

STRATEGIC INTERNAL AUDIT EXCELLENCE AND ORGANIZATIONAL SURVIVAL: AN EMPIRICAL INVESTIGATION OF FINANCE BUSINESSES IN THAILAND

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Abstract: *In the post-GFC business world, internal audit functions have taken centre stage. Anecdotally, managers now appear to hold the belief that an internal audit system focused on excellence that will optimize decision-making, achieve organizational goals, create value and lead to long-term business success. This research aimed to uncover empirical evidence for the impact of strategic internal audit excellence (SIAE) on organizational survival via a composite of mediating variables: best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. A convenience sample of 94 finance firms across Thailand was selected to participate in this survey research. Hypothesized relationships among the variables were analyzed statistically using ordinary least squares (OLS) regression. SIAE was found to have a positive impact on best internal audit practice, internal audit efficiency, and internal audit achievement. Internal audit strategies that focused on excellence were found to be capable of creating value for the internal audit and organizational operations more generally. In particular, best internal audit practice led to a significant positive effect on internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. Moreover, financial reporting quality was discovered to have a significant effect on decision-making success and organizational survival. The benefits of SIAE for efficient and effective internal audit function and organizational survival revealed the value for organizations of aligning their internal control strategies and operations with best practice.*

Keywords: *Strategic Internal Audit Excellence, Best Internal Audit Practice, Internal Audit Efficiency, Internal Audit Achievement, Financial Reporting Quality, Decision-Making Success, Organizational Survival*

1. Introduction

The professional internal audit performs a crucial governance role of protecting and serving the interest of firms by improving the reliability of audit reports. In addition, global business competition demands reliable, high-quality financial reporting and decision-making success. Also, the internal audit is an activity that adds value and supports decision-makers to

ensure an organization's efficient operation. Strategic internal audit efficiency (SAIE) is a core topic of corporate governance (Haat, Rahman, & Mahenthiran, 2008; Daniela & Attila, 2013). In addition, SAIE can effectively assist an organization to achieve and survive.

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Strategic internal audit excellence (SIAE) refers to the ability of an organization to integrate internal audit practices to improve performance beyond the current standard (Barac, Plant & Motubatse, 2009; Fadzil, Haron & Jantan, 2005; Kanellou & Spathis, 2011; Pinto et al., 2013). SIAE comprises several components: internal audit professional orientation, internal audit innovation capability, internal audit learning focus, internal audit integration concern, and internal audit participation awareness.

SIAE standards are derived from the International Standards for the Professional Practice of Internal Auditing and the Chartered Institute of Internal Auditors, as set and maintained by the International Auditing and Assurance Standards Board (IAASB). SIAE creates an adjustment in the internal audit structure to be consistent with changing external factors and the growing demand of stakeholders. Furthermore, excellence in an internal auditing context includes the ability to identify, utilize, and respond to an ever-changing business environment. Auditing competency requires demonstrated possession of: (a) professional knowledge, (b) professional skills, and (c) professional values and ethics. Also, excellence is recognized as a strong indicator of firm performance and success (Onncharoen & Ussahawanitchakit, 2008)

Over the past three decades, the concept of internal audit function has developed a focus on excellence to respond to the administration of internal audit function in order to promote an organization's operational effectiveness and efficiency. For instance, the most widely used definition of audit quality is by DeAngelo (1981, p.186), stating that "the quality of audit services is defined to be the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach".

Over this time, scholars have conceptually reconstructed internal audit

systems and processes for the benefit of entrepreneurs who are interested in improving internal audit outcomes. This has led to a central research question: which internal audit activities add value, and which do not? This field of research has led to the realization by internal auditors that internal audits must be carried out in accordance with professional practice standards for internal audits to deliver organizational success in the form of efficiency and effectiveness of operational performance (Al-Twajjry et al., 2003).

Research in the field of internal audit systems recognizes the valuable role of SIAE and the positive effects that flow from internal audit operations focused on excellence (e.g, Al-Twajjry et al., 2003). However, the literature has lacked a firm empirical basis for answering the question whether an internal audit focused on excellence has an effect on survival of an organization. Hence, this paper aims to examine the effects of SIAE on organizational survival by the development of a theoretical research model, based on a synthesis of the existing literature.

The sample used in this study is finance firms in Thailand. The main reasons are that financial firms are highly regulated with regulations, procedures, conditions or terms of deposit, credit and payment processes, insurance systems, lending processes, not to mention risk management systems associated with the operations of a lending institution (Alic & Rusjan, 2012).

The key concept is to establish a quality assurance framework financial business so that operational practices can be controlled and monitored. Through documentation, procedures, and working processes, people in the organization should be made aware of their responsibilities, as well as procedures to ensure operational excellence and efficiency of internal operations. Organizations must have the training, knowledge, and skills to work with the data record, including checking the operation that is specified in the document, and correcting any error. It includes

guidelines on how to prevent mistakes re-occurring (Alic & Rusjan, 2012; KPMG, 2001).

It is assumed that opinions on, or attitudes toward, the focus on excellence in internal audits will be aligned horizontally and vertically throughout the organization. Accordingly, the motivation of this research is as follows: 1) to focus on firm strategic internal audit excellence; 2) to develop a new dimension of SIAE; and 3) to investigate the SIAE of finance businesses. Furthermore, this research examines the relationship of antecedents and consequences of SIAE. Professional internal audits are essential to develop internal audit strategies and knowledge to adapt to continuously changing business conditions while remaining responsive to stakeholder expectations.

The present study makes several contributions to the literature on SIAE. Firstly, it can help the internal audit manager to integrate internal audit practices to foster efficiency and effectiveness of operational processes. Secondly, it can assist the CEO process choices to make organization-wise decisions that benefit the financial business. Finally, this research examines SIAE from a different perspective to propose new dimensions of SIAE that previous researchers have overlooked.

The remainder of the paper is organized as follows. The next section reviews the related literature and provides the focus of the study by examining the conceptual framework of internal auditing and its effectiveness. The third section presents the research design by providing information on the sample, the development of the survey and the methodology for data analysis. The results of the study are reported and discussed in the fourth section. Then, the fifth section summarizes the paper, presents significant findings of the study and draws conclusions. Finally, the paper discusses the limitations of the study and future research directions.

2. Literature Review

The present study implements the resource-advantage theory to clearly explain SIAE and its effects. This theory is detailed as follows.

Resource-Advantage Theory is widely cited in the research literature. This theory has been emphasizing resource-based competence and strategic management, an approach based on interdisciplinary contributions of Hunt & Morgan (1995, 1997). It is a theory of firm behavior in a context of business competition, which emphasizes the importance of market segmentation and resources (Hunt, 2002). The basic idea is that the resources of each firm are different, which can reduce costs, and lead to superior performance (Hunt, 2010). The key strategy determinant of profitability is based on the view that superior performance and sustainable competitive position depend on the resources of the firm. The key challenge for managers is to turn basic resources into core competencies. Generally, these contributions can be associated with frameworks grounded in three extant paradigms such as the competitive forces paradigm, the strategic conflict paradigm, and the efficiency paradigm, which have given rise to the resource-advantage theory (Hunt & Arnett, 2004; Hunt & Madhavaram, 2006). This research uses the resource-advantage theory as the main theory to explain SIAE, as it is more amenable to testing by the scientific method.

The resource-advantage theory emphasizes the ongoing process of competition (comparative advantage in resources, competitive advantage in the marketplace, and superior financial performance (Hunt & Morgan, 1997). The rationale is that the resources of firms are diverse, unique, and relatively static within the same industry. "Resource-Advantage theory is an evolutionary, disequilibrium-provoking, process theory of competition in which innovation and organizational learning is endogenous. Firms and consumers have imperfect information, and

entrepreneurship, institutions and public policy affect economic performance” (Hunt & Dennis, 2004, p.14). Firms attempt to compare their resource advantage with competitors and identify market positions of competitive advantage in some segments so as to achieve higher financial performance. Resources are divided into tangible and intangible assets available to the firm that are able to efficiently and effectively produce a market offering that has value (Hunt, 1997). Tangible resources are assets that can be quantified such as manufacturing plants, production equipment, and technological resources. In contrast, intangible resources are assets that are unobservable, such as knowledge, skill, experience, reputation, human capital, and patents of know-how (Hunt & Madhavaram, 2006). The resource-advantage theory stresses the value of: (1) market segments; (2) heterogeneous firm resources; (3) comparative advantages/ disadvantages in resources; and (4) marketplace positions of competitive advantage or disadvantage (Hunt & Morgan, 1997). It integrates two theories which are the environmental demand theory and the resource-based theory of the firm (Priem & Butler, 2001, p.35). Moreover, the resource-advantage theory is divided into three parts: (1) resources; (2) market position; and (3) financial performance (Hunt & Morgan, 1997). Also, it places stress on resources, competence, and factor relationships (Wittmann, Hunt & Arnett, 2009), proactive and reactive, that contribute to competitive advantage (Hunt & Arnett, 2003).

In this research, the resource-advantage theory is applied to explain how SIAE, as an intangible strategic resource, can create an advantage for the internal audit process, internal audit outcome, (comprising best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success) and longer term organizational survival.

Strategic Internal Audit Excellence (SIAE)

Internal audit functions help ensure effective internal control and reliable financial reporting (IIA, 2012; PWC, 2009). The audit plan refers to the ability of internal auditors to appropriately use resources for the audit, within time, within the scope of evidence, and is consistent with the level of risk tolerance of the organization (Bedard, et al, 2008).

The plan for the internal audit scheme should aim to build confidence in operations and add value to the organization (Dereli, Baykasoglu & Das, 2007). The plan is reviewed annually with changes considered and approved by all primary stakeholders as appropriate. This is important, given the success of the program relies on alignment of operational goals throughout the business for organization-wide implementation (Ernst & Young., 2003). Further, the plan should be able to respond flexibly and efficiently to any problems as they arise. In addition, it must be linked to a greater future organizational vision. A strategic audit plan reduces risk (Ernst & Young, 2008) and reduces opportunities for fraud and cost overruns (Limmroth, 2012) by guiding the development of the internal audit function. The plan is more than a point-in-time risk assessment. It formally defines the value proposition of the new audit function.

This research study defines SIAE as the ability to use knowledge to integrate practices and perform audits within a context of best practice and professional standards. SIAE helps to build confidence in the auditing function, and adds value to the organization (Hany, Maged & Ahmad, 2015). Furthermore, financial reporting quality is an advanced approach that auditors use to largely eliminate an organization’s financial risk and achieve audit performance (Doyle, Ge & McVay, 2007). Internal control effectiveness improves the reliability of financial reporting (Wittayapoom & Limsuwan, 2012). In addition, internal audit can

procedures of the organization. Using institutional theory and contingency theory the present study's authors have developed a model of SIAE that comprises five dimensions: internal audit professionalism orientation, internal audit innovation capability, internal audit learning focus, internal audit integration concerns, and internal audit participation awareness.

