# AUDIT RENEWAL STRATEGY AND AUDIT PERFORMANCE: AN EMPIRICAL ANALYSIS OF CPAs IN THAILAND

Thanniti Jiraphatthanaponsin<sup>1</sup>, Sutana Boonlua<sup>2</sup> and Suparak Janjarasjit<sup>3</sup>

Abstract: This research investigates the effect of five dimensions of audit renewal strategy on best audit practice, audit information advantage, audit professionalism effectiveness, and audit performance. The relationships between the audit renewal strategy and its consequences can be explained by the dynamic capabilities theory. The research instrument includes a mailed survey questionnaire to 1,925 Certified Public Accountants (CPAs) in Thailand. Of the 395 questionnaires, 391 were deemed useable yielding a response rate of 22.47%. The results showed that audit development continuity, audit concept change, audit process flexibility, and audit learning dynamism have a positive and significant effect on the following audit outcomes: best audit practice, audit information advantage, and audit professionalism effectiveness. Similarly, audit outcomes have a positive significant effect on audit performance. Moreover, the findings provide an important tool for audit renewal strategy that will help auditors to survive in the audit market. As a result, audit renewal strategy is the main driver for enhancing audit performance in order to progress within the audit profession.

JEL Classification: M40, M41, M42

**Keywords:** Audit renewal strategy, best audit practice, audit information advantage, audit professionalism effectiveness, audit performance

# 1. INTRODUCTION

Continual movement in the world economy causes high levels of competition among businesses and their investments which, in turn, lead to more complicated business structures. This phenomenon is reflected in the expansion and growth of businesses resulting in labour outsourcing and redundancies (Radu, 2011 and Shih and Jue, 2006). As a result, business

Thanniti Jiraphatthanaponsin, Mahasarakham Business School, Mahasarakham University, Kantarawichai, Mahasarakham 44150 Thailand, E-mail: thanniti.aa@gmail.com

Sutana Boonlua, Mahasarakham Business School, Mahasarakham University, Kantarawichai, Mahasarakham 44150 Thailand, E-mail: sthanyakhan@gmail.com

<sup>&</sup>lt;sup>3</sup> Suparak Janjarasjit, Mahasarakham Business School, Mahasarakham University, Kantarawichai, Mahasarakham 44150 Thailand, E-mail: suparak.j@acc.msu.ac.th

organisations need to adapt and renew their business operational concepts, such as the regulation of business plans, marketing strategies, and transferring modern technology to production in order to cope with changes that could otherwise result in the loss of an organization's resources, such as capital skills, time, and manpower. Therefore, organizations must be aware of the importance and needs of global economic movements and developments, and the resulting changes that occur in all organizations that affect businesses and individual professionals, including the audit profession. Because the audit profession plays an extremely important role in the economic system, auditors are a key component of the effective development of domestic capital markets, and providing transparency and reliability for third parties who receive the financial statements and require transparent judgments made with professional scepticism (Guiral et al., 2011). Therefore, auditors need to effectively review their working strategies to be successful in their careers (Mullins, 2002).

In regard to the auditing profession in Thailand, global economic changes affect the Federation of Accounting Professions (FAP) through their accounting and auditing standards. These changes focus on the processes of the International Federation of Accountants which launched a charter for the accounting profession in 2015. This gives credibility for information users. Therefore, auditors need to fully comprehend the current movements, participate in seminars about accounting, and audit frequently to improve their own capabilities and assist other auditors. Owing to these challenges, auditors are required to develop their own capabilities not only for auditing knowledge but also for other skills relating to their professions, such as finance, economics, politics, law, information, and technology, to handle the challenges and changes.

Notably, the commencement of the ASEAN Economic Community (AEC) is one recent factor affecting the audit profession in Thailand. Auditors need to develop their auditing skills as well as other skills, be aware of the need for continual self-improvement in order to work effectively and to promote and develop them in the audit profession. This includes the ability to put working techniques and theory into practice that add value to the users of financial statements, shareholders, and third parties. The AEC has brought opportunities and challenges to auditors' work, allowing the free mobility of professionals/skilled labour in the ASEAN community under the ASEAN Mutual Recognition Arrangements (MRAs). MRAs are framework arrangements established in support of liberalising and facilitating trade in services. This has resulted in greater competition among auditors and has affected auditing career paths (FAP, 2014). Therefore, Thai auditors must adjust their audit strategies to suit the new economic environment, international accounting standards, and complicated transactions, in order to attract investment opportunities (Peecher, Schwartz, and Solomon, 2007).

A key strategy that can deal with dynamic environments is strategic renewal (Huff, Huff, and Thomas, 1992). Strategic renewal is a process of substantial transformation with respect to key organisational characteristics to maintain the stability of the organisation (Agarwal and Helfat, 2009). Previous research has found that strategic renewal provides the management with process links to increasing commitment to new knowledge and innovative behaviour, which results in changes to an organisation's product-market strategies and main capabilities (Floyd and Wooldridge, 2000).

