

## Empirical Review on Factors that Determine an Internal Audit Effectiveness

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### Abstract

*The goal of this study is to give a framework that explains how internal audit effectiveness may be operationalized and what factors can influence that effectiveness. Internal audits have become one of the most important tools for companies to ensure that their processes follow standard standards and standards. Internal audits provide numerous benefits that have been widely documented in the literature. Organizations, on the other hand, find it difficult to measure the performance of internal audits and to understand the aspects that determine audit effectiveness. A systematic literature study was done to identify relevant articles, as well as to gather and synthesize evidence on the operationalization of internal audit effectiveness and the factors that may influence internal audit effectiveness. Following a thorough review of the relevant studies, a comprehensive set of possibly affecting elements was developed. The systematic review's findings are compiled into a framework. The findings of this study will aid in a better understanding of the current status of internal audit effectiveness research, including the elements that influence it, as well as gaps and potential for future research. Understanding how internal audit effectiveness may be measured, as well as the elements that may influence it, can help organizations better understand their current performance and, ultimately, improve it in the future.*

### Keywords

Effectiveness; Internal audit; Antecedents of IAE; IAE



## I. Introduction

Internal auditing (IA) is a critical instrument for monitoring and controlling an organization's governance and operations (IIA, 2010). Initially, the IA role was responsible for ensuring compliance, financial control, and asset protection (Dellai et al., 2016). IA has undergone adjustments in recent years that have resulted in an expansion of its area of activity and a boost in its value-adding capabilities. The Institute of Internal Auditors (IIA) has developed a widely accepted definition of internal auditing. Internal audit effectiveness, or how well an internal audit office performs its duty, is allegedly affected by four factors: internal audit quality, management support, organizational structure, and auditee demographics (Fadzil, Haron, & Jantan, 2005).

Internal auditing is ineffectual, as seen by the numerous financial scandals that have happened in worldwide firms or businesses. Internal auditing is defined as an independent and objective activity that provides a corporation with assurance and insurance about the level of control it has over its operations (Ramamoorti, 2003). Internal audit helps a company achieve its objectives by conducting a systematic and thorough evaluation of the entity's risk management, control, and management systems, as well as making recommendations on how to improve their performance (Daniela & Attila, 2013). Management must commit to executing internal audit recommendations and provide resources to ensure audit effectiveness (Oussii & Boulila, 2020).

Despite these justifications for the benefits of IAs, determining how effective IA activities are and if the benefits have been realized is difficult for businesses. There is a need for reliable, practical, and straightforward indicators that can assist businesses in measuring the efficacy of IAs, as this is an important component of understanding the factors that influence IA quality (Cohen and Sayag, 2010; IIA, 2016). To quantify the degree of objective achievement, or in other words, the efficacy of IAs, IAs should define performance metrics and related assessment criteria based on their business context (IIA, 2016).

There is a substantial body of knowledge on the topic of IA efficacy in the literature, as well as several literature studies that highlight influential elements (Endaya and Hanefah, 2013; Lenz and Hahn, 2015; Lenz et al., 2018). Some of these studies, on the other hand, need to be updated to reflect the current state of the art and practice as shown by new empirical investigations. On the other hand, more recent evaluations (Endaya and Hanefah, 2013; Juwita 2021, Lenz and Hahn, 2015; Lenz et al., 2018) do not use systematic procedures in discovering and assessing sources and published material, and so neglect a number of important empirical investigations. According to Alzeban & Gwilliam (2014), internal audit's traditional purpose has been to monitor internal controls and assure financial compliance. They go on to say that today's internal audit function has expanded to cover risk management as well as a larger consulting role in businesses. The role of internal auditing has evolved in recent years, with two major developments (Vadasi, Bekiaris, & Andrikopoulos, 2020, Sarens, Abdolmohammadi, & Lenz 2012, Widajatun & Kristiastuti, 2020; and D'onza, Lamboglia, & Verona 2015).

The IIA's professional standards (IIA, 2017) are of limited use in this regard. As a result, as a synthesis of existing literature, we need to expand our understanding of the state of the research on the effectiveness of IAs, examine the indicators or metrics used for operationalizing/quantifying the effectiveness of IAs, and comprehend the factors that influence IA effectiveness. This research question was created to address these goals.