Figure 1
Conceptual Model of Strategic Internal Audit Excellence and Organizational Survival



professional should also be flexible enough to adapt to strategic change management expectations in pursuit of organizational objectives (Ljubisavljevic & Jovanovic, 2011).

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professional conduct and quality of auditing work, as evidenced by feedback from stakeholders (e.g. clients and the wider social community) (Subsomboon & Ussahawanitchakit, 2009).

More specifically, internal audit professionalism orientation refers to the ability of an auditor to provide audit services that require specialized knowledge and expertise, and act with integrity, self-regulation, and high standards of individual behavior, quality of work, and conduct, as evidenced by feedback from stakeholders (such as creditors, investors, and lenders). Within the concept of internal audit professionalism, importance is placed on the quality of audit work. This includes having the verification skills, competence, and experience to conduct internal audits with efficiency and effectiveness, which leads to longer term business success (Sampattikorn, Ussahawanitchakit & Boonlua, 2009).

Strategic professionalism occurs within a context of organizational objectives and procedures. Research proves the internal audit executive, in order to be strategic, must establish a professional orientation based on such characteristics as independent self-regulation, commitment to the needs of clients, as well as principles of accounting and responsibility (Gelb & Strawser, 2001; Sridharan et al., 2002).

Self-regulated independence is important for being viewed as qualified to judge audit work from the viewpoint of an autonomous professional, so as to understand how to control audit work without fear or favor (Karapetrovic & Willborn, 2002).

Additionally, auditing errors can undermine confidence in the quality of service provided by the internal audit professional (Karapetrovic & Willborn, 2002). Where lack of accountability and responsibility are the source of error, they relate to duties, justification, action and consequences, situation, task quality, and obligations of the auditor. A focus on accountability can reduce the potential for

conflict of interest (Parker, 2000). Therefore, a professional internal audit orientation can encourage best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success of the firm. Therefore, the first sets of hypotheses are as follows:

Hypotheses 1a-e: *Internal audit professionalism orientation has a positive influence on: (a) best internal audit practice, (b) internal audit efficiency, (c) internal audit achievement, (d) financial reporting quality, and (e) decision-making success.*

- *Internal Audit Innovation Capability*

In the context of internal auditing innovation, the Chartered Institute of Internal Auditors defines internal audit as the sum total of activities that firms implement to improve operational processes and add value for stakeholders (IIA, 2002). Also, Innovation is defined as the generation and/or acceptance of ideas, processes, products, or services, which the relevant adopting unit perceives as new (Garcia & Calantones, 2002). Innovations consist of two types – incremental and breakthrough. Incremental innovations are changes and improvements on old methods, ideas, products. In contrast, breakthrough innovations are based on concepts that are novel and unique (Garcia & Calantone, 2002). Thus, internal audit innovation capability refers to new or developed internal audit strategies and techniques that internal auditors use to conduct internal audit activities.

Because of corporate scandals, internal auditors have to create and develop audit strategies or techniques to increase the efficiency and effectiveness of their activities. Prior research has studied various elements of internal audit innovation, such as corporate risk evaluation, computer assisted audit techniques (CAAT), and control self-assessment (Samrisakun & Ussahawanitchakit, 2009). Internal Audit Innovation capability assists corporate risk

evaluation by internal auditors, leading to greater productivity from internal audit expenditure, thereby providing higher returns on audit investment (Dittenhofer, 2001a). Computer-assisted audit techniques enhance the audit operation by simultaneously saving time and improving the accuracy of auditing work (Dittenhofer, 2001b).

Also, using CAATs for data analysis may be the best way to identify fraud. By looking for multiple employees using the same bank account, CAATs can help identify ghosts on the payroll, which can increase an auditor's confidence in performing responsibilities and help an organization combat fraud and misconduct (Thomson, 2001).

Control self-assessment contributes significant value to audit efforts and extends to an even greater extent responsibilities to the audit committee and management, in accordance with the IIA standard and Committee of Sponsoring Organizations Report (Martin, Sander & Scalan, 2014). Also, it provides the advantage of collecting invaluable feedback from personnel who are close to the operations and who, in many cases, are aware of problems, but are hesitant to discuss them or suggest improvements. Additionally, internal audit innovation has the advantage of enabling more continuous quality improvement than other internal audits (Karapetrovic & Willborn, 2001).

Therefore, internal audit innovation capability facilitates best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success of the firm. Therefore, the second sets of hypotheses are as follows:

Hypotheses 2a-e: *Internal audit innovation capability has a positive influence on: (a) best internal audit practice, (b) internal audit efficiency, (c) internal audit achievement, (d) financial reporting quality, and (e) decision-making success.*

- *Internal Audit Learning Focus*

The concept of awareness of learning, or metacognition, in an organizational context is the ability of an organization to take appropriate action, whether or not administrative structures and procedures are in place, to encourage learning and use of knowledge gained. Experience creates opportunities to add value to the company's development and utilization of knowledge in the operations of the organization (Li & Ragu-Nathan, 2010; Srichanapun & Ussahawanitchakit, 2013). This learning focus is why managerial guidelines, mechanisms, and management structures are being implemented to promote learning in many firms (Jitnom & Ussahawanitchakit, 2010). Such learning is important because it is needed for firms to respond quickly to changes in their external business environment (Coetzer & Perry, 2008). The conditions and management methods which facilitate this ability to learn comprise five dimensions: 1) vision and mission, 2) a commitment to leadership and empowerment, 3) experiments and returns, 4) effective transfer of knowledge, and 5) teamwork and group problem-solving (Li, & Ragu-Nathan, 2010).

Accordingly, an internal audit learning focus centers on the performance of team members, who are dedicated to professional practice. Ability to learn is manifest in internal audit activities of the global internal auditing profession in several ways, such as providing comprehensive professional educational and developmental opportunities, standards, certification programs, and other professional practice guidance (Arena et al., 2006).

In the context of professional practice by the internal auditors of firms, past research evinces a need to examine all business risks and transactions. Also, the internal audit profession requires access to an integrated knowledge system, which will give him/her full capabilities to audit the business (Rodrigue & Gowda, 2011). In addition, Sung & Chai (2012) concluded that knowledge about the education and training

needs of internal auditors can help them understand what is expected of them in terms of experience and qualifications in order to become a competent internal auditor. In some situations, an internal auditor may lack the depth of knowledge, feedback, and experience that is required to conduct an audit. This inadequacy may be caused by a company that lacks a commitment to education/training, or lacks aptness of staff in training. As a result, it cannot develop optimal operating proficiency (Carpenter et al., 2002; Zahra, Neubaum & Larranet, 2007).

As mentioned, education and training are the major components of internal audit learning that lead to the increased ability to practice accurate and timely internal audits. Additionally, many younger auditors may believe that the skills acquired through educational programs result in an increase of skills, knowledge, and abilities (Seol, Lee & Kim, 2011). Consequently, in this research, the ability of the internal audit function to pursue knowledge and practical experience of the internal audit through education, training, monitoring, and knowledge updates, is associated with the development of knowledge about later professional inspection, and will realize future benefits.

Therefore, internal audit learning focus can enhance and improve SIAE, which leads to the best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. Thus, the third sets of hypotheses proposed are as follows:

Hypotheses 3a-e: *Internal audit learning focus has a positive influence on: (a) best internal audit practice, (b) internal audit efficiency, (c) internal audit achievement, (d) financial reporting quality, and (e) decision-making success.*

- Internal Audit Integration Concerns

Internal auditing integration concern is the creation of an integrated internal audit system for the evaluation of management

system performance, including quality, environmental, health, safety, ergonomics, and financial audit sub-systems (Karapetrovic & Willborn, 2002). Consequently, it decreases the amount of similar-looking assessment and audits. The effort to integrate all compliance allows for documenting and examining a control only once and using it for many different regulations (Lin, Wang & Yu, 2010). Internal auditing integration concerns are likely to produce nothing; nevertheless it has many benefits for a firm.

Moreover, an organization not only competes in local markets, but also competes in the global market. As such, it needs to be compliant with many technical standards and requirements, such as corporate governance and international accounting standards (Karapetrovic & Willborn, 2002). Significantly, internal auditors have a responsibility to examine the compliance of a firm in their professional rules and regulations, such as the quality of financial statements required by international accounting standards, the quality of management systems, and the security of information technology required by the Office of Securities and Exchange Commission (Moorthy et al., 2011).

Additionally, more integrated compliance views, risk information, and quality of auditing is necessary (Ernst & Young, 2013). Internal audit integration concerns should lead an internal auditor to evaluate overall parts and look around the work that s/he assesses. Within the integration of financial statement and information audits, it helps an internal auditor to understand the impact and significance of the control of information technology on financial statements (Chaney & Kim, 2007). To evaluate how processes are automated and, more generally, how applications facilitate the movement of information in relation to their interfacing applications, auditing integration helps internal auditors to identify mistakes in a financial statement caused by programming error.

Thus, internal auditors can increase the confidence of assurance in the accuracy of a financial statement. Deficiency of effective internal audit integration may result in inconsistencies within an audit. The result is a faulty conclusion about the process under evaluation (Laviada, 2006). Accordingly, best internal audit practice makes it easier to find the inefficiencies in the process and easier to evaluate the performance of risk management than a spot focus. This helps firms improve their process and increase the effectiveness of risk management thereby resulting in increased internal audit efficiency and internal audit achievement. Therefore, a focus on internal audit integration can enhance and improve SIAE, which is conducive to best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. Thus, the fourth sets of hypotheses are as follows:

Hypothesis 4a-e: *The greater the internal audit integration concern is, the more likely that firms will achieve higher: (a) best internal audit practice, (b) internal audit efficiency, (c) internal audit achievement, (d) financial reporting quality, and (e) decision-making success.*

- *Internal Audit Participation Awareness*

Internal audit participation awareness refers to the induced ability of all stakeholders, including managers and practitioners, to mention any problems, or give feedback about an organization's operations. It includes awareness of the requirement for teamwork within an organization. Since the introduction of internal audits, regulation and standards have played a pivotal role. An internal audit is conducted in different operating environments and in alignment with the goals of each organization (Rameesh, 2003). As such, different environments may affect the capacity for internal auditing participation (IIA, 2012). Moreover, an organization may seek to establish and manage new internal audit systems for

sustainable competitive advantage, leading to changes in the workplace (Bielinska-Dusza, 2011). This may affect the participation of internal auditing, which requires commitment by personnel to operational standards for the professional practice of internal audits (Lee & Ismail, 2010).

In general, employee participation and engagement in public sector organizations is low (Abdolmohammadi, 2012). Also, worker participation is consistent with greater values, including the right of an employee to be involved in decision-making that affects his/her work environment (Derfuss, 2009). It is still a matter of debate within management research whether participation actually improves outcomes, especially performance.

