

A Review on Risk-Based Audit Approach: Malaysian Public Sector's Perspective

Noor Afza Amran*, Mazrah Malek, Mohamad Sharofi Ismail,
Mohamad Naimi Mohamad Nor

Universiti Utara Malaysia, Kedah, Malaysia

*Corresponding Author Email: afza@uum.edu.my

<https://doi.org/10.58458/ipnj.v13.02.05.0096>

Received: 27 June 2023

Reviewed: 7 August 2023

Accepted: 12 October 2023

Published: 15 December 2023

Abstract

Purpose: This study aims to understand the Risk-Based Audit (RBA) approach, the advantages of RBA, RBA in the Malaysian public sector, and the issues and challenges in implementing RBA in the Malaysian public sector.

Design/ Methodology/ Approach: A library search and evaluation of earlier literature reviews were conducted on the topic of RBA and internal auditing that covers online and print sources, journal articles, newspaper articles, and official legal documents.

Findings: RBA is a methodology that provides an independent and objective opinion to an organisation's management, determining whether the management of its risks is on acceptable levels. The strength of RBA lies in the distinct nature of this audit approach, which focuses on the business risk and factors triggering the risk and resulting in a more effective and efficient audit. Several issues and challenges were identified in the implementation of RBA, especially in Malaysia: (1) legislation requirements; (2) lack of resources; (3) limited access to data; and (4) duplication of work.

Research Limitations/ Implications: The data pertaining to public sector internal audit reports are considered confidential and sensitive. This aspect placed limitations on the depth of the collected insights. This study also focused on the data obtained mainly from secondary sources, leading to results that cannot be generalised to other countries.

This article is part of a research on Study of Strengthening Risk-Based Auditing and Best Practices of Other Countries, supported by the Accountant General's Department of Malaysia through *Geran Penyelidikan Perakaunan dan Kewangan Sektor Awam Tahun 2023* (JANM.IPNCPD.100-3/3/2 Jld.6 (74)).

Practical Implications: Findings from the document review and identification of current problems may offer indications to the Accountant General's Department of Malaysia (AGD) on the current usage of RBA. Therefore, subsequent actions are required to improve internal audit work.

Originality/ Value: This study discussed the current state of RBA applied by the internal auditors in the Malaysian public sector. This finding may encourage future researchers to highlight the methods of integrating a comprehensive RBA that would fulfil the 3Es (effective, efficient, and economy) for the benefit of internal auditors, particularly in the Malaysian public sector.

Keywords: Risk, internal audit, public sector, Accountant General's Department of Malaysia (AGD).

1.0 Introduction

In today's environment, effective internal auditing requires thorough planning including a swift response to the rapidly changing risks. To add value and improve an organisation's effectiveness, internal audit priorities should be in line with the organisation's objectives and address the risks with the highest potential to affect the organisation's ability to achieve its goals. Therefore, the RBA approach is a useful technique to be employed by auditors to perform their audits. In this case, the auditors are focused on analysing and managing different types of risks that may lead to material misstatements. Moreover, a study by Le et al. (2022) examined the factors affecting audit performance through a RBA approach and the relationship between RBA and the quality of independent audit firms. It was indicated from the results that RBA positively and significantly affect the quality of independent audit firms in Vietnam.

Through the use of RBA, auditors direct their attention towards the key risk areas that may contain misstatements. One crucial aspect of the RBA approach is the assessment of the design and implementation of controls against the identified risks. In this case, the challenge is present in determining whether the correct controls are being identified and scrutinised to produce an effective audit. Furthermore, auditors are required to perform a risk assessment of material misstatements based on their understanding of the client's business and control environment. A "top-down" approach to identifying risks involves the clients' day-to-day operations and their financial statements. Upon the identification and assessment of the risks of material misstatement in the financial statements, auditors are able to arrange the audit procedures to respond to the assessed risk, allowing the reduction of the audit risk to an acceptably low level. In a recent study by Wang et al. (2023), it was found that in enabling internal audit activities to add more value to the organisation, integrated risk-based internal audit planning is proposed to assist the audit department in achieving multiple objectives besides risk management. The new framework integrates the risk assessment of auditable units with the selection of audit activities and resource allocation through a combined analytic hierarchy process (AHP), fuzzy comprehensive evaluation (FCE), and weighted multi-choice goal programming (WMCGP) approach. Based on the above discussions, this article aims to discuss the importance of using RBAs for internal auditors to carry out their audit jobs, identify the advantages of the RBA method and practices in the Malaysian public sector,

and examine the issues and challenges in the implementation of RBA in Malaysian public sector. The motivations of this study include the examination of the level of RBA being applied at the AGD's Office and how RBA helps the internal auditors carry out their responsibilities. Notably, the contribution of this study is present through the suggestion for a comprehensive RBA model that may enhance the internal auditors' work to be effective, efficient, and economical based on the gap identified in the current RBA applied in the Malaysian public sector.

The remaining sections of this study begin with Section 2, which reviews prior studies pertaining to RBA topics. Section 3 discusses the research method, followed by Section 4 that presents the results and discussions as well Section 5 provides implications, limitations and future research. The conclusion of this study is presented in Section 6.

2.0 Literature Review

2.1 Evolution of RBA

Messier (2014) found that RBA originated in the late 1990s for most public accounting firms (Bell, Peecher, & Solomon, 2005; Knechel, 2007). International standard setters including the Auditing Standards Board (ASB) and the International Auditing and Assurance Standards Board (IAASB) have issued their standards from 2005 to 2006 (American Institute of Certified Public Accountants (AICPA), 2013; IAASB, 2013), while the Public Company Accounting Oversight Board (PCAOB) issued risk assessment standards in 2010 (PCAOB, 2013). Furthermore, the standard setters believe that the introduction of a risk-based auditing process would enhance the quality of audits. To illustrate, the Accounting Standard Board stated that its risk assessment standards would enhance audit quality by obtaining (1) a more in-depth understanding of the entity and its environment to identify the risks of material misstatement in the financial statements and the entity's actions to mitigate them; (2) a more rigorous assessment of the risks of material misstatement of the financial statements based on understanding of the identified risks, and; (3) an improved linkage between the assessed risks and the nature, timing, and extent of audit procedures performed in response to those risks (AICPA, 2013).

To ensure that organisations adopt risk-based audits, it is vital for internal auditors to play their role in monitoring the company's risk profile and identifying areas to improve risk management (Goodwin-Stewart & Kent, 2006). The objective of an internal audit is to increase the efficiency and effectiveness of the organisation through constructive criticism. While organisations are required to follow rules and regulations, the rules do not necessarily ensure that organisations continue to operate efficiently (DiMaggio & Powell, 1983; Meyer & Scott, 1983). Considering the institutional pressures and uncertainty, organisations will adopt characteristics similar to other organisations with the same environment. This condition is known as isomorphism (DiMaggio & Powell, 1983). Additionally, Fogarty (1996) found that the key attribute of the institutional theory lies in its ability to highlight the distinction between organisations' accomplishments and what is suggested in their structures to the external environment that they should accomplish.

