corona en el impuesto sobre la renta de Jordania, el centro tiene el mayor impacto, seguido del norte y luego del sur.

**Originalidad:** este estudio amplía el uso de la tecnología de ciencia de datos, big data e inteligencia artificial, ya que son herramientas necesarias y efectivas para mejorar la calidad del control financiero y contribuyen significativamente a alcanzar los objetivos fundamentales de contener, detener y controlar la epidemia.

**Palabras clave:** Tecnología de la Información, Calidad del Control Financiero, Corona Pandémica, Equipos, Software, Redes, Bases de Datos, Impuesto sobre la Renta Jordano.

#### **INTRODUCTION**

#### **Background**

The economic environment, as well as the information technology revolution, are characterized by change, acceleration, and intense competition, making it necessary for organizations to keep up with these rapid and enormous changes, and it also obliged them to

find new ways and methods of work to ensure their stability, survival, and continuity to achieve all their objectives.

Information technology has ushered in developments at all levels, particularly in business organizations. It has been able to infiltrate most, if not all, private and governmental business organizations and corporations, fundamentally changing human life and business operations. It has been noted in previous years that many institutions use information technology to enable work teams to increase the efficiency and effectiveness of administrative performance and develop their skills and behavior. Thus, the use of information technology has an active role in highlighting the scalable administrative capabilities of individuals. Furthermore, it will provide them with everything they need, i.e., the means, tools, and capabilities necessary for development and change in their work institutions (Al-Otaibi, 2010).

The critical role of technology at all levels of upper and middle management in job and administrative efficiency requirements for the occupants of these positions. This role is manifested in decentralization solutions in the authority of middle management via operation programming and the resulting depersonalization of performance and the reduction of cadres due to process automation of jobs, particularly routine ones. Information technology requires technical knowledge and allows as many individuals as possible to participate in decision-making (Ibrahim *et al.*, 2020). As a result of the preceding, the subject of this study is the role of information technology in enhancing the quality of financial control at the Jordanian Income Tax.

#### The Problem of the Study and its Questions

Due to the critical nature of modern technology in the workplace, the process of integrating information technology into government institutions is a modern requirement for keeping up with the rapid evolution of the work environment. As a result, it has become necessary for various institutions to place a premium on the notion of information technology and to prepare for its use, particularly in the country's regulatory institutions. In a supervisory job, the employees in Jordanian income tax are responsible for designing data and final outputs. Therefore, this study aims to identify information technology and its role in enhancing the quality of financial management in the context of the Corona pandemic's impact on Jordan's income tax and to address the following questions. The primary question is as follows:

"What role does information technology play in enhancing the quality of financial control due to the Corona pandemic on Jordan's income tax?"

This question generates the following sub-questions:

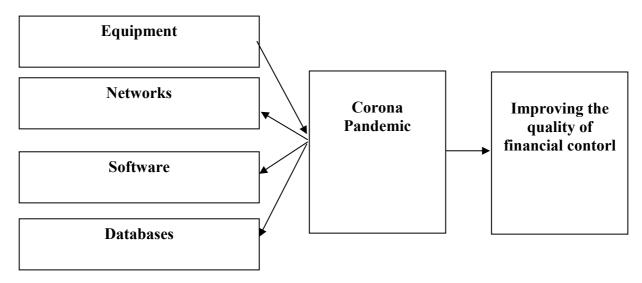
- 1. Does technology equipment have a role to play in enhancing the quality of financial control due to the Corona pandemic on the Jordanian income tax?
- 2. Is software's role in enhancing the quality of financial control due to the Corona pandemic on Jordanian income tax?
- 3. Is networks' role in enhancing the quality of financial control due to the Corona pandemic on the Jordanian income tax?
- 4. Is there a role for databases in enhancing the quality of financial control due to the Corona pandemic on the Jordanian income tax?

#### The Significance of the Study

The study is significant because it provides a stream of scientific knowledge that addresses one of the most urgent and critical issues confronting institutions at present. It sheds light on the importance of information technology and its effective role in addressing development goals. The significance of this study is demonstrated in the variables used to determine the role of information technology in enhancing the quality of financial control due to the Corona pandemic on the Jordanian income tax, following the rapid development of information technology, global convergence, and administrative development, and considering it a continuous process that does not come to a halt. The study aims to define the concept of financial control and its significance to contribute to the improvement of accounting and its work in financial control, as well as the application of obtained results.

