


**THE IMPACT OF INFORMATION TECHNOLOGY GOVERNANCE UNDER COBIT-5
FRAMEWORK ON REDUCING THE AUDIT RISK IN JORDANIAN COMPANIES**

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 21 November 2022</p> <p>Accepted 16 February 2023</p>	<p>Purpose: The goal of this study is to ascertain how the COBIT 5 framework, which consists of (Planning and organization, Acquire and implementation, Support and Delivery, Monitoring and evaluation, Guidance and Control), affects audit risk.</p> <p>Theoretical framework: IT governance (ITG) is a strategic and administrative procedure that aids in an organization's efficient and responsible usage of IT. The efficacy of audit control and audit process can be significantly impacted by COBIT5.</p> <p>Design/methodology/approach: This study used a quantitative approach, with questionnaires distributed to 450 workers from each of the 150 Jordanian companies. The three employees served as a representative sample from the finance, internal audit, and IT departments. A total of 371 sets of questionnaires were returned with complete responses and were further examined. The data analysis employed descriptive analysis, Pearson correlation, and multiple linear regressions.</p> <p>Findings: The results of this investigation revealed that every independent variable, including Cobit 5, had a favorable and substantial impact on the decrease of audit risk. one of the most important results of this study showed that Monitoring and evaluation is one of the most influential dimensions of ITG to reducing audit risks, and perhaps this may be due to the nature of the delivery of IT within companies' systems and the implementation of their applications and services to be delivered.</p> <p>Research, Practical & Social implications: This study helps Jordanian companies to enhance the application of information technology governance, which contributes to raising the level of efficiency of their accounting systems and enabling them to compete.</p> <p>Originality/value: The findings showed that are a limited number of studies on IT governance and audit risk that have focused on developing countries, especially Jordan, and this is where the research comes in –to fill up the gap.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i2.1236</p>
<p>Keywords:</p> <p>ITG; Cobit 5; Audit Risk.</p> 	

**O IMPACTO DA GOVERNANÇA DA TECNOLOGIA DA INFORMAÇÃO SOB A ESTRUTURA
COBIT-5 NA REDUÇÃO DO RISCO DE AUDITORIA NAS EMPRESAS JORDANIANAS**

RESUMO

Objetivo: O objetivo deste estudo é verificar como a estrutura COBIT 5, que consiste em (Planejamento e organização, Aquisição e implementação, Apoio e entrega, Monitoramento e avaliação, Orientação e Controle), afeta o risco de auditoria.

Estrutura teórica: A governança de TI (ITG) é um procedimento estratégico e administrativo que ajuda no uso eficiente e responsável da TI por parte de uma organização. A eficácia do controle de auditoria e do processo de auditoria pode ser significativamente impactada pelo COBIT5.

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Design/metodologia/abordagem: Este estudo utilizou uma abordagem quantitativa, com questionários distribuídos a 450 trabalhadores de cada uma das 150 empresas jordanianas. Os três funcionários serviram como uma amostra representativa dos departamentos de finanças, auditoria interna e TI. Um total de 371 conjuntos de questionários foram devolvidos com respostas completas e foram analisados mais detalhadamente. A análise de dados empregou análise descritiva, correlação de Pearson e regressões lineares múltiplas.

Descobertas: Os resultados desta investigação revelaram que cada variável independente, incluindo a Cobit 5, teve um impacto favorável e substancial na diminuição do risco de auditoria. Um dos resultados mais importantes deste estudo mostrou que o monitoramento e avaliação é uma das dimensões mais influentes do ITG para reduzir os riscos de auditoria, e talvez isto possa ser devido à natureza da entrega de TI dentro dos sistemas das empresas e a implementação de suas aplicações e serviços a serem entregues.

Pesquisa, implicações práticas e sociais: Este estudo ajuda as empresas jordanianas a melhorar a aplicação da governança da tecnologia da informação, o que contribui para elevar o nível de eficiência de seus sistemas de contabilidade e permitir que elas concorram.

Originalidade/valor: Os resultados mostraram que há um número limitado de estudos sobre governança de TI e risco de auditoria que se concentraram nos países em desenvolvimento, especialmente na Jordânia, e é aqui que entra a pesquisa - para preencher a lacuna.

Palavras-chave: ITG, Cobit 5, Risco de Auditoria.

EL IMPACTO DE LA GOBERNANZA DE LA TECNOLOGÍA DE LA INFORMACIÓN BAJO EL MARCO COBIT-5 EN LA REDUCCIÓN DEL RIESGO DE AUDITORÍA EN LAS EMPRESAS JORDANAS

RESUMEN

Propósito: El objetivo de este estudio es determinar cómo afecta al riesgo de auditoría el marco COBIT 5, que consta de (Planificación y organización, Adquisición e implementación, Soporte y entrega, Seguimiento y evaluación, Orientación y control).

Marco teórico: El gobierno de las TI (ITG) es un procedimiento estratégico y administrativo que ayuda a una organización a hacer un uso eficiente y responsable de las TI. COBIT5 puede influir significativamente en la eficacia del control y el proceso de auditoría.

Diseño/metodología/enfoque: Este estudio utilizó un enfoque cuantitativo, con cuestionarios distribuidos a 450 trabajadores de cada una de las 150 empresas jordanas. Los tres empleados constituyeron una muestra representativa de los departamentos de finanzas, auditoría interna e informática. En total, se devolvieron 371 cuestionarios con respuestas completas, que se examinaron posteriormente. En el análisis de los datos se emplearon el análisis descriptivo, la correlación de Pearson y regresiones lineales múltiples.

Resultados: Los resultados de esta investigación revelaron que cada variable independiente, incluyendo Cobit 5, tuvo un impacto favorable y sustancial en la disminución del riesgo de auditoría. Uno de los resultados más importantes de este estudio mostró que el Monitoreo y la evaluación es una de las dimensiones más influyentes de ITG para reducir los riesgos de auditoría, y tal vez esto puede ser debido a la naturaleza de la entrega de TI dentro de los sistemas de las empresas y la implementación de sus aplicaciones y servicios a prestar.

Investigación, implicaciones prácticas y sociales: Este estudio ayuda a las empresas jordanas a mejorar la aplicación de la gobernanza de las tecnologías de la información, lo que contribuye a elevar el nivel de eficiencia de sus sistemas contables y les permite competir.

Originalidad/valor: Los resultados demuestran que el número de estudios sobre el gobierno de las tecnologías de la información y el riesgo de auditoría centrados en los países en vías de desarrollo, especialmente Jordania, es limitado, y es aquí donde la investigación viene a colmar esta laguna.