2.2 Risk-Based Audit (RBA)

RBA is a methodology that provides an independent and objective opinion to an organisation's management to determine whether the management of risks is conducted on acceptable levels. Furthermore, auditing through a risk-based approach would reduce the potential of an erroneous audit opinion and assist in achieving audit objectives for the majority of large companies (Gerasimova, Parasotskaya, & Dvoretzkava, 2019). The RBA is one of many opinions presented to the board and audit committee on corporate governance. These opinions are more conventionally known as 'assurance' that includes the opportunity to justify why the assurance should not be provided partially or completely.

RBA begins with all the objectives of the organisation and determines whether the risks harming these objectives are reduced to an acceptable level by the internal control to ensure the achievement of these objectives. In the RBA approach, the methodology consists of five core internal audit roles highlighting the risk management framework of the organisation, which are as follows:

- i. Providing the assurance that the processes used by management to identify all significant risks are effective.
- ii. Providing the assurance that risks are correctly assessed (scored) by management to prioritise them.
- iii. Evaluating risk management processes to ensure that the response to any risk is appropriate and conforms to the organisation's policies.
- iv. Evaluating the report of key risks by managers to directors.
- v. Reviewing the management of key risks to ensure that controls have taken place on the operation and have been monitored.

An important risk management process is a system of internal control that reduces risks to a level acceptable by the board, which is the 'risk appetite' of the organisation. Figure 1 presents the relationship between the risk appetite (dotted line), risks before they are controlled (inherent risks), and risks after they are controlled (residual risks).

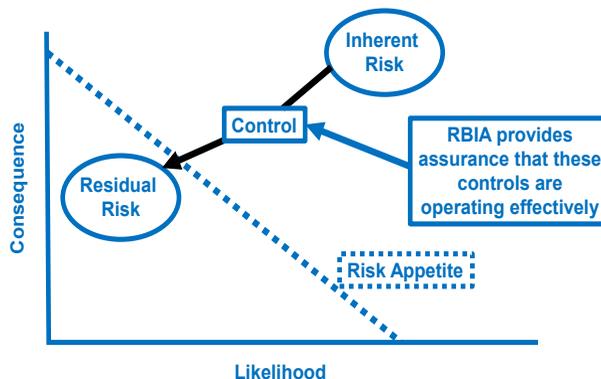


Figure 1: The Interaction Between the Risks

Source: www.internalaudit.biz

It is important for the auditor to plan and implement the audit process using a risk-based audit as it enables the auditor to avoid implicit audit risks and the risks of control and discovery (Sahaib, 2023). In most large organisations, a suitable risk management framework should take place as they are affected by regulations that require the identification, assessment, management, and monitoring of risks. Additional work may be required to identify, record, and score all significant risks to prioritise them.

2.3 RBA Stages

Under RBA stages, the following four opinions are required to be reported to the board:

- i. The risks to the organisation's objectives are managed on acceptable levels.
- ii. Management has established a proper internal control framework focusing on specific objectives, identified the risks threatening the objectives, and established controls that should reduce the risks to acceptable levels.
- iii. The controls are sufficient and operated to reduce the risks below the risk appetite and ensure the achievement of the related objective.
- iv. Action is taken to reduce the risks below the risk appetite and ensure the achievement of the objective.

In presenting the opinions, two audit stages are involved: (1) examination of the internal control framework set up by management; and (2) test of the controls within the framework. The examination and testing stages should be separated into individual audits targeted at the risks with the highest inherent scores, which requires an audit plan. Figure 2 presents the main activities in the planning process carried out by internal audit management.

RBIA - The Risk-Based Internal Audit

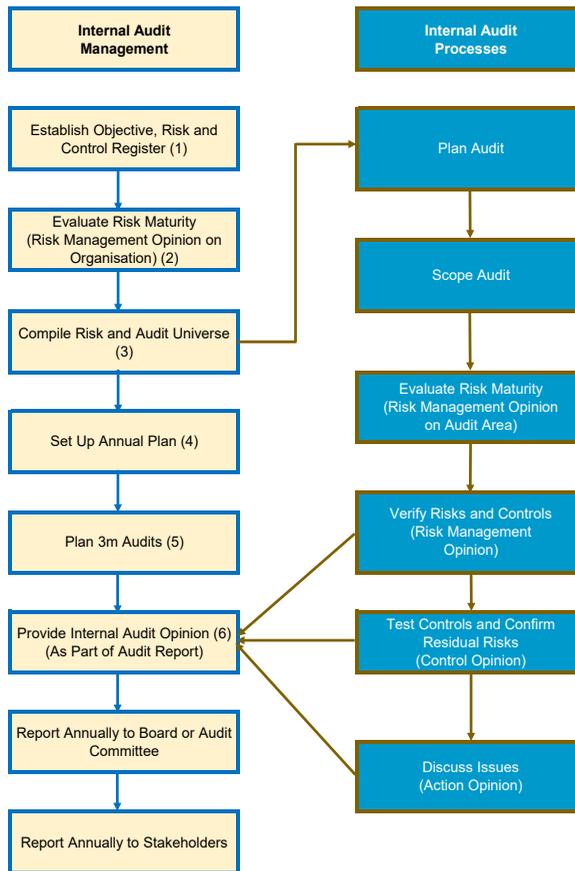


Figure 2: Main Activities in the Planning Process

Source: www.internalaudit.biz

2.4 Levels of Risk Maturity

In conducting RBA activities, the risks in an organisation can be categorised into different levels of risk. The categories of risk defined under the Chartered Institute of Internal Auditors (IIA-UK and Ireland) and The Orange Book (2023) on Management of Risk-Principles and Concepts are presented in the subsequent sections.

2.4.1 Chartered Institute of Internal Auditors (IIA-UK and Ireland)

The Chartered Institute of Internal Auditors (IIA-UK and Ireland) publication on ‘Risk-Based Internal Auditing’ defined five levels of risk maturity. Considering that the effectiveness of RBA revolves around a reliable risk register, understanding the characteristics of each type of risk and determining the suitability of each characteristic with the organisation are important.