#### The Study Plan

A study plan was established in response to the problem of the study; it shows the relationship among the independent variable, the dependent variable, and the mediator, which are depicted in Figure 1



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#### **Keywords**

#### Financial Control

It is a part of control activities that include financial and accounting policies and processes, paperwork, records, and financial reports that ensure the institution's assets and money are preserved (Kullab, 2005).

#### Information Technology

It is a type of technology that is used to create, store, exchange, and utilize various types of information (business data, motion pictures, voice chats, multimedia presentations, and other forms of technology). It includes various equipment, applications, and fundamental services used to process data (Oyewole *et al.*, 2008).

#### Networks

They are a type of communication system that enables the collaboration of multiple software applications. These applications can be used by anyone, such as Internet browsers, and can operate without human intervention, such as information browsing programs on the World Wide Web (Internet) (Raymond *et al.*, 2009).

#### **Databases**

These are a set of data that have been arranged and organized so that several applications may use them by centralizing the data and decreasing repeats efficiently rather than storing the data in distinct and separate files with their own independent application (Chowdhury, 2010).

#### Devices and equipment

They are electronic devices that are capable of processing data by receiving, storing, and retrieving data automatically, as well as executing arithmetic and logical operations on it (Murar and Brad, 2014).

#### **Software**

It is a collection of commands that instruct the computer on how to accomplish specific activities, as software is designed to instruct computers on how to read inputs, store, retrieve, update, and transform data into useful forms (Maelah *et al.*, 2021).

#### The Concept of IT

The term technology is fraught with ambiguity and interpretation since some use it interchangeably with technology, while others see a clear distinction between the two. Technology's origins can be traced all the way back to the Greeks. It is composed of two syllables: *techno* which means industrial operation, and *logic*, which means science or method; so, it is the science of industrial operation in one word.

According to Webster's Dictionary, technology is the technical language, applied science, and technical method for accomplishing a practical purpose and a collection of means used to provide for people's livelihood and well-being. Technology, as defined by the dictionary, is a method or method of processing technical details or a method for achieving a purpose. Moreover, it refers to the way of producing a particular product or performing a particular task as technology. Additionally, it is described as the optimal combination of technological outputs or products to achieve production goals. It entails the application of scientific knowledge to the production of specialized products (Ibrahim Elhadidy, 2021)

There are numerous and varied perspectives among individuals interested in defining the concept of technology from various perspectives. Others define it as the process of developing the manufacturing process and the methods used to reduce production costs and improve work methods. In contrast, others define it as the technical methods and processes used by the organization to convert inputs such as materials, knowledge, energy, and capital to outputs in the form of goods and services (Naser *et al.*, 2013).

Additionally, technology is defined as the processes, techniques, equipment, and works that are utilized to convert inputs (materials, information, and ideas) into outputs (products and services). Numerous notions relating to information technology have also arisen. There is no

clear definition, as each researcher is aware of their own trends and viewpoints within their specialized scope.

Among the well-known concepts of information technology are computer hardware and software, data and storage technology, and information and data management. These concepts include the process of storing and supplying information and data as resources for an organization's information technology (Loudon and Loudon, 2004)

#### The Concept of Financial Control

Financial control is defined as a set of procedures that aims to protect the security of financial transactions, safeguard public funds, ensure that public performance complies with applicable laws, rules, and directions, and identify and remedy any irregularities. Additionally, control is defined as the organized processes that aim to verify the implementation of the organization's plans necessary to achieve the organization's objectives, to coordinate between administrative units and to ensure proper utilization of the institution's resources, and assist the administration in taking corrective action in the event of a systemic weakness (Hooper *et al.*, 2008).