Therefore, internal audit participation awareness can enhance and improve SIAE, which leads to best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. Thus, the fifth sets of hypotheses are as follows:

Hypothesis 5a-e: *Internal audit participation awareness has a positive influence on: (a) best internal audit practice, (b) internal audit efficiency; (c) internal audit achievement, (d) financial reporting quality, and (e) decision-making success.*

- *Consequences of Strategic Internal Audit Excellence (SIAE)*

The research literature shows that SIAE contributes to the strategic vision of an organization. SIAE provides a point of emphasis for the integrated effort and organizational structures, which lead to decision-making success and superior performance.

- *Best Internal Audit Practice*

In this research, best internal audit practice refers to internal auditing processes that comply with auditing policies, which are consistent with accounting standards

and accepted accounting principles that are transparent and accountable. The best auditing practice suggests that the potential effectiveness of the audit committee results in financial reporting quality and adding financial information and reducing risk to the organization while enhancing the quality of the internal audit (Ninlaphay, Ussahawanitchakit, Boonlua, 2012). Best internal auditing practice affects the quality of financial reporting and the reliability of financial information; reduce corporate risk, and internal audit quality (Sampattikorn, Ussahawanitchakit, Boonlua, 2012). Based on the literature above, best internal audit practice is a potential possibility that affects internal audit efficiency, financial reporting quality, decision-making success, and internal audit achievement.

The reasons for best internal audit practice are clear. Principles of good corporate governance have to be disclosed to assure stakeholders that financial reporting is credible and accurate. It is a consequence of good audit practice, is consistent with auditing guidelines and in compliance with generally accepted accounting standards, leading to transparency and accountability (Yakhor & Dorweiler, 2005). Also, best auditing practice has a significant role in business decisions, assisting with credit applications and correctly improving earnings (Niniyom & Kunsrison, 2011).

Internal audit excellence has certain requirements. Past research shows that best auditing practice includes: records maintenance, efficient accounting systems, and constant monitoring. Bookkeepers should ensure that financial records are kept secure, along with a backup, and are readily available (Ninlaphay, Ussahawanitchakit, & Boonlua, 2012). In addition, best practice audit firms focus on the learning and understanding of accounting standards. The application of knowledge and experience to improve and develop auditing practice work should be included in any guidelines for best auditing practice contributing to the

effectiveness of internal control (Witherell, 2004).

Therefore, best internal audit practice can enhance and improve SIAE, which leads to, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-making success. Thus, the sixth sets of hypotheses are as follows:

Hypothesis 6a-e: *Best internal audit practice has a positive influence on: (a) internal audit efficiency, (b) financial reporting quality, (c) decision-making success, and (d) internal audit achievement.*

- Internal Audit Efficiency

In this research, internal audit efficiency is referred to as the ability and impartiality of an internal audit to measure quality. Thus, internal audit efficiency taps into the ability of firms to save resources, including money and time normally spent on auditing operations, with superior reliability and performance standards (Bailey, Gramling & Ramamoorti, 2003). Efficiency is the ratio of input per output, where input is measured in terms of hours spent per audit report, or years spent per audit report. Highly efficient auditors and officers have “inspiration” to create audit yield with each hour of audit time invested. The core notion is 'time is money' when it comes to time spent in the audit office. General ideas of efficiency may diverge from the particular operationalizations seen here on efficiency auditing. As such, efficiency is only one concept that may be revisited as a dividend of SIAE's multiple potentialities.

Internal audit per se is defined by the individual characteristics of: professional experience, professional certification and training, internal audit management, the size of internal audit operational quality, audit objectives, and goals that help to maximize value and transform the performance of organizations (Savcuk, 2007). If effective, internal control can reduce errors and risks associated with an audit operation, reduce the burden on internal audit systems, and lead to higher quality financial data. Internal audit thus

adds value to firm reputation and credibility (Mihret & Yismaw, 2007), and increases the capacity of an organization to achieve its goals (Prawitt, Smith & Wood, 2009).

Therefore, internal audit efficiency can enhance and improve SIAE, which leads to financial reporting quality, decision-making success, and organizational survival. Thus, the seventh sets of hypotheses are as follows:

Hypothesis 7a-c: *Internal audit efficiency has a positive influence on: (a) organizational survival, (b) financial reporting quality, and (c) decision-making success.*

- Internal Audit Achievement

Audit effectiveness is demanded by an organization's stakeholders. This is particularly true of securities market investors, who need assurance about the effectiveness of audit verification procedures (Dittenhofer, 2001; Karagiourgos, Drouglas & Dimou, 2010). It has been a challenge to extract audit effectiveness from internal control assessment. This shows the importance of stakeholder demands for effectiveness, which can result in improved quality of documentation, including financial statements to investors.

The acceptance of stakeholders also demands proof of qualification, such as a satisfactory major in the Certified Professional Internal Audit of Thailand (CPIAT) by anyone claiming to provide financial reporting services. Also, in the audit profession, and financial reporting more generally, the determining quality of an audit decision is to hand down informed advice. The context of financial statements is concerned with quality information and advice conveyed to stakeholders following the failure of auditing in the lead up to the GFC.

The goal of every organization is to succeed according to its objectives and survive the future. The best way is to base these on long-term perspective, social responsibility, and the welfare of all

stakeholders. This belief is based on the prevailing theoretical assumption post-GFC that a corporation that exercises social corporate responsibility, by aligning corporate strategy throughout the organization, has a competitive advantage that helps it to survive in the long run (Porter & Kramer, 2006). Thus, internal audit achievement of a corporation will improve its ability to attract non-tangible resources, profits, increased performance, and create a competitive advantage, including the satisfaction of needs and wants of stakeholders (Mattingly, Harrast & Olsen, 2009; Ayuso, Rodingues & Ricart, 2006).

In this research, internal audit achievement is the objective, and is operationalized as audit effectiveness in terms of gathering sufficient and appropriate evidence of audit success, regarding risk reduction, internal control effectiveness, and implementation of internal audit standards. Therefore, internal audit efficiency can enhance and improve SIAE, which leads to financial reporting quality, decision-making success, and organizational survival. Thus, the eighth sets of hypotheses are as follows:

Hypothesis 8a-c: *Internal audit achievement has a positive influence on: (a) organizational survival, (b) financial reporting quality, and (c) decision-making success.*

- Financial Reporting Quality

Financial reporting quality means the ability to successfully implement a technique to build quality, satisfaction and accuracy by using the least resources. The technique can be invented and adapted to achieve even better results (IASB, 2012). Ideally, organizational management should attempt to achieve operational efficiency to increase competitive advantage. Operational efficiency is the ability of an organization to operate while economizing resources and increasing quality to achieve organizational objectives and goals. The context of a rapidly changing business

environment makes the challenge even more difficult and increasingly costly. Ongoing changes and intense competition associated with the contemporary business world demonstrate the need for organizations to think in terms of strategic operations (Gelb & Strawser, 2001). Organizational strategies are necessary to achieve the goals of an organization. Strategies for excellence should be imbedded in the strategic auditing plan. Here also belongs the methods for strategy implementation, the vision of the organization's future long-term direction; the mission covering what the organization needs to do to achieve its vision, and having the objective as the goal for realizing its strategies. The internal audit is an instrument, or more specifically, a significant management mechanism in the evaluation of operations and internal controls of an organization. An organization can extract productivity from an internal audit in terms of using scarce administration resources more efficiently, thereby enhancing the value and success of an organization (Biddle, Hilary & Verdi, 2009; Doyle, Ge & Mcvan, 2007;).

In this research, financial reporting quality means the ability to successfully implement a technique to build quality, satisfaction and accuracy by using the least resources. The technique can be invented and adapted to achieve even better results. Therefore, financial reporting quality can enhance and improve goal achievement, which leads to decision-making success, and organizational survival. Thus, the ninth sets of hypotheses are as follows:

Hypothesis 9a-b: *Financial reporting quality has a positive influence on: (a) organizational survival, and (b) decision-making success.*

- *Decision-Making Success*

Decision making has a crucial role in management, particularly when the operation of the organization is multi-dimensional, because decision-making influences long-term business survival

(Chong & Eggleton, 2003; Tzu-Chuan et al., 1998). Furthermore, effective decision-making can be used to improve the working efficiency of the organization and help to increase the potential of the organization (Chenhall, 2003). Thus, decision-making refers to action needed in time to perform operations or to solve problems. Decision-making includes options such as selecting strategies to promote maximum efficiency or best success, while remaining true to the goals of the organization and its stakeholders (Yeshmin & Hossan, 2011). Therefore, if data has quality, the decision-maker will use his/her judgment for decision-making. If data is timely, accurate, and reliable, it will lead to better decision-making. So decision-making refers to the selection of operational guidelines, or option assessment and selection in relevant conditions (Davies, 2009).

Therefore, in this research, decision-making success is defined as correctly choosing an option from a range of possible business operations using quality information that is appropriate, timely, accurate, reliable, and fits within the target market, in order to achieve the business goals of the organization. Therefore, decision-making success can enhance and improve goal achievement, and firm performance, which leads to organizational survival. Thus, the tenth hypothesis is as follows:

Hypothesis 10: *Decision-making success has a positive influence on organizational survival.*

- *Organizational Survival*

The survival of the organization must bring strategy to deploy to ensure an operation that is efficient and effective, leading to the survival of the organization. The status 'survival of the organization' is operationalized as 'continuing from the past to the present and expected to occur in the future'. An internal audit department can practice and encourage strategic thinking in the operations of a successful organization (Pongpearchan & Ussahawanitchakit,

2011). Karagiorgos Dougalds & Giovanis, 2011 has studied the interaction between components of the internal control system and operational audit of hospitality businesses in Greece. Their results suggest that the composition of an internal audit is crucial for the efficiency of an internal audit, which affects the survival and success of the business.

The survival of an organization depends on creative adaptation of an organization (Drogalas & Dimou, 2011). In general, survival can be explained by the how strategy – innovation – and the ability to do the job. In addition, the ability to manage an uncertain business environment is important (Persson, 2004). In the present study, firm survival refers to the ability of an organization to break down the barriers to succeed in a difficult modern business environment, including uncertainty and changes in competition. When an organization has a stable development, its economic growth is more certain in the long run.