Palabras clave: ITG, Cobit 5, Riesgo de Auditoría.

INTRODUCTION

In recent years, the issue of (ITG) has become one of the major concerns among business organizations and companies. IT has become an integral part in the business of companies to support, sustain and grow business. The concept of (ITG) appeared in 1998 as a

result of the need to control IT that emerged after the recent financial crises and scandals that hit major international companies (Sasaki, and Yonezawa, 2010).

Including the crisis that started in the second half of 2008, which is considered as one of the most severe crises, the global economy has been exposed to after the great depression, and as an integral part of the world, the impact of this global financial crisis has also spread to the Jordanian economy, which led to the share price, amounted to 40% (ASE, 2012). In the business context, governance is a set of rules, processes, and actions that an organization follows to determine its strategies and operate the organization in a specific way to help it achieve its goals. While (ITG) refers to organizational structures and processes that ensure the organization's IT fully supports its goals (Andry & Setiawan, 2019), (Sethibe, Campbell & McDonald, 2007). According to (Susanti & Sucahyo, 2016), ITG is the role of leaders, executive management, and IT managers in controlling the implementation of IT strategy in order to ensure business and IT alignment.

In the Jordanian context, the global crises that have affected firms all over the world have caused stakeholders in Jordan to reconsider the credibility of Jordanian listed companies' financial reporting, as Jordan was one of the first countries to adopt the (ITG) Guide to help companies monitor business and control errors, as it obligated all companies listed on the Amman Stock Exchange to work with them, including public shareholding companies (ASE, 2012). There is a growing interest among various stakeholders, including the government, investors, and clients, in using ITG to improve firm performance (Hamdan, Abzakh & Al-Ataibi, 2010). The degree of companies' commitment to apply the general framework for IT effectiveness has become one of the most fundamental standards that investors consider while making their investment decisions, especially in light of the economic globalization and intense competition between different organizations to enter the financial markets, locally or globally for investment, where control environments and organizations lacking ITG are more susceptible to fraud, abuse, and misuse (De Haes, Van Grembergen, & Debreceny, 2015; Mahadeen, Al-Dmour, Obeidat, & Tarhini, 2016). Control environments with ITG can be more effectively monitored for compliance. Additionally, employees of organizations with ITG policies are aware of their responsibilities as they relate to the digital environment (Almasria, Airout, Samara, Saadat, & Jrairah 2021; Mahadeen at al., 2016), but the mechanisms of ITG are applied much more extensively in large enterprises than in SMEs (Huang, Zmud, & Price, 2010).

Cobit5, ITIL, and ISO are examples of framework models that can help ITG in an organization improve. Cobit5 is one of the three frameworks that provides the most comprehensive overview of IT management (Zhang, le Fever, & le Zhang,2013) Cobit 5 contains a number of processes for IT governance and management that are easily understood by IT operations and business managers. (COBIT 5) released by ITG Institute (ITGI), which is a part of the ISACA (Information Systems Audit and Control Association) (Isaca, 2011) as this framework aims to a set the best practice in governance and audits of information systems. COBIT's framework is concerned with the internal control of electronic information systems and the technology associated with these systems, as well as the protection of information security (De Haas at al, 2015.) The previous study also (Almasria at al., 2021; Veerankutty, Ramayah, & Ali, 2018) revealed evidence of a relationship between ITG and the audit risk. Effective ITG will help mitigate within-firm fraud that was the basis of some of the notable corporate collapses (Almasria at al., 2021). ITG reduces fraud by identifying various business risks and legal risks and audit risk, by improving key internal control areas, and by predicting material accounting misstatements (IFAC, 2002; Kranacher & Riley 2019; Dechow, M., Ge, W., & Larson 2011), According to (Akman, Acar, & Kizil 2020), corporate ITG can help an organization protect itself from these common audit risk issues.

Furthermore, theoretical and empirical evidence demonstrated that IT, when properly managed, could reduce audit risk (Lee, Taylor, S. & Taylor, 2006; Putri, Aknuranda, & Mahmudy, 2017).

Based on the aforementioned concerns, the primary research question raised in this current study is whether or not ITG, as implemented through the five major components (PO), (AI), (SD), (ME), and (GC), has the ability to reduce audit risk. The remainder of this paper is divided into sections on literature review, methodology, results discussion, and conclusion.

LITERATURE REVIEW

It Governance (COBIT5)

The COBIT 5 framework for ITG is one of the most significant developments in the field of technology governance, helping to understand an organization's current IT state, identify gaps, and finally plan for improvements (ISACA, 2014). COBIT5 as a framework enables executives to bridge the gap between control desires, technical issues, and business risks (Goldman and Ahuja, 2011), and ITG support can be obtained through a mutual control structure (Al Qassimi and Rusu,2015).

34 high-level control goals are included by the COBIT 5 framework in particular, which auditors should use to confirm that sufficient controls are in place to maintain the security of the IT environment. Additionally, it has a complete IT internal control checklist that can be used to carefully examine both IT general controls and application controls for the goal of regulating compliance analysis, making it simpler for CPAs to analyze the firms' IT internal control. (Lin, Guan & Fang, 2010).

The COBIT5 framework is based on an organized process model with five primary domains that can design an empirical test of detailed and specific IT-related control objects. (Ali, Al-tahat, Al-Duleemi, Al-Afeef, and Al-hawamdah, 2019) (PO), (AI), (DS), (ME) (GC).

1. Organization and Planning: It is the bedrock upon which ITG and effective corporate governance are built. It has several goals, including coordinating the company's technology and activities through the planning process, whether short or medium term. (PO) works to ensure that IT management, in addition to improving the strategic alignment process, (Patón-Romero, Baldassarre, Piattini, & Garca, 2017). (Preittigun, Chantatub, & Vatanasakdakul, 2012).

2. Acquire and Implementation: It concerns the company's identification and purchase of IT requirements for effective business leaders (Bakshi & Eswar, 2018), and this includes controlling the following goals: managing changes, acceptance, transformation, program and project management, requirements of definition management, managing identification and building solutions, and knowledge management.

3. Delivery and Support: The domain focuses on improving the IT system, supporting data and handling it correctly to maintain its commercial activities, maintaining the continuity of information flow, and making information permanently accessible to internal and external beneficiaries. (Ali et al., 2019) This control or regulator includes the following goals (Iqbal, Widyawan, & Mustika, 2016): Operations management, asset management, service management, event planning, and business continuity management are the four categories.

A framework for building elasticities and effective retaliatory capability is provided by DS, which also assesses the consequences of prospective threats to the organization and protects its reputation, brand, and value-creating operations (Mutiara, Prasetyo, & Widya, 2017).