**RQ1:** *In the literature, what elements are thought to influence the efficiency of an IAF??*

A systematic literature review (SLR) was conducted to address these RQ, with studies that empirically examined the influence of a set of parameters on IAF efficacy and secondary studies that assessed the existing literature serving as the foundation. A complete range of academic digital libraries was searched for papers published between 2000 and March 2021. After reviewing a variety of types of research on the topic from various settings, the study adopted elements supported by Alzeban & Sawan (2013) and Alzeban & Gwilliam (2014) as potential predictors of IAEF in enterprises. Table 1 highlights the elements that were shown to be significant to IAE in these investigations. Previous research has been done on these factors and how they affect the efficiency of internal auditing.

## II. Review of Literature

With the keyword “determinants of internal audit effectiveness (IAE),” we performed a large search of the literature. I concentrated on major auditing (AAA, AAR, CPA, RJFA, IJAFAE, IJBM. JAAR, MAJ) and accounting research journals (from the German Academic Association for Business Research's latest journal ranking<sup>1</sup>), but also ensured that more remote outlets from a large quest for Google Scholar and Google were included. I then reviewed the names of promising publications and their abstracts. Additionally, in the bibliographies of the listed publications, I considered appropriate studies. I did not, however, scan for working papers and books or book chapters

systematically. The predominant research method is surveyed, and analysis of main determinants provides a comprehensive overview of the survey-based determinants of IAE research. I found related articles to be relevant.

According to the literature, internal audit plays a key role in organizations. Internal audit effectiveness is also examined in the literature (Endaya & Hanefah, 2016), with key pillars outlined for achieving it. According to Dal Mas & Barac (2018) and Kotb, Elbardan, & Halabi (2018), internal audit quality must be increased to achieve audit effectiveness (2020). Evidence of added value and efficacy is one way to be recognized as a valid function in the eyes of key stakeholders. Al-Twaijry, Brierley, and Gwilliam (2003) use institutional theory to explain the findings of two surveys and research interviews concerning internal audits in the Saudi Arabian corporate sector. According to the findings, internal audit is not well-developed. It is found in departments with insufficient resources, a lack of trained individuals, constraints on their degree of independence, a concentration on compliance audit rather than performance audit, and a lack of acceptability by management and auditees, where it does exist. The authors proposed that the state play a more forceful role by encouraging organizations to form internal audit departments and arrange their activities according to internal audit standards, based on institutional theory.

Using a case study of a large public sector higher educational institution in Ethiopia, Mihret & Yismaw (2007) looked at how internal audit quality, management support, organizational setting, auditee qualities, and the interplay between these factors influence internal audit effectiveness. Internal audit quality and management support have a significant impact on audit effectiveness, according to the findings of the study, but organizational setting and auditee characteristics have little impact. Cohen and Sayag's exploratory study (2010) aimed to create a conceptual understanding of internal audit effectiveness in businesses. They developed a scale for evaluating internal auditing efficiency as well as a model of the factors that influence it. Internal auditing is used by 138 Israeli companies, according to the report (a 37 percent response rate). Data on the effectiveness of internal audits were provided by the business' general managers, while data on the factors was provided by their internal auditors. According to the findings, the scale created in this study exhibited good psychometric properties. In correlation and regression studies, top management support was found to be the most important factor of internal audit effectiveness, with organizational independence having a slight influence. In both the public and private sectors, the predictors had the same effect. The study model was able to describe the effectiveness of internal auditing to a large extent.

Shamki & Amur Alhajri (2017) explored the extent to which internal audit effectiveness is influenced by a number of factors in the Omani public sector, including the scope of the audit, the internal auditor's expertise, and senior management's response. Using a questionnaire with four sections and 48 questions for responses from 45 managers and 163 employees at the Public Authority for Social Insurance (PASI) in the Sultanate of Oman, descriptive analysis, correlation analysis, and multiple regressions were used to examine the relationships among the study's variables. Bednarek (2018) aims to know what factors influence the effectiveness of internal auditing. Internal audit effectiveness improves with age; it is regularly monitored; the results of measuring audit performance and self-assessment are used to introduce changes; the audit committee identifies significant risks and sets priorities for annual and strategic audit plans, and the audit committee identifies significant risks and sets priorities for annual and strategic audit plans, and the audit committee identifies significant risks and sets priorities for annual and strategic audit plans, and the audit committee identified

### Framework for Internal Audit Effectiveness

Table 1 shows a synthesis of the existing literature to create an integrated framework for IA effectiveness. The framework takes into account the aspects that have been studied in primary studies and are thought to have an impact on the effectiveness of IAs. Each of the studies we looked at looked into the impact of at least one of these elements on one of the IA efficacy metrics. The Common Body of Knowledge CBOK (IIARF, 2019), a survey series of members of the IIA, provides a thorough study on the state of internal auditing practice. The CBOK 2015 Practitioner Survey (IIARF, 2015) includes a set of metrics that companies can use to assess the effectiveness of their internal audit program.