3. Research Methods

- *Sample Selection and Data Collection Procedure*

A sample of finance firms was drawn from the total population of organizations in Thailand. Financial businesses in Thailand were selected on the basis that financial firms operate within a highly regulated organizational context, including regulations, procedures, conditions or terms of deposit, credit, insurance systems, payments, loans and, in particular, risk management (Alic & Rusjan, 2012). The key concept is the placement of the financial businesses into a system that assures that the practices can be controlled and monitored. Through documentation, procedures and working processes ensure that people in the organization know their responsibilities, and procedures for operational excellence and efficiency of internal operations. An internal audit department is necessary and useful for organizations, especially large

organizations, with the goal of long-term operational survival. It ensures that organizations have the training, knowledge, and skills to work with the data record, including checking that operations are documented appropriately, and can correct errors. The department should have written guidelines on how to prevent an error re-occurring (Alic & Rusjan, 2012; Kumar & Balakrishnan, 2011; The Bank of Thailand, 2014). Therefore, SIAE can support the operations of a business, and can add value and facilitate long-term survival. The participants in this study were Internal Audit Directors or Internal Audit Managers. The intended sample was 247 financial companies in Thailand, but only 94 were usable. They were selected from the list of the Bank of Thailand (<http://www.bot.or.th>, February, 2015). The effective response rate was 39.66 percent.

Potential non-response bias was tested to detect and reflect possible problems with non-response errors. The assessment and investigation of non-response bias was centered on two different procedures: a comparison of sample statistics and values of the population's demographic information of the firm such as the number of employees, and average annual income. Later, comparison of first-wave and second-wave data, as recommended by Armstrong & Overton (1977). The procedure showed no significant differences.

A questionnaire was used for data collection because the questionnaire is an appropriate instrument and a widely-used method for large-scale data collection (Kwok and Sharp, 1998). The final questionnaires were emailed out in May 2014, accompanied by a cover letter outlining the rationale and aims of the research study.

- *Variables Measurement*

To measure the conceptual model, the researchers used a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). It excluded control variables and showed the number of items,

in order to tap into each variable. Furthermore, all constructs were developed from the definition of each construct. Consequently, the variable measurements of this study are defined as below:

- *Dependent variable*

Organizational survival in this research is defined as developing organizational survival via a corporate strategy that focuses on the needs of stakeholders, cooperation and acceptance of an opinion by all parties, using the five- item scale from Naidoo (2010).

- *Independent variables*

SIAE dimensions, an independent variable in this study, is measured by awareness, confidence, operations analysis, integration techniques, and detection methods. Additionally, SIAE involves professional orientation, internal audit innovation capability, internal audit learning focus, internal audit integration concern and internal audit participation awareness. This construct is developed as a new scale including a twenty-one item scale. Firstly, *internal audit professionalism orientation*, measured by the degree of applying in professional characteristics, skills, competence, independent self-regulation, commitment to management's need, accountability, and responsibility. This construct is developed as a new scale from the definition and literature, including a four-item scale. Secondly, *internal audit innovation capability* is measured by the degree of new or developed technology, techniques, and practices that internal audit uses to conduct internal audit activities. This construct is developed as a new scale from the definition and literature, including a four-item scale. Thirdly, *internal audit learning focus* is measured by the degree of internal auditors' education, training, using new technique and adaptation to achieve efficiency and effectiveness. This construct is developed as a new scale from the definition and literature, including a four-item scale. Fourthly, *internal audit integration concern* is measured by the

degree of emphasizing linkage between all internal audit procedures into one practice in order to achieve many objectives in one auditing time. This construct is developed as a new scale from the definition and literature, including a four-item scale. Lastly, *internal audit participation awareness* is measured by the degree of the auditing attraction, induction and activities of stakeholders, the manager on the practitioner to give any opinion on problems in the operation. This construct is developed as a new scale from the definition and literature, including a five-item scale.

Mediating variables: Firstly, *best internal audit practice* is measured by the degree of audit processes that comply with internal audit policies that are consistent with auditing standards and accepted accounting principles that are transparent and accountable. This construct is developed as a new scale from the definition and literature, including a four-item scale. Secondly, *internal audit efficiency* is measured by the degree of the monitoring of internal controls and risk management systems of the organization according to standards, in accordance with the facts to reduce the risk of fraud in a timely and cost-efficient manner. A four-item scale is adapted from Gatewongsa & Ussahawanitchakit (2013). Thirdly, *internal audit achievement* is measured by the degree to which an internal auditor can perform an audit independently, clearly, and completely by collecting and analyzing information without error or bias. This construct is measured by four items developed as a new scale from its definition and the literature. Fourthly, *financial reporting quality* is measured by the degree of understandability, relevance, comparability and reliability of the financial statement that is presented to increase stakeholder accuracy, completeness and is published in a timely manner. A four-item scale is adapted from Chopset & Ussahawanitchakit, (2013). Lastly, *decision-making success* is

measured by the degree of organization to choose business operations option correctly using quality information in a timely, accurate, and reliable manner, consistent with the target in order to execute business goals of the organization. This construct has emerged as a new scale from the definition and literature, including a six-item scale.

- *Control variables*

The control variables include firm size and firm age, which may affect the relationships between firms and survival.

Firm size. In previous research, the impact of firm size is shown to be an important factor affecting internal audit function (Chow, 1982). On one hand, a large firm has more reporting processes, more employees, and adequate resources for internal audit operations. On the other hand, smaller organizations may have insufficient resources for internal audit operations (Erickson et al., 2010). In this study, firm size is defined as the total invested assets of the firm. It is a dummy variable in which 0 is a firm with total assets equal or lower than 10,000,000,000 baht and 1 is a firm that has total assets more than 10,000,000,000 baht.

Firm age has an impact on internal audit activities. The period of operation affects the activities of the internal audit (Doyle, Ge & McVay, 2007), because the capacity validity. Cronbach's alpha for all variables lies in a range of 0.703-0.908. As a result, the internal reliability of all variables is acceptable. The ordinary least squares (OLS) regression analysis is used to test all

for solving problems in the operation of organizations that has operated a long time will be able to manage better, which is different to recently established organization or smaller operations.

Firm age is reflected in terms of progress and survival after 15 years, if an internal audit department is not doing its job (Agarwal & Gort, 2002). Therefore, firm age was used as a dummy variable in which 0 means that the firm has been in business less than or equal 15 years, and 1 means the firm has been in business more than 15 years (Boonmunewai & Ussahawanitchakit, 2010).

- *Methods*

Reliability and Validity: To test validity, factor analysis was utilized to investigate the underlying relationships. This study used exploratory factor analysis to examine the construct validity of the instrument. Factor loading of each construct of greater than 0.4 indicated appropriate construct validity (Hair et al., 2006). Moreover, the reliability of the measurements was evaluated by Cronbach's alpha coefficients. Cronbach's alpha coefficients were greater than 0.70 (Nunnally & Bernstein, 1994). The results for factor loading and Cronbach's alpha of this study are shown in Table 1. The range of factor loading between 0.504-0.942 indicates that there is satisfactory construct

hypotheses in the framework. OLS deemed appropriately to examine the hypothesized relationships in this study (Aulakh, Masaaki & Hildy, 2000). The following 10 equation models are presented as below:

Table 1
Results of Measure Validation

Variables	n	Factor Loadings	Alpha Coefficient
Organizational Survival (OS)	30	0.710-0.791	0.752
Internal Audit Professional Orientation (IAPo)	30	0.880-0.923	0.908
Internal Audit Innovation Capability (IAIc)	30	0.718-0.829	0.780
Internal Audit Learning Focus (IALf)	30	0.814-0.870	0.866
Internal Audit Integration Concern (IAIo)	30	0.656-0.827	0.768
Internal Audit Participation Awareness (IAPa)	30	0.599-0.864	0.771
Best Internal Audit Practice (BIP)	30	0.694-0.830	0.754
Internal Audit Efficiency (IAE)	30	0.506-0.942	0.744
Internal Audit Achievement (IAA)	30	0.633-0.866	0.772
Financial Reporting Quality (FRQ)	30	0.685-0.722	0.703
Decision- Making Success (DMS)	30	0.581-0.827	0.811

$$\text{Equation 1: BIP} = \alpha_1 + \beta_1 \text{IAPo} + \beta_2 \text{IAIc} + \beta_3 \text{IALf} + \beta_4 \text{IAIo} + \beta_5 \text{IAPa} + \beta_6 \text{FS} + \beta_7 \text{FA} + \varepsilon_1$$

$$\text{Equation 2: IAE} = \alpha_2 + \beta_8 \text{IAPo} + \beta_9 \text{IAIc} + \beta_{10} \text{IALf} + \beta_{11} \text{IAIo} + \beta_{12} \text{IAPa} + \beta_{13} \text{FS} + \beta_{14} \text{FA} + \varepsilon_2$$

$$\text{Equation 3: IAA} = \alpha_3 + \beta_{15} \text{IAPo} + \beta_{16} \text{IAIc} + \beta_{17} \text{IALf} + \beta_{18} \text{IAIo} + \beta_{19} \text{IAPa} + \beta_{20} \text{FS} + \beta_{21} \text{FA} + \varepsilon_3$$

$$\text{Equation 4: FRQ} = \alpha_4 + \beta_{22} \text{IAPo} + \beta_{23} \text{IAIc} + \beta_{24} \text{IALf} + \beta_{25} \text{IAIo} + \beta_{26} \text{IAPa} + \beta_{27} \text{FS} + \beta_{28} \text{FA} + \varepsilon_4$$

$$\text{Equation 5: DMS} = \alpha_5 + \beta_{29} \text{IAPo} + \beta_{30} \text{IAIc} + \beta_{31} \text{IALf} + \beta_{32} \text{IAIo} + \beta_{33} \text{IAPa} + \beta_{34} \text{FS} + \beta_{35} \text{FA} + \varepsilon_5$$

$$\text{Equation 6: IAE} = \alpha_6 + \beta_{36} \text{BIP} + \beta_{37} \text{FS} + \beta_{38} \text{FA} + \varepsilon_6$$

$$\text{Equation 7: IAA} = \alpha_7 + \beta_{39} \text{BIP} + \beta_{40} \text{FS} + \beta_{41} \text{FA} + \varepsilon_7$$

$$\text{Equation 8: FRQ} = \alpha_8 + \beta_{42} \text{BIP} + \beta_{43} \text{IAE} + \beta_{44} \text{IAA} + \beta_{45} \text{FS} + \beta_{46} \text{FA} + \varepsilon_8$$

$$\text{Equation 9: DMS} = \alpha_9 + \beta_{47} \text{BIP} + \beta_{48} \text{IAE} + \beta_{49} \text{IAA} + \beta_{50} \text{FRQ} + \beta_{51} \text{FS} + \beta_{52} \text{FA} + \varepsilon_9$$

$$\text{Equation 10: OS} = \alpha_{10} + \beta_{53} \text{IAE} + \beta_{54} \text{IAA} + \beta_{55} \text{FRQ} + \beta_{56} \text{DMS} + \beta_{57} \text{FS} + \beta_{58} \text{FA} + \varepsilon_{10}$$

4. Results and Discussion

The descriptive statistics and correlation matrix in Table 2, examined potential problems relating to multicollinearity and variance inflation factors (VIF), to provide information on the extent to which non-orthogonality between independent variables might have inflated standard errors. The VIFs range from 1.130-8.309, well below the cut-off value of 10 recommended by Hair et al. (2010), meaning that the independent variables are not correlated with each other. Consequently, there were no substantial multicollinearity problems encountered.