Financial control is also defined as the process by which an independent body ensures the safety of financial, accounting, and administrative actions, ascertains the legitimacy of alimony and its compliance with applicable laws, compares implementation results to established plans, measures the level of business results against what was planned, and studies and treats deviations (Naser *et al.*, 2013). After reviewing numerous references dealing with the concept of control, this study defines financial control as the procedures that are carried out to ensure the proper progression of work in the right direction, ensuring the efficiency and effectiveness of performance through the use of the most appropriate control pattern, examination of supervisory systems and procedures, and monitoring following Labor Standards.

### Information Technology and its Role in Improving the Quality of Financial Control due to the Corona Pandemic

The Corona pandemic is an unprecedented public health disaster and has had substantial economic consequences for both industrialized and developing countries. As the epidemic spreads and governments respond, the Supreme Audit Institutions' role in assisting government response procedures by enforcing financial management discipline and guaranteeing openness

and accountability has been regarded as important. It discusses prior experiences of higher agencies participating in the government's reaction to natural and manufactured disasters. Critical oversight and essential controls may be jeopardized in these conditions, particularly given the requirement for public financial management systems to be responsive and flexible.

Supreme Audit Institutions can critically analyze and upgrade economic recovery efforts, financial management systems, and governance following the crisis. It entails mobilizing and prioritizing available systems and government technology resources to produce adaptable audit techniques. Thus, the current study demonstrates the importance of information technology in enhancing financial control in the aftermath of the Corona pandemic, influencing all state sectors, including the tax department.

#### **Related Studies**

The study (Musaed Alkthery and Abdullah Al-Qiawi, 2020) tries to determine the role of public transaction control in optimizing government spending. This is accomplished by debating how to provide oversight of public transactions. To have a better understanding of the subject, Hedada-souk ahras municipality was chosen as a case study. The study is undertaken through a personal interview and analysis of numerous documents received from the Department of Finance and Economic Activity's Office of Public Transactions. The study concluded that public transactions are subject to internal control, specifically the Commission for opening tenders and evaluating offers, and external control, specifically the municipal committee for public transactions, to ensure the transaction runs smoothly and to ensure transparency, equality, and freedom in awarding the transaction.

While the study (Tarabay, 2021) aimed to evaluate financial control procedures in banks operating in Jordan during the Corona pandemic from the perspective of bank employees in Jordan, the results of the study indicated that overall financial control procedures, as well as both the general framework of control, internal control, and external control, are implemented well in Jordanian banks during the Corona pandemic, with rates reaching 62.5% for total financial control, 62.17% for the general control framework within banks, and 65.13% for external control. External control procedures have a statistically and morally significant impact on the quality of internal control procedures application, and financial control procedures play an active role.

On the other hand, the study (Al-Aqib et al. 2021) attempts to determine the reality of information systems in Sudanese banks and the impact of information systems on

administrative control and financial control. The researchers used a descriptive-analytical method, designing and distributing a 29-item questionnaire to a random sample of banks operating in the state of Gezira. The following statistics were used: frequencies and percentages, arithmetic mean, and Spearman's rank correlation coefficient, all via the statistical packages for social sciences (SPSS) program. The study determined that all paragraphs on the extent of readiness of information systems used in Sudanese banks operating in the state of Al-Jazirah were derived from an arithmetic mean (4.03), implying that the relative weight was 80.3 percent, and it also established the existence of a statistically significant relationship between information systems and administrative control, as well as the existence of a statistically significant relationship between information and financial control. The researchers recommended that attention be paid to the quality of information systems outputs that assist decision-makers in the administrative and financial control domains and the components of information systems (hardware, software, networks, human resources, operations).

According to the study (Ali, 2016) the rapid and tremendous growth of information technology, as well as the accompanying increase in the number of funds and the expansion of their scope, necessitated the provision of information to its users with the appropriate speed and accuracy, prompting them to consider the importance of utilizing information technology and its systems as a cornerstone and tool of knowledge that assists in the processing of data in a timely and accurate manner. The study sought to quantify the influence of information technology on accounting performance through interviews with finance and control department managers and personnel and a questionnaire distributed to accounting and control department employees. The study demonstrated that information technology favors accounting performance by reducing the time required to complete financial transactions and boosting accountant performance.