4. Monitoring and Evaluation: This framework includes a plan for the (ME) process that explains what to do, what activities are required to carry out the (ME) process, who is in charge of them, and when and where they will take place. The objectives of this governing component are as follows: 2017 performance and conformance, internal control system control,

monitoring and analyzing compliance with external requirements (Putri, Aknuranda, & Mahmudy) (ME).

5. Guidance and Control: Monitoring is the gathering and examination of data concerning a project or program that takes place while the project or program is being implemented. Although advice is ongoing, it can be carried out by internal or external impartial assessors for an organization, initiative, or program. The following goals are included in this control (Abdel basset, 2014): assuring stakeholders' transparency, benefit delivery, risk reduction, and resource enhancement. Despite its significance in the corporate world, little study has been done on how ITG and audit risk relate to Jordanian enterprises (Almasria at al., 2021; Veerankutty, Ramayah, & Ali, 2018).

This study provided empirical evidence for the use of ITG (cobit5) in Jordanian businesses.

Audit Risk

There are currently about 300 audit firms in Jordan, ranging from the majority of very small audit firms to a minority of firms that are significantly larger and work with much larger clients, including multinationals operating in Jordan. Since Jordan's independence in 1946, the audit profession has grown significantly (Abdullatif, 2013). The audit profession has advanced significantly in the modern era as a result of the growth of the concept of separating ownership from management, the development of IT, and the expansion of company size, which increased risks and the need for an independent and trustworthy body on the part of the owners to ensure the management is making the best use of available resources.

In Bulletin No. 47, the American Institute of Certified Public Accountants (AICPA) defined audit risk as "the risk that leads to the auditor's failure without his being aware of the reservation in his report when there is a fundamental error in the financial statements." Audit risk is the possibility that an auditor will express an incorrect audit opinion when a financial report is materially incorrect.

And when auditors sought to use statistical sample techniques in the audit, audit risk would initially surface. The samples were typically far bigger than those indicated by the auditors' judgements when those statistical approaches were applied to calculate sample size. Despite the fact that risk is a crucial aspect of auditing, according to Hayes, Glynn, and Shanahan (2005), audit risk is the possibility that an auditor may submit an unqualified report as a result of failing to find a major misstatement. Risk-based auditing must first identify high-

risk areas that demand intensive scurvies in order to be effective in this. The next step is to decide how to lessen the auditing procedures in low-risk regions.

According to Arens, Elder, Beasley, & Hogan, (2017), risk audit process consists of three components:

1. Inherent risk: The inherent risk is defined by the American Institute of Certified Public Accountants (AICPA) as the willingness of the balance of a specific account or type of transaction to be for the error, which is essential if it is combined with errors in other balances or a certain type of transaction, with no special internal control procedures with it.
2. Control risk: According to (Arens et al., 2017), it is a measure of a reviewer's estimate of the probability of the internal system discovering errors that exceed the acceptable limit in a given set of data at the appropriate time.
3. Detection risk: It is the risk that the procedures used by the auditor to reduce audit risk to an acceptable level will fail to detect an existing and potentially material misstatement, either individually or when aggregated with other misstatements. Shelest, (2021). (2021).

ITG(COBIT5) and Audit Risk

Previous research has looked at ITG (COBIT 5) as an effective tool in assisting companies and banks in achieving their long and short-term strategic goals through an intellectual consensus between IT and the activities of companies with a view to achieving their future leadership. Because of the importance of ITG, information systems may face numerous risks (Nurhajati, 2016; Khanom, 2017).

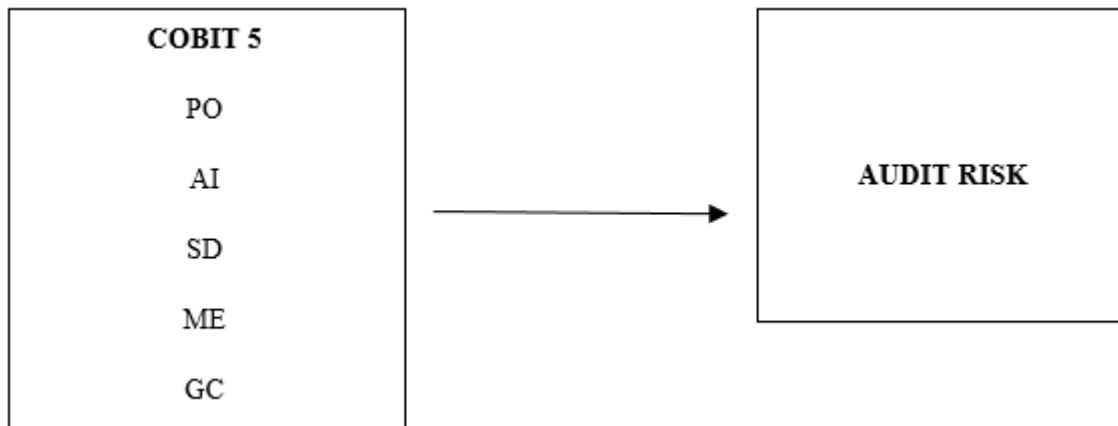
As a result, it poses a clear threat to businesses, particularly in terms of financial data security and reliability. The importance of using COBIT 5 as a framework that companies use to protect their information from risks and audit risks is highlighted here. (Alotaibi, Zraqat, and Alotaibi) (2021).

Therefore, prior studies (Almasria et al., 2021; Veerankutty, Ramayah & Ali., 2018) found evidence of a link between ITG and audit risk, showing that the application of ITG (cobit5) procedures influences the reduction of audit risk and helps to improve the quality of external auditing. Almusawi and Okour (2021) see the COBIT5 framework as a tool to help managers, auditors, and users understand their IT systems, as well as helping to improve the corporate governance model, leading to the choice of the level of security and making necessary controls to protect the company's assets effectively, and achieving the quality of output that

enables users, managers, and decision makers to make appropriate decisions. Corporate IT strategy should be thoroughly defined, planned, and organized to eliminate audit risks and produce high-quality results.

Research Framework

Figure 1: Proposed research framework



Source: Authors

Based on previous studies (Ali at al., 2019; Okuor, 2019), a more effective ITG will lead to reduce audit risk through the five dimensions of COBIT5,

Based on the research background discussed above, the hypothesis that is tested in the study is shown as below:

H1: There is a statistically significant impact of applying effective ITG in reducing audit risk in Jordanian companies.

H1a: There is a statistically significant impact of applying an effective PO process in reducing the audit risk in Jordanian companies.