The analysis of descriptive statistics describes the basic characteristics of variables, including mean and standard deviation. The descriptive statistics are used to analyze the basic features of the data in this research. Overall, the range of mean scores for all constructs is 3.979 - 4.448. Table 2 shows the mean scores for all dimensions of SIAE (internal audit professionalism orientation, internal audit innovation capability, internal audit learning focus, internal audit integration concern, and internal audit participation awareness) are respectively: 4.448, 4.182, 4.202, 4.268, and 4.319. Moreover, SIAE has a standard deviation value of 0.503 - 0.555. The results also show that the range of mean scores of SIAE consequences, consisting of best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality

and decision-making success are respectively: 4.207, 4.093, 3.979, 4.145 and 3.975. The standard deviation value of

SIAE consequences is between 0.542 and 0.649.

Table 2
Descriptive Statistics and Correlation Matrix

Variables	IAPo	IAIc	IALf	IAIo	IAPa	BIP	IAE	IAA	FRQ	DMS	OS	FS	FA
Mean	4.448	4.182	4.202	4.268	4.319	4.207	4.093	3.979	4.145	3.975	4.017	n/a	n/a
S.D.	.503	.555	.553	.505	.552	.649	.578	.601	.542	.595	.649	n/a	n/a
IAPo	1												
IAIc	.767***	1											
IALf	.484***	.536***	1										
IAIo	.540***	.565***	.750***	1									
IAPa	.518***	.522***	.738***	.723***	1								
BIP	.635***	.739***	.710***	.765***	.803***	1							
IAE	.481***	.536***	.709***	.753***	.698***	.719***	1						
IAA	.590***	.693***	.704***	.809***	.816***	.784***	.832***	1					
FRQ	.495***	.471***	.493***	.643***	.710***	.631***	.584***	.562***	1				
DMS	.383**	.289***	.468***	.625***	.658***	.553***	.572***	.481***	.630***	1			
OS	.239**	.397***	.377***	.531***	.496***	.432***	.487***	.384***	.624***	.814***	1		
FS	.065	-.015	.237**	.221**	.259**	.157	.226**	.203*	.242**	.135	.080	1	
FA	-.002	.005	.035	.044	.071	.066	.049	.024	.133	.007	.003	.310***	1
*p<.10, ** p<.05, ***p<.01													

The correlation matrix shows the correlations between two variables and verifying multicollinearity problems by intercorrelations among the independent variables. Accordingly, the evidence suggests that they are significantly related to the five dimensions of SIAE between 0.484-0.767, $p < 0.01$. Also, the evidence suggests that they are significantly related to the five dimensions of SIAE and all constructs between 0.239-0.832, $p < 0.01$. The results indicate that most of the correlations are less than 0.80, as recommended by Hair et al. (2010) with some exceptions. The correlation of internal audit achievement on internal audit efficiency is 0.832, internal audit participation awareness on best internal audit practice is 0.803, internal audit integration concern on internal audit

achievement is 0.809, and decision-making success on organizational survival is 0.814.

Table 3, shows the results of the relationships between the first dimension of strategic internal audit excellence and its consequential variables. Firstly, the results show that the evidence relates to internal audit professionalism orientation. The findings indicate that internal audit professionalism orientation has only a significant positive effect on decision-making success (H1e: $\beta_{29} = 0.314$, $p < .05$). This is consistent with Struweg & Meintjet (2000), who states that professional internal can best be viewed as ability in providing quality of services that produce expertise that can lead to decision-making success. *Therefore, Hypothesis 1e is supported.*

Table 3
Results of Regression Analyses

Independent Variables	Dependent Variables				
	BIP	IAE	IAA	FRQ	DMS
IAPo	-.014 (.058)	-.101 (.071)	-.043 (.052)	.147 (.123)	.314** (.132)
IAIc	.311*** (.061)	.102 (.074)	.267*** (.054)	.068 (.128)	.093 (.138)
IALf	.259*** (.061)	.102 (.074)	.267*** (.054)	.068 (.128)	.093 (.138)
IAIo	.376*** (.069)	.367 (.084)	.082 (.062)	.195 (.146)	.544*** (.157)
IAPa	.132* (.068)	.650*** (.082)	.215*** (.061)	.591*** (.142)	.299** (.154)
Control Variables:					
FS	-.065 (.083)	.007 (.100)	.018 (.074)	.149 (.174)	-.038 (.188)
FA	.076 (.079)	-.025 (.096)	-.038 (.071)	.152 (.166)	-.067 (.179)
Adjusted R²	.732	.582	.689	.518	.408
Maximum VIF	3.773	3.773	3.773	3.773	3.773
*p<.10, ** p<.05, ***p<.01, ^a Beta coefficients with standard errors in parenthesis.					

Nevertheless, it has no significant effect on best internal audit practice (H1a: $\beta_1 = -0.014$, $p > .10$), internal audit efficiency (H1b: $\beta_8 = -0.101$, $p > .10$), internal audit achievement (H1c: $\beta_{15} = -0.043$, $p > .10$) and financial reporting quality (H1d: $\beta_{22} = 0.147$, $p > .10$). The possible reason for this is that, sometimes, the process of strategic internal audit does not need to be professional because unexpected problems occur on the way to practices, and these problems may be eliminated by new practices that point to strategic planning. This is consistent with Laohamethanee, Ussahawanitchakit & Boonlue (2013) who note that audit professionalism has no significant effect on modern audit practice, audit knowledge diversity, audit skills excellence, and audit learning competency. Another possible reason is internal auditors who lack of professional experience. Also, responsibilities must be carried out in compliance with standards of ethics. This is consistent with Sudsomboon & Ussahawanitchakit (2009), who note that professionalism should be flexible to allow for procedural adaptation throughout the year. Also, Ljubisavljevic & Jovanovic (2011) note that compliance with laws and

regulations has no effect on financial information, reliability and internal audit efficiency. Consequently, internal audit professionalism orientation has no relationship with best internal audit practice, internal audit efficiency, internal audit achievement, and financial reporting quality. **Therefore, Hypothesis 1e is supported, but Hypotheses 1a, 1b, 1c and 1d are not supported.**

Secondly, hypotheses exist to investigate the relationship between internal audit innovation capability and its consequences. Results indicate that internal audit innovation capability has a significant positive effect on best internal audit practice (H2a: $\beta_2 = 0.311$, $p < .01$) and internal audit achievement (H2c: $\beta_{16} = 0.267$, $p < .01$). These results are consistent with Samritsakul & Ussahawanitchakit (2009) who state that internal audit innovation can best be viewed as ability in providing quality of audit. **Therefore, Hypotheses 2a and 2c are supported.**

However, it has no significant effect on internal audit efficiency (H2b: $\beta_9 = 0.102$, $p > .10$), financial reporting quality (H2d: $\beta_{23} = 0.068$, $p > .10$), and decision-making success (H2e: $\beta_{30} = 0.093$, $p > .10$).

This is consistent with Garcia & Calantone (2002), who state that a common work process causes poor work quality, so internal audit functions should be carefully planned to reduce mistakes and cut costs. Moreover, Sampattikorn & Ussahawanitchakit (2012) reveal that internal audit planning comprehension awareness cannot increase the benefit of financial information and organizational value. **Therefore, hypotheses 2b, 2d, and 2e are not supported.**

Thirdly, hypotheses exist to investigate the relationship between internal audit learning focus and its consequences. The results indicate that internal audit learning focus has a significant positive effect on best internal audit practice (H3a: $\beta_3 = 0.259$, $p < .01$) and internal audit achievement (H3c: $\beta_{17} = 0.575$, $p < .01$). This is consistent with Li & Ragu-Nathan (2010), who state that internal audit learning can best be viewed as ability to provide learning within a firm, and support for professional internal audit activities (Juma, 2006). **Therefore, Hypotheses 3a and 3c are supported.**

Conversely, it has no significant effect on internal audit efficiency (H3b: $\beta_{10} = -0.022$, $p > .10$), financial reporting quality (H3d: $\beta_{24} = -0.201$, $p > .10$), and decision-making success (H3e: $\beta_{31} = -0.050$, $p > .10$). This is consistent with Srichanapun & Ussahawanitchakit (2012) who state that internal audit learning has no positive effect on financial reporting reliability. Moreover, Chopset & Ussahawanitchakit (2013) note that internal audit learning has no influence on financial reporting quality. **Thus, Hypotheses 3b, 3d, and 3e are not supported.**

Fourthly, Table 3 reveals that internal audit integration concerns have a significant positive effect on best internal audit practice (H4a: $\beta_4 = 0.376$, $p < .10$), internal audit efficiency (H4b: $\beta_{11} = 0.367$, $p < .01$), and decision-making success (H4e: $\beta_{32} = 0.544$, $p < .01$). This is consistent with Chaney & Kim (2007), who state that internal audit learning can best be

viewed as ability in providing learning within the firm, and support for professional internal audit activities. This is consistent with Karapetrovic & Willborn (1998), who state that internal audit report value has a significant positive relationship with information integration benefit and organizational value, which leads to more usefulness in making decisions by users. **Therefore, Hypotheses 4a, 4b and 4e are supported,**

Nevertheless, it has no significant effect on internal audit achievement (H4c: $\beta_{18} = -0.082$, $p > .10$), and financial reporting quality (H4d: $\beta_{25} = 0.195$, $p > .10$). Also, the audit integration signals the challenge for internal audit to become more relevant and valuable to the organization (Lenz & Sarens, 2012). **Thus, Hypotheses 4c and 4d are not supported.**

Finally, in light of internal audit participation, awareness has a significant positive effect on best internal audit practice (H5a: $\beta_5 = 0.132$, $p < .10$), internal audit efficiency (H5b: $\beta_{12} = 0.650$, $p < .01$), internal audit achievement (H5c: $\beta_{19} = 0.215$, $p < .01$), financial reporting quality (H5d: $\beta_{26} = 0.591$, $p < .01$), and decision-making success (H5e: $\beta_{33} = 0.299$, $p < .05$). This is consistent with Al-Twaijri, Brierly & Gwilliam (2003), who state that firms with higher participation in internal audit function have greater audit quality. Also, worker participation can help to monitor and ensure performance delivery, best value, and decision-making success (Cho, Fredman & Shin, 2012; Hyman & Mason, 1995). **Therefore, Hypotheses 5a, 5b, 5c, 5d and 5e are supported.**

Overall, these results provide evidence that finance businesses with each dimension of SIAE (internal audit professionalism orientation, internal audit innovation capability, internal audit learning focus, internal audit integration concern, and internal audit participation awareness) have a positive effect on best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, and decision-

making success. *Therefore, Hypotheses 1, 2, 3, and 4 are partially supported but Hypotheses 5 is fully supported.*

For the control variables, firm size, there is no significant influence on best internal audit practice ($\beta_6 = -0.065$, $p > .10$), internal audit efficiency ($\beta_{13} = 0.007$, $p > .10$), internal audit achievement ($\beta_{20} = 0.018$, $p > .10$), financial reporting quality ($\beta_{27} = 0.149$, $p > .10$), and decision-making success ($\beta_{34} = -0.038$, $p > .10$). The possible explanation is that a big firm has the money for investments in technology innovation, research and development in innovation (Chow, 1982), and has more attention to risk monitoring and internal control systems than smaller firms (Erickson et al., 2010)

However, firm age (the period of time operating in an operating business) has a

significant positive influence on financial reporting quality ($\beta_{28} = 0.152$, $p < .05$). The result implies that businesses are affected by firm age, meaning that firms with higher than 15 years in operation have greater financial reporting quality. The result is consistent with Boonmunewei & Ussahawanitchakit (2010) who note that firm age has a positive relationship with valuable, unique decision-making meaning that a new firm has more valuable, individual decision making than a long time operating firm. On the other hand, it has no significant influence on best internal audit practice ($\beta_7 = 0.076$, $p > .10$), internal audit efficiency ($\beta_{14} = -0.025$, $p > .10$), financial reporting quality ($\beta_{28} = -0.038$, $p > .10$), and decision-making success ($\beta_{35} = -0.067$, $p > .10$).

