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Article

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Antecedents and Internal Audit Quality Implications of Internal Audit Effectiveness

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Abstract

Cognizant of the growing importance of internal control as a corporate governance mechanism in organizations, this paper investigates factors that are associated with internal audit effectiveness. Additionally, this paper also investigates the relationship between internal audit effectiveness and internal audit quality. A total of 102 questionnaires were collected from internal auditors and chief audit executives of 12 multinational companies in Malaysia. The data was analyzed through structural equation modeling by using SmartPLS Software 3.0. The findings reveal that management support, interdepartmental coordination and the support and acceptance of auditees were associated with internal audit effectiveness. Conversely, the findings also revealed that independence, objectivity and competence (the three building blocks of internal audit effectiveness) were also related to internal audit quality. The study contributes to the agency theory by highlighting the factors associated with the effectiveness of internal audits and quality audit outcomes to protect the best interest of principals while fulfilling the corporate governance imperative. This study also contributed to the institutional theory by highlighting how proper structures and systems can lead to a culture of governance and internal controls. The study confirmed the significance of interdepartmental coordination and the support and acceptance of auditees towards internal audit effectiveness, the exploration of which remains limited in current literature.

Keywords: independence, objectivity, competency, internal audit effectiveness, internal audit quality, Agency Theory

1. INTRODUCTION

Weak governance systems that led to various corporate scandals in the US (i.e. Enron, WorldCom, Tyco) resulted in the enactment of the Sarbanes-Oxley Act 2002, a leading piece of legislation calling for increased governance of US listed corporations while exerting a significant influence over corporate governance systems in countries around the world (AlHares, 2019). The Sarbanes-Oxley Act Section 404 mandates all publicly trading companies in the US to establish internal controls and procedures for financial reporting and to document, test, and maintain those controls (Marks, 2017). Recently, the Association of Certified Fraud Examiners (ACFE) reported that there were 2,690 cases of occupational fraud in 125 countries, leading to confounding losses amounting to more than USD 7 billion, with 42% of these fraud cases being attributed to the organization's lack of adequate internal controls (ACFE, 2018). If only the fundamental tenets of internal audits (IA) were applied and internal controls respected, these companies would not have been exposed to such unnecessary risks. Hence, the importance of internal controls as a mechanism of corporate governance of which IA is a natural constituent, cannot be overemphasized.

IA's role in corporate governance stems from the fact that internal audit establishes the truth, integrity, and reliability of operational and financial information for decision-making at all levels of governance (Joksimovic & Ahmed, 2017). In the same vein, the Institute of Internal Auditors (IIA) also reiterates that internal audit can help organizations achieve their objectives through a systematic and disciplined approach to evaluating the effectiveness of risk management, control, and governance processes (IIA, 2020). Internal auditors are expected to detect and report corruption, negligence or abuse of authority. Such audits are termed compliance audits as they seek to ensure the adherence to laws, regulations, policies, procedures and organizations' codes of conduct. Secondly, IA is also an essential mechanism for assessing an organization's overall performance or what could be referred to as an operational audit (Al-Twaijry et al., 2003).

The agency theory generally assumes that principals (owners) may not trust their agents (managers) due to information asymmetries and opportunistic behaviours (Adams, 1994). Therefore, both internal and external audits are used as mechanisms by principals to evaluate and control their agents' behaviour to reinforce trust and align principal-agent interests (Rusted et al., 2013). Standard setters such as the Association of Chartered Certified Accountants (ACCA) and the IIA have repeatedly stressed the need for the audit function to be independent and objective to ensure that audits are carried out effectively to deliver quality audit outcomes. Such is their significance that the very definition of an internal audit by the IIA states that an internal audit is an independent, objective assurance and advisory practice intended to add value and enhance organisations' operations (IIA, 2020). Both the ACCA and the IIA also further stressed that internal auditors must have the required competencies (knowledge and skills) to carry out their roles effectively. The competency levels of internal auditors will give both the principals and agents confidence that the internal auditors can carry out their tasks effectively and professionally (Erasmus & Coetzee, 2018).

Mihret et al. (2010) and Turetken et al. (2019), in their synthesis of relevant IA literature, argued that compliance with the International Standards for the Professional Practice of Internal Auditing (ISPPIA) of the IIA could serve as a guideline to measure IA effectiveness and proposed internal auditor objectivity and proficiency as essential dimensions of IA effectiveness. An IA function that operates on the ideals of independence, objectivity and proficiency will enable internal auditors to undertake IA tasks effectively and are therefore regarded as the building blocks of IA effectiveness (Al Matarneh, 2011; ACCA, 2021; IIA, 2020). Given the fact that research may help to elucidate how IA can help to align principal-agent interests while at the same time taking guidance from the IIA (an institution dedicated to IA), this study is informed by both the agency and institutional theories.

Scholars have attempted to investigate the factors related to IA effectiveness and how it can be measured (AL-Twaijry et al., 2003; Mihret & Yismaw, 2007; Yee et al., 2008; Cohen & Sayag, 2010; Ahmad et al., 2009). These studies implied that IA may not always be useful, and the antecedents of IA effectiveness may not have been fully explored as yet. These studies also highlights that IA effectiveness tends to differ according to the country and organizational dynamics within an IA setting. However, some of these studies were exploratory (i.e. Cohen & Sayag, 2010; Ahmad et al., 2009) and all of these studies measured IA effectiveness as a single proxy measure instead of being measured by several dimensions. IA's true importance is mostly concealed in the fact that its very presence may be a motivation for employees and managers to carry out their operations with care and proficiency (Coram et al., 2008), hence measuring its effectiveness remains a challenge. Since the concept of IA effectiveness is still vague and under-researched (Alzeban & Sawan, 2013), there is an opportunity for scholars to continue scrutinizing the subject so as to add new knowledge to the literature (Erasmus & Coetzee, 2018). Arguably, the factors contributing to the independence, objectivity and competency of

IA have received little attention from researchers (Cohen & Sayag, 2010; Mihret et al., 2010; Erasmus & Coetzee, 2018), more so in the context of developing nations (Alzeban & Gwilliams, 2014). According to Lenz and Hahn (2015), the impact of IA on specific organizational contexts merits further research to deepen the understanding of the factors that may restrict or enhance IA's effectiveness. The use of different organizational settings, standards and constructs in determining IA effectiveness may add to the growing body of IA literature (Cohen & Sayag, 2010; Mihret et al., 2010; Anderson, 2003).

Against this background, the research identified three variables (antecedents), management support, the support and acceptance of auditees and interdepartmental coordination, which will be tested against IA effectiveness. While prior studies have empirically demonstrated the link between management support as a driver of IA effectiveness (Cohen & Sayag, 2010; Mihret & Yismaw, 2007; Alzeban & Gwilliam, 2014), limited studies have attempted specifically to examine the link of management support with the independence, objectivity and competency of IA. This is substantiated by Stewart and Subramaniam (2009), who stressed that very little is known about the influence of management attitudes towards IA objectivity and independence. Conversely, the support and acceptance of auditees or auditee attributes in IA is yet another variable that is little researched (Mihret & Yismaw, 2007; Hunziker, 2017). Likewise, interdepartmental coordination, the third variable, has only been studied by Chaiwong (2012) and Hunziker (2017) in the context of IA to date. In their synthesis of empirical literature Lens & Hahn (2015) pointed out that auditee attributes and interdepartmental collaborations in the context of IA is an emerging field of research, which has not been examined to a great extent - a research gap that the present research seeks to address. Additionally, the study also examines the role of independence, objectivity and competency in influencing IA quality.