H1b: There is a statistically significant impact of applying an effective AI process in reducing the audit risk in Jordanian companies.

H1c: There is a statistically significant impact of applying an effective SD process in reducing the audit risk in Jordanian companies.

H1d: There is a statistically significant impact of applying an effective ME process to reduce the audit risk in the Jordanian companies.

H1e: There is a statistically significant impact of applying an effective of GC and control in reducing the audit risk in Jordanian companies.

MATERIAL AND METHODOLOGY

Population and Sampling

The population of this study is 150 Jordanian Companies Listed on the Amman Stock Exchange 2019 end of December, that included three main sectors in Jordan: Financial companies, service companies and finally, industrial companies.

The 450 respondents will consist of 3 employees from each of the 150 companies. Out of the 3 employees, it will represent the finance department, the internal audit department and finally from IT department.

Data Collection

For this study, the questionnaire method was used (PO, AI, SD, ME, GC) and audit risk, due to its many advantages (Bryman, 2003). It was conducted using a quantitative approach, where questionnaires were distributed by hand to 450 respondents of 3 employees from each of the 150 Jordanian companies. Out of the 3 employees, they will represent the finance department, the internal audit department and finally from IT department as a sample and 79 sets of questionnaires were returned with complete answers and were further analyzed.

Regression Model

Regression model represents the relationship between independent and dependent variables:

$$REA = a_0 + a_1PO + a_2OI + a_3SC + a_4ME + a_5GC + e$$

Where:

REA: represents Audit Risk

PO: represents PO

OI: represents AI

SC: represents SD

ME: represents ME

GC: represents GC

e: represents random error.

ai: represents regression model coefficients.

RESULTS AND DISCUSSION

Based on Table 1, a majority of the respondents are male comprising 60.9% of all, and female comprise 39.1% of all. The largest group of respondents, comprising (45.3%) is in the age range of 41 to 50 years old. In terms of experience, the category of years of experience (21

to 30) constituted the largest percentage, which amounted to (32.9%), while the category of years of experience (10 and below) constituted the lowest percentage, which amounted to (9.7%) It was the largest proportion specialists in the field of (Accounting), where their percentage reached (41.5%), followed by the specialization (IT), that reached (34.0),as for the functional section, the highest percentage of the audit function was (38.8%). Finally, the sample was described according to the position of the highest percentage is assistant heads of departments, which amounted to (53.1%).

Table 1: Respondents' Demographic

		N	Percentage
Gender	Male	226	60.9
	Female	145	39.1
Age	30 and below	14	3.8
	31 to 40	132	35.6
	41 to 50	168	45.3
	51 and above	57	15.3
Years of Experience	10 and below	36	9.7
	11 to 20	68	18.3
	21 to 30	121	32.9
	31 to 40	78	23.5
	41 and above	58	15.6
Scientific Specialization	Accounting	154	41.5
	Economy	62	16.7
	IT	126	34.0
	Others	29	7.8
Functional Section	Department of Finance	101	27.2
	Audit Department	144	38.8
	Department of IT	126	34.0
Position	Manager	42	11.3
	Head of Department	132	35.6
	Assistant Head of Department	197	53.1

Source: Authors

Descriptive statistics methods, represented by arithmetic means and standard deviations, as well as rank and relative importance, were used to describe the answers of the study of sample numbers.

IT Governance (cobit5)

Planning and organization

Table 2: Means, Standard Deviation and Relative Importance for (PO)

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
1	There is a specific strategic plan for the company's information system.	4.466	0.713	High	1
2	The company's management carries out a continuous update of its IT	4.296	0.734	High	3
3	The IT applied to the company is characterized by its ability to comply with external requirements	4.229	0.756	High	6
4	The company's management establishes a plan to manage the expected risks	3.353	0.603	Medium	10
5	The company has a committee concerned with planning and managing information systems	2.995	0.930	Medium	11
6	The company has the necessary financial resources to operate the information systems.	4.245	0.769	High	4
7	The company's management defines standards and procedures to ensure adherence to the security of information system.	4.199	0.872	High	7
8	The company's management conducts a periodic and continuous assessment of its information systems	4.235	0.651	High	5
9	The company's management evaluates risks related to the information systems.	4.105	0.715	High	8
10	The company's management plans the technological infrastructure to ensure that future actions and trends are monitored.	4.046	0.743	High	9
11	The company's management adopts procedures to control the costs of operating its information systems.	4.434	0.748	High	2
General average for PO		4.055	0.423	High	

Source: Authors

According to Table 2, the general average of (PO) is (4.055), with a standard deviation of (0.423) and a high relative importance. The paragraph (There is a specific strategic plan for the company's information system) comes in first with a mean of (4.466) and is of high relative importance, while the paragraph (The Company has a committee concerned with planning and managing information systems) comes in last with a mean of (2.995) and is of medium relative importance

Acquire and Implementation

Table 3: Means, Standard Deviation and Relative Importance for (AI)

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
12	The company has the necessary infrastructure needed for effective implementation of IT system	4.388	0.739	High	1
13	The company's IT personnel are highly qualified and skilled.	4.216	0.803	High	3
14	The company's management conducts periodic maintenance of the IT infrastructure.	4.334	0.836	High	2
15	The company has all the necessary requirements for its users' IT operations.	4.113	0.748	High	5
16	The company's management carries out periodic and continuous preventive maintenance of the electronic equipment used by IT.	4.183	0.760	High	4
17	The company's management depends on special software to cope with the changes that happen to IT.	3.817	0.834	High	6
18	The company's has clear policy to deal with the risks expected from implementing the IT.	3.501	0.957	Medium	7
General average AI		4.079	0.588	High	

Source: Authors

According to Table 3, the general average of (AI) is (4.079) with a standard deviation of (0.588) and has a high relative importance. The first paragraph (The company has the necessary infrastructure needed for effective implementation of IT system) has a mean of (4.388) and is of high relative importance, while the last paragraph (The company has clear policy to deal with the risks expected from implementing IT) has a mean of (3.501) and is of medium relative importance.