Table 4
Results of Regression Analyses

Independent Variables	Dependent Variables				
	BIP	IAE	IAA	FRQ	DMS
BIP	.759*** (.079)	.896*** (.050)	.696*** (.182)	.418*** (.187)	
IAE			.385*** (.142)	.431*** (.140)	.080 (.156)
IAA			.369*** (.222)	.466*** (.214)	.142 (.115)
FRQ				.378*** (.131)	.229** (.084)
DMS					.710** (.083)
Control Variables:					
FS	.276*** (.166)	.173 (.106)	.241 (.183)	-.010 (.175)	-.120 (.139)
FA	-.079 (.156)	-.122 (.079)	.100 (.181)	-.170 (.172)	-.033 (.137)
Adjusted R ²	.516	.781	.436	.463	.672
Maximum VIF	1.130	1.130	7.304	7.532	3.778
*p<.10, ** p<.05, ***p<.01, ^a Beta coefficients with standard errors in parenthesis.					

Table 4, shows the relationships between best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, decision-making success, and organizational survival.

The evidence in Table 4 indicates that best internal audit practice has a significant positive effect on internal audit efficiency (H6a: $\beta_{36} = 0.759$, $p < .01$), internal audit achievement (H6d: $\beta_{39} = 0.896$, $p < .01$), financial reporting quality (H6b: $\beta_{42} = 0.696$, $p < .01$), and decision-making success

(H6c: $\beta_{47} = 0.418$, $p < .01$). It is in accordance with previous research; best audit practice focus is associated with increases in audit value, audit report quality, and financial information usefulness (Ninlaphay, Ussahawanitchakit & Boonlua, 2012). Moreover, when properly designed, internal audit activities can significantly improve the business as a whole (Witherell, 2004). The internal audit provides managers with useful information for economizing (Yakhor & Dorweiler, 2005). Also, internal auditors provide alerts and warnings of risks that require attention, and track corrective actions (Sampattikorn, Ussahawanitchakit & Boonlua, 2012). **Therefore, Hypotheses 6a, 6b, 6c and 6d are supported.**

Secondly, the results indicate that internal audit efficiency has a significant positive effect on financial reporting quality (H7b: $\beta_{43} = 0.385$, $p < .01$) and decision-making success (H7c: $\beta_{48} = 0.431$, $p < .01$). In this regard, internal audit efficiency is a strategy that can help add value to a firm (Prawitt, Smith & Wood, 2009). This is consistent with Bailey; Gramling & Ramanoorti (2003) who note internal audit efficiency can lead to resource savings and elicit superior performance. **Therefore, Hypotheses 7b and 7c are supported**

In contrast, it has no significant influence on organizational survival (H7a: $\beta_{53} = 0.080$, $p > .10$). The possible explanation is that when an auditor does not understand the organizational objectives, goals, and the importance and value of the process, it leads to incomplete firm performance. This is consistent with Savcuk (2007) who notes that modern internal auditors provide reliable and trustworthy data to assist managers. Moreover, statements on reliability deal with issues related to the extent of assurance provided by an audit, the accounting policies used in the financial statements, the scope of assurance provided by the auditor that the audited financial statements give a true and fair view, the audited report's effectiveness in

communicating the extent of the audit work performed and fraud within the audited entity (Pourheydari & Abousaiedi, 2011). Also, the internal auditors should present information and discoveries in a way that allows decision-makers to make good choices (Kapoor & Brozzetti, 2012). On the other hand, Gramling et al. (2004) argue that when the audit procedure reliability is low, the work performance is not contingent on the level of internal audit function competence or objectivity. Also, Laonamtha, Ussahawanitchakit & Boonlua (2013) reveal that accounting information quality has no effect on decision-making success. Also, Mihret & Yismaw (2007) note that audit findings would not serve much purpose unless management is committed to implementing audit quality. **Hence, Hypothesis 7a is not supported.**

Thirdly, the results indicate that internal audit achievement has a significant positive effect on financial reporting quality (H8b: $\beta_{37} = 0.369$, $p < .01$) and decision-making success (H8c: $\beta_{55} = 0.466$, $p < .01$). **Therefore, Hypotheses 8b and 8c are supported**

However, it has no significant influence on organizational survival (H8a: $\beta_{49} = 0.142$, $p > .10$). This is consistent with Chaikambang, Ussahawanitchakit & Boonlua (2012) who reveal that valuable information specialization has significant effects on decision-making advantage. Also, an internal audit can assist in providing useful information for strategic decision-making (Anderson & Svare, 2013). Moreover, Sampattikorn, Ussahawanitchakit & Boonlua (2012) argue that internal audit information benefit has a significant positive direct effect on organizational value, business performance, and sustained goal achievement. In addition, internal audit quality is a key factor that makes firms successful. It seems then that firms that provide reliable basic information to auditors can help them decide correctly and in a timely manner how to help firms

management, control operations and make effective management decisions, which enhances the value and competitiveness of a firm. **Thus, Hypothesis 8a is not supported.**

Furthermore, the results indicate that financial reporting quality has a significant positive effect on organizational survival (H9a: $\beta_{55} = 0.229$, $p < .05$) and decision-making success (H9b: $\beta_{50} = 0.378$, $p < .01$). This is consistent with financial reporting quality being a key factor that makes firms successful. It seems then that firms that provide reliable basic information to auditors can help them decide correctly and in a timely manner how to help firms manage, control operations and make effective management decisions, which enhances the value and competitiveness of a firm. Also, Chaikambang & Ussahawanitchakit (2012) reveal that valuable information specialization has a significant effect on the quality of decision-making. Also, an internal audit can assist in providing useful information for strategic decision-making (Anderson & Svare, 2013). **Therefore, Hypotheses 9a and 9b are supported.**

Moreover, decision-making success has a significant positive effect on organizational survival (H10: $\beta_{56} = 0.710$, $p < .01$). This is consistent with Chaikambang & Ussahawanitchakit (2012) who reveal that quality decision-making has a significant effect on goal achievement. Furthermore, internal auditing helps to ensure that business decisions and management operations remain consistent with an organization's mission, strategies, and objectives (Yeshmin & Hossan, 2011). **Therefore, Hypothesis 10 is supported.**

Overall, these results provide empirical evidence for the relationships between best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, decision-making success, and organizational survival. **Therefore, Hypotheses 6, 9 and 10 are supported,**

while Hypotheses 7 and 8 are partially supported.

For the control variables, the results indicate that firm size has a significant positive effect on internal audit efficiency ($\beta_{27} = 0.276$, $p < .05$) and financial reporting quality ($\beta_{45} = 0.241$, $p < .05$). This result implies that business is affected by firm size, meaning that firms with assets of more than 10,000,000,000 baht have greater internal audit efficiency. However, firm size has no significant influence on internal audit achievement ($\beta_{40} = 0.173$, $p > .10$), decision-making success ($\beta_{51} = -0.010$, $p > .10$), and organizational survival ($\beta_{57} = -0.120$, $p > .10$) meaning that a new firm has more relative value in terms of firm performance than old firms. New business will find many types of risk (e.g. liability losses, business interruption, and resources losses). They should weigh the importance of potential risks by assessing which method is most likely to identify potential threats to a business (Lackey, 2012). Moreover, new firms are involved in more innovation, more development of new products, and are more amenable to enter new markets, which offers higher returns (Doms, Lewis & Robb, 2010). This is consistent with prior studies, which suggest that firm size can impact firm performance (Prempre & Ussahawanitchakit, 2013). Additionally, Sampattikorn & Ussahawanitchakit (2012) state that firm size has a significant positive effect on some dimensions of best internal audit practices.

However, firm age has no significant effect on internal audit efficiency ($\beta_{38} = -0.079$, $p > .10$), internal audit achievement ($\beta_{41} = -0.122$, $p > .10$), financial reporting quality ($\beta_{46} = 0.100$, $p > .10$), decision-making success ($\beta_{52} = -0.170$, $p > .10$), and organizational survival ($\beta_{58} = -0.033$, $p > .10$). The result is consistent with Chitmun & Ussahawanitchakit (2012) who note that firm age has a negative relationship with

valuable, unique decision-making, meaning that a new firm has more valuable, individual decision-making than a more established firm.

5. Contributions

- *Theoretical Contribution* The results confirm that resource-advantage theory can usefully explain how an internal audit excellence orientation can impact real business phenomena in the context of financial firms. The institutional theory of the firm explains how hypothesized causal links between strategic internal audit variables can engender organizational success and establish firm survival through competitive advantage.

- *Managerial Contribution* The internal audit department should understand and utilize SIAE to improve their internal audit performance. It is a guide for executives to change their operational processes and strategies. Therefore, these findings can be a guide for organizations that want to improve and create efficiency and effectiveness in their operations.

6. Limitations and Suggestions for Future Research

- *Limitations* Although the study results have theoretical and managerial implications for internal audit researchers and practitioners, respectively, some care should be exercised owing to the limitations of this study. Firstly, many respondents were not key informants who could provide a clear understanding of SIAE and its businesses. Respondents were often working in other positions such as Executive Director, executive board member, Accounting Manager, and Chief Financial Officer. Therefore, the results may be influenced by using these data from other groups. Secondly, the data on which these results were based were derived only from Thai financial firms. Thus, these findings may lack generalizability of the SIAE to other businesses (e.g. The Stock of Exchange in Thailand Firms, Small and

Medium sized Enterprises and Governmental Institutions).