In order to achieve the research objectives, this study collected data from a sample of 12 MNCs in Malaysia, with 102 respondents working as internal auditors in the IA department, which was analyzed via SPSS and partial least squares structural equation modelling (PLS-SEM). SPSS was used to analyze the descriptive statistics, whereas PLS-SEM was used to validate the conceptualized model's proposed hypotheses. Analysis from PLS-SEM encompasses two stages. Stage one validates the measurement model by confirming construct reliability, convergent validity and discriminant validity. Once the measurement model is validated, proposed relationships are validated by running the bootstrapping procedure, *see Abbasi et al. (2021) for details*.

It is hoped that the outcomes of this research may add to the body of knowledge by providing evidence on the relationship between the selected factors, IA effectiveness and internal audit quality from the perspective of multinational companies (MNC) in a developing country like Malaysia. This study may also be of value to organizations and institutions, i.e. the IIA. The findings may help to shed light on the factors associated with effective IA and quality audit outcomes, which will be useful to managers (agents) tasked with the responsibility of ensuring the effectiveness of their organization's internal control systems in meeting shareholder requirements (principals) while addressing the corporate governance imperative.

2. Literature Review and Hypothesis Development

2.1 Underpinning Theories

This study is theoretically founded on two theories, namely agency theory and institutional theory. The agency theory suggests that a company consists of a nexus of contracts between the economic resource owners (principals) and managers (agents), who are responsible for the use and control of these resources (Jensen & Meckling, 1976). This theory has been used in past auditing related research (Pilcher et al., 2011; Joksimovic & Ahmed, 2017), as it is concerned with resolving conflicts that may arise in agency relationships, i.e. between principals (owners of the firm) and the agents (management and the executives of the firm). The theory deals with two key issues, namely i) the conflict of interest between the principals and their agents, including the difficulty faced by the principals when verifying the actions of their agents and ii) the discrepancy in the attitude towards risk between a principal and its agent. The information asymmetry and conflict of interest that may arise between the agents and the principal justifies the need for internal and external auditing to resolve agency problems in organizations. There is also a possibility that the management or its employees (agents) may not act in the best interest of their principal (as is evident from the various corporate scandals relating to mismanagement, misappropriation of funds and ethical violations) or what is referred to by Scapens (1985) as the 'moral hazard' problem (Jensen & Meckling, 1976; Adams, 1994). Such a moral hazard implies that agents may face a dilemma when the pursuit of maximizing their wealth happens at the expense of the principal's interests (Sarens & Abdoolmohammadi, 2011). On the other hand, due to not having access to all available information, principals may not be able to decide whether an agent's acts are in the firm's best interest, which has been referred to as 'adverse selection' by Adams (1994).

Hence, to reduce the likelihood of problems such as moral hazard and adverse selection, principals and agents engage in contracting relationships to achieve 'Pareto-optimality', where both principals and agents will incur contracting costs (Scapens, 1985). For instance, to reduce the risk of shirking by agents (Kren and Krer, 1993), principals will resort to subjecting the firm's financial statements to external audit scrutiny and incur monitoring costs. On the hand, agents too will incur bonding costs resulting from the costs associated with instituting IA initiatives to show principals that they are acting with integrity and consistent with their employment contracts. Doing so will help managers to safeguard their jobs and salaries. It has been argued that the principal's expenditures on monitoring agents' actions are reflected in the agents' salary (Wallace, 1980). Therefore it is in the agents' best long-term interest to be committed to proper internal control mechanisms, i.e. IA, to avoid the risk of adverse effects on their employment and salaries by principals (Adams, 1994). Additionally, as agents are only humans who may be susceptible to their surroundings and greed-driven temptations, the burden is also on the principals to ensure that their agents manage the organization the best they can through appropriate corporate governance practices, i.e. internal controls (Rudyanto & Siregar, 2017). As a governance-related control system mechanism, principals can use IA to monitor their agents' performance, minimize agency costs, and simultaneously align the interest between agents and principals (Eisenhardt, 1989; Rusted et al., 2013).

Application of the agency theory to the current research context, i.e. Multinational Companies in Malaysia (MNC's), would help enrich our understanding of how the IA function can reduce information asymmetries between the principals and agents of the 12 selected multinational companies which are currently incorporated in Malaysia as limited private corporations with headquarters in the USA (8 MNC's) and Germany (4 MNC's). In single-tier systems (i.e. the USA), the audit committee (AC) plays an instrumental role in establishing appropriate corporate governance practices. As implied by the Sarbanes Oxley Act, the AC is a permanent committee of the board of directors of US stock exchange-listed corporations (Eulerich et al., 2015). As for two-tier systems (i.e. Germany, Malaysia) the IA function is considered the management board's agent and the management board is accountable for the setting up and maintenance of the IA function (Khan et al., 2020). The management board assigns the IA function to oversee the board's subordinate bodies, among other responsibilities, and evaluate the internal control systems. Additionally, the AC supervises the IA function to ensure proper and effective management of the IA by the executive board (Eulerich et al., 2015).

DiMaggio & Powell's (1983) institutional theory is also related to the current research endeavour. This theory explains how organizational structures and practices are formed due to changes brought about by institutional pressures (Mihret et al., 2010), which has been termed, by DiMaggio & Powell (1983), institutional isomorphism, which comes in three forms: coercive, mimetic and normative isomorphisms. The theory underlines the value of organizational structures regarding compliance to rules, regulatory enforcement and social accountability. Under this premise, the board of directors will have to establish linkages between the organization and the external environment and secondly support the internal audit function to monitor and evaluate the management and administrative procedures that lead to organizational performance (Joksimovic & Ahmed, 2017). Past research of Al-Twaijry et al. (2003) implies that government influence (coercive isomorphism) tends to be more significant in IA practices in some countries as compared to responses towards uncertainties, risks and environmental forces (mimetic isomorphism). The rise in accounting and audit professionals (normative isomorphism) is also said to positively impact the cause of IA in organizations (Al-Twaijry et al. 2003, Yee et al., 2008). Prior research has validated the use of institutional theory in IA related research (Al-Twaijry et al., 2003; Mihret et al., 2010; Arena & Azzone, 2007; Joksimovic & Ahmed, 2017).

Combining both these theories will help the boards of directors and the management to better understand their roles, responsibilities, and obligations relating to IA as an integral component of corporate governance. While the agency theory encourages boards to improve organisation performance through corporate governance and accountability principles, the institutional theory stresses the value of administrative procedures and compliance with regulatory requirements to improve organizational efficiency and governance.

2.2 Internal Audit Effectiveness

Prior research in the area of IA effectiveness seems to suggest that the extent of IA effectiveness tends to vary according to national differences and organization-specific dynamics prevalent within IA settings (AL-Twaijry et al., 2003; Mihret & Yismaw, 2007; Yee et al., 2008; Cohen & Sayag, 2010; Ahmad et al., 2009). Cohen & Sayag (2010) undertook an exploratory study to investigate the factors that contributed towards IA effectiveness and developed a scale for all independent variables (consisting of the public vs private sector, quality of audit work, management support, proficiency of internal auditors, organizational independence and career advancement) and a dependent variable, i.e.

IA effectiveness. A total of 37 items subjected to exploratory factor evaluations were used to measure IA effectiveness with three interpretable factors (i.e. audit quality, internal auditee evaluation and the added contribution of IA towards the organization). After collecting and analysing the data from 108 Israeli organizations, the study reports that all the scales' psychometric properties were acceptable. However, based on the regression analysis, only top management support, quality of audit work and organizational independence were positively associated with IA effectiveness.