- i. Risk enabled: (Risk management and internal control are fully embedded into the operations) An understanding of the management of risk and the monitoring of controls would be highly sophisticated for an organisation. The emphasis of the audit work would be placed on ensuring that the risk management processes are working properly, key risks are reported to the board, and the controls by managers are conducted. When deficiencies are identified, a recommendation from the internal activity may not be necessary as the management would be aware of the action to be taken.
- ii. Risk managed: (Enterprise-wide approach to the developed and communicated risk management) In this case, facilitating the management's proposed action where deficiencies are found is necessary.
- iii. Risk defined: (Strategies and policies are in place and communicated. Risk appetite is defined) While most managers may have compiled lists of risks, it is possible that these lists would not be assembled into a complete Objectives, Risks, and Controls Register (ORCR). The internal audit activity would act as a consultant to facilitate the compilation of a complete ORCR from the lists of risks that have been compiled by managers. The quality of risk management may vary across the types of organisations. Therefore, any individual audit would need to emphasise understanding the level of risk maturity in the areas under audit. With poor risk management, it is necessary to facilitate the identification of risks using workshops and interviews. It is also possible that a certain degree of consultation work will be necessary to advise managers on what action to take when deficiencies are found.
- iv. Risk aware: (Scattered silo approach to risk management) No ORCR will be available; only a few managers would be required to determine their risks. Furthermore, internal auditors would act as consultants to undertake a risk assessment in line with management to determine the work required to implement a risk framework that fulfils the conditions of the board. With the use of the key risks agreed upon by the management, an audit/ consulting plan will be generated with the aim of providing assurance that risks are managed or recommending suitable methods of responding to the risks.
- v. Risk naïve: (No formal approach developed for risk management) It would be necessary for risk-aware organisations to promote or provide consultation on the establishment of a risk management framework.

2.4.2 The Orange Book (2023) on Management of Risk-Principles and Concepts

The Orange Book (2023) aims to build uncertainty regarding the organisation's benefit by constraining threats and taking advantage of opportunities. Five key aspects to addressing risk are present, which are as follows:

- i. Tolerate: The exposure may be tolerable without any further action being taken. Even if it is not tolerable, the ability to perform any actions on the risks may be limited or the cost involved in the actions may be disproportionate to the potential benefit. This option may be supplemented by contingency planning for managing the impacts that will arise if the risk is realised.
- ii. Treat: The organisation's continuous business activity enables the possibility of the risk, therefore action (control) is taken to constrain the risk to an acceptable level.
- iii. Transfer: The transfer of risks may be considered to reduce the exposure of the organisation. It may also be attributed to another organisation (possibly another government organisation) that is more capable of effectively managing the risk. It is important to note that some risks are not fully transferable; it is generally not possible to transfer reputational risk even if the delivery of a service is contracted out. The relationship with the third party to which the risk is transferred should be carefully managed to ensure a successful transfer of risk.
- iv. Terminate: Some risks will be treatable or obtainable on acceptable levels solely by terminating the activity. It is noteworthy that the option of terminating activities may be highly limited in the government sector compared to the private sector. To illustrate, several activities are conducted in the government sector due to the high associated risks that offer no alternative methods for achieving the output or outcome required for the public benefit.
- v. Take the opportunity: (Option that should be considered when risk is being tolerated, transferred, or treated) Two aspects are present: 1) whether an opportunity arises at the same time threats are mitigated to utilise the positive impact; 2) whether the emerged circumstances offer positive opportunities despite not imposing threats.

2.5 RBA Documentation

In conducting the RBA, a link is established between the objectives, risks and controls, and audits, creating a list known as Risk and Audit Universe (RAU). Provided that risks and audits are mapped, the audit plan would be generated. The audit plan reports could be produced through the following methods:

- i. Audits in the current audit plan.
- ii. Risks in order of the objectives being threaten.
- iii. Risks through the inherent risk score in order of their significance.
- iv. Risks associated with a particular process or function.
- v. Many other reports including the reports on resources based on the stored data.

Figure 3 summarises the important data and the 'audit trail' provided by RBA. This figure demonstrates the method through which any individual test is related to the overall

opinion shown to the audit committee, which facilitates the justification of opinion based on the individual tests.

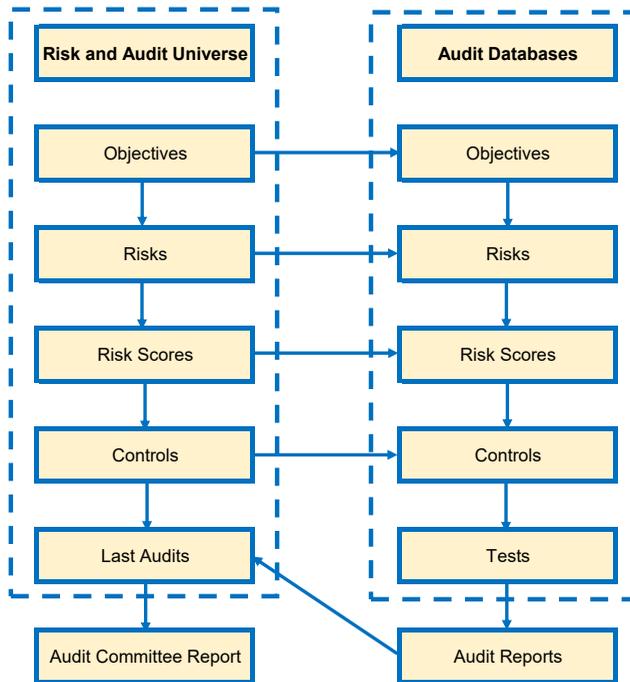


Figure 3: Audit Documentation

Source: www.internalaudit.biz

2.6 RBA versus Traditional Internal Audit

The RBA is an approach separated from other internal audits; provided that it requires extensive knowledge of the business and its risks, it is frequently regarded as being considerably complex. Based on the International Institute of Internal Auditors (IIA), a traditional internal audit is an independent evaluation function that examines the processes of serving the business and reporting the inspection results. This audit is also known as a control-oriented audit, given that internal auditors constantly monitor and report on the internal control structure that is present in the organisation on behalf of the management. Under RBA, a traditional internal audit is required to focus on the application and effectiveness of risk management procedures, risk assessment methodologies, and a critical evaluation of the adequacy and effectiveness of the internal control system. While the responsibility for identifying and managing risks falls under management, one of the key roles of internal audit is to provide assurance that the risks have been properly managed (Chartered Institute of Internal Auditors, 2023). Accordingly, the following Table 1 presents a comparison between RBA and the traditional approach of internal audits (IA).

Table 1: Traditional Internal Audit (IA) versus RBA

Traditional IA Approach	RBA Approach
The audit plan is based on the audit cycle.	The audit plan is based on the results of the business risk evaluation. Risky areas are mainly and frequently addressed.
Important risks might not be covered during the audit plan.	Provides assurance that important risks are being managed properly.
Focuses on deficiencies in controls and cases of non-compliance with policies and procedures.	Focuses on risks that are not properly controlled and excessively controlled.
IA resources are spread over all business activities.	More efficient use of IA resources by concentrating on risk areas.
Business risks are not being mapped.	The importance of risks is established during the risk assessment phase in line with the agreement between IA.
Disagreement with the business management over the action plans, leading to delays in implementation.	Facilitates the consensus with line management on the required action plans, leading to timely improvement in the implementation of corrective measures.