- *Suggestion for Future Research* Some of the research hypotheses were unexpectedly disproved. For example, internal audit professionalism does not have a significant effect on best internal audit practice, internal audit efficiency, and internal audit achievement. Another example is the learning focus can moderate only internal audit well-roundedness and internal audit learning focus, but other variables cannot. As a result, further research is needed to investigate the hypotheses that were not found significant for possible alternative explanations that are not immediately clear to the researchers. Moreover, stakeholder expectations do not affect SIAE dimensions and in some cases impact significantly in a negative direction (best internal audit practice, internal audit efficiency, internal audit achievement, financial reporting quality, decision-making success, and organizational survival). Furthermore, the relationships among other (omitted) variables should be investigated further, including internal audit practice quality, risk management effectiveness, success at fraud detection, outstanding operational efficiency, business excellence, and goal achievement. The results show that SIAE has a significant positive effect on best internal audit practice, internal audit efficiency and internal audit achievement. In addition, financial reporting quality has a positive effect of the decision-making success and organizational survival, risk management effectiveness has a positive effect of the business excellence, and fraud error detection success has a positive effect of the business excellence and goal achievement. Moreover, business excellence and goal achievement have a strong positive effect on firm survival. Future research should investigate these hypotheses using in-depth interviews or focus groups in each firm. The usefulness

of the SIAE scale should be confirmed by applying it to different auditor populations (e.g. governmental auditors) or different firm samples (e.g. collect company data from The Stock Exchange of Thailand, or select firms from a different population in another country) in order to widen the generalizability of findings. Furthermore, the new scale should be explored and developed by applying different approaches such as in-depth interviews of the internal audit managers in each firm, in order to create and confirm true construct measurements and all relationships of this model. However, this study's focus was on investigating the relationships among business excellence, goal achievement, and firm survival. The key research question was how internal audit excellence orientation effects business success and firm survival used a sample of finance firms. A key finding was that the internal audit director or internal audit manager informant is a significant factor affecting the integrity of audit information for analysis in order to convey to an organization a true understanding of its business potential.

References

- Aaker, D.A., Kumar, V. & Day, G.S. (2001). *Marketing Research*, New York: John Wiley & Sons.
- Abdolmohammadi, M. J. (2012). Chief Audit Executives' Assessment of Internal Auditors' Performance Attributes by Professional Rank & Cultural Cluster. *Behavioral Research in Accounting*, 24(1), 1-23.
- Agarwal, R. & Gort, M. (2002). Firm Product Life Cycles and Firm Survival. *American Economic Review*. 92: 184-190.
- Alic, M. & Rusjan, B. (2010). Contribution of the ISO 9001 Internal Audit to Business Performance. *International Journal of Quality & Reliability Management*, 27(8), 916-937.
- Al-Twaijry, A.A., Brierley, J.A. & Gwilliam, D.R. (2003). The Development of Internal Audit in Saudi Arabia: An Institutional Theory Perspective. *Critical Perspectives on Accounting*, 17, 507-531.
- Arena, M., Reinhart, C., & Vázquez, F. (2006). The Lending Channel in Emerging Economics: Are Foreign Banks Different? (No. w12340). *National Bureau of Economic Research*.
- Armstrong, S.J. & Overton, T.S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396-402.
- Aulakh, P.S., Masaaki, K. & Hildy, T. (2000). Export Strategies and Performance of Firm from Emerging Economies: Evidence from Brazil, Chile, and Mexico. *Academy of management Journal*, 43(3), 342-361.
- Ayuso, S., Rodriguez, M.A. & Ricart, J.E. (2006). Using Stakeholder Dialogue as a Source for New Ideas: A Dynamic Capability Underlying Sustainable Innovation. *Corporate Governance: The International Journal of Business in Society*, 6(4), 475-490.
- Bailey, A.D., Gramling, A.A. & Ramamoorti, S. (2003). Research Opportunities in Internal Auditing. *Institute of Internal Auditors Research Foundation*.
- Barac, K., Plant, K. & Motubatse, K.N. (2009). Perceptions on the value added by South African Internal Audit Functions. *African Journal of Management*, 3(13).
- Bedard, J.C., Deis, D.R., Curtis, M.B. & Jenkins, J.G. (2008). Risk Monitoring & Control in Audit Firms: a Research Synthesis. *Auditing: A Journal of Practice & Theory*, 27(1), 187-218.
- Biddle, G.C., Hilary, G. & Verdi, R.S. (2009). How does Financial Reporting Quality Relate to Investment Efficiency?. *Journal of Accounting & Economics*, 12, 112-131.

- Bhasin, M. (2009). Corporate Governance & Transparency Scenario: An Empirical Study of Asia. *International Review of Business Research Papers*, 5(6), 269-297.
- Boonmunewai, S., & Ussahawanitchakit, P. (2010). Internal Audit Competency, Organizational Outcomes, and Firm Success: An Empirical Evidence from Thai-listed Firms. *Journal of International Management Studies*, 10(4), 1-26.
- Carpenter, T.D. (2007). Audit Team Brainstorming, Fraud Risk Identification & Fraud Risk Assessment: Implications of SAS No. 99. *The Accounting Review*, 82(5), 1119-1140.
- Chaney, C., & Kim, G. (2007). The Integrated Auditor, *Internal Auditor*, 64(4), 46-51.
- Chenhall, R.H. (2003). Management Control Systems Design within its Organizational Context: Findings from Contingency-Based Research & Directions for the Future. *Accounting, Organizations & Society*, 28, 127-168.
- Chong, V.K. & Eggleton, I.R.C. (2003). The Decision-Facilitating Role of Management Accounting Systems on Managerial Performance: The Influence of Locus of Control & Task Uncertainty. *Advances in Accounting*, 20, 165-197.
- Chow, C.W. (1982). The Demand for External Auditing: Size, Debt and Ownership Influences, *The Accounting Review*, 57(2): 272-291.
- Coetzer, A. & Perry, M. (2008). Factors Influencing Employee Learning in Small Businesses. *Education Training*, 50(8/9), 648-660.
- Daniela, P. & Attila, T. (2013). Internal Audit versus Internal Control & Coaching. *Procedia Economics & Finance*, 6, 694-702.
- Davies, M. (2009). Effective Working Relationships between Audit Committees and Internal Audit, the Cornerstone of Corporate Governance in Local Authorities. A Welsh Perspective. *Journal of Management and Governance*, 13, 41-73.
- DeAngelo, L.E. (1981). Auditor Size & Audit Quality. *Journal of Accounting & Economics*, 3(3), 183-199.
- Dereli, T., Baykasoglu, A. & Das, S.A. (2007). Fuzzy Quality-Team Formation for Value Added Auditing: A Case Study. *Journal of Engineering & Technology Management*, 24, 366-394.
- Derfuss, K. (2009). The Relationship of Budgetary Participation on Reliance on Accounting Performance Measures with Individual-level Consequent Variable: a Meta-Analysis. *European Accounting Review*, 18(2), 203-239.
- Dittenhofer, M. (2001a). Internal Auditing Effectiveness: An Expansion of Present Methods. *Managerial Auditing Journal*, 16(8), 443.
- _____. (2001b). Performance Auditing in Governments. *Managerial Auditing Journal*, 16(8), 438.
- Doyle, J., Ge, W. & McVay, S. (2007). Determinants of Weaknesses in Internal Control over Financial Reporting. *Journal of Accounting & Economics*, 44, 193-223.
- Erickson, K. I., Raji, C. A., Lopez, O. L., Becker, J. T., Rosano, C. and Newman, A. B. (2010). Physical Activity Predicts Gray Matter Volume in Late Adulthood: The Cardiovascular Health Study. *Neurology*, 75, 1415-1422.

- Ernst & Young. (2008). Escalating the Role of Internal Audit, *Ernst & Young's 2008 Global Internal Audit Survey*, Ernst & Young. London: s.n.
- _____. (2013). *Key Considerations for Your Internal Audit Plan*. Enhancing the risk assessment & addressing emerging risks, Insights on governance, risk & compliance. S.l.: s.n.
- Fadzil, F.H., Haron, H. & Jantan, M. (2005). Internal Auditing Practices & Internal Control System. *Managerial Auditing Journal*, 20(8), 844-866.
- Fredrick, O.S., Gideon, O.A. & Narkiso, O.O. (2014). An Analysis of the Role of Internal Audit in Implementing Risk Management- a Study of State Corporations in Kenya. *International Journal of Business & Social Science*. 5(6), 169-176.
- Gelb, D.S. & Strawser, J.A.(2001). Corporate Social Responsibility & Financial Disclosures: an Alternative Explanation for Increased Disclosure. *Journal of Business Ethics*, 33(1), 1.
- Garcia, R. & Calantone, R. (2002). A Critical Look at Technological Innovation Typology & Innovativeness Terminology: A Literature Review. *Journal of Product Innovation Management*, 19(2), 110-132.
- Haat, M.H., Rahman, R.A. & Mahenthiran, S. (2008). Corporate Governance, Transparency & Performance of Malaysian Companies. *Managerial Auditing Journal*, 23(8), 744-778.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2006). Multivariate Data Analysis. *Pearson Education International*, 1(2): 12-18.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis: A global perspective*. 7th ed. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Hany, E., Maged, A., & Ahmad, G. (2015). The Dilemma of Internal Audit Function Adaptation: the Impact of ERP & Corporate Governance Pressures. *Journal of Enterprise Information Management*, 28(1), 93-106.
- Hunt, S.D. (1997). Resource-Advantage Theory: An Evolutionary Theory of Competitive Firm Behavior. *Journal of Economic Issues*, 1, 59-77.
- _____. (2003). The Resource-advantage Research Program. Working Paper, Lubbock TX: Marketing Department, Texas Tech University.
- _____. (2010). Marketing Theory; Foundations, Controversy, Strategy, Resource-Advantage Theory. Armonk, NY; M, E, Sharpe.
- _____. (2013). A General Theory of Business Marketing: R-A theory, Alderson, the ISBM Framework, & the IMP Theoretical Structure. *Industrial Marketing Management*, 42, 283-293.
- Hunt, S.D. & Arnett, D.B. (2003). Resource-Advantage Theory & Embeddedness: Explaining R-A Theory's Explanatory Success. *Journal of Marketing Theory & Practice*, 11(1), 1-17.
- _____. (2004). Market Segmentation Strategy, Competitive Advantage, & Public Policy: Grounding Segmentation Strategy in Resource-Advantage Theory. *Australian Marketing Journal*, 12(1), 7-25.
- Hunt, S.D. & Morgan, R.M. (1995). The Comparative Advantage Theory of Competition. *Journal of Marketing*, 59(2), 1-15.
- _____. (1997). Resource-advantage Theory: A Snake Swallowing Its Tail or General Theory of Competition. *Journal of Marketing*, 61(4), 74-82.