In another exploratory study, Ahmad et al. (2009) investigated the factors that could lead to IA effectiveness via open-ended questionnaires directed to public sector employees performing IA roles from various government agencies in Malaysia. Two open-ended questions were posed: the problems associated with the IA function and important factors that contributed to IA effectiveness. Based on 99 responses, the study found that the respondents perceived internal audit quality, cooperation of internal auditors, top management support, adequate resources and the interaction with the audit committee as the factors that are important for internal audits to be effective. However, the study's simplistic and descriptive nature did not go far enough in explaining the relationship between specific factors and IA effectiveness.

Drawing on a case study of a large public higher educational institution in Ethiopia, Mihret and Yismaw (2007) highlighted the factors that had a bearing on IA effectiveness. Based on primary data collected from audit personnel and an interview with the IA director via a case study protocol, the study found that only the quality of IA and management support had a strong influence over IA effectiveness. Simultaneously, the organizational setting and auditor attributes did not exert a substantial impact on IA effectiveness. The study also highlighted the need for the audit office to enhance the audit personnel's technical proficiency in order to foster audit effectiveness whilst reducing staff turnover.

On the other hand, Al-Twajry et al. (2003) explored the IA practices of Saudi Arabian companies from an institutional theory perspective based on a sample of 135 companies listed on the Saudi Stock Exchange. Utilizing questionnaires and interviews to assess the extent of the compliance of IA practice with ISPPIA standards, the study found a low level of IA effectiveness and IA's value-adding capacity in Saudi Arabia. IA was merely utilized to assess financial record keeping and information reliability, compliance with rules and regulations, and evaluation of internal control mechanisms in organizations. The study also revealed a low level of auditee cooperation, consequently leading to poor IA recommendations. The study also implied that IA practices in Saudi Arabia might sometimes not be in line with ISPPIA standards. Hence, the establishment of the IIA chapter in Saudi Arabia may exert a normative isomorphic pressure for the compliance and further development of IA.

Yee et al. (2008) looked at IA in Singapore from a slightly different viewpoint. The study focused on Singaporean Managers' perceptions of IA practices and assessed whether IA is regarded as a partner of the management or as a routine enforcement watchdog. They argued that while IA's importance in organizations is growing, the IA function can play a value-adding role in organizations by enlarging the scope of its services to include operational areas. The study utilized structured interviews from 83 Singaporean senior, middle and junior managers who are IA customers from 25 organizations. Contrary to the results of Al-Twajry et al. (2003), Yee et al. (2008) found that Managers at the senior levels were generally pleased with the proficiency and services of internal auditors. The authors attributed their findings to the well established corporate sector and a relatively healthy external auditing environment in Singapore. Therefore Singapore's internal auditors' expertise and knowledge mean that they are better able to deliver value-adding benefits deriving from IA practices than those in Saudi Arabia.

Beckmerhagen et al. (2004) argued that in order to measure IA effectiveness adequately, the evaluation must not be only done on results of the audit against the planned objectives, but also the audit process itself (planning, execution to reporting and follow-up) and the resources that are required to carry out effective audit (which consist of internal auditors who are competent, independent and objective). This argument ties in with the approach of Sawyer (1995), who emphasized the need for audit practices to be benchmarked against specific universally accepted standards and suggested five standards for internal auditing comprising interdependence, proficiency, the scope of the work, the performance of the audit and the management of the audit department. On the other hand, Albrecht et al. (1988) argued that IA effectiveness is not a 'computable reality' but is somewhat dependent on the subjective judgments assigned to this function by the management. Put simply, this meant that IA could only be measured against the expectations of key stakeholders, some of whom are government regulators (coercive isomorphism) and investors or owners (principals). In keeping with the approach of Sawyer (1995) and Al-Twajry et al. (2003), whose research was based on the compliance of ISSPIA standards, the present research also adopts the ISSPIA standards, which arguably offers a reliable approach to measuring IA effectiveness (Mihret et al., 2010; Turetken et al., 2019). This approach measures IA effectiveness in several dimensions (i.e. independence, objectivity and competency)

instead of using a single proxy measure adopted in past research (i.e. Cohen & Sayag, 2010; Mihret & Yismaw, 2007; Al-Twaijry, 2003). The literature relating to these dimensions is discussed in the following section.

2.3 Independence, Objectivity and Competence (The Building Blocks of IA Effectiveness)

The effectiveness of the IA is contingent upon independence, objectivity, and the competence of internal auditors. Fulfilment of these three criteria is considered the cornerstone of effective internal audit as the degree of quality in determining and reporting abnormalities and breaches depends on the proficiency, independence and objectivity of IA (Al Matarneh, 2011). According to Cohen and Sayag (2010), organizational independence will raise IA's efficiency and reduce conflict amid faithfulness to the company and faithfulness to specific managers and it gives internal auditors a supportive work atmosphere. Moreover, the independence of internal auditors increases the independence of the IA function. The IIA affirms that "without independence," "the desired results of internal auditing cannot be realized". The IIA's International Standards for the Professional Practice of Internal Audit (ISPPA) clearly defines in section 1110.A1 that independence means "*the internal audit activity must be free from interference in determining the scope of internal auditing, performing work, and communicating results. The chief audit executive must disclose such interference to the board and discuss the implications*" (IIA, 2016). Put simply, independence means that IA's work is free from any form of interference (Emmanuel et al., 2013). Both Cohen & Sayag (2010) and Alzeban & Gwilliam (2014) concluded that independence is an essential prerequisite of IA effectiveness.

According to Dellai and Omri, (2016), the independence and objectivity of internal auditing have a positive effect on increasing IA effectiveness. Objectivity is necessary for any professional responsible for providing professional judgment, without which the judgment loses its value and meaningfulness. In the IA context, the need for objectivity cannot be overemphasized since the management, as the users of audit services, depend in part on the internal auditor's opinion when making important decisions. This view is corroborated by Schneider (2003): objectivity is a crucial ingredient of IA effectiveness to ensure reliable and valid outcomes. In this regard, the ISPPA standard has also specified the need for internal auditors to be objective and that "*the internal auditors must maintain an impartial, unbiased attitude and avoid any conflict of interest*" (IIA, 2016, Sec. 1120) in the course of carrying out their duties. According to Muchthler (2003), seven factors can affect internal auditors' objectivity: self-reviews, economic interest, personal relationships, familiarity, cultural, racial and gender biases and cognitive biases. While most studies relating to IA effectiveness tested independence and objectivity as a single factor, the study of Fadzil et al. (2005) tested objectivity separately from independence and found that objectivity was positively associated with the monitoring aspect of such internal control systems.

Prior studies have also stressed the need for auditors to be appropriately qualified to carry out IA work effectively. Auditors' competence is also potentially relevant and essential in ensuring that the IA exercise is carried out effectively (Al-Twaijry, 2003). Standard setters consistently highlight the importance of internal auditors who possess the right knowledge, skills, and other competencies necessary to undertake IA duties and responsibilities (IIA, 2006). The ISSPIA standards (1210-Proficiency) also specify the need for internal auditors to possess the knowledge, skills and competencies to carry out audits effectively (IIA, 2016, Sec. 1210). The studies of Ali et al. (2007) and Ahmed et al. (2009) found that a lack of qualified personnel in terms of having sufficient IA training, experience and knowledge had a negative impact on the work of internal auditors and suggested training as a prerequisite for enhancing IA work. The IA team needs to have the ability to deliver high-quality services. Mihret et al. (2010) suggest that both technical and ongoing training are considered essential to the IA team's effectiveness. Internal auditors need professional skills, adequate education and experience to carry out their duties and responsibilities well (Pickett and Spencer, 2010). According to Arena and Azone (2009), the competency of the auditor consists of two factors: knowledge and behaviour. This was echoed by the findings from the Global Internal Audit Survey carried out by the IIA confirming that knowledge, behavioural skills and technical skills are essential competencies required by Chief Audit Executives (CAE) and internal auditors (IIA, 2010). Past studies have confirmed auditors' need to have the required knowledge and skillset to carry out audit work effectively (Fadzil et al., 2005; Alzeban and Gwilliam, 2014; Hunziker, 2015).