With the above-mentioned challenges in mind, this study incorporates the audit renewal strategy with the concept of strategic renewal to support the auditor's work and enhance audit performance. Currently, strategic renewal has become a prominent theme in a variety of organization and management research domains. Moreover, most researches on renewal strategy centres continually renew or recreate the firms' strategies (Huff, Huff, and Thomas, 1992; and Leonard-Barton, 1993), while neglecting individual-level heterogeneity (Lacetera *et al.*, 2004). Consequently, to fill the research gap, this study focuses on renewal strategy at the individual level focusing on CPAs in Thailand. The study investigates the effect of the audit renewal strategy on audit performance and attempts to provide empirical evidence that supports causal relationships between the audit renewal strategy and audit consequences. Thus, the study creates new knowledge and identifies the positive characteristics of the audit renewal strategy to be used as a guideline for audit professional development in order to create audit sustainability expertise and promote audit performance within a dynamic environment.

#### 2. LITERATURE REVIEW

#### 2.1. Theoretical Foundation

The relationship between the audit renewal strategy and audit performance can be explained by the dynamic capabilities theory. This theory was introduced by David Teece and Gary Pisano in 1994. Dynamic capabilities lead to competitive advantage. The term 'dynamic' refers to the ability to competently adjust to the changing business environment (Teece Pisano, and Schuen, 1997). The term 'capability' emphasises that the main role of strategic management is in adjusting, integrating and reconfiguring internal and external organisational skills, resources and functional competencies, to suit the requirements of a rapidly changing environment (Teece Pisano, and Schuen, 1997). According to Menon (2008), dynamic capabilities theory tries to explain competitive advantage in a rapidly changing environment through the integration of learning and modifications to the working model (Teece Pisano, and Schuen, 1997).

Previous research has found that dynamic capabilities clarify not only the competence of the organisation to understand potential technological shifts, but also its capability to acclimatise to changes through innovation (Hill and Rothaermel, 2003). Moreover, the antecedent to dynamic capabilities is the process of integrating, reconfiguring, and gaining and releasing resources to suit and create market changes that can be found at the individual, firm, or network level (Eisenhardt and Martin, 2000; Zollo and Winter, 2002). Bharadwaj, Varadajan, and Fahy (1993) confirmed that the different capabilities of a person affected the performance of each person in gaining a competitive advantage. Griffith *et al.* (2006) suggested the organizations generate the ability to create or develop dynamic capabilities that lead to competition, superior advantages, and drive the organization towards achieving better performance. Chien and Tsai (2012) found that the dynamic capabilities from resource utilization in the organization contributed towards a positive influence on performance. For that reason, the theory of dynamic capabilities is considered an appropriate theory to define the meaning and clearly explain the phenomena regarding audit renewal strategy and audit performance.

This study integrates the relationships between each dimension of the audit renewal strategy and its consequences. Figure 1 shows the conceptual framework of the audit renewal strategy and audit performance and hypotheses.

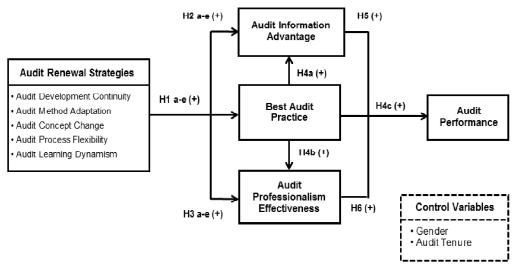


Figure 1: Model of Audit Renewal Strategy and Audit Performance

Source: Jiraphatthanaponsin (2016)

# 2.2. Audit Renewal Strategy (ARS) and its Dimensions

The main construct of this study is the audit renewal strategy adapted from strategic renewal. This can create a competitive advantage and help ensure the firm's survival. Strategic renewal is the transformation of an organization through the renewal of key ideas (Guth and Ginsberg, 1990) and the independent activities carried out by the firm to alter its path (Baden-Fuller and Volberda, 1997). The concept of renewal strategy is a strategic process that affects a firm's adaptation to the changing environment and its impediments, as well as its self-renewal in terms of changes in capabilities and strategic intent (Chakravarthy and Doz, 1992).