Source: Chaudhari (2017)

2.7 Advantages of RBA Approach

As previously mentioned, RBA may be defined as an audit approach based on the determined risk profiles of the businesses, the audit progress based on the risk profile of the business, and the allocation of the audit resources based on the risk profile for improvement in the efficiency of the audit. This type of audit approach is regarded as superior compared to the traditional internal audit approach due to its advantages. Accordingly, Chaudhari (2017) highlighted the immediate advantages of the use of RBA, as presented in Table 2.

Table 2: Benefits of RBA

Strategic Benefits	<ul style="list-style-type: none"> Easier adaptability to the changing conditions by developing a consistent and comprehensive approach to risk management Offers a better understanding and management of the risks
Performance-Related Benefits	<ul style="list-style-type: none"> Increases the risk of opportunity by reducing negative risks Provides the risks to be identified correctly and the existing management and internal control to ensure the best performance
Management of Unexpected Events	<ul style="list-style-type: none"> Creates the ability to give the correct answer to unexpected demands and challenges in the face of deviations from targets Easier to understand the risks waiting for the business and their actual effects

Source: Chaudhari (2017)

The implementation of RBA allows the identification of the following advantages:

a) Increases the Efficiency of Auditing

The RBA is an approach that enables the internal audit review to increase its efficiency and focus on business needs. It virtually covers all aspects of public financial management and enhances transparency, accountability, and responsiveness to public expenditure policy

priorities (Lutta, 2012). As a result, the management is able to effectively identify, assess, and respond to the risks above and below the risk appetite (e.g., the amount of risk to which the organisation is prepared to accept, tolerate, or be exposed at any point in time), which ensures that the key concerns and significant risks are taken into account within the scope of the audit.

b) More Risk-Focused, Oriented

The RBA is designed to be used throughout the audit to efficiently and effectively focus on the nature, timing, and extent of audit procedures in the areas with the highest potential for causing material misstatements in the financial report (Institute of Chartered Accountants of Australia, 2011). Therefore, the responses to risk are effective albeit not excessive in managing the inherent risks within the risk appetite. Generally, risks that have been mitigated to within the management's risk appetite would be tolerated. Furthermore, the additional management action to treat, transfer, or terminate the risk would be carried out if the residual risk exceeds the risk appetite. In other words, the RBA directs the audit at high-risk areas as opposed to financial areas, which may not represent the high risk. Essentially, a higher-risk area would require more audit time and client controls.

Considering that the audit plan is driven by the proportion of risks where the audit committee requires assurance, the number of resources required would be determined. This condition also ensures that the resources are directed towards the examination of the management of the most significant risks. The risks based on RBA can be scored by attributing a level such as a high, medium, or low risk to the consequence and likelihood of the risk. This aspect differs from the traditional audit approach, whereby the available resources determine the audits that could be carried out. Traditionally, internal audit has accepted a control-based approach inspecting and verifying the operation of compliance and financial controls in line with an established set of criteria.

c) Value-Added to the Organisation

Besides focusing on the level of risk, the RBA helps evaluate and build value into the financial reporting process and the client's business and activities. To illustrate, the RBA that focuses on both recorded and unrecorded risk improves financial statements and the financial statement reporting process. This improvement is achieved by shifting the focus from inspecting the quality of the financial information recorded in the financial statements to establishing quality in the financial reporting process and adding value to the client's operations (Gibson, 2003).

At every stage, the RBA aims to reinforce the responsibilities of management and the board for the management of risk (Chartered Institute of Internal Auditors, 2023). Notably, the use of data is critical for improved insights. A correct assessment of risk could only be undertaken if adequate and reliable data is available on time and at regular intervals. The RBA prioritises the auditor's understanding of the entity and its environment to identify risks that may result in material misstatements of the financial report. This understanding is gained through the clients' operation of their business, management, and internal and external environments. The acquired knowledge can assist in designing an audit programme that features the most effective combination of tests in response to each client's unique circumstances. In other words,

an effective audit department is able to develop a variety of approaches, enabling the selection of the optimal approach on a case-by-case basis.

d) More Transparent Audit Trail

RBA also provides an 'audit trail' from an individual audit report through tests, controls, and risks to objectives, which is then forwarded to the audit committee report that determines whether those objectives are threatened or vice versa. In circumstances where residual risks are not in line with the risk appetite, action can be taken to mitigate the situation. Moreover, the RBA ranks the recommendations for mitigating the risks by offering the highest value added and followed to the lowest value. These recommendations can be identified through controls, risks, and processes to the organisation's objectives. Auditors are also able to conveniently specify the proportion of significant risks that have been audited and the respective results to provide assurance to the board regarding the effectiveness of the company's system of internal control.

e) Encourages Strong Risk Management Processes

Risk management is a challenging landscape that requires the adaptation skills of auditors, considering that every organisation presents different attitudes towards risk and different structures, processes, and languages. Risk management processes, including the effectiveness of responses and completion of actions, are monitored by management to ensure the continuation of their effective operation. For this reason, RBA aims to reinforce all the responsibilities of risk management and establish a strong and well-designed risk management framework. A study by Lois et al. (2021) found a statistically significant positive relationship between the implementation of RBIA and the provision of risk management training and between the active audit committee role and the establishment of a formalised risk management system.

f) Proper Classification and Reporting of Risks

Risks, responses, and actions are properly classified and reported, considering that RBA links all the aspects of internal auditing, namely the objectives, processes, risks, controls, tests, and reports. The extent of transaction testing would depend on the risk profile of the organisation and its operations. Furthermore, the relevance of any test is present in terms of its relation to the opinion on the entire risk management framework, which is attributed to the relationships set up in the risk and audit universes. However, this condition is necessarily feasible in cases where conventional audit programs are used due to the vagueness of why the test is conducted, the significance of a control that is found to be defective, the risk treated by the control, and the objective threatened by the risk.

3.0 Research Methodology

A library search and evaluation of earlier literature reviews on the topic of RBA and the internal auditing profession were conducted to achieve the study's objectives. The library search covered a wide range of materials, including online and print sources, journal articles, newspaper articles, and official legal documents. The references were compiled using online resources including Web of Science, Scopus, Science Direct, and Google Scholar. It is

important to note that the references were taken solely from manuscripts/ papers issued between 1988 and the most recent year of 2023.

4.0 Results and Discussions

Based on the literature review in Section 2, this section highlights the development of internal audit in the Malaysian public sector, followed by the relevant rules and regulations in Malaysian public sector internal audit, the importance of RBA in the Malaysian public sector, and the issues and challenges in the implementation of RBA in Malaysian public sector.