2.4 Management Support

Management is beginning to rely on IA as an internal control mechanism for checks and balances purposes while ensuring that it is working effectively (Mahzan et al., 2012). According to Cohen and Sayag (2010), internal auditors can obtain adequate resources to carry out their duties and tasks, and the IA department can hire capable staff and provide ongoing training and improvement when there is top

management support. The absence of management's backing undesirably affects the IA performance, particularly the behaviour of auditees who may not take the audit exercise seriously (Mihret and Yismaw 2007). Conversely, a management team that fails to exercise the internal auditors' suggestions can reduce the efficiency of the IA team (Van Peursem, 2005). In a study within the Malaysian public sector, management support was the second most crucial determinant of IA effectiveness, after sufficient auditing staff (Ahmed et al., 2009). In a relatively recent study, Alqudah et al. (2019) found that top management empowerment towards internal auditors positively impacted internal auditors' effectiveness in carrying out IA within Jordanian public sector organizations. Several studies have confirmed that management support is a significant predictor of IA effectiveness (Dittenhofer, 2001; Mihret & Yismaw, 2007; Cohen & Sayag, 2010; Alzeban & Gwilliam, 2014). However, Stewart and Subramaniam (2009) found that research on senior management's effect on IA objectivity and independence is under-scored. Therefore, it is hypothesized that:

H1a: There is a positive relationship between management support and the independence of internal audit.

H1b: There is a positive relationship between management support and the objectivity of internal audit.

H1c: There is a positive relationship between management support and the competence of internal audit.

2.5 Support and Acceptance from Auditees

Gaining the support and acceptance from auditees is critical to the achievement of audit objectives. This construct means that all auditees are fully aware of the auditors' role and are cooperative during the IA exercise. According to Yismaw and Mihret (2007), auditors are obligated to have full open access to entire events, records and possessions, and must be given support and cooperation by auditees to realize efficient audit work. The extent and level of cooperation influence the extent to which IA achieves its objectives (Al-Twajry *et al.*, 2003). The study of Chaiwong (2012) found that understanding and accepting auditees was a precursor to internal audit performance. Similarly, Hunziker (2017) found that auditee attributes were an essential predictor of efficient internal control systems in organizations. This research posits that the greater the support and acceptance of the auditees towards the auditors and the whole IA process, the more independent, objective, and competent the IA process will be. Given the fact that this factor is still under-examined the research postulates the following hypotheses:

H2a: There is a positive relationship between support & acceptance from auditees and the independence of internal audit.

H2b: There is a positive relationship between support & acceptance from auditees and the objectivity of internal audit.

H2c: There is a positive relationship between support & acceptance from auditees and the competence of internal audit.

2.6 Interdepartmental Coordination

Coordination and collaboration between internal auditors and other departments are vital to the audit task and process. The joint preparation and sharing of information, opinions and reports to support higher-quality audits and avoid excessive duplication of work are some instances of synchronization and collaboration. The information delivered by other departments provides a better audit view and probably one provided with greater resource effectiveness in conditions where the internal auditor can rely on work carried out by other departments. With the exception of Chaiwong's (2012) research confirming that IA performance hinges on the relationship between the IA and other departments, very little is known about the significance of this relationship in practice. A recent study by Hunziker (2017) found that inter-departmental coordination between internal auditors and other departments was positively related to Swiss companies' internal control efficiency. Conversely, Lenz & Hahn (2015) argued that since not much is known about the effect of interdepartmental collaborations in the context of IA as it has not been examined to a great extent, it is an emerging field of research that is worthy of pursuit. Hence this research posits that:

H3a: There is a positive relationship between interdepartmental coordination and the independence of internal audit.

H3b: There is a positive relationship between interdepartmental coordination and the objectivity of internal audit.

H3c: There is a positive relationship between interdepartmental coordination and the competence of internal audit.

2.7 Independence, Objectivity, Competence and Internal Audit Quality

There is no agreed-upon definition of audit quality in either the internal or the external auditing literature. Regardless of whether it is internal or external, audit quality has been defined as the capacity to realize and report abnormalities and breaches; the latter is the most noticeable indicator of audit quality (Daniels& Booker, 2011; Butcher et al., 2013). The degree of quality in determining and reporting abnormalities and breaches depends on IA's proficiency, independence, and objectivity (Al Matarneh, 2011). On a different note, hopes from a proper IA function encompass controlling the efficiency and effectiveness of operations, the degree of achievement of compliance in regulations and internal procedures, the reliability of financial reporting and the preservation of assets (Hayes et al., 2015). As noted by Cohen and Sayag (2010), IA quality should include the level of compliance with IIA standards, the ability to plan the audit, execute audit findings and communicate them.

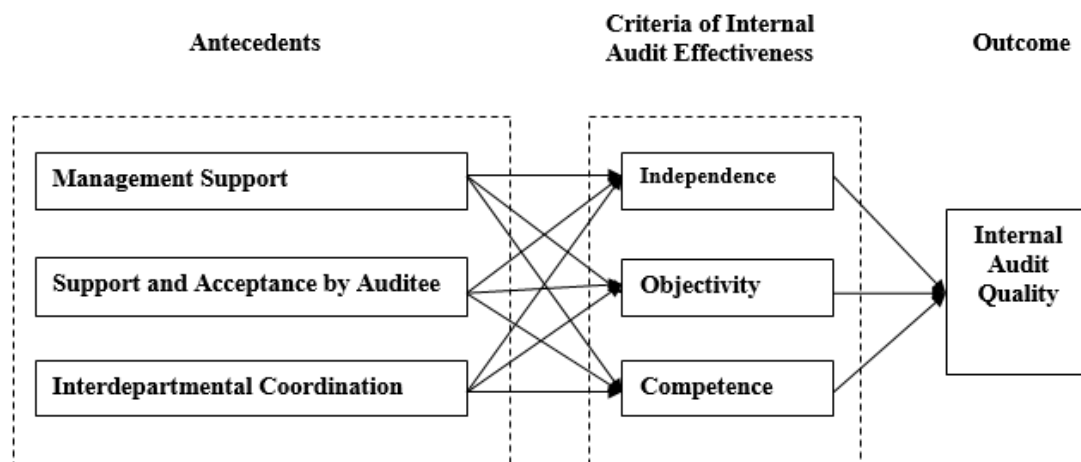
Conversely in research involving 240 listed firms in Greece, George et al. (2015), having reviewed the literature of IIA, Cohen and Sayag (2010), Bota-Avram and Palfi (2009) and Alzeban & Gwilliam, (2014) pointed out that internal quality audit is characterized by the accomplishment of IA objectives, communication between internal and external auditors, the efficiency of the internal auditor's work, an appropriate justification of the internal auditor's findings, the significance of the internal auditor's recommendations and the rationality of the internal auditor's report. Past research has confirmed that independence, objectivity, and competence are prerequisites of IA quality (Abbott et al., 2016; Alzeban and Gwilliams, 2014; Cohen and Sayag, 2010). Research has also established that the lack of independence and objectivity can compromise audit outcomes in terms of bias in evidence collection, evaluation, audit recommendations and reporting (Mustika, 2015). Independence, objectivity, technical competence and qualified internal auditors are vital ingredients of good corporate governance (Basel Committee, 2012). The study of Fadzil et al. (2005) also found that professional proficiency, objectivity, and independence significantly influenced internal control systems' quality. This study, therefore, hypothesizes that:

H4a: There is a positive and significant relationship between the independence of IA and internal audit quality.