The audit renewal strategy (ARS) in this study is defined as the approach that contributes to achievement by continual transformation such as: method, concept, process, and learning in order to create audit sustainability expertise and promote audit performance. The audit renewal strategy is an important tool that affects audit performance (Pennekamp and Vlasveld, 2006). It forces the auditor to change the strategy that relates to changes in the environment to reach the audit objective. This object enables the companies to exhibit the correct financial status, overall operation and cash flow on their financial statement. These underline the main point of general accounting principles. Huff, Huff, and Thomas (1992) suggest that the strategic renewal encourages organizations to adapt themselves to suit the dynamic environment - auditors must adjust their knowledge of accounting and auditing standards when such standards change or the style of business management changes to one of electronic commerce. In addition, technological change can create the need for an appropriate auditing plan. Chakravarthy (1984) defined the strategy for self-renewal as understanding behaviour transformation, including the changing environment, objectives, and the strategy and/or the structure for sustainable survival. According to previous research, strategic renewal can create a competitive advantage to ensure the firm's survival and support the use of new knowledge and innovative behaviour (Chakravarthy and

Doz, 1992). Thus, auditors run audit renewal strategies that lead to sustainable auditing expertise. This means auditors have excellent audit practices with the audit information advantage of information quality for audit decision making, audit professionalism, and audit performance effectiveness. Five dimensions were identified and defined from the literature as follows:

Audit development continuity (ADC) is defined as the continual learning about techniques and new methods of auditing through education and training in accounting and auditing programs, and communication or interaction with the external environment, such as with clients and others, for achieving auditing success. The concept of professional education programs is used in the ADC provision of International Education Standards for Professional Accountants: IES 7. These standards state that professional accountants must develop themselves and engage in lifelong learning. The Continuing Professional Development (CPD): Program of Lifelong Learning is named Input-Based Approaches. Input-based Approaches focus on the learning activities that fit into developing the knowledge of professional accountants. The concept behind Generally Accepted Auditing Standards (GAAS) and the Federation of Accounting Professions states that auditors must develop their knowledge in order to understand more of the environment of professional audits, transactions, and practices. Consequently, the auditors' discretion affects the firm's financial statements. Similarly, the Federation of Accounting Professions mandates that auditors must continually develop their knowledge in order to gain innovative knowledge that advances alongside any business changes. Auditors' scepticism affects the materiality of the financial statement (IFAC, 2009).

Audit method adaptation (AMD) is defined as the capability to adjust the strategies and techniques in auditing to conform to accounting and auditing standards and technological advances in modern times. AMD is integrated from TSA 330, the Auditor's Responses to Assessed Risks that offers sufficient audit evidence (IFAC, 2010). Digital technology influences changes in business operations in companies and industries around the world. The auditor must adjust the audit procedures to create credible evidence, e.g. when an auditor has more audit evidence or new information that conflicts with audit evidence in the audit criteria, and then he or she should adjust the risk evaluation and audit plan, which can lead to audit performance effectiveness.

Audit concept change (ACC) is defined as adjustments in notions and attitudes that are necessary for audit work that leads to auditing effectiveness. The concept of strategic renewal is applied to ACC, that is, transformation through concept renewal to be useful for auditors who manage and develop an effective audit process (Guth and Ginsberg, 1990; Schaffer and McCreight, 2004; Washington and Hacker, 2005). Consequently, auditors must change the audit concepts to progress using professional standards and technologies that enhance audit effectiveness.

Audit process flexibility (APF) is defined as the ability to adjust audit procedures, audit planning, audit practices, and audit reports. The purpose of APF is information exposure and the acceptance of new aspects and concepts that adjust the auditing process to fit the changed environment; for example, the present business management style, the progress of technologies and the standard of generally accepted accounting principles. APF is adapted from the concept of strategic flexibility. Strategy flexibility leads to saving both time and expense and can respond to the dynamic environment. The strategy flexibility objective is to integrate parts of the

organization together with both flexibility resources and process strategies to support the knowledge and capacity for performance (Lau, 1996; Monden, 1983; Pauwels and Matthyssens, 2004; and Schonberger, 1986). Subsequently, the change in audit process flexibility is key in the audit process because it supports the audit process's effectiveness and efficacy.

Audit learning dynamism (ALD) is defined as the change in skills, understanding, knowledge, attitudes and the value of auditors through self-based-learning, colleague-based-learning, technology-based-learning, observation, and work experience that create an effective auditing performance. ALD is integrated into the concept of learning dynamics and the concept of continuing professional capability development, which is defined as the development of the ability required to demonstrate the competence that comprises professional knowledge, ethics, and attitudes (IAESB, 2008).

The literature reveals that audit development continuity leads to new levels of thinking; the creation of new ideas; creativity; points of view; and knowledge (Wong and Chueng, 2008), both internal and external, that allow individual knowledge to be constantly renewed, widened and improved (Goh and Richards, 1997). This finding concerns GAAS, which require auditors to develop their knowledge for understanding the environment in the professional audit, transactions, and practices because the auditor's judgment has an effect on the credibility of audit reports. In Thailand, the Federation of Accounting Professions requires accountants to continually develop their knowledge to address changes in the business sector. Wong and Cheung (2008) found that auditors should continually learn through training and discussion with accounting experts. In addition, auditors should take an accounting test to develop the skills that become best practice in auditing. Furthermore, Garavan (2007) suggests that auditors improve their actions, tacit learning, and knowledge-sharing to enable them to achieve best audit practice.

At present, digital technology influences and affects the operations of companies and industries globally and this has an effect on auditors. Digital