**Table 1.**

<b>CODE</b>	<b>FACTORS ON IAE</b>
<b>Supply Side</b>	
IAEF1	Competence of the internal audit department
IAEF2	Size of the internal audit department
IAEF3	Organizational setting
IAEF4	Scope limitation
IAEF5	Compliance with applicable standards
IAEF6	Management training ground
IAEF7	Auditee attributes
IAEF8	Internal audit independence
IAEF9	Internal audit objectivity
IAEF10	Conduct risk consulting
IAEF11	Outsourcing internal audit
IAEF12	Quality of audit work
IAEF13	Chief audit executive's leadership style
<b>Demand Side</b>	
IAEF14	Management support for internal audit
IAEF15	Interaction between internal and external audit
IAEF16	Cooperation with the audit committee
IAEF17	Information and communication
IAEF18	Existence of a follow-up process
IAEF19	Supportive control environment
IAEF20	Cultural dimensions

## III. Results and Discussion

### Factors of Internal Audit Effectiveness

This section delves into the specifics of the factors that have been identified as having an impact on the effectiveness of IAs in the extant literature. According to the literature, an effective IA adds value to the business by ensuring that defined procedures, laws, and regulations are followed, as well as providing a chance to improve existing processes (Yee et al., 2008)

We use the approach proposed by Lenz and Hahn, (2015) to classify the potentially significant elements, which divides them into two categories: supply and demand. The supply side refers to elements based on internal auditors' self-assessment, whereas the

demand side refers to aspects involving the opinions of external stakeholders, such as auditees. Cohen and Sayag (2010) agree, citing the environment as an extra part of IA that reflects the connection with other stakeholders. We discovered 20 factors in total from the original research, 13 on the supply side and seven on the demand side. Table 1 lists these factors, as well as the studies that address them. Below is a brief summary of each factor, as well as a discussion of how they are operationalized in the research examined. Following that, there will be a brief discussion of the direction and magnitude of each factor's impact on audit effectiveness.

### **3.1 IAEF1: Competence of the Internal Audit Department**

As represented by the internal auditor, this element alludes to the IA department's proficiency and professional care. Internal auditors must have the knowledge, skills, and other abilities necessary to accomplish their specific obligations, according to the IIA. This is referred to as proficiency. Similarly, "internal auditors must exercise the care and skill that would be anticipated of a reasonably prudent and competent internal auditor," which is referred to as professional care (IIA, 2017). The IA department's competence is one of the most widely studied aspects in the literature, appearing in 22 of the 37 major studies. The competency of staff members is a critical component of effective IA (IIA, 2017). Furthermore, The International Standards for the Professional Practice of Internal Auditing (ISPPA) emphasizes the necessity of the internal auditing team, which must have the appropriate knowledge, skills, and other competences to carry out their duties (Dellai et al., 2016). Some of the primary studies we looked into (e.g., Lenz, R., and Hahn, U. (2015), Mihret, D.G., and Yismaw, A.W. (2007), and Oussii, A.A., and Taktak, N.B. (2018)) link competencies to employee experience, professional qualification, percentage of certified employees, training hours, and educational level. These research relied on questionnaires to determine the internal auditor's competencies, such as the number of years they've worked for the company and the amount of certifications and trainings they've gotten over the years (Nurdiono and Gamayuni, 2018).

### **3.2 IAEF2. Size of the Internal Audit Department**

According to Bednarek (2018), one of the necessary conditions for an internal auditor to conduct efficient IAs is the availability of a sufficient number of trained specialists. Arena and Azzone (2009) suggest that larger internal audit departments would allow internal auditors to rotate, resulting in a more objective audit. As a result, the size of the IA department is seen as a significant aspect that may have an impact on IA efficacy (Chang et al., 2019). The size is also determined by the resources allotted and the amount of money spent on the IA function (Alhajri, 2017). According to Bednarek (2018), the quality of IA is likely to be higher when the audit department has a suitable number of staff members. Arena and Azzone (2009) used the number of employed IA department personnel to determine the size of the department, whereas [S3] used the number of employed full-time-equivalent internal auditors (EMP). However, as Ege, M.S. (2015) points out, the ratio of internal auditors to total personnel in the firm can be more valuable because it provides a normalized statistic for comparison purposes.