4.1 Development of Internal Audit in the Malaysian Public Sector

The audit institution was established in Malaya during the British administration in the early 1800s to strengthen the government's financial administration system. This institution was separated by state for the Federated Malay States and the Straits Settlements. The first Auditor General for the Federated Malay States was appointed in 1906, while the audit institution for the Straits Settlements was present in Singapore and solely involved two states in Peninsular Malaya: Penang and Melaka. In 1932, the two audit institutions were merged and placed under the control of the Director of Colonial Audit based in London. This institution was also introduced in the Unfederated Malay States. The auditing process focused on verifying financial statements and record maintenance, which also involved impromptu inspections. Prior to the Federal Constitution and the Audit Act 1957, the auditing process was based on laws and regulations such as the General Orders of the Federated Malay States Government, current directives from the Secretary to the Government, Malayan Union Circulars, and Colonial Regulations (Jabatan Audit Negara, 2014).

Notably, the internal audit function has been an integral part of the Malaysian public sector since the early 1970s. The Malaysian government recognised the importance of an independent internal audit function in ensuring an effective management of public resources and promoting good governance and accountability. The development of the internal audit function in the Malaysian public sector could be traced back to the establishment of the National Audit Department (NAD) in 1957. The NAD was responsible for conducting external audits of government agencies and departments. However, until the early 1970s, the Malaysian government had not recognised the importance of the functions of an internal audit within government agencies and departments. Moreover, the growth of internal auditing in the Malaysian public sector has undergone significant changes over the years. Following the Malaysian government's recognition of the importance of internal audits in ensuring effective and efficient governance, various initiatives have been implemented to strengthen the internal audit function.

In the early days, the internal audit function in the Malaysian public sector was mainly compliance-based, with focus being placed on ensuring adherence to financial regulations and procedures. However, following the changes in the landscape of governance and the increasing complexity of public sector organisations, the evolution of the internal audit into a more strategic and risk-based function has gained importance.

4.2 Rules and Regulations in Malaysian Public Sector Internal Audit

Legislation and regulations hold a high significance in the financial management of the public sector. Every action of the management should be in line with the provisions of the law. Furthermore, the audit team is responsible for ensuring the organisation's compliance with laws and regulations. In Malaysia, the public sector internal audit is governed by several regulations and guidelines that are framed within the context of the Federal Constitution, the Financial Procedures Acts of 1957, Treasury Instructions, and Treasury Circulars. These regulations also outline the legal and procedural framework for the internal audit function in the public sector.

4.2.1 Federal Constitution

The Federal Constitution of Malaysia has established the constitutional framework for governance and financial management in Malaysia, followed by the establishment of the principles of accountability, transparency, and integrity in the management of public funds. The constitution assigns responsibility to the government to ensure that public funds are utilised efficiently and effectively. Under Articles 96 to 112, the Federal Constitution presents clauses related to government financial management and control. The provisions in relation to the audits are present in Article 106(2), highlighting the crucial task and authority of the Auditor General in terms of examining the finances of the government (Federal and States). The Auditor General also holds the authority to examine the accounts of other public organisations and specific bodies specified by the king through his order.

4.2.2 Financial Procedures Acts 1957

The purpose of the Financial Procedures Acts (FPA) 1957 is to manage and control Malaysia's public finances, financial accounting, and reporting procedures. The element of control in the Act is outlined under Section 15A (3), where the person in charge (e.g., controlling officer) of public money should confirm whether the details in a financial statement (Section 16) are accurate and appropriate. They may also include comments or explanations if necessary, while the Minister or State financial authority may request this confirmation.

The FPA 1957 outlines the legal framework for financial management and control in the public sector. It also governs the processes related to budgeting, accounting, procurement, and internal audit. The FPA 1957 establishes the role of the AGD as the central authority responsible for financial management and control, which includes the establishment and operation of internal audit units. Under the FPA 1957, public sector entities are required to establish internal audit units to conduct independent and objective assessments of financial transactions, systems, and controls. This act specifies the powers and functions of the internal audit units, including the authority to access records, request information, and report on any irregularities or weaknesses in financial management.

4.2.3 Treasury Instructions and Treasury Circulars

The Treasury has issued administrative guidelines known as the Treasury Instructions and Treasury Circulars to provide specific instructions and procedures for financial management and control in the public sector. These guidelines cover various aspects of internal audit,

including the establishment of internal audit units, the qualifications and appointment of internal auditors, audit planning and procedures, reporting requirements, and follow-up actions on audit findings. Furthermore, the Treasury Instructions and Treasury Circulars also highlight the roles and responsibilities of internal auditors, internal audit committees, and management in relation to internal audit activities. This is followed by guidance on the conduct of audits, which features the scope, methodology, and reporting requirements.

According to Treasury Instruction 138, the Accountant General under the direction of the Secretary General of Treasury is responsible for ensuring that an appropriate accounting system is established and an appropriate supervision is carried out to prevent losses that are caused by fraud or negligence. In Treasury Instruction 303, an officer shall immediately report to the Secretary General of Treasury or the State Financial Officer on any matter through which he knows or believes that misconduct or inefficiency by any officers under his control has caused or may cause financial loss to the government. Thus, failure to make this report may hold the supervisory officer accountable.

Treasury Circular, PS 1.2 is about the implementation of Federal Government accrual accounting practices which is based on the regulations and guidelines issued by the Accountant General's Department of Malaysia. Another Treasury Circular on the establishment of Internal Audit in the Public Sector is PS 3.1, which elaborates on the implementation of internal audit in Federal and State Ministries or Departments. It aims to provide an explanation of the roles and responsibilities of the Internal Audit Unit, Secretary General of the Ministry or Federal Department or State Government Secretary and Malaysia Treasury, including guidance on the implementation of Internal Audit. Based on this circular, the Internal Audit Unit plays a role in conducting financial management audits, which include the examinations of financial systems, internal controls, and financial records to ensure that expenses, revenue, assets, and stores are managed in accordance with relevant laws, regulations, and directives.

Following Treasury Circular PS 3.1, a new Treasury Circular PS 3.2 was introduced in the establishment of Audit Committees at the Ministry and State Government levels. These circular aims to discuss issues raised by either the Internal Audit Unit or the NAD. The Audit Committees also play a role in ensuring that preventive and corrective actions are taken by the auditing party to rectify related weaknesses and prevent their recurrence. Besides the laws and regulations issued by the Malaysian government, Internal Audit adopts rules and guidelines issued by professional bodies, such as the Institute of Internal Audit and SIRIM Malaysia. In terms of the standards, the AGD uses the Committee of Sponsoring Organisations of the Treadway Commission (COSO) and MS ISO 31000 as the main references.

The COSO, which develops the COSO framework, is a widely accepted framework for internal control and risk management. It consists of five interrelated components: control environment, risk assessment, control activities, information and communication, and monitoring. The framework emphasises the importance of a strong control environment, which includes factors such as integrity and ethical values, management philosophy and operating style, organisational structure, and human resource policies and practices. This is followed by MS ISO 31000, which is a standard that outlines the principles and guidelines for risk management. It also highlights the need for organisations to adopt a systematic approach to managing risk, which comprises the identification, assessment, and treatment of risks.