H4b: There is a positive and significant relationship between IA's objectivity and internal audit quality.

H4c: There is a positive and significant relationship between the competence of IA and internal audit quality.

Figure 1. Proposed Research Framework



3. METHODS

3.1 Sample Population

In deciding on an acceptable sample size for this study, Roscoe's (1975) rule of thumb suggests that the minimum sample ought to be a minimum of ten times the number of variables. Since the research had a total of 7 variables, the minimum sample size required was 70 respondents. Twelve MNC's operating in the free industrial zone (FIZ) of Penang were randomly chosen based on the Federation of Malaysian Manufacturers (FMM) Directory of Malaysian Industries 2017. A total of 180 self-administered questionnaires were distributed to the 12 selected MNCs' IA department. The researchers were granted access to the IA departments by the selected MNC's on the condition of anonymity and the questionnaires were distributed using a drop and pick method, allowing the respondents to complete the questionnaires at their own pace. Only a total of 102 usable responses were obtained and were fully answered. The low response rate could be attributed to the low number of auditors, averaging between 5 in smaller companies and an average of 12 auditors in bigger MNCs.

These MNC's were all incorporated in Malaysia as limited private corporations or known locally as 'Sendirian Berhad' and hence were subjected to the standard audit requirements imposed by the Companies Commission of Malaysia and the Inland Revenue Board of Malaysia. These MNC's need to have their accounts audited on an annual basis by a Ministry of Finance approved external company auditor, who must be a member of the Malaysian Institute of Accountants. Although MNC's that are incorporated as private limited corporations are not subjected to the regulatory requirements of the Securities Commission of Malaysia and the Malaysian Code of Corporate Governance, which are applicable to Public Limited Corporations, most MNC's as a matter of good practice and to fulfil parent country requirements have sound mechanisms of internal control and risk management in the form of Internal Audit Departments to continuously monitor and evaluate risk and promote a culture of best practice and continuous improvement. Out of the 12 MNC's that were randomly chosen, eight were headquartered in the USA, which uses a one-tier board structure, and four were headquartered in Germany, which follows a two-tier board structure (Khan et al., 2020). The demographic profile of the respondents is presented in table 1 below:

Table 1. Demographic Profile of Respondents

Demographics	Characteristics	Frequency	Percentage
Gender	Male	45	44
	Female	57	56
Age	21 – 25	4	3.9
	26 - 30	22	21.5
	31 – 35	37	36.2
	36 – 40	21	20.5
	>40	18	17.9
Tertiary Qualification (excluding professional membership)	Certificate / Diploma	5	4.9
	Bachelor's degree	53	52.0
	Post Graduate	42	41.0
	None	2	1.9
Professional Designation	MICPA	3	2.9
	ACCA	22	21.5
	CPA	19	18.6
	CIA	44	43.1
	CIMA	10	9.8
	None	4	4.1
Current Position	Manager of IAD	12	11.7
	Senior Auditor	62	60.7
	Junior Auditor	28	27.4
Audit Experience	< 1 year	1	0.9
	1 – 5 years	26	25.4
	6 – 10 years	50	49.0
	11 – 15 years	18	17.6
	16 – 20 years	4	3.9
	>20 years	1	0.9

Table 1 above shows the demographic profile of the respondents. The overall distribution of males and females were 44% and 56% respectively, with a slightly higher percentage of females employed in the selected MNCs' IA departments. The age range of the respondents was from 21 years to over 40 years of age. The majority of the respondents were 35 years and below (61.6%), while those who were 36 to 40 years and above cumulatively accounted for 38.4% of the respondents. A considerable majority had tertiary qualifications, except for two respondents who did not have any formal tertiary qualifications, indicating MNC's preference for internal auditors with academic qualifications. In terms of professional designations, only four respondents were not affiliated with any accounting or auditing related professional bodies. A vast majority of the respondents (98 of them) had professional designations, and 44 respondents had the Certified Internal Auditors (CIA) designation by the IIA of Malaysia. In terms of the respondents' current position in their respective IA departments, 11.7% were Managers of the IA departments, 60.7% were senior auditors, and the remaining 27.4% were junior auditors. In terms of audit experience, a vast majority of the respondents (73) had more than six years of working experience in an audit-related setting while only 27 respondents had less than five years of audit-related working experience.

3.2 Measures

To test the hypotheses presented, a survey instrument was designed in the form of a questionnaire which had two sections, namely 'Section A', which included 6 demographic items, and 'Section B', which comprised 32 items representing the constructs in the study. The questionnaires were anchored on a five-point Likert-scale ranging from (1) strongly disagree to (5) strongly agree. Measurement items should characterize the concepts about which valid generalizations are to be made in order to fulfil content validity (Bohmstedt, 1970). All the measurement scales were adapted from previously published studies as follows:

Management support (MS) was measured using a five-item scale adapted from Alzeban & Gwilliam (2014). The items are: MS1 – "The top management provides support and encouragement to the audit team to perform its duties and responsibilities." MS2 – "Management is aware of the internal audit department's needs and provides required resources". MS3 – "The management is involved in planning the internal audit." MS4 – "Reports on the internal audit team's work is being delivered to the management". MS5 – "The management responds to the internal audit reports".

Support and acceptance of auditee (SAA) were measured by adapting Yismaw & Mihret's (2007) two-item, scale which is made up of: SAA1 – "The auditees are supportive by giving ease of access to required records and activities in all units audited." SAA2 – "The auditee gives a good level of cooperation to the auditors in achieving IA objectives."

Interdepartmental Coordination (IC) was measured using a four-item scale adapted from Hunziker (2017). The scale measured the coordination of tasks and employees from different departments in the internal audit exercise. The items include IC1 – "All employees involved in the internal audit activity operate in a coordinated manner." IC2 – "It is important to coordinate internal audit tasks in such a manner that internal auditing objectives can be achieved easily." IC3 – "There are no misunderstandings regarding the responsibility of internal audit tasks." IC4 – "It is easy to maintain a comprehensive view of all internal audit activities."

Independence; the scale to measure independence was adapted from Cohen & Sayag (2010). The eight-item scale is made up of: IND1 – "The IA operates independently and can audit any issue it considers in need of auditing." IND2 – "The IA can access any necessary information even if it is classified." IND3 – "The IA team is rotated so that they can cover a variety of assignments." IND4 – "The CAE have a functional reporting relationship with the board of directors." IND5 – "The CAE have regular and direct working relations with the general manager and the managerial team." IND6 – "Terminating the work of the auditor requires the approval of the IA committee and or the board of directors." IND 7 – "All organizational data pools can be downloaded and examined by the IA." IND 8 – "The IA sometimes take part in designing organizational systems and procedures for regulating their procedures".

Objectivity: the scale to measure objectivity was adapted from Fadzil et al. (2005), developed based on ISPPIA standards. The three-item scale is made up of: OBJ1 – "The internal auditors are not assigned to areas where close friends or relatives are employees to avoid conflict of interest." OBJ2 – "Internal audit activities should be free from any form of interference". OBJ3 – "Internal auditors must maintain an impartial and unbiased attitude when carrying out their duties".