- Hunt, S.D. & Madhavaram, S. (2006). Teaching Marketing Strategy: Using Resource-advantage Theory as an Integrative Theoretical Foundation. *Journal of Marketing Education*, 28(2), 93-105.
- International Accounting Standards Board (IASB). (2012). *Framework for the Preparation & Presentation of Financial Statement*. London: UK.
- Institute of Internal Auditors. (IIA). (2012). International Standards for the Professional Practice of Internal Auditing. The Institute of Internal Auditors. Altamonte Springs, FL. n.p.: n.p. 10 March 2015.
- _____. (2014). *Institute of Internal Auditors*. [online]. From: www.theiia.org/index [Accessed 3 February, 2015].
- IIA Professional Guidance. (2002). Recommendation for Improving Corporate Governance. *Internal Auditor*, 59(3), 68.
- Consequences. *Review of Business Research*, 13(3), 123-150.
- Jitnom, S. & Ussahawanitchakit, P. (2010). Strategic Learning Capability, Firm Performance and Sustainable Growth: An Empirical Study of Auto Spare Part Manufacturing Businesses in Thailand. *International Journal of Business Strategy*, 10(4), 107-131.
- Karagiorgos, T., Drogalas, G. & Dimou, A. (2010). Effectiveness of Internal Control System in the Greek Bank Sector. *The South European Review of Business Finance & Accounting*, 6(2), 1-11.
- Karapetrovic, S. & Willborn, W. (2002). Self-audit of Process Performance. *International Journal of Quality & Reliability Management*, 19(1), 24-45.
- Kanellou, A. & Spathis, C. (2011). Auditing in Enterprise System Environment: a Synthesis. *Journal of Enterprise Information Management*, 24(6), 494-519.
- KPMG, (2001). *Understanding Enterprise Risk Management – An Emerging Model for Building Shareholder Value*. S.l.: s.n.
- Kwok, W.C., & Sharp, D.J. (1998). A Review of Construct Measurement Issues in Behavioral Accounting Research. *Journal of Accounting Literature*, 17, 137-174.
- Laohamethanee, W., Ussahawanitchakit, P. & Boonlua, S. (2013). Internal Audit Skepticism & Firm Value of Thai-Listed Firms: An Empirical Investigation of Its Antecedents & Consequences. *Review of Business Research*, 13(3), 123-150.
- Laonamtha, U., Ussahawanitchakit, P., & Boonlua, S. (2013). Modern Cost Management Capability and Firm Performance: An Empirical Assessment of Auto Parts Businesses in Thailand. *Review of Business Research*, 13(4), 77-102.
- Laviada, A.F. (2006). Internal Audit Function Role in Operational Risk Management. *Journal of Financial Regulation & Compliance*, 15(2), 143-55.
- Lee, D. & Ismail, I. (2010). Internal Audit Practices of Listed Construction Companies in Malaysia: some Preliminary Evidence. *Internal Auditing & Risk Management*, 3(19), 65-73.
- Li, K. & Ragu-Nathan. (2010). Development and Validation of Learning Capability Construct in IOS Supply Chain Network Context. *Working paper*. <<http://www.decisionsciences.org/Proceedings/DSI2008/docs/253-9820.pdf>>15 February 2014.
- Limmroth, P.S., (2012). Internal Audit and Compliance as a Combined Function: Lessons Learned. *Journal of Health Care Compliance*, 27-32.
- Lin, Y., Wang, Y. & Yu, C. (2010). Investigating the Drivers of the Innovation in Channel Integration and Supply Chain Performance: A Strategy Orientated Perspective.

- International Journal of Production Economics*, 127(2), 320-332.
- Ljubisavljevic, S. & Jovanovic, D. (2011). Empirical Research on the Internal Audit Position of Companies in Serbia. *Economic Annals*, 191, October-December.
- Martin, K., Sanders, E. & Scalan, G. (2014). The Potential Impact of COSO Internal Control Integrated Framework Revision on Internal Audit Structured SOX Work Programs. *Research in Accounting Regulation*, 26(1), 110-117.
- Mattingly, J.E., Harrast, S.A. & Olsen, L. (2009). Governance implications of the effects of stakeholder management on Naidoo, V. (2010). Firm Survival through a Crisis: the Influence of Market Orientation, Marketing Innovation and Business Strategy. *Industrial marketing management*, 39(8), 1311-1320.
- Ninniyom, P. & Kunsrisom, R. (2011). The Role of Accounting Best Practice Efficiency in Accounting Information Effectiveness on Thai Food Business Success. *Review of Business Research*, 11, 156-165.
- Ninlaphay, S., Ussahawanitchakit, P. & Boonlua, S. (2012). Internal Control System Effectiveness and Ongoing Firm Sustainability: Evidence from Financial Businesses in Thailand. *Journal of International Finance & Economics*, 12(4).
- Nunnally, J.C. and Bernstein I.H. (1994). *Psychometric Theory*. New York: McGraw-Hill, 1994.
- Ooncharoen, N. & Ussahawanitchakit, P. (2008). Building Organizational Excellence and Business Performance of Hotel Business in Thailand: Effects of Service Culture and Organizational Characteristics. *International Journal of Business Research*, 8(3), 13-26.
- Parker, S.K. (2000). From Passive to Proactive Motivation: The Importance of Flexible Role Orientations and Role financial reporting. *Corporate Governance*, 9(3), 271.
- Meintjes, C., & Niemann-Struweg, I. (2009). The Role of a professional body in professionalization: The South African Public Relation Case. *Prism*, 6(2).
- Mihret, D.G. & Yismaw, A.W. (2007). Internal Audit Effectiveness an Ethiopian Public Sector Case study. *Managerial Auditing Journal*, 22, 470-484.
- Moorthy, K.M., Zulkifflee M., Seetharaman, A., Gopalan, M. and San, L.H. (2011). The Impact of Information Technology on Internal Auditing. *African Journal of Business Management*, 5(9), 3523-3539.
- Breadth Self-Efficacy. *Applied Psychology: An International Review*, 49, 447-469.
- Persson, H. (2004). The Survival and Growth of New Establishments in Sweden 1987-1995, *Small Business Economics*. 23(5): 423-440.
- Pinto, J., Pereira, Moniana, A.C., Reinaldo, M. & Peters, S. (2014). Role of Internal Audit in Managerial Practice in Organizations. *African Journal of Business Management*, 8(2), 68-79.
- Pongpearchan, P. & Ussahawanitchakit, P. (2011). Strategic Entrepreneurship Management Competency and Firm Success: A Comparative Study of SMEs in Auto and Electronic Parts in Thailand. *International Journal of Business Strategy*, 11(2), 1-31.
- Prawitt, D.F., Smith, J.L. & Wood, D.A. (2009). Internal Audit Quality and Earnings Management. *The Accounting Review*, 84(4), 1255-1280.
- Priem, R.L. & Butler, J.E. (2001). Is the Resource-Based "View" a Useful Perspective for Strategic Management Resource?. *Academic of Management Review*, 26(1), 22-40.
- PWC, Pricewaterhouse Coopers. (2009). *Business Upheaval: Internal Audit Weighs its Role Amid the Recession and Evolving Enterprise Risks*. New York:

- State of the Internal Profession Study, PwC.
- Sampattikorn, S., Ussahawanitchakit, P. & Boonlua, S. (2012). Best Internal Audit Practices and Goal Achievement Sustainability: An Empirical Examination of Thai-listed Firms. *Journal of International Business and Economic*, 13(5), 40-66.
- Rodrigues, G. & Gowda, P. (2011). A Study of Organizational Climate In Professional College Libraries and Information Centres in Mangalore City. *Annals of Library and Information Studies*, 58, 24-33.
- Savcuk, O. (2007). Internal Audit Efficiency Evaluation Principles. *Journal of Business Economics and Management*, 8(4), 275-284.
- Seol, H., Lee, S. & Kim, C. (2011). Identifying New Business Areas Using Patent Information: A DEA and Text Mining Approach. *Expert Systems with Applications*, 38(4), 2933-2941.
- Srichanapun, P., Ussahawanitchakit, P. & Boonlua, S. (2013). Internal Audit Proficiency and Firm Goal Achievement: An Empirical Investigation of Thai-listed Firms. *International Journal of Business Research*, 13(2), 111-136.
- Sridharan, U.V., Caines, R.W., McMillan, J. & Summers, S. (2002). Financial Statement Transparency and Auditor Responsibility: Enron and Andersen. *International Journal of Auditing*, 6(3), 277-286.
- Subsomboon, S. & Ussahawanitchakit, Phapruke. (2009). Professional Audit Competencies: The Effects on Thai's CPAs Audit Quality, Reputation, and Success. *Review of Business Research*, 9(3), 66-85.
- Sumritsakun, C. & Ussahawanitchakit, P. (2009). Internal Audit Innovation and Firm Stability of Thai Listed Company; How Do Implement in an Organization?. *Journal of Academic of Business and Economics*, 9(4).
- Sung, S.Y. & Choi, J.N. (2012). Effects of Team Knowledge Management on the Creativity and Financial Performance of Organizational Teams. *Organizational Behavior and Human Decision Processes*, 118(1), 4-13.
- Thompson, C. (2001). CAAT Can Do. *The Internal Auditor*, 58(3), 73, 2001.
- Tzu-chuan, C., Robert, G., Powell, D., & Powell, P.L. (1998). An Empirical Study of the Impact of Information Technology Intensity in Strategic Investment Decisions. *Technology Analysis & Strategic Management*, 10(3), 325-338.
- Wittayapoom, K. & Limsuwan, S. (2010). The Relationships between Internal Audit Quality and Organizational Effectiveness of Thai-Listed Firms. *Journal of International Management Studies*, 10(3), 194-206.
- Witherell, B. (2004). Corporate Governance: Stronger Principles for Better Market Integrity. *The OECD Observer*, 243, 41-43.
- Wittmann, C.M., Hunt, S.D. & Arnett, D.B. (2009). Explaining Alliance Success: Competences, Resources, Relational Factors, and Resource-advantage Theory. *Industrial Marketing Management*, 38, 743-756.
- Yakhori, M., & Dorweiler V.P. (2005). Corporate Governance Reform: Impact on Accounting and Auditing. *Corporate Governance*, 5(1), 39-44.
- Yeshmin, F. & Hossain, M.A. (2011). Significance of Management Accounting Techniques in Decision-making: An Empirical Study on Manufacturing Organizations in Bangladesh. *World*, 1(1), 148-164.
- Zahra, S.A., Neubaum, D.O. & Larrañeta, B. (2007). Knowledge Sharing and Technological Capabilities: The Moderating Role of Family Involvement. *Journal of Business Research*, 60(10), 1070-1079.