Additionally, the standard also emphasises the importance of integrating risk management into an organisation's overall management system.

The Federal Constitution, FPA 1957, Treasury Instructions, Treasury Circulars, and Professional Bodies Guideline establish the regulatory frameworks governing the establishment and operation. These frameworks also conduct internal audits in the public sector in Malaysia. These regulations aim to ensure accountability, transparency, and effective financial management in the utilisation of public funds.

4.3 RBA in the Malaysian Public Sector

In Malaysia, risk-based auditing is an approach used by the public sector to evaluate the effectiveness of internal controls and ensure compliance with laws, regulations, and policies. This approach involves the assessment of risks in line with the organisation's objectives, followed by designing audit procedures to address those risks. Furthermore, the Malaysian government introduced several initiatives to address various risks in government management, including the Government Transformation Program (GTP) and the Economic Transformation Program (ETP). These initiatives were implemented based on feedback from various levels of society. The government's efforts in executing the GTP and ETP reflected their commitment to address the needs of the people rather than their personal interests. As a result, GTP and ETP exhibited positive progress and outcomes.

The GTP highlighted the importance of engaging and comprehending the requirements of the people to deliver suitable programmes for all Malaysians. The GTP presents three horizons, namely GTP 1.0 (2010-2012), GTP 2.0 (2013-2015), and GTP 3.0 (2016 onwards), which will determine Malaysia's status as a developed nation. Furthermore, GTP includes seven National Key Result Areas (NKRA) with an aim to address various issues such as the reduction of cost of living, reinforced rural development, upgrade on urban public transportation, improvement in the standard of living of low-income households, assurance of quality education, reduction of crime rate, and eradication of corruption. Some of the aforementioned risks in GTP are the risks of crime and corruption.

Risk-based auditing is an approach to auditing that focuses on identifying and assessing risks to determine the areas that require more thorough examination. In the context of Malaysia, risk-based auditing is used by the Internal Audit Department in various government agencies and regulatory bodies to ensure accountability, transparency, and efficiency in the implementation of the GTP, NKRA, and ETP initiatives. Using RBA methodologies, government agencies and auditors are able to prioritise their resources and efforts in areas with higher risks or stronger impact on the achievement of the desired outcomes for the GTP, NKRA, and ETP. This feature assists in identifying potential issues, vulnerabilities, or inefficiencies in the implementation of these programmes, allowing for corrective actions to be taken to address the issues. Moreover, this auditing is also an integral part of the governance and performance management framework in Malaysia, which ensures an effective implementation and monitoring of the GTP, NKRA, and ETP initiatives and promotes accountability and transparency in public service delivery and economic transformation.

4.4 Issues and Challenges in Implementing RBA in Malaysian Public Sector

RBA is highly beneficial to the public sector. However, several issues and challenges are present in the RBA in the public sector in Malaysia, which will be discussed in this section.

4.4.1 Legislation, National Leadership, and Culture

Malaysia is a country that has gained independence from the British. For this reason, British or Commonwealth nations have a significant influence on the structure of public administration and the legal framework of the public sector. Malaysia is a federal country that comprises 13 states and three federal territories. Each state is under its respective government, while the federal government is responsible for all affairs related to the administration of the state, such as defence and internal security. Thus, each state is differentiated by various laws. The existence of various forms of legislation increases the level of bureaucracy and the vagueness of administration. The efforts to standardise administrative practices, such as accounting and auditing, have led to several challenges. Moreover, the existence of various forms and types of legislation may impact the efforts of effectively identifying and managing risks (Saad, & Alias, 2020). There is also a question regarding to what extent can the existence of many rules and regulations affect the effectiveness of internal audit practices in Malaysia's public sector (Mohd Noor & Mansor, 2018).

National leadership factors also influence public management practices. To a certain extent, the leadership of the country would determine the leadership and direction of a ministry. Furthermore, leadership changes, such as the changes taking place after the 14th and 15th Malaysian general election results, may impact public management policies and decision-making. Leadership changes and political pressure could also affect the freedom of public service personnel (e.g., personnel under the accounting and auditing sectors) in making objective decisions (Alias & Saad, 2020). In fact, Malaysia is a plural country consisting of various cultures, races, and religions. However, racial dominance takes place in certain sectors, such as the dominance of Malays in the public sector, Chinese in the business sector, and Indians in the plantation sector. This difference affects effective risk communication and reporting to relevant stakeholders (Johari & Zainuddin, 2018). Besides, cultural differences, which also include ways of thinking, customs, and attitudes, play a role in building an efficient risk management environment.

4.4.2 Lack of Resources and Talent

It could be seen that the existence of a new unit in the organisation will increase the operating cost, which would impact the organisation's expenses. Resource constraints, such as financial funds, may inhibit risk-based internal audit operations, which explains the organisations' reluctance to spend on RBA activities (Noor & Zakaria, 2016). Ahmad, Othman, Othman, and Jusoff (2009) highlighted that the inadequacy of audit personnel is a significant hindrance to the efficacy of the internal audit function in the public domain. To develop an effective RBA, any tasks in organisation should be carried out by competent staff. They are not only required to be objective, but they also need to be equipped with experience in the fields of accounting, auditing, and risk management. The lack of skilled members in the field of internal audit leads to challenges in solving the issues and employing and maintaining internal audit staff in a department (Noor, Zakaria, & Hossain, 2019).

4.4.3 Data Access, Staff Understanding, and Environmental Change

To implement RBA, easy accessibility to information and data related to accounting is crucial. The data should also be complete and relevant to facilitate the process of identifying risks and follow-up actions. However, if the data is unobtainable, it would be challenging to monitor the effectiveness of risk management activities (Cheong, Azam, & Ahmad, 2020). It is also important to note that the process of conducting RBA involves multiple units within an organisation, which may extend beyond departmental boundaries. Thus, thorough comprehension and collaboration among the personnel within a department are crucial. The degree of collaboration and absence of participation among the personnel will affect the identification of primary risks within the organisation. The complexity of this situation increases when the comprehension of RBA and understanding of the internal auditor's function are limited, which may also restrict the auditor's ability to contribute value to the organisation.

Delivery activities in the public sector have changed over time. Currently, service delivery activities, especially those involving relational affairs employ various forms of technology. The widespread use of technology requires a more modern auditing method. In this case, auditing standard setters particularly those in the public sectors such as AGD requires proactive actions in managing environmental change issues and constantly providing clear guidance to auditing practitioners in the public sector.