Competency (COMP) was measured using a scale adapted from Alzeban & Gwilliam (2014). The four-item scale includes: COMP1 – "Internal auditors should have appropriate academic qualifications." COMP2 – "Internal auditors should have professional internal audit qualifications."

COMP3 – “Internal auditors should be committed to continuous professional development.” COMP4 – “Internal auditors should have some work experience in the field of internal audit.”

Finally, the outcome variable, quality of internal audit (IAQ), was measured using a six-item scale which was adopted from Cohen and Sayag (2010). The items include: IAQ1 – “The annual audit plan is determined completely by the internal auditor.” IAQ2 – “The areas audited are very significant to the organization.” IAQ3 – “The IA can cover all organizational units and all issues.” IAQ4 – “The response of auditees to the audit is submitted in writing and is relevant and comprehensive.” IAQ5 – “There is a regular follow-up by the IA staff to examine actions taken to correct the problems found.” IAQ6 – “The internal auditor also performs other activities such as developing procedures and conducting economic and financial audits.” See table 2 for details.

Table 2. Measurement Model Assessment

Construct	Source	Outer VIF	Items	Loadings	CR	AVE
Management Support (MS)	Alzeban& Gwilliams, (2014)	2.645	The top management provides support and encouragement to the audit team to perform its duties and responsibilities	0.815	0.89	0.62
		2.748	Management is aware of the needs of IAD and provides required resources	0.83		
		2.396	The management is involved in planning the internal audit	0.893		
		1.591	Reports on the work of the internal audit team is being delivered to the management	0.69		
		1.914	The management provides responses to the internal audit reports	0.687		
Support and acceptance of auditee (SAA)	Yismaw&Mihret's (2007)	1.766	The auditees are supportive by giving ease of access to required records and activities in all units audited	0.91	0.905	0.827
		1.27	Good level of cooperation is given by the auditee to the auditors in achieving IA objectives.	0.908		
		1.899	All employees involved in the internal audit activity operate in a coordinated manner	0.841		
		2.765	It is important to coordinate internal audit tasks in such a manner that internal auditing objectives can be achieved easily	0.905		
		2.532	There are no misunderstandings regarding the responsibility of internal audit tasks	0.899		
Interdepartmental Coordination (IC)	Hunziker (2017)	1.21	It is easy to maintain a comprehensive view of all internal audit activities	0.671	0.858	0.62
		1.786	The IA operates totally independently and can audit any issue it considers in need of auditing	0.847		
		1.58	The IA can access any necessary information even if it is classified	0.773		
		1.476	The IA team is rotated so that they can cover a variety of assignments	0.803		
		1.454	The CAE have functional reporting relationship with the board of directors	0.719		
		1.863	The CAE have regular and direct working relations with the general manager and the managerial team	0.736		
		1.238	Terminating the work of the auditor requires the approval of the IA committee and or the board of directors	0.776		
		1.656	All organizational data pools can be downloaded and examined by the IA	0.84		
Independence (IND)	Cohen & Sayag (2010)	1.786	The IA operates totally independently and can audit any issue it considers in need of auditing	0.847	0.93	0.624
		1.58	The IA can access any necessary information even if it is classified	0.773		
		1.476	The IA team is rotated so that they can cover a variety of assignments	0.803		
		1.454	The CAE have functional reporting relationship with the board of directors	0.719		
		1.863	The CAE have regular and direct working relations with the general manager and the managerial team	0.736		

Objectivity (OBJ)	Fadzil et al. (2005)	1.476	The IA sometimes take part in designing organizational systems and procedures for regulating their procedures	0.815	0.848	0.651
		2.39	The internal auditors are not assigned to areas where close friends or relatives are employees to avoid conflict of interest	0.866		
		2.419	Internal audit activities should be free from any form of interference	0.808		
		3.507	Internal auditors must maintain an impartial and unbiased attitude when carrying out their duties	0.741		
		2.695	Internal auditors should have appropriate academic qualifications	0.828		
Competency (COMP)	Alzeban & Gwilliams, (2014)	3.597	Internal auditors should have professional internal audit qualifications	0.721	0.841	0.571
		2.617	Internal auditors should be committed to continuous professional development	0.747		
		2.11	Internal auditors should have some work experience in the field of internal audit	0.722		
		3.39	The annual audit plan is determined completely by the internal auditor	0.853		
		4.6	The areas audited are very significant to the organization	0.911		
Internal Audit Quality (IAQ)	Cohen & Sayag (2010)	2.712	The IA is able to cover all organizational units and all issues	0.865	0.912	0.646
		2.72	The response of auditees to the audit is submitted in writing and is relevant and comprehensive	0.822		
		3.254	There is regular follow-up by the IA staff to examine actions taken to correct the problems found	0.875		
		3.39	The internal auditor also performs other activities such as developing procedures and conducting economic and financial audits	0.357		

3.3 Common Method Bias (CMB) & Multicollinearity

Podsakoff et al. (2003) posited that survey-based studies tend to common method bias. In relation to this Podsakoff et al. (2003) suggested taking both procedural and statistical remedies to address such issues. Thereby, this research took all the measures as a procedural remedy. Statistically, the researchers applied several measures to take account of the common method variance. According to the Harman single factor, the results revealed that this study has no CMB related issues as the single factor variance extracted was less than the threshold values of 50%, recommended by Podsakoff et al. (2003). Furthermore, the inner variation inflated factor (VIF) and the findings also reveal that all the Inner VIF values are less than 3.3 suggested by Kock (2015), ranging from 1.269 to 2.057. Hence, based on the above findings, it can be concluded that the study is free of common method bias.

Furthermore, to investigate the multicollinearity, the researcher applied the outer VIF criterion. According to Mason and Perreault (1991) and Shieh (2010), a study will have multicollinearity related issues when the outer VIF values are more than 10. Thereby, according to the findings of this study, all the values mentioned in table 1 are in line with the guidelines prescribed by the researchers. Therefore, the study was found to have no multicollinearity related issues.

3.4 Data Analysis

The data were analyzed using partial least squares structured equation modelling (PLS-SEM) via the SmartPLS 3.2.9 software in order to uncover the direct effects of the antecedents on IA effectiveness and its subsequent, direct effect on the outcome variable, internal audit quality.

4. FINDINGS

4.1 Measurement Model

As the first step, the model's convergent validity and reliability were analyzed by assessing the factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). Table 1 presents the measurement model; the factor loadings satisfy the recommended value of more than 0.6 (Hair et al., 2019; Keong et al., 2020). The AVE value of all the seven variables was in the range of 0.571 to 0.827, which satisfies the recommended value of more than 0.50. The CR ranging from 0.841 to 0.93 also satisfies the requirements as it is greater than the recommended value of more than 0.70 (Hair et al., 2019).

Table 3. Heterotrait-Monotrait Ratio (HTMT) ratios

	MEAN	SD	COMP	IC	IND	MS	OBJ	IAQ	SAA
COMP	4.38	0.60							
IC	4.19	0.53	0.341						
IND	3.64	1.36	0.354	0.559					
MS	4.28	0.49	0.325	0.764	0.519				
OBJ	4.33	0.56	0.475	0.404	0.58	0.51			
IAQ	3.88	0.60	0.321	0.456	0.432	0.52	0.451		
SAA	4.27	0.47	0.458	0.687	0.702	0.753	0.716	0.633	

The model's discriminant validity was tested by examining the correlations between the potentially overlapping construct measures, following the Heterotrait-Monotrait Ratio (HTMT). It is found from Table 3 that all the HTMT values of the constructs are below 0.86, which fulfils the criterion of HTMT 0.85 by Henseler et al. (2015). These results suggest that the required discriminant validity for the research model has been achieved. Overall, the measurement models have shown adequate reliability and validity; thus, the research is fit to pursue the structural model assessment to test the hypotheses.