### **3.3 IAEF3. Organizational Setting**

Organizational setting includes not only organizational policies and procedures that regulate IA operations, but also organizational profile, internal organization role, and position within the overall organizational context (Mihret and Yismaw, 2007). Clear policy and procedure that are in line with the organization's practices are essential and can have



an impact on the efficiency of the IA (Mihret and Yismaw, 2007). The organization's characteristics, such as politics, role ambiguity, and conflict, are cited as key aspects in Bender, R. (2006)'s study. Several studies (e.g., Dellai, H., Ali, M., and Omri, B. (2016)) have used survey questionnaires to extract various elements of the organizational setting and its impact on IA efficacy. For example, the organizational structure and its ability to provide a framework within which the segregation of roles is defined (Karagiorgos et al., 2011), or the existence (or lack) of defined policies and procedures against which organizational activities are to be measured (Mihret and Yismaw, 2007).

### **3.4 IAEF4. Scope limitation**

The term "audit scope" refers to the "audit's extent and boundaries" (ISO, 2011). Good scope limitation for IA, according to Erasmus et al. (Erasmus and Coetzee, 2018), indicates that no restrictions are placed on IA activities. Internal auditing can look at any area of a company, evaluating every process, system, and document while communicating with all stakeholders. The internal auditor can uncover possible process improvement or uncover nonconformance by specifying the correct scope. In the available literature, a combination of questionnaire items and interviews is utilized to capture the scope constraint of an IA. For instance, the study Arena, M., and Azzone, G. (2009) uses a five-point Likert scale, where "1" refers to the case with no scope limitation, and "5" with extensive scope limitation.

### **3.5 IAEF5. Compliance with Applicable Standards**

Internal auditors who are effective adhere to professional norms (Feizizadeh, 2012). Studies "Adherence to the IIA standard" is cited as an influential factor by Barisic and Tusek (2016). Internal auditors and IA operations should follow the IIA standard for objectivity, competency, and professional care, according to the IIA standard (Dejnaronk et al., 2016). The ISO 19011:2016 standard was also used as a framework for completing audit activities, according to the literature (Beckmerhagen et al., 2004).

### **3.6 IAEF6. Management Training Ground**

The management training ground, according to Dellai et al. (2016), improves IA efficacy since IA activities can be used to train aspiring managers. Internal auditors can gain a deeper grasp of the process, as well as internal controls and a wide range of information, by engaging in IA activities. Researchers, on the other hand, express reservations about this feature, citing the influence that incorporating managers in IAs can have on the independence and objectivity of the IA (Yee et al., 2008). Arena, M., and Azzone, G. (2009) employ the following questionnaire items to capture this characteristic (to be indicated using a five-point Likert scale on "agreement").

- IA is considered for training and preparing employees in the organization;
- IA is considered for the promotion process of employees in the organization; and
- IA is considered a stage in the career development of employees in the organization.

### **3.7 IAEF7. Auditee Attributes**

An auditee, according to ISO 19011:2016, is the organization that is being audited (ISO, 2011). The auditee in this case refers to the people who work for the company. According to Bednarek, P. (2018), auditee qualities include the auditee's proficiency, attitude, and level of collaboration with the auditor. These characteristics also influence audit effectiveness by relating to auditees' capacity to fulfill their objectives. The survey

[S4] asks auditees about their amount of cooperation with auditors, the level of access offered to internal auditors, and their ability to inspect auditee's records.

### **3.8 IAEF8. Internal Audit Independence**

IA independence is seen as a critical factor in IA efficacy (Alzeban and Gwilliam, 2014). Independence is defined as “the freedom from situations that jeopardize the ability of the IA activity to carry out IA tasks in an unbiased manner” in this article (Dejnaronk et al., 2016). Safeguarding tools should be available in the IA department to allow the internal auditor to conduct IA independently (D'Onza et al., 2015). According to D'Onza et al., (2015), the reference document containing the IA department's position in the organization, its rights of access to individuals, and other information, to ensure IA independence, documents, and assets, as well as a document that defines the scope of internal auditing, are beneficial. The lack of independence, according to the research, is a barrier to satisfactory IA performance (Alzeban and Gwilliam, 2014).