4.4.4 Duplication of Works

Cooperation and good relations between the NAD and the Internal Audit Unit are crucial for achieving the organisational objectives. Therefore, the preparation process of the Annual Internal Audit Plan requires a discussion between the Internal Audit Unit and the NAD regarding audits that have been, are being, and will be conducted. This discussion would ensure that there is no overlapping task and allow the identification of areas or issues that require audit.

5.0 Implications, Limitations, and Future Research

Apart from the aforementioned issues and challenges, another challenge is present in combatting corruption in the public sector. The prevention of corrupt practices should begin at an earlier stage, considering the critical repercussions of this unethical activity to the country. However, the effectiveness of the current internal audit practices to minimise corruption cases remains a matter of debate. Therefore, the Malaysian Institute of Integrity has developed the Anti-Bribery Management System (ABMS) ISO 30071:2016, which can also be used by the internal auditor of the public sector to prevent and identify corruption-related risks (Wan Mohd Radzi, 2023). Furthermore, the presence of internal auditors and the implementation of internal audit activities gain a negative perception by some parties. Besides affecting the effectiveness of internal audits, this perception is also not considered a value-adding agent in the organisation. In this case, Wan Mohd Radzi (2023) suggested that the integrity of internal auditing should be streamlined, while the aspect of risk identification especially the risk of corruption should be emphasised.

This study, which focuses on risk-based audits in the Malaysian public sector, is not exempted from limitations. Some of the limitations may impact the comprehensive analysis of

the subject matter. One notable constraint was present in data collection, which was attributed to confidentiality concerns. Furthermore, the restricted access to sensitive information within internal audit reports in the public sector may limit the depth of insights being obtained. Provided this study also focused on the data collected mainly from secondary sources, the generalisation of the results of this work to other countries could not be carried out. Thus, it is suggested for future researchers to further explore the methods of integrating a comprehensive RBA with 3Es (effective, efficient, and economy) for the benefit of internal auditors, particularly in the Malaysian public sector.

Several factors have contributed to the necessity of expanding the implementation of RBA within public sector agencies. Upon the observation of the Auditor General's Report, it could be seen from the internal audit reports that recurring audit issues take place annually. Similarly, a newspaper report cited the statement by the Prime Minister, Datuk Seri Anwar Ibrahim, that ministers must carefully examine each audit query in the 2021 Auditor General's Report, particularly the queries involving recurring matters that remain unaddressed. The Prime Minister also stated that lessons should be learnt from each audit query in the report, while the ministers are urged to identify issues and seek solutions. He emphasised during a Cabinet meeting dated 18 January 2023 that an extended period was dedicated to scrutinising the 2021 Auditor General's Report, and the ministers have been urged to ensure that no repetition of any query would occur (Rafidah, 2023). Overall, this situation was supported by findings recorded from Transparency International, which assesses the extent of corruption perception in this country.

Table 3: Transparency International (Corruption Perceptions Index) - Malaysia

Year	Ranking
2022	61
2021	62
2020	57
2019	51
2018	61

Source: <https://www.transparency.org/en/countries/malaysia>

The Corruption Perceptions Index (CPI) ranks countries based on perceived levels of corruption within the public sectors, which indicates expert opinions and citizens' perceptions. Malaysia's fluctuating CPI rankings over the years (Table 3) demonstrated the changing perceptions of corruption within its governance, where audit, particularly risk-based internal audit, plays a significant role. Effective audit practices contribute to transparency and accountability by identifying, assessing, and mitigating risks, including the risks related to corruption. Moreover, an audit enhances the integrity of governance mechanisms by addressing the weaknesses in internal controls and suggesting improvements. The role of audit is extended to the evaluation of the efficacy of anti-corruption measures, which ensures compliance with laws and ethical standards and validates the accuracy of financial data. Often associated with corruption, the audit also aids in detecting fraud and assessing whistleblower protection mechanisms. While audit fosters a culture of transparency, the complexity of corruption requires a comprehensive approach that involves legal reforms,

enforcement mechanisms, public awareness initiatives, and continuous governance improvement to effectively address the perceptions reflected in CPI rankings.

The latest development of Malaysian scenario is associated with the voters' response towards the government in the general and state elections, which specifically focus on the governance of government agencies. The pressure from the voice of the people in the general elections in 2018 and 2022, including the state elections in 2023 serves as an indicator of the government's rejection to enhance governance administration and subsequently reduce cases of corruption, abuse of power, breach of trust, and fraud. High-profile cases including 1MDB, the National Feedlot Corporation (NFC), and the Port Klang Free Trade Zone (PKFZ) ought to serve as the catalysts for change in government administration. Moreover, the recent election outcomes indicate the urgency for reform in government administration, particularly in strengthening the governance of each government agency through changes in the implementation of internal audits. Notably, RBA emerges as the most suitable alternative to reinforce the execution of internal audits.

6.0 Conclusion

Risks are the inevitable elements faced by any organisation. To illustrate, the occurrence of an incident such as organisational fraud may cause adverse effects on an organisation. In mitigating these potential risks, it is recommended that the organisation conducts inspections or audits of its processes and activities. Conducting audits is a crucial process, particularly for organisations involved in service delivery and the use of public funds, such as government agencies. In line with the increasingly intricate and technologically advanced landscape of the modern world, it is imperative that the auditing methods employed in the public sector would also evolve accordingly. Moreover, the re-evaluation of the auditing methods that prioritise the compliance aspects is also important. The auditing methodology should prioritise the risk factor, specifically in terms of its impacts on the overall function of an organisation and the effective methods of managing it.

Overall, auditors involved in the RBA approach ought to identify the key risks in day-to-day business operations, assess the impacts of those risks on financial statements, and arrange audit procedures based on the assessed risks. RBA approach does not only assist auditors in managing and minimising the audit risk, but it also assists in reducing audit work to a certain degree while maintaining the audit quality. In this case, auditors should focus on the risky areas that may lead to material misstatement. Their audit objectives can be fulfilled without being required to spend significant time on the low-risk areas. Despite the unavailability of a perfect audit approach that provides the auditors with a full guarantee that the audit objectives are fulfilled, the RBA approach can help auditors reduce the possibility of the audit objectives not being fulfilled in the audit engagement regardless of the size, location, and complexity of the client. For this reason, the RBA approach is the most frequently used audit approach among auditors in auditing financial statements.