4.2 Structural Model

In PLS, R^2 calculates the determination coefficient and the path coefficient level of significance (beta value). According to Hair, Ringle & Sarstedt (2011), this is an important evaluation to investigate the structural model's goodness. After assessing the validity of the measurement model, the study tested the hypotheses using the structural model. The research model's explained variance (R^2) value was 0.305, indicating that the model can explain 30.5% of the variance in IA quality associated with IA effectiveness. The R^2 for internal audit effectiveness, which are independence, objectivity and competence, are 0.45.6 (45.6%), 0.344 (34.4%), 0.158 (15.8%) respectively. Findings also revealed the study has satisfactory predictive relevance (Q^2), which was found to be more than 0 for all the endogenous variables, i.e. QIA (0.18), IND (0.269), OBJ (0.211) and COMP (0.052).

Table 4. Path coefficients and hypotheses testing

Hypotheses	Relationship	Beta	Std error	P-values	Decision
1a	MS \rightarrow IND	0.193	0.101	0.028*	supported
1b	MS \rightarrow OBJ	0.404	0.091	0.000**	supported
1c	MS \rightarrow COMP	0.257	0.127	0.022*	supported
2a	SAA \rightarrow IND	0.054	0.084	0.021*	supported
2b	SAA \rightarrow OBJ	0.126	0.105	0.015*	supported
2c	SAA \rightarrow COMP	-0.121	0.119	0.154	not supported
3a	IC \rightarrow IND	0.371	0.134	0.003*	supported
3b	IC \rightarrow OBJ	0.201	0.111	0.035*	supported
3c	IC \rightarrow COMP	0.350	0.136	0.005*	supported
4a	IND \rightarrow IAQ	0.156	0.109	0.037*	supported
4b	OBJ \rightarrow IAQ	0.002	0.119	0.042*	supported
4c	COMP \rightarrow IAQ	0.293	0.128	0.011*	supported

Notes: * $p < 0.05$, ** $p < 0.01$ (One-tailed)

The structural model's path coefficient signifies the hypothesized relationship between the variables studied (Hair et al., 2019). Path coefficients of the structural model were measured, and then bootstrap analysis (re-sampling = 5000) was executed to evaluate the statistical significance of the path coefficient in this study. Table 4 illustrates the results of the hypothesis testing. The results revealed that only one was not significant out of the twelve hypotheses under the direct hypothesis section. Management support was positively related to IA effectiveness; hence, H1a – H1c was supported.

Conversely support and acceptance of auditees showed a significant positive relationship with independence and objectivity, supporting H2a and H2b. However, support and acceptance of auditees were negatively related to competence, thereby rejecting H2c. Interdepartmental coordination was also significantly related to the independence, objectivity and competence of IA and hence H3a – H3c were supported. As for this research's outcome variable, the results indicate a significant relationship between IA effectiveness (independence, objectivity and competence) and IA quality and hence all three hypotheses (H4a – H4c) were supported.

5. DISCUSSION OF FINDINGS

The study highlighted the key drivers that were associated with IA effectiveness. With the exception of management support, studied in various audit-related contexts, the study also highlighted other drivers (i.e. support and acceptance from auditees and interdepartmental coordination) which have been scarcely explored thus far.

The study found a positive relationship between management support and IA effectiveness (H1a, H1b and H1c), which is consistent with past studies (i.e., Cohen & Sayag, 2010; Alzeban & Gwilliam, 2014). The findings also echo the view of Yismaw and Mihret (2007) that the absence of management support undesirably affects IA effectiveness and performance as it hampers the audit process due to the lack of commitment and priority by the top management. However, Christopher, Sarens and Leung (2009) warn that independence and objectivity can be threatened when the management is strongly involved in developing the IA plan and suggested that the CAE and the IA committee should monitor the impact of top management inputs so as to ensure that it does not affect the independence and objectivity of IA. Top management support and commitment set essential precedents for all constituent members of a company to take the audit process seriously to ensure that the audit process is carried out independently and critically. Apart from ensuring that the audit team receives adequate resources to carry out IA, management support also means that all the auditors are continuously trained and developed so they will have the required competencies to undertake the audit process (Cohen & Sayang, 2010), the lack of which has been proven to negatively affect internal auditing (Ahmed et al., 2009).

The study also found that gaining the support and acceptance of auditees was a vital determinant to ensure that the audit process can be carried out independently and objectively, which has also been substantiated by Chaiwong's (2012) and Yismaw & Mihret's (2007) findings. This will ensure that the auditors have full access to all events, records and documented evidence necessary for effective audits (Yismaw and Mihret, 2007). On the other hand, the support and acceptance of auditees were not associated with the competence of internal auditors. The research posits that the support and acceptance of auditees may not significantly affect the development of the professional and technical skills of the auditors. However, it could be argued that some positive learning opportunities do exist where the development of soft skills is a concern.

The results also implied that interdepartmental coordination, especially between internal auditors and other departments, had a positive influence on IA effectiveness, namely on independence, objectivity, and competence, which is aligned with Chaiwong's (2012) findings. Such interdepartmental relationships will ensure greater coordination, cooperation and most importantly, communication, which are all critical for the smooth running of the internal control assessment exercise. What is more, the ISPPA standard also emphasizes the need to form a professional working association between the audit teams and other parties, which helps the internal auditors to achieve IA goals and provide effective audit outputs. The findings are also consistent with Hunziker's (2017) studies, which found that inter-departmental coordination between internal auditors and other departments led to improved IA efficiency.

The last three hypotheses (H4a-H4c) predicting a positive relationship between IA effectiveness (independence, objectivity and competence) and IA quality were also supported. The findings give clear evidence that independently, objectively and competently carried out IA leads to IA quality, ultimately ensuring that the IA objectives are met and that the IA work was carried out efficiently for improved compliance and continuous improvement (Cohen & Sayag, 2010). This research confirms that competent auditors are able to deliver quality audits, which is consistent with the findings of Fadzil et al. (2005), Alzeban and Gwilliam (2014) and Hunziker (2015) that the improved competencies of auditors coupled with experience (Nudiono & Gamayuni, 2018) can lead to quality audit work. The

findings are also aligned with the code of ethics of IA, emphasising the need for competence, whereas ISPPIA standards clearly state that independence, objectivity and competency are crucial factors that have a strong bearing on quality audit work (IIA, 2016). The IA activity should be independent, objective, and its services should strive to add value and improve an organization's operations on course towards accomplishing its objectives.

6. CONCLUSIONS AND IMPLICATIONS

In a nutshell, this research has provided empirical evidence on the factors (i.e. management support, interdepartmental coordination and support and acceptance of auditees) that were positively related to independence, objectivity and competence, the three building blocks of IA effectiveness. This paper has empirically demonstrated the organizational dynamics (antecedents) that can influence IA effectiveness, which subsequently affects IA quality. The research novelty is evident in the two factors that have been least explored: interdepartmental coordination and the support and acceptance of auditees, which positively predicted IA effectiveness. Conversely, the findings also revealed that the independence, objectivity and competence of IA were able to predict IA quality, thereby confirming the link between IA effectiveness and IA quality. Therefore, the research concludes that management support, interdepartmental coordination, and the support and acceptance of auditees are important determinants of IA effectiveness, which in turn positively influences IA quality.