### **3.9 IAEF9. Internal Audit Objectivity**

An unbiased mental attitude that permits internal auditors to perform engagements in such a way that they believe in their work output and that no quality compromises are made, according to the definition of objectivity (Dejnaronk et al., 2016). Along with IA independence, objectivity is seen as one of the most important factors in IA effectiveness (Al Matarneh, (2011), Alzeban and Gwilliam, (2014) ). Internal auditors must judge based on evidence acquired during audit activities in order to be objective (Dejnaronk et al., 2016). Despite critiques that the measuring of this component involves a significant amount of subjectivity, the research frequently uses questionnaires with Likert scales to elicit the level of IA objectivity Alzeban and Gwilliam, 2014).

### **3.10 IAEF10. Conduct Risk Consulting**

In recent years, the focus of IA has shifted from traditional compliance and monitoring against particular standards/regulatory requirements to a new approach that emphasizes focusing on and making recommendations for enhancing an organization's performance (Allegrini et al., 2006; Arena and Azzone, 2009). Risk-based auditing is a novel approach to assist organizations to recognize the risks that may prevent them from achieving their goals (Arena and Azzone, 2009). Organizations can set particular controls to manage their risks and, as a result, enhance their operations by understanding their risk profile. As a result, risk management is critical to the success of IA. Arena and Azzone (2009) propose that internal auditors should have a consultancy role to help firms improve their processes and Internal audit effectiveness by creating best practices. However, there are many who oppose this viewpoint, claiming that such consulting services could influence the IA's legitimacy (Lenz and Hahn, 2015).

### **3.11 IAEF11. Outsourcing Internal Audit**

IAs can be managed internally, outsourced to other parties, or a mixture of the two. Dellai et al. (2016) discuss the benefits and drawbacks of outsourcing IAs. While internally organized IAs can help staff acquire skills and expertise in the examined domain, outsourced IAs are thought to promote audit objectivity. In-house IAs are thought to be more expensive, owing to the costs associated with recruiting and training the audit team. On the other hand, with outsourced IAs, the auditors are more likely to lack key knowledge of the business area and corporate culture, which may block their ability to uncover important issues and identify potential changes. The results of interviews with IA

stakeholders are presented in Allegrini et al., (2006), whereas Endaya and Hanefah, (2013) use questionnaire items to capture the impact of outsourcing IAs.

### **3.12 IAEF12. Quality of Audit Work**

Internal auditing quality refers to how internal auditors carry out their duties and evaluate processes in accordance with procedure or standard (Cohen and Sayag, 2010; Rupsys and Boguslauskas, 2007). The term "quality of audit work" also includes "internal audit planning and supervision, fieldwork, recording, reporting, findings, recommendations, and follow-up actions" (Endaya and Hanefah, 2013). Internal auditors are responsible for developing and maintaining quality assurance and improvement program that encompasses all parts of their work (IIA, 2017). Consider the audit work's quality in terms of compliance with internal auditing standards. However, in this SLR, these two elements are differentiated as audit work quality and conformity to IA standard criteria. Other studies use the term IA performance to refer to the audit work's quality. This aspect is regarded as the quality of the audit job for consistency in this SLR. The quality of audit work was examined using questionnaires given to stakeholders based on the primary studies.

### **3.13 IAEF13. Chief Audit Executive's Leadership Style**

The manner the IA is managed by the chief audit executive (CAE) is one of the drivers of the IA's value proposition (D'Onza et al., 2015). According to the literature, the most crucial talent that a CAE should have is leadership (Burnaby et al., 2007). The literature discusses the importance of the CAE's leadership style in setting and driving IA, as well as the impact of the CAE's leadership style on IA effectiveness. Transformational, transactional, and passive/laissez-faire leadership styles are frequently used to describe leadership (Bass, 1999). Transactional leaders use conditional reinforcement to reward followers for meeting expectations, but transformational leaders inspire and intellectually encourage followers to work for the common good rather than their own interests; laissez-faire leadership is considered non-leadership (Bass, 1999; Burns, 1978). The empirical study by D'Onza et al., (2015) shows that CAE leadership style has a substantial impact on IA effectiveness. It also demonstrates that the above-mentioned traditional conception of leadership may not be acceptable or consistent with leaders of professional teams in a regulated environment. The findings show that laissez-faire leadership has limitations in terms of IA effectiveness, and suggest that such leaders become both transformative and transactional, as this has a substantial impact on the success of their IA activities (Dal Mas and Barac, 2018).