Support and Delivery

Table 4: Means, Standard Deviation and Relative Importance for (SD)

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
19	The company's management determines the level of information systems services provided to clients.	3.930	0.967	High	6
20	The company's management provides sufficient and necessary support to implement the IT system effectively.	4.431	0.711	High	3
21	The need to find a pioneering management of the company to solve its problems effectively.	4.474	0.667	High	2
22	The company's management applies appropriate mechanisms to protect its data and information.	3.237	0.474	Medium	7

23	The company's management determines every user's need for data from its information system.	4.224	0.710	High	5
24	IT helps keep the company in line with its planned and future plans.	4.307	0.752	High	4
25	The company's management adopts effective practices and procedures aimed at managing and maintaining data.	4.523	0.747	High	1
General average for SD		4.161	0.445	High	

Source: Authors

According to Table 4, the general average of (SD) is (4.161) with a standard deviation of (0.445) and is of high relative importance. The first paragraph (The company's management adopts effective practices and procedures aimed at managing and maintaining data) has a mean of (4.523) and is of high relative importance, while the last paragraph (The company's management applies appropriate mechanisms to protect its data and information) has a mean of (3.237) and is of medium relative importance.

Monitoring and Evaluation

Table 5: Means, Standard Deviation and Relative Importance for (ME)

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
26	The company's management adopts targeted procedures to ensure IT goals are achieved.	4.394	0.836	High	2
27	The company's management collects the data necessary for control the IT system.	4.431	0.726	High	1
28	The company's management applies an appropriate mechanism to evaluate performance of IT system.	4.299	0.709	High	4
29	The company's management evaluates the extent of customer satisfaction towards company's IT system periodically.	3.482	0.566	Medium	8
30	The company has the appropriate IT security controls.	4.283	0.801	High	5
31	The company's management regularly measures the available level of information systems' users.	3.609	0.984	Medium	7
32	The management of the company provides information that reflects the level of ITG.	4.369	0.829	High	3
33	The company's management obtains a copy of the evaluation results related to the IT.	4.154	0.785	High	6
General average for ME		4.128	0.520	High	

Source: Authors

According to Table 5, the general average of (ME) is (4.128) with a standard deviation of (0.520) and has a high relative importance. The paragraph (The company's management collects the data required to control the IT system) at the beginning has a mean (4.431) and is

of high relative importance, whereas the paragraph (The company's management evaluates the extent of customer satisfaction towards the company's IT system on a regular basis) has a mean (3.482) and is of medium relative importance.

Guidance and Control

Table 6: Means, Standard Deviation and Relative Importance for (GC)

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
34	The company's management conducts an evaluation process on the outputs of the IT system.	3.534	0.566	Medium	8
35	The company's management monitors and evaluates the extent to which the results of implementing the IT system comply with external requirements.	4.113	0.770	High	5
36	The management of the company ensures that the risks related to IT are minimized.	4.121	0.811	High	4
37	The company's management evaluates the efficiency of its internal control systems.	4.148	0.748	High	3
38	The company's management adopts targeted procedures to ensure that information is communicated to shareholders in a transparent manner	4.159	0.801	High	1
39	The company's management complies with the rules and regulations issues by relevant higher regulatory bodies	3.650	1.027	Medium	7
40	Management of the company verifies and controls the settings of the ITG framework.	4.151	0.844	High	2
41	Management of the company monitors the level of compliance of IT operations with Relevant rules and regulation.	3.844	1.067	High	6
General average for GC		3.965	0.564	High	

Source: Authors

According to Table 6, the general average of (GC) is (3.965) with a standard deviation of (0.564) and is of high relative importance. The paragraph (The Company's management adopts targeted procedures to ensure that information is communicated to shareholders in a transparent manner) is of high relative importance at the start, while the paragraph (The Company's management conducts an evaluation process on the outputs of the IT system) is of medium relative importance at the end. Table 7 represents the overall score for each dimension under ITG:

Table 7: Means, Standard Deviation and Relative Importance for ITG

Item No.	Dimensions	Means	Standard Deviation	Relative Important	Rank
1	PO	4.055	0.423	High	4
2	AI	4.079	0.588	High	3
3	SD	4.161	0.445	High	1
4	ME	4.128	0.520	High	2
5	GC	3.965	0.564	High	5
General average for ITG		4.077	0.422	High	

Source: Authors

Table 7 revealed that SD was ranked first and represented a high degree (mean 4.161). While GC is ranked last and also has a high degree (mean 5.83.96529). The overall mean (4.077) reflected ITG's importance

Audit Risk

Inherent Risk

Table 8: Means, Standard Deviation and Relative Importance for Inherent Risk

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
42	Do procedures and regulations within companies contribute to reducing the inherent risks?	4.245	0.858	High	3
43	The nature of the errors that the auditor expects to discover is considered a factor affecting the estimation of the size of the risks inherent in the companies.	4.528	0.747	High	1
44	Does the size of the company affect the inherent risk?	4.283	0.773	High	2
45	The nature of the company's operation affects the inherent risk	3.364	0.560	Medium	4
General average for Inherent Risk		4.105	0.509	High	

Source: Authors

According to Table 8, the overall average of Inherent Risk is (4.105) with a standard deviation of (0.509), indicating that it is of high relative importance. The paragraph (The nature of the errors that the auditor expects to discover is considered a factor influencing the estimation of the size of the risks inherent in the companies) at the beginning has a mean of (4.528) and is of high relative importance, whereas the paragraph (The nature of the company's operation affects the inherent risk) at the end has a mean of (3.364) and is of medium relative importance

Control Risk

Table 9: Means, Standard Deviation and Relative Importance for Control Risk

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
46	The sure the effectiveness of control and auditing procedures for accounting records reduces the level of control risks.	3.307	0.553	Medium	3
47	Data analysis and monitoring of companies contributes to reducing control risks.	4.456	0.705	High	2
48	Maintaining a continuous system of training programs for employees leads to a low level of control risks.	4.496	0.691	High	1
General average for Control Risk		4.086	0.431	High	

Source: Authors

According to Table 9, the overall average of Control Risk is (4.086) with a standard deviation of (0.431), indicating that it is of high relative importance. The first paragraph (Maintaining a continuous system of employee training programs leads to a low level of control risks) has a mean of (4.496) and is of high relative importance, while the last paragraph (Ensuring the effectiveness of control and auditing procedures for accounting records reduces the level of control risks) has a mean of (3.307) and is of medium relative importance.