References

- Ahmad, H., Othman, R., Othman R., & Jusoff, K. (2009). The effectiveness of internal audit in Malaysian public sector. *Journal of Modern Accounting and Auditing*, 5(9), 53-62.
- Alias, N., & Saad, N. M. (2020). Internal audit independence in the Malaysian public sector: The challenges. *Journal of Financial Reporting and Accounting*, 18(1), 1-16.
- American Institute of Certified Public Accountants. (AICPA) (2013). *AICPA professional standards (clarified)*. Available at <http://www.aicpa.org/>
- Bell, T., Peecher, M. E., & Solomon, I. (2005). *The 21st century public company audit: Conceptual elements of KPMG's global audit methodology*. KPMG LLP.
- Chartered Institute of Internal Auditors. (2023). *Risk based internal auditing*. Retrieved from: <https://www.iaa.org.uk/resources/risk-management>
- Chaudhari, S. (2017). *A guide to risk-based internal audit system in banks*. Notion Press.
- Cheong, C. S., Azam, M. S., & Ahmad, M. (2020). The role of internal audit in enhancing governance in the Malaysian public sector. *Journal of Financial Crime*, 27(1), 168-182.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2013). *Internal control-integrated framework*. Retrieved from Framework-Executive-Summary.pdf (SECURED) (coso.org)
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. <https://doi.org/10.2307/2095101>
- Federal Constitution of Malaysia. (1963). *Laws of Malaysia*. Retrieved from https://www.jac.gov.my/spk/images/stories/10_akta/perlembagaan_persekutuan/federal_constitution.pdf
- Fogarty, T. J. (1996). The imagery and reality of peer review in the US: Insights from Institutional Theory. *Accounting, Organizations and Society*, 21(2/3), 243-267.
- Gibson, M. S. (2003). Is corporate governance ineffective in emerging markets?. *Journal of Financial and Quantitative Analysis*, 38(1), 231-250.

- Gerasimova, L. N., Parasotskaya, N. N., & Dvoretzkava, V. V. (2019). Financial analysis in budgetary institutions. *Revista Inclusiones*, 6(Sp), 244-256.
- Goodwin-Stewart, J., & Kent, P. (2006). The use of internal audit by Australian companies. *Managerial Auditing Journal*, 21(1), 81-101.
- Government Transformation Programme (GTP). (2010). Retrieved from http://lib.perdana.org.my/PLF/GOVERNMENT%20PUBLICATION/Government%20Transformation%20Programme/GTP2_ENG_Cp1.pdf
- Institute of Chartered Accountants of Australia. (2011). Developing a risk-based internal audit plan. Available at: <http://www.theiia.org/en/content/guidance/recommended/supplemental/practice-guides/developing-a-risk-based-internal-audit-plan>
- International Auditing and Assurance Standards Board (IAASB). (2013). *International standard on auditing*. Available at www.ifac.org/auditing-assurance.
- Jabatan Audit Negara. (2014). *Pengauditan sektor awam Malaysia- Sepintas lalu*. Available at: https://www.audit.gov.my/images/PDF/2014/Pengauditan/bm%20pengauditan%20sektor%20awam%20malaysia%20sepintas%20lalu-1_opt.pdf
- Johari, N. N., & Zainuddin, Y. (2018). Perception of internal audit effectiveness in the Malaysian public sector: The impact of cultural differences. *Journal of Public Administration and Governance*, 8(2), 227-239.
- Knechel, W. R. (2007). The business risk audit: Origins and obstacles (and opportunities?). *Accounting, Organizations, and Society*, 32(4/5), 383-408.
- Le, T. T., Nguyen, T. M. A., Do, V. D., & Ngo, T. H. C. (2022). Risk-based approach and quality of independent audit using structure equation modeling: Evidence from Vietnam, *European Research on Management and Business Economics*, 28(3), 1-11.
- Lois, P., Drogalas, G., Nerantzidis, M., Georgiou, I., & Gkampeta, E. (2021). Risk-based internal audit: Factors related to its implementation. *Corporate Governance*, 21(4), 645-662.
- Lutta, S. E. (2012). *Determinants of adoption of risk-based audit in public sector in Kenya*. Unpublished MBA Project, University of Nairobi.

- Messier Jr., W. F. (2014). Teaching and educational notes. An approach to learning risk-based auditing. *Journal of Accounting Education*, 32(3), 276-287. Available at: <http://dx.doi.org/10.1016/j.jaccedu.2014.06.003>
- Meyer, J. W., & Scott, W. R. (1983). *Organizational environments*. Beverly Hills, CA: Sage Publications.
- Mohd Noor, N. R., & Mansor, N. (2018). *A conceptual study on the internal audit effectiveness in Malaysian public sector agencies*. In: Extended Abstract of Kelantan International Learning and Innovation Exhibition 2018 (KILIX 2018). Enhancing Commercialisation Through Innovation. Universiti Teknologi MARA Cawangan Kelantan, Kota Bharu Kelantan, 7-12. ISBN 9789671672006
- MS ISO 31000. (2009). *Risk management*. Retrieved from: <https://www.iso.org/iso-31000-risk-management.html/>
- Noor, M. A. M., & Zakaria, N. A. (2016). The impact of internal audit resources on internal audit effectiveness in Malaysian public sector organizations. *Procedia Economics and Finance*, 37, 329-335.
- Noor, M. A. M., Zakaria, N. A., & Hossain, M. A. (2019). The effect of competency and professionalism on the performance of internal auditors in Malaysian public sector organizations. *Journal of Financial Crime*, 26(3), 788-803.
- The Orange Book. (2023). *Management of risk - Principles and concepts*. October 2004, HM Treasury. Available at: www.hm-treasury.gov.uk
- Public Company Accounting Oversight Board (PCAOB). (2013). *PCAOB auditing standards*. <http://www.sec.gov/rules/pcaob/pcaobarchive/pcaob2013>
- Rafidah M. R. (2023, January 18). *Menteri pastikan ketirisan tidak berulang - Anwar*. Berita Harian Online. <https://www.bharian.com.my/berita/nasional/2023/01/1053392/menteri-pastikan-ketirisan-tidak-berulang-anwar>
- Saad, N. M., & Alias, N. (2020). Challenges faced by the Malaysian public sector internal audit: A review. *Journal of Accounting and Finance in Emerging Economies*, 6(1), 1-13.
- Sahaib, R. M. (2023). The role of risk-based auditing in enhancing the informational content of financial reports. *World Economics and Finance Bulletin*, 22, 42-66. Retrieved from <https://scholarexpress.net/index.php/wefb/article/view/2670>

- Transparency International. (2022). Corruption Perception Index. <https://www.transparency.org/en/countries/malaysia>
- Wan Mohd Radzi, W. S. (2023, January 10). *Perkemas integriti audit dalaman*. Available at: https://www.iim.gov.my/wp-content/uploads/2022/09/Sinar-Harian_10.1.2023.pdf
- Wan Mohd Radzi, W. S. (2023, January 13). *Audit dalaman organisasi kurangkan risiko pekerja rasuah*. Available at: https://www.iim.gov.my/wp-content/uploads/2022/09/Berita-Harian_13.1.2023.pdf
- Wang, X., Ferreira, F. A. F., & Yan, P. (2023). A multi-objective optimization approach for integrated risk-based internal audit planning. *Ann Oper Res*. <https://doi.org/10.1007/s10479-023-05228-2>