Similarly, the study (Ben Aishi *et al.* 2016) seeks to determine the effect of information technology on the effectiveness of internal control systems in Algerian shareholding businesses, specifically the Biskra state. Auditor, Audit Director, Assistant Director of Audit. The study examined 13 joint-stock enterprises in Biskra State and determined that: - They affect the usage of information technology, which affects the efficacy of the internal control system by activating control systems in businesses, attaining the company's objectives, and adjusting work.

While the study (Al-Aroud, 2010) sought to demonstrate the effect of information technology quality on the efficacy of internal auditing in Jordan's public shareholding industrial

and service firms, seventy-two questionnaires were retrieved, including 33 from the industrial firm's sector and 39 from the service companies' sector, representing a rate of (68%) of the questionnaires issued. The study addressed the problems using descriptive statistical methods (means and deviations) and multiple regression analysis. The study questioned and tested its hypotheses, concluding that internal auditors' perceptions of the quality of information technology and each of its dimensions, as well as the effectiveness of internal audit, were relatively high and that there is a significant statistically significant impact of the quality of information technology on the effectiveness of internal audit, as explained by its percentage of variance (67 percent). The study proposes that information characteristics be improved as a measure of information technology quality, as well as the need to strengthen the skills of information technology professionals in applying current technology.

According to the study (Jumada, 2010), most businesses tend to design accounting information systems with specific specifications, particularly in light of information technology, to control the massive amounts of necessary data in these businesses and ensure their high reliability. As such, this study focused on the general controls inherent in electronic accounting information systems and their effect on the trustworthiness of accounting data. A questionnaire was designed and distributed to Damascus' audit offices to accomplish the study's aims. The questionnaire assessed the impact of four general control controls for electronic accounting information systems on increasing the reliability of accounting information in businesses: organizational controls - access control controls - file security and protection controls - and system development and documentation controls. The study indicated that the general controls of electronic accounting information systems substantially boost the trustworthiness of accounting information in businesses.

#### **Measurement Model**

CFA was used to assess the model's fit and adapted from the CFA. CFA was performed. The fit statistics in Table 1 indicate that the theoretical model fits the data well (2/df=1.644, p.00; CFI:.924; GFI; RMSEA:.062; SRMR: 0.049). Cronbach's alpha is larger than 0.60 in Table 2, indicating that the internal consistency is satisfactory. Additionally, Hair *et al.* (2012) determined the discriminant validity of their method by calculating the square root of the average variance retrieved. The square root of The AVE was greater than the partial correlations for each construct.

Therefore, VIF values for independent variables must be less than 5.00. Between the independent variables, there is no association. The validity of the concept is illustrated in Figure 2 using factor loadings. Particularly the convergent validity assessment results. In Figure 2, all factor loading values are more than 0.50 (Hair *et al.*, 2012), indicating that all constructs pass the construct validity test and all items were assigned to the stated core values.

Table 1 Goodness of fit statistics (N=166).

χ2 /df	IFI	TLI	CFI	RMSEA	SRMR
1.644	0.930	0.924	0.929	0.062	0.049

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Table 2 Means, Standard Deviations, Table 2 Means, Standard Deviations, Reliability, Correlation Coefficients and the square root of AVE (N=166).

and the square root of TVE (TV=100).									
		SD						The	
Measures	Mean		Q	EQU	S	N	D	square	vif
								root of	
								AVE	
Q	4.10	0.64	1					0.72	
EQU	3.78	0.93	1	1				0.90	1.64
S	3.51	1.25	1	0.41	1			0.92	1.22
N	4.01	0.77	-1	0.59	0.27	1		0.77	1.91
D	4.16	0.85	-1	-0.44	-0.07	-0.64	1	0.84	1.62
Cronbach's			0.91	0.95	0.97	0.90	0.93		
Alpha									

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#### **Hypothesis**

The study proposed several hypotheses, including the following:

- 1. Due to the Corona pandemic and the Jordanian income tax, technological equipment can help improve the quality of financial control.
- 1- There is a role for software in enhancing financial control quality in light of the Corona pandemic's impact on Jordan's income tax.
- 2- The usage of networks has a role to play in enhancing the quality of financial control in light of the Corona pandemic's impact on Jordan's income tax.
- 3- The usage of databases has a role to play in enhancing the quality of financial control in light of the Corona pandemic's impact on Jordan's income tax.
- 4- In light of the Corona pandemic and the Jordanian income tax, the region is regarded a modified variable for the role of technology equipment in enhancing the quality of financial control.