6.1 Theoretical Implications

In terms of theoretical implications, this research contributes to the growing body of IA literature by highlighting the important drivers and outcomes associated with IA effectiveness. The research added to the corporate governance discourse and addressed the vital research gap highlighted by Lenz & Hahn (2015) from a developing country perspective, where such research has been lacking (Alzeban & Gwilliams, 2014). The findings also uncovered that inter-departmental coordination could affect IA effectiveness, which is a fundamental contribution, as the relationship of internal auditors, auditees and interdepartmental collaboration is a new field of research under-examined in the context of IA thus far (Lenz and Hahn, 2015). In contrast Chaiwong (2012), who found that the support and acceptance of auditees can influence the competency of auditors, this research found that the competency of auditors was not contingent on the support and acceptance of auditees, which from a pragmatic perspective should be within the ambit of management support.

This research contributed to the agency theory by highlighting the crucial factors (management support, support and acceptance of auditees and interdepartmental coordination) that are associated with the independence, objectivity and competence of IA. Close attention to these factors will ensure that the internal auditing exercise will lead to quality audit outcomes, rendering its full value in the best interest of the principals of the company. The boards' (principals') persistent insistence that the managers (agents) adhere to corporate governance principles and commit to internal control initiatives will lead to organizations that are accountable and capable of fulfilling stakeholder requirements. Since the agency theory suggests that the board of directors has an important monitoring function to perform internal control initiatives (Elamer et al. 2018), boards could rightfully use IA to aid in overseeing and monitoring the activities and operations of the organization. With such monitoring and control systems, organizations will attract more shareholders and debt shareholders, who would have better confidence knowing that their interest will be protected (AlHares, 2019).

The study also adds to the institutional theory by highlighting the factors associated with the effectiveness of IA and its effects on quality audit outcomes. Since IA auditors' competency is positively associated with quality audit outcomes, the continued commitment by organizations towards training and developing their internal auditors would raise the standards and professionalism of internal auditors, thereby contributing towards improvement in internal control practices in organizations, exemplifying normative isomorphism. Conversely, the IIA could also rise to the occasion and act as a catalyst for change in promoting best practice and encouraging organizations to put proper structures and systems in place that leads to a culture of governance and internal controls, apart from coercive regulatory forces, i.e. Securities Commission of Malaysia, Audit Oversight Board and Companies Commission of Malaysia. The IIA could forge collaborative and consultative relationships with organizations, training providers and institutions to create awareness about the nature and potential benefits of IA.

6.2 Managerial Implications

Managerial implications can also be derived from this research as the paper explored the factors that can influence the independence, objectivity and competence of the IA team, which in turn affects IA quality, complementing organizational efforts to achieve their goals whilst fulfilling compliance

requirements. Hence, the IA team's principles of independence, objectivity, and professional competency (as emphasised in the ISPPIA standards of IIA) should not be taken lightly by organizations. These are the prerequisites of effective IA that have been shown to influence quality IA outcomes. The outcomes of the quality audit should translate into quality recommendations, thus improving and further strengthening the processes of corporate governance in organizations as specified in the ISPPIA standard '2110 – Governance' which includes: i) promoting good business ethics and values within the organization, ii) improving management processes, performance, controls and accountability, iii) overseeing and communicating risk and control information to appropriate areas of the organization and iv) coordination of activities and the communication of information between the board, internal and external auditors as well as other assurance providers and the management (IIA, 2016). To enhance the quality of audit reports, the board of directors, managers and regulators should continuously ensure that the principles of independence, objectivity and competence are being upheld. A commitment to internal control practices (i.e. internal audit) would certainly help organizations to evaluate the extent to which organizations are able to fulfil their obligations and in the process are able to avoid being subjected to any possible sanction (Porter, 2009).

As for MNC's that are listed in the Malaysian Stock Exchange Board (MSEB), as well as MNC's that are publicly trading in their parent country, the Malaysian Code of Corporate Governance (MCCG) introduced in 2000 (Securities Commission Malaysia, 2020) and the OECD principles of corporate governance (OECD, 2019) can be referred to as a useful tool and guideline to foster the internalization of corporate governance culture. The MCCG was developed based on globally accepted principles and corporate governance practices that go above and beyond the minimum statutes, regulations, and legal enforcement. Although the principles and best practices put forth by MCCG relating to internal control may not be as rigorous as Sarbanes-Oxley, organizations should not downplay the importance of the task and resources required to assess internal control fully. Corporations can also refer to other sources such as the Committee of Sponsoring Organizations of The Treadway Commission's (COSO) 'Internal Control-Integrated Framework' for a more comprehensive understanding of internal control and its relevant practices. This is known to be a reliable basis for external audit attestation of management's control assessment (KPMG, 2004).

This research provides insights to the boards of directors and management of MNCs and the IA Department Manager or the Chief Audit Executive (CAE) on efforts that can be taken to improve IA effectiveness and IA quality. The IA Manager, IA team and the management should take appropriate initiatives to entrench the main factors that have been found to be associated with IA effectiveness in this research, namely management support, the support and acceptance of auditees and interdepartmental collaborations between the IA team and other departments. By putting these considerations into action, organizations will ensure that the audit process is carried out independently and objectively whilst ensuring that the IA department is staffed with highly qualified employees who are consistently trained and developed to conduct IA effectively. Management's commitment and support are essential as the lack of this may send the wrong signal to the auditees and affect auditee attitudes and the level of support accorded in meeting their departments' audit objectives, thereby compromising IA effectiveness and quality audit outcomes. Since the nature, objectives and risks of organizations' businesses vary, the IA manager / CAE can develop an internal audit charter, as advocated by the IIA, describing the purpose, authority and responsibility for internal auditing, which is then presented to the board for approval via the audit committee. The charter is a blueprint or a policy document that specifies independence, objectivity, access, reporting, planning, quality improvement, and approvals (IIA, 2019). This information may also be useful to external stakeholders when evaluating the IA function as part of an organization's overall governance process.

7. LIMITATIONS AND FUTURE RESEARCH

Like any other research studies, this paper also presents some limitations which open up future research avenues. The study only selected 12 MNC's operating within the FIZ of Penang, Malaysia, which may not represent MNC's operating in Malaysia, although the study provides substantial evidence about the drivers and outcomes associated with IA effectiveness. The sample size of 102 respondents was also small owing to the low number of auditors, averaging between 5 in smaller companies to 12 auditors in bigger MNCs; hence, the findings should be treated with caution. Future researchers could consider targeting a larger sample size with more companies involved. Future studies could also be conducted in Malaysian public listed corporations subjected to audit requirements by regulatory bodies to validate further factors associated with IA effectiveness, with a specific emphasis on interdepartmental collaborations and the support of auditees, two factors which are still under-examined. The present model could also be extended in different organizations and country settings for further validation. As IA involves various stages and phases, it opens up possible research avenues to

investigate the factors associated with the effective execution of each stage of the IA for greater clarity on what it would take to ensure that the IA exercise renders the desired value to organizations.

Further research could also be conducted on the specific contents and potential use and benefits of IA reports. Research on how IA reports can enhance governance transparency among internal and external stakeholders is lacking in the ASEAN context. On a different note, researchers could also consider studying the factors that are associated with the effective implementation of internal control systems and internal audits in non-governmental organizations (NGO), which often depend on public funds and donations from individuals and corporations to further their cause, as audit-related research within NGO settings is so far lacking.

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