### **3.14 IAEF14. Management Support for Internal Audit**

Internal auditors may have a high degree of independence and autonomy, yet their capacity to accomplish their obligations within an organization may be constrained (AlTwaijry et al., 2003; Alzeban and Gwilliam, 2014). As a result, management support is crucial in assisting internal auditors in carrying out their duties (Baheri et al., 2017; Halimah et al., 2012). The support and dedication of top management for internal auditing is critical, as it is for any major effort in a company, particularly in the implementation of audit recommendations. (AlTwaijry et al., 2003). As a result, management support has been identified as a major influencing factor on IA efficacy in various research. Employee perceptions of management support for IAs are often captured by a set of questionnaire items in studies like (Mihret, D.G. and Yismaw, A.W.,2007).



### **3.15 IAEF15. Interaction between Internal and External Audit**

Increased engagement (in the form of cooperative planning, information and report exchange, etc.) between IA and external audit actions has been shown to have a good impact on the literature (Badara and Saidin, 2014). (Alzeban and Gwilliam, 2014). As a result, some research used questionnaire items to investigate the relationship between the level of interaction and the effectiveness of IAs (Mihret, D.G. and Yismaw, A.W. ,2007).

### **3.16 IAEF16. Cooperation with the Audit Committee**

The Internal Auditor and the Audit Committee are two separate control bodies: the Internal Auditor works within the company, while the Audit Committee is made up of members of the board of directors and is responsible for monitoring and evaluating the organization (Arena and Azzone, 2009). Cooperation between the IA and the audit committee is critical for both sides, as it is seen to have an impact on the effectiveness of the IA's actions through the sharing of information and data (Alshbiel, 2017; Bednarek, 2018).

### **3.17 IAEF17. Information and Communication**

The identification, comprehension, and exchange of information in an acceptable form and timeline to achieve the IA objectives are referred to as the information and communication element (Karagiorgos et al., 2011). Furthermore, communications about the IA must include the predetermined objectives and scope, as well as the IA's results, suggestions, and action plans (IIA, 2017). According to Karagiorgos et al., (2011), communication to IA stakeholders (e.g. audit committee, senior management, board of directors) can be verbal or written and includes the audit report as part of the management level communication (Dejnaronk et al., 2016).

### **3.18 IAEF18. Existence of a Follow-Up Process**

The chief audit executive must establish a follow-up process for monitoring previously identified internal control deficiencies and ensuring that management actions have been effectively implemented, or that senior management has accepted the risk of taking no action, according to an IIA performance standard (IIA, 2017). The availability of a follow-up mechanism for the status of audit findings and recommendations, according to studies in the literature, has a beneficial impact on the enhancement of IAF effectiveness (Mihret and Yismaw, 2007; Oussii and Taktak, 2018).

### **3.19 IAEF19. Supportive Control Environment**

Communication with other employees, who often perceive an internal audit as a "company policy," and a better understanding of the internal audit role by management can be facilitated by an environment in which management recognizes the importance of controls and the structures that review their effectiveness (Barisic and Tusek, 2016). The control environment is the set of rules, methods, and structures that serve as the foundation for implementing internal control throughout the business (COSO, 2013). A considerable relationship exists between the quality of IA and the control environment component of the internal control system, according to the study Arena and Azzone, (2009). A supportive control environment, according to Karagiorgos et al. (2011), has a positive impact on IA efficacy. The statements of the COSO framework are widely used to operationalize the elements that describe the supporting control environment (COSO, 2013). Such statements are intended to capture opinions about statements that represent certain aspects of the control environment, such as ethical awareness and management style, level of awareness

of the importance of control, and the existence of enterprise risk management and related monitoring activities.