- 5- In light of the Corona epidemic over the Jordanian income tax, the region is regarded a modified variable for the function of software in increasing the quality of financial control.
- 6- In light of the Corona epidemic and the Jordanian income tax, the region is considered a modified variable for the function of networks in enhancing the quality of financial control.
- 7- The region is treated as a modified variable for the role of databases in enhancing the quality of financial control in the aftermath of the Corona pandemic regarding Jordan's income tax.

#### **Testing of Hypotheses**

The hypotheses 1, 2, 3, and 4 were tested using maximum likelihood estimation (MLE). MLE is a technique for estimating the parameters of a probability distribution using a probability function as the objective function. However, H5, H6, H7, and H8 are modeled using observed variable OLS and logistic regression path analysis (Hayes, 2018).

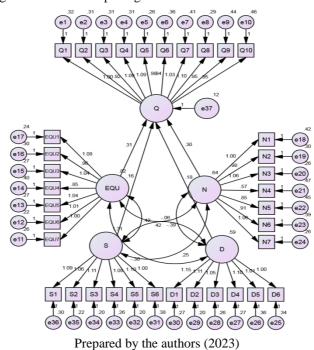


Fig.1: Model of multiple regression -Unstandardized Estimates

Fig.2: Model of multiple regression-Standardized Estimates

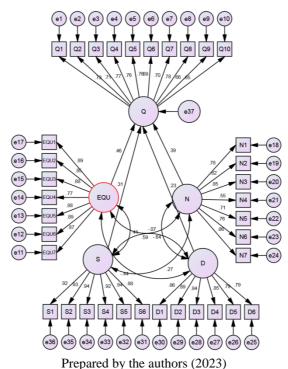


Table (3) shows the effects between independent variables and dependent variable .The effect (EQU $\rightarrow$  Q) was 0.15 ,(S $\rightarrow$  Q) its effect was 0.281 , the effect N $\rightarrow$  Q ) was 0.171,

and the effect  $(D \rightarrow Q)$  was 0.297. All these effects are significant ( p < 0.05 ) , therefore H1 , H2 ,H3, and H4 were supported

Table 3: Maximum Likelihood Estimates(N=166).

Links	Estimate	S.E.	C.R.	P-value
$EQU \rightarrow Q$	0.15	0.032	4.766	0.000
$S \rightarrow Q$	0.281	0.065	4.323	0.000
$N \rightarrow Q$	0.171	0.058	2.944	0.003
$D \rightarrow Q$	0.297	0.053	5.655	0.000

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To investigate the hypotheses of moderation. Modeling with OLS and logistic regression path analysis was used. As shown in (table 4), the interaction term was not statistically significant for EQU (p=.459>0.05), showing that region was not a substantial moderator of EQU on Q's influence, and so H5 is not supported.

S(p=0.068,) had a statistically significant interaction term, showing that region was not a substantial moderator of S's effect on Qt, and so H6 is not supported. The interaction term was statistically significant for N (p=0.047, R2=0.0168), showing that region was a substantial positive moderator by a factor of 0.0168 of the influence of N on Q. As a result, H7 was endorsed.

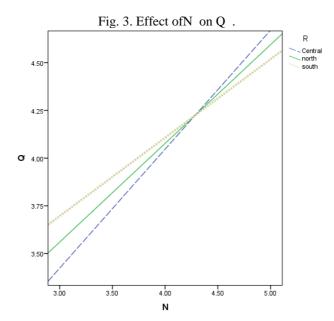
The interaction term was statiscally significant for D (p= 0.003,  $\Delta R2=0.0489$ ), indicating that region was a significant moderator positively of the effect of N on Q by a factor of 0.0489. Therefore H8were supported

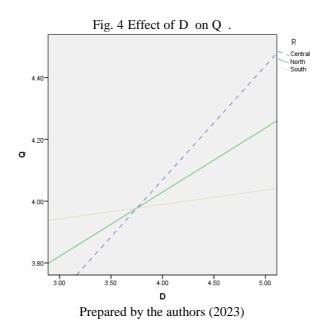
To better understand the interaction effects, Q scores were plotted at combination of levels for region. The plots demonstrate that both the effects of N and D on Q were positive for all. The more effect for central then north and then south (Figs. 2), (Fig. 4).