Detection Risk

Table 10: Means, Standard Deviation and Relative Importance for Detection Risk

Item No.	Paragraph	Means	Standard Deviation	Relative Important	Rank
49	Check out the proper application of effective audit procedures contributes to lowering the risk of detection.	4.334	0.683	High	2
50	Effective good planning of the audit process by the auditor reduces detection risk	4.275	0.735	High	3
52	Verifying the proper application of audit procedures reduces detection risk	4.383	0.770	High	1
52	Proper planning of the audit minimizes detection risk	3.288	0.620	Medium	4
General average for Detection Risk		4.070	0.517	High	

Source: Authors

According to Table 10, the overall average of Detection Risk is (4.070) with a standard deviation of (0.517) and is of high relative importance. The paragraph (Proper audit planning minimizes detection risk) at the beginning has a mean (4.383) and is of high relative importance, while the paragraph (Proper audit planning minimizes detection risk) at the end has a mean

(3.288) and is of medium relative importance. Table (4) below represented the descriptive measures of dimensions of Audit Risk, as follows

Table 11: Means, Standard Deviation and Relative Importance for Audit Risk

Item No.	Dimensions	Means	Standard Deviation	Relative Important	Rank
1	Inherent Risk	4.105	0.509	High	1
2	Control Risk	4.086	0.431	High	2
3	Detection Risk	4.070	0.517	High	3
General average for Audit Risk		4.087	0.398	High	

Source: Authors

Table 11 showed that inherent risk was ranked first and represented a high degree of risk (mean 4.105). While detection risk is ranked last and is also represented to a high degree (mean 4.070). The high importance of Audit Risk was reflected in the overall mean (4.087).

Hypothesis Test

The research objective is to ensure that ITG using the COBIT5 framework can influence the reduction of audit risk for companies, through (PO, AI, SD, ME, GC). As the result, both research objectives have been achieved.

Table 12: * Regression result of main hypothesis H1

Dependent variable	R	R ²	F	Sig F	Regression Coefficients				
					Independent variable	B	Std. error	T	Sig t
Audit Risk	0.781	0.610	114.016	0.000	PO	0.083	0.042	1.988	0.048
					AI	0.088	0.035	2.507	0.013
					SC	0.179	0.048	3.761	0.000
					ME	0.183	0.036	5.132	0.000
					GC	0.194	0.033	5.924	0.000

*Significant at 0.05 level.

Source: Authors

The model summary table indicates that the coefficient of determination, R Square, accounts for around 61.0% of the variation in (Audit Risk).

The ANOVA (F-test) is a good test of the model's capacity to explain any change in the dependent variable in addition to testing the model's statistical acceptability (Audit Risk). The influence of independent variables (ITG) combined is significant when the F statistic's significance value (F=114.016) is less than 0.05. The regression line coefficients also showed that (PO) has a significant effect on audit risk, with a coefficient equal to (0.083) being significant with (t= 1.988) and (Sig t=0.048) being less than 0.05, and that (AI) has a significant effect, with a coefficient equal to (0.088) being significant with (t= 2.507) and (Sig t=0.013) being less than 0.05. When the coefficient is equal to 0.179, the t value is 3.761, and the sig t

value is 0.000, (SC) has a large impact. When the ($t=5.132$) and ($\text{Sig } t = 0.000$) are less than 0.05 and the coefficient equals (0.183), (ME) has a significant impact. With ($t= 5.924$) and ($\text{Sig } t = 0.000$) being less than 0.05, (GC) has a substantial impact. This leads to accept the main hypothesis one that stated **H1**: There is a statistically significant impact of applying effective ITG in reducing the audit risk in Jordanian companies.

Table 13: * The result of the sub-hypothesis test

Dependent variable	R	r ²	F	Sig F	Regression Coefficients				
					Independent variable	B	Std. error	T	Sig t
Audit Risk	0.558	0.312	166.949	0.000	PO	0.525	0.041	12.921	0.000
Audit Risk	0.645	0.416	262.344	0.000	AI	0.436	0.027	16.197	0.000
Audit Risk	0.683	0.466	322.286	0.000	SD	0.610	0.034	17.952	0.000
Audit Risk	0.652	0.426	273.547	0.000	ME	0.499	0.030	16.539	0.000
Audit Risk	0.666	0.444	294.888	0.000	GC	0.470	0.027	17.172	0.000

Planning and organizational processes have a considerable impact on lowering audit risk, as indicated by the Pearson's coefficient of $r=0.558 > 0.7$.

Source: Authors

Also explained by the model is the coefficient of determination for 31.2 percent of the variation in (Audit Risk). The significance value of the F statistic ($F=166.949$) is less than 0.05 ($\text{Sig } F = 0.000$), demonstrating the relevance of the independent variables' (PO) influence. The regression line coefficients also showed that (PO) has a substantial impact on audit risk, with a significant coefficient of (0.525) with a t value of 12.921 and a Sig t value of 0.000 less than 0.05. According to Akman, Acar, and Kizil (2020), PO can help a company reduce these typical audit risk problems. According to a study by Ali et al. (2019), the effectiveness of the internal control and audit system in Jordanian public joint-stock companies is significantly impacted by the application of the COBIT system in terms of its dimensions (PO). According to (Anomah and Aduamoah, 2018), a PO process reduces risks by guiding and supporting operations using data collected from pertinent measurements while operating constantly within predetermined limitations.

Pearson's coefficient of $r=0.645 > 0.7$ indicates a significant relationship between the AI process and audit risk reduction. The model explains 41.6 percent of the variation in (Audit Risk) with a coefficient of determination. The F statistic's significance value ($F=262.344$) is less than 0.05, indicating that the effect of independent variables (AI) is significant. Furthermore, the regression line coefficients indicated that (AI) has a significant effect on audit risk, with coefficient equals (0.645) being significant with ($t= 16.197$) and ($\text{Sig } t = 0.000$) less than 0.05.

And a study by (Wolden, Valverde, & Talla, 2015) revealed that the COBIT5, using an AI system, is critical in protecting the supply chain management system from electronic penetration. Pearson's coefficient of $r=0.683 > 0.7$ indicates a significant relationship between the SD process and audit risk reduction.

The model summary table indicates that R Square, the coefficient of determination, accounts for around 46.6% of the variation in (Audit Risk). The significance value of the F statistic ($F=322.286$) is less than 0.05 (Sig F = 0.000), demonstrating the relevance of the independent variable (SD) influence. Additionally, the regression line coefficients showed that (SD) has a substantial impact on audit risk, with a significant coefficient of (0.610) with a t-value of 17.952 and a Sig-t value of 0.000 less than 0.05.

According to a study by Al-Fatlawi, Al Farttoosi, and Almagtome (Al-Fatlawi, Al Farttoosi, & Almagtome, 2021), the effectiveness of the internal control and audit system in Jordanian public joint-stock companies is significantly impacted by the application of the COBIT system in terms of its dimensions (SD).