### 3.20 IAEF20. Cultural dimensions

A number of cross-cultural auditing studies have been reported in the literature, with cultural dimensions – as conceptualized by Hofstede et al. (2010) – serving as the foundation. These investigations frequently reveal major differences in practice based on cultural background (Hughes et al., 2009). The empirical work of Alzeban, A., and Gwilliam, D. (2014) explores the impact of three cultural elements of Hofstede's framework on the quality of internal audits, namely power distance, uncertainty avoidance, and individualism (Alzeban, 2015). The extent to which less powerful members of institutions expect and accept unequal power distribution is referred to as power distance (Hofstede et al., 2010). A larger degree of power distance shows that the institution has obviously created a hierarchy. Uncertainty avoidance is defined as a society's tolerance for ambiguity, in which people embrace or shun an unexpected, unknown, or out-of-the-ordinary event. The degree to which persons in a society are integrated into groups is investigated by individualism (versus collectivism). Individualistic societies have loose links, with most people only knowing their close family (Hofstede et al., 2010). The survey data from 67 chief executive auditors in Alzeban and Gwilliam (2014) demonstrates a positive relationship between higher power distance and uncertainty avoidance, as well as poor IA quality. The findings also demonstrate a link between individuality and higher IA quality, implying that the quality of an IA is largely determined by the accomplishments of the individual internal auditors involved in the process.

### Discussions

We offer a summary of the factors reported in each primary study that are thought to influence IA effectiveness in this part, as well as discuss the findings. We offer an integrated framework based on the findings and explain its mapping to the results presented in the CBOK 2015 Practitioner Survey based on the findings (IIARF, 2015). If the empirical research results reveal that a factor has no statistically significant influence on the effectiveness of an IA, it is termed to have "no correlation." The direction of a statistically "significant effect" can be positive or negative. The direction of a statistically "significant effect" might be either positive or negative. The positive outcome shows a link between the factor and the success of the IA (i.e. an increase in the auditor competence leads to an increase IA effectiveness). The negative effect, on the other hand, points in the other direction. For example, Alhajri, M.O. (2017) discovered that IA independence had a detrimental impact on IA effectiveness. If the empirical study demonstrates that the influence of a factor varies depending on the dependent variable, or that it is only partially supported, the contradicting result is relevant.

Similarly, research by Badara, M.S., and Saidin, S.Z. (2014) show mixed results when it comes to the impact of "conduct risk consulting." Similarly, only a few primary studies provide information on the design steps that were taken into account when creating these objects. The majority of primary research only report on the ultimate outcomes, while a set of studies (i.e. Barisic, I. and Tusek, B. (2016), Cohen, A. and Sayag, G. (2010), and Dikici, A., Turetken, O. and Demirors, O. (2018), report on the pilot tests to validate the questionnaire items prior to the main survey. The analysis of existing works that review IA effectiveness pinpoints specific issues and challenges that demand further investigation in this research field. The early findings indicate an imbalanced emphasis on the perceived IA effectiveness over the objectively measured approach.

## IV. Conclusion

In this study, we used an SLR to look into the indicators that have been utilized in the literature to operationalize or quantify the effectiveness of IAs, as well as to report on the elements that are thought to influence IA effectiveness. The searches were conducted on seven well-known electronic libraries in order to locate potentially relevant papers published between 2000 and 2021. This research has implications for both research and practice. This structured review will be valuable to practitioners who want to improve the effectiveness of IAs done in their businesses. Not only can the indicators and metrics be used to analyze and monitor the efficacy of their audits, but they can also be used to better understand and improve the elements that contribute to the effectiveness of these activities. Researchers should look at our work as a comprehensive resource that provides pointers to the elements studied in the literature as well as a foundation for future research in this field.

Further exploration of these possibly impacting elements should be considered in future research. We focused our research on studies that looked into the aspects that influence IA effectiveness. However, there is a corpus of study that looks into the impact of IA effectiveness/quality, or a number of key criteria of IA effectiveness, on a variety of organizational functions or concepts. For example, the impact of internal audit competence and independence on financial reporting quality (Abbott et al., 2016), and the impact of internal audit quality on the risk of managerial misbehavior (Abbott et al., 2016). (Ege, 2015) or on the earnings management (Prawitt et al., 2009). These papers are not included in our list of primary studies since they present useful and intriguing indicators for the operationalization of IA effectiveness. This is a flaw in our study that could be addressed by future research focusing on empirical studies in the literature that include IA effectiveness/quality as both a dependent and independent variable. This will allow the suggested framework for the operationalization of the term IA effectiveness to include a greater set of indicators and measures.

This systematic literature review contains a number of flaws, the most significant of which is the research approach used. We only looked at empirical studies, and the inclusion and exclusion criteria we employed in this review limited the kind of articles we could look at. Future studies could broaden the scope of the review to incorporate contributions from the grey literature in order to gain a better knowledge of the usefulness of IAs, as well as the factors that influence them and how they are operationalized.

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