Table 4: Results of Moderation Testing (N=166).

Moderation	R2 change	F	P-value
EQU_R	0.0016	0.468	0.495
S_R	0.0137	3.35	0.068
N_R	0.0168	3.99	0.047
D R	0.0489	8.86	0.003

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#### The Results

- 1- Due to the Corona pandemic and the Jordanian income tax, technological equipment can help improve the quality of financial control.
- 2- There is a role for software in enhancing the quality of financial control, particularly in view of the impact of the Corona pandemic on Jordan's income tax.
- 3- Due to the Corona pandemic and the Jordanian income tax, there is a role for the use of networks in enhancing the quality of financial control.
- 4- The usage of databases has a role to play in enhancing the quality of financial control in light of the Corona pandemic's impact on Jordan's income tax.
- 5- Due to the Corona pandemic and the Jordanian income tax, the region is not regarded a modified variable for the role of technology equipment in enhancing the quality of financial control.
- 6- Due to the Corona epidemic over the Jordanian income tax, the region is not regarded a modified variable for the function of software in increasing the quality of financial control.
- 7- The area is a modified variable for the function of networks in increasing the quality of financial control in light of the Corona pandemic's influence on the Jordanian income tax, with the center having the greatest beneficial impact, followed by the north and south.
- 8- The area is treated as a modified variable for the function of databases in enhancing the quality of financial control in light of the Corona pandemic's influence on the

Jordanian income tax, with the center having the greatest beneficial impact, followed by the north and south.

#### **DISCUSSION**

The purpose of this study is to quantify the influence of information technology elements and their function in enhancing the quality of financial control in the Jordanian income tax in the aftermath of the Corona pandemic through descriptive and quantitative ratio analysis. To accomplish this goal, the study examined the theoretical aspects of information technology and its role in enhancing the quality of financial control through a review of concepts, objectives, methods, and effects, as well as case studies of selected countries throughout the world, particularly third world countries. Additionally, the study of the Jordanian Income Tax Department's experience aims to develop the study's framework and extract basic factors about information technology and its role in improving the quality of financial management in light of the department's impact from the Corona pandemic. All previous studies (alkthery, 2021, Tarabiya, 2021, Al-Aqib and colleagues, 2021, Ben Aishi, 2016, Al-Aroud, 2010) addressed the same subject, with the exception of the sectors studied and assessed and the time of study.

#### RECOMMENDATIONS

This study includes a set of recommendations recommended by the researcher, namely: the need to adhere to the defense orders and laws issued by the government regarding the Corona pandemic, and also the need to expand academic research on the expansion of the policy of using advanced technological methods in information technology, such as the use of data science technology, big data, and intelligence analytics. The industrial sector plays an important role in improving the quality of financial control, and also has an important impact in achieving the basic goals of containing, stopping, and controlling the Corona epidemic. This is in addition to the lack of Arab studies on this subject.

#### REFERENCES

Ben Aishi, Bashir, and Ben Aishi, A. (2016), "The impact of the use of information technology on the effectiveness of the internal control system in Algerian joint stock companies: a field study on joint stock companies in the state of Biskra, Algeria.", Journal of Research in Accounting and Finance Sciences, Vol. 1, pp. 64–80.

Al-Aqib, Amal, Youssef, Mustafa, and Muhammad, H. (2021), "The impact of information systems on the effectiveness of administrative and financial control in Sudanese banks: a case study of banks operating in East Gezira locality.", The Arab Journal of Human and Social Sciences, pp. 27–99.

Al-Otaibi, A.A.R. (2010), "The impact of the use of information technology on the performance of human resources: A field study in the Australian international academy", Melbourne: Australian International Academy.