The ME process and the decrease of audit risk are significantly correlated, according to Pearson's correlation of $r=0.652 > 0.7$. The model summary table indicates that the coefficient of determination, or R Square, accounts for around 42.6% of the variation in (Audit Risk). The significance value of the F statistic ($F=273.547$) is less than 0.05 (Sig F = 0.000), demonstrating the importance of the independent variables' impact (ME). Additionally, the regression line coefficients showed that (ME) significantly affects audit risk, with a significant coefficient of (0.499) with a t value of (16.539) and a sig t value of 0.000 less than 0.05. (Putri, at al.,2017). (Al-Fatlawia et al., 2021) said that in order to lessen the risks connected with financial statement items, the bank has put in place a monitoring framework that is complimentary to the complexity of the dangers it may face.

Furthermore, by reducing the need to protect and promote the flow of information within a network, automating database management software reduces the opportunity for information to be mishandled, misused, or exploited within a network (Ali et al., 2019) and Okour, 2019.

Pearson's coefficient of $r=0.666 > 0.7$ indicates a significant relationship between the GC process and audit risk reduction. According to the model summary table, R Square, the coefficient of determination, accounts for approximately (44.4%) of the variation in (Audit Risk).

The F statistic's significance value ($F=294.888$) is less than 0.05, indicating that the effect of independent variables (GC) is significant. Furthermore, the regression line coefficients

indicated that (GC) has a significant effect on Audit Risk, where coefficient equals (0.470) is significant with ($t= 17.172$) and ($\text{Sig } t =0.000$) less than 0.05.

Okour (2019) discovered that effective guidance and control greatly reduce the risk associated with cloud computing. Several studies have identified IT competency use of guidance and control as an important factor influencing audit practices to improve auditing and reduce associated risk (Mazza & Azzali, 2018; Siew, Rosli, & Yeow 2020; Thottoli, 2021).

CONCLUSION

This study looked into how the COBIT5 framework affects audit risk in Jordanian-listed companies. We concentrated on the main COBIT5 characteristics highlighted by PO, AI, SD, ME, and GC. The study's findings show that ITG Cobit 5 and Audit Risks are of high relative importance, demonstrating that the management of the company is interested in keeping an eye on operations and IT to make sure they adhere to policies, strategies, laws, and regulations in this area as well as attempting to lessen audit risks and threats brought on by the use of technology as well as the effectiveness and efficiency of their processes in order to lessen these risks. The results support the idea that audit risks will decline as (ME) procedures become more common in firms by showing that (ME) is one of the most significant features of ITG in decreasing audit risks. While (DS) made a minor contribution to lowering audit risks, this could be due to the nature of IT delivery within companies' systems and the implementation of their applications and services to be delivered, as well as the validity and accuracy of transaction records and decisions made in light of them, and the authorized use of IT, all of which affect detecting errors and thus lowering audit risk.

ACKNOWLEDGEMENT

The College of Business Management and Accounting University Tenaga Nasional, Malaysia, provided funding for this work.

REFERENCES

- Abdel basset, A. (2014). *Cobit 5 as a mechanism for IT governance a case study of state oil company*, Master Thesis. Abou Bekr Belkid University. Tlemcen, Algeria.
- Abdullatif, M. (2013). Fraud risk factors and audit programme modifications: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 7(1), 59-77.

Ahmad.o. B, (2019), *the impact of the risk of planning the audit process on the quality of the audit from the viewpoint of the Jordanian chartered accountant*, master thesis, alalbait university, Jordan.

AICPA (2006): SAS Audit Sampling. American Institute of Certified Public Accountants, New York.

Akman, V., Acar, B., & Kizil, C. (2020). Audit Techniques to Avoid Cost Accounting Frauds. *Emerging Markets Journal (EMAJ)*, University of Pittsburgh Press (USA), 10(1), 60-66.

Al-Fatlawi, Q. A., Al Farttoosi, D. S., & Almagtome, A. H. (2021). *Accounting information security and it governance under cobit 5 framework: A case study*. *Webology*, 18(Special Issue on Information Retrieval and Web Search), 294-310.

Al-Hija, A. (2017). *The impact of the reliability of accounting information systems in light of the application of information technology governance on the profitability of Jordanian banks listed on the Amman Stock Exchange*, PhD thesis, The World Islamic Sciences and Education University, Jordan.

Ali, H. & Nassour, R. (2014). *Determining the level of IT governance applicable Commercial Bank of Syria in Lattakia according to a framework (COBIT)*, Tishreen University Journal for Research and Scientific Studies -Economic and Legal Sciences Series Vol. (36) No. (2).

Ali, O., Al-tahat, S., Al-Duleemi, K., Al-Afeef, J., & Al-hawamdah, H. (2019). The Impact of the Decisions of the COBIT 5 Committee on the Effectiveness of the Internal Control Systems in the Jordanian Industrial Joint Stock Companies. *The Journal of Social Sciences Research*, 5(11), 1587-1599.

Alsmady , A. A. (2022). Accounting Information Quality, Tax Avoidance and Companies' Performance: the Moderate Role of Political Connection. *International Journal of Professional Business Review*, 8(1), e0622. <https://doi.org/10.26668/businessreview/2022.v7i6.622>

Almasria, N., Airout, R. M., Samara, A. I., Saadat, M., & Jrairah, T. S. (2021). The role of accounting information systems in enhancing the quality of external audit procedures. *Journal of management Information and Decision Sciences*, 24(7), 1-23.

Almusawi, I. G. (2021). USING COBIT FRAMEWORK FOR REDUCING THE AUDIT RISKS OF ACCOUNTING INFORMATION SYSTEMS. *Akkad Journal of Contemporary Accounting Studies*, 1(1), 52-74.

Alotaibi, M. Z., Alotibi, M. F., & Zraquat, O. M. (2021). The impact of information technology governance in reducing cloud accounting information systems risks in telecommunications companies in the state of Kuwait. *Modern Applied Science*, 15(1), 143-151.

Al Qassimi, N., & Rusu, L. (2015). IT governance in a public organization in a developing country: A case study of a governmental organization. *Procardia Computer Science*, 64, 450-456.