Ali. (2016), "The role of information technology in improving accounting performance: An applied study in a company", Journal of Administrative Studies, Vol. 9 No. 17, pp. 182–215.

Chowdhury, S.I. (2010), "A conceptual framework for Data Mining and Knowledge Management", Business Information Systems: Concepts, Methodologies, Tools and Applications, IGI Global, pp. 418–432.

Hair, J.F., Sarstedt, M., Pieper, T.M. and Ringle, C.M. (2012), "The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications", Long Range Planning, Elsevier, Vol. 45 No. 5–6, pp. 320–340.

Hooper, D., Coughlan, J. and Mullen, M.R. (2008), "Structural equation modelling: Guidelines for determining model fit", Electronic Journal of Business Research Methods, Vol. 6 No. 1, pp. pp53-60.

Ibrahim Elhadidy, H. (2021), "The effectiveness of infographics in the interactive marketing of entrepreneurial ideas to support the scope of entrepreneurship.", Major Architecture, Arts and Humanities, Arab Association for Islamic Civilization and Art, Vol. 6 No. 30, pp. 538–556.

Ibrahim, M., Al-Mashaqbah, A., Koch, B. and Datta, P. (2020), "An evaluation Keyw Keywords ords of available digital elevation models (DEMs) for geomorphological feature analysis", Environmental Earth Sciences, Springer, Vol. 79 No. 13, pp. 1–11.

Kullab, M. (2005), "Assessment of radon-222 concentrations in buildings, building materials, water and soil in Jordan", Applied Radiation and Isotopes, Elsevier, Vol. 62 No. 5, pp. 765–773.

Loudon, K. and Loudon, J. (2004), "Management Information Systems, 2006", Prentice Hall, USA.

Maelah, R., Al Lami, M.F.F. and Ghas, G. (2021), "Usefulness of management accounting information in decision making among SMEs: the moderating role of cloud computing", Asia-Pasific Management Accounting Journal, Accounting Research Institute (ARI), Vol. 16 No. 1, pp. 59–92.

Murar, M. and Brad, S. (2014), "Monitoring and controlling of smart equipments using Android compatible devices towards IoT applications and services in manufacturing industry", 2014 IEEE International Conference on Automation, Quality and Testing, Robotics, IEEE, pp. 1–5.

Musaed Alkthery, A. and Abdullah Al-Qiawi, D. (2020), "The effect of SPAWN strategy in developing persuasive writing skills and productive habits of mind", Arab World English Journal (AWEJ), Vol. 11 No. 1.

Naser, K., Al Salem, A. and Nuseibeh, R. (2013), "Customers awareness and satisfaction of Islamic banking products and services: Evidence from the kuwait finance house (note 1)", International Journal of Marketing Studies, Canadian Center of Science and Education, Vol. 5 No. 6, p. 185.

Oyewole, P., Sankaran, M. and Choudhury, P. (2008), "Information communication technology and the marketing of airline services in Malaysia: A survey of market participants in the airline industry", Services Marketing Quarterly, Taylor & Francis, Vol. 29 No. 4, pp. 85–103.

Raymond, L., Croteau, A.-M. and Bergeron, F. (2009), "When information technology is counterproductive: revisiting the innovation paradigm in manufacturing SMEs".

Tarabay. (2021), "The impact of applying external financial control procedures on the quality of internal control procedures in banks operating in Jordan during the Corona pandemic period from the workers' point of view, The Arab Journal for Scientific Publishing, Vol. 2 No. 27, pp. 501–527.

Jasti, K., & Varalakshmi, C. (2023). MEASUREMENT OF USERS ACCEPTANCE OF SELECTED FINANCIAL TECHNOLOGY PRODUCTS AND SERVICES. International Journal of Professional Business Review, 8(2), e01530. https://doi.org/10.26668/businessreview/2023.v8i2.1530

Dharma, F., Syakhroza, A., & Martani, D. (2022). Does the Social Assistance Budget Realization Affect Incumbents' Votes? (Study in Indonesia Local Election). International Journal of Professional Business Review, 7(6), e0636. https://doi.org/10.26668/businessreview/2022.v7i6.636