- Andry, J. F., & Setiawan, A. K. (2019). IT governance evaluation using COBIT 5 framework on the national library. *Journal Sistema Informasi*, 15(1), 10-17.
- Anomah, S., & Aduamoah, M. (2018). Proposed Analytical Procedure for The Customization and Implementation of COBIT 5, An Auditing Tool: An Action Design Research Approach. *Edpacs*, 57(3), 15-34.
- Arens, A. A., Elder, R. J., Beasley, M. S., & Hogan, C. E. (2017). Auditing and assurance services. *Auditing and Assurance Services*.
- ASE, (2012). *Terms and conditions for using the Amman Stock Exchange website*. Retrieved from <https://www.ase.com.jo/>.
- Bakshi, S., & Eswar, M. (2018). Portfolio, *Program and Project Management Using COBIT 5*. <http://www.isaca.org/COBIT/focus/Pages/portfolio-program-and-projectmanagement-using-cobit-5-part-3.aspx>
- Bryman, A. (2003). *Research methods and organization studies* (Vol. 20). Routledge.
- Dechow, P. M., Ge, W., & Larson, C. (2011). R., and Sloan, R, G. *Predicting material accounting misstatements*, 17-82.
- De Haes, S., & Van Grembergen, W. (2015). An exploratory study into IT governance implementations and its impact on business/IT alignment. *Information Systems Management*, 26(2), 123-137.
- Goldman, J. E., & Ahuja, S. (2011). Integration of COBIT, balanced scorecard and SSE-CMM as an organizational & strategic information security management (ISM) framework. In *ICT Ethics and security in the 21st century: new developments and applications* (pp. 277-309). IGI Global.
- Hamdan, A., Abzakh, M. H., & Al-Ataibi, M. H. (2010). Factors affecting accounting conservatism when preparing corporate financial reports: Evidence from Jordan. *Jordan Journal of Business Administration*, 8(1), 23-44.
- Hayes, A. F., Glynn, C. J., & Shanahan, J. (2005). Validating the willingness to self-censor scale: Individual differences in the effect of the climate of opinion on opinion expression. *International Journal of Public Opinion Research*, 17(4), 443-455.
- Huang, R., Zmud, R. W., & Price, R. L. (2010). Influencing the effectiveness of IT governance practices through steering committees and communication policies. *European Journal of Information Systems*, 19(3), 288-302.
- Iqbal, A., Widyawan, & Mustika, I. W. (2016, June). COBIT 5 domain delivery, service and support mapping for business continuity plan. In *AIP Conference Proceedings* (Vol. 1746, No. 1, p. 020045). AIP Publishing LLC.
- Isaca, "COBIT 5: The Framework - Exposure Draft," *USA IT Gov. Inst.*, p. 86, 2011.

- Jankūnaitė, R., Kanapickienė, R., & Gipiienė, G. (2005). Employment of audit risk models. *Ekonomika*, 71, 59-76.
- Khanom, T. (2017). Cloud Accounting: A Theoretical Overview. *Journal of Business and Management*, 19(6),31-38. <https://doi.org/10.9790/487X-1906053138>
- Kranacher, M. J., & Riley, R. (2019). *Forensic accounting and fraud examination*. John Wiley & Sons.
- Lee, P. J., Taylor, S. J., & Taylor, S. L. (2006). Auditor conservatism and audit quality: evidence from IPO earnings forecasts. *International Journal of Auditing*, 10(3), 183-199.
- Lin, F., Guan, L., & Fang, W. (2010). Critical factors affecting the evaluation of information control systems with the COBIT framework: A study of CPA firms in Taiwan. *Emerging Markets Finance and Trade*, 46(1), 42-55.
- Mahadeen, B., Al-Dmour, R. H., Obeidat, B. Y., & Tarhini, A. (2016). Examining the effect of the Organization's Internal Control System on Organizational Effectiveness: A Jordanian empirical study. *International Journal of Business Administration*, 7(6), 22-41.
- Mazza, T., & Azzali, S. (2018). Information technology controls quality and audit fees: Evidence from Italy. *Journal of Accounting, Auditing & Finance*, 33(1), 123-146.
- Nurhajati, Y. (2016). The Influence of Cloud Computing Technology on the Auditing Process and the Auditing Profession. *International Journal of Scientific & Technology Research*, 5(8), 1-9.
- Okour, S. (2019). The Impact of the Application of IT Governance According to (COBIT 5) Framework in Reduce Cloud Computing Risks. *Mod. Appl. Sci*, 13(7), 25.
- Patón-Romero, J. D., Baldassarre, M. T., Piattini, M., & García Rodríguez de Guzmán, I. (2017). A governance and management framework for green IT. *Sustainability*, 9(10), 1761.
- Preittigun, A., Chantatub, W., & Vatanasakdakul, S. (2012). A Comparison between IT governance research and concepts in COBIT 5. *International Journal of research in management and technology*, 2(6), 581-589.
- Putri, M. A., Aknuranda, I., & Mahmudy, W. F. (2017). Maturity evaluation of information technology governance in PT DEF using Cobit 5 Framework. *Journal of Information Technology and Computer Science*, 2(1), 19-27.
- Siew, E.-G., Rosli, K., & Yeow, P. H. (2020). Organizational and environmental influences in the adoption of computer-assisted audit tools and techniques (CAATTs) by audit firms in Malaysia. *International Journal of Accounting Information Systems*, 36, 100445.
- Sasaki, T., Yonezawa, Y. (2010). Corporate governance and shareholder value, *Journal on securities analysts*, vol.3, no.

Sethibe, T., Campbell, J., & McDonald, C. (2007). IT governance in public and private sector organisations: examining the differences and defining future research directions. *ACIS 2007 Proceedings*, 118.

Silva, E. L. da, Lima, G. C. de A., & Veiga, C. R. P. da. (2023). Achievements and Challenges of the Regulatory Compliance Program in a Large Philanthropical Hospital Institution. *International Journal of Professional Business Review*, 8(1), e01224. <https://doi.org/10.26668/businessreview/2022.v8i1.1224>

Shelest, A. S. (2021). AUDIT RISK: ESSENCE, EVALUATION AND DIRECTIONS OF MINIMIZATION. *РЕДАКЦІЙНА КОЛЕГІЯ*, 190

Susanti, R. Y., & Sucahyo, Y. G. (2016, May). Information technology governance evaluation and processes improvement prioritization based on COBIT 5 framework at secretariat general of the Indonesian house of representatives. In *2016 4th International Conference on Information and Communication Technology (ICoICT)* (pp. 1-6). IEEE.

Thottoli, M. M. (2021). Impact of information communication technology competency among auditing professionals. *Учет. Анализ. Аудит*, 8(2), 38-47.

Veerankutty, F., Ramayah, T., & Ali, N. A. (2018). Information technology governance on audit technology performance among Malaysian public sector auditors. *Social Sciences*, 7(8), 124.

Wolden, M., Valverde, R., & Talla, M. (2015). The effectiveness of COBIT 5 information security framework for reducing cyber attacks on supply chain management system. *IFAC-PapersOnLine*, 48(3), 1846-1852.

Zhang, S., le Fever, H. T., & le Zhang S, F. H. (2013). An Examination of the Practicability of COBIT Framework and the Proposal of a COBIT-BSC Model. *Journal of Economics, Business and Management*, 1(4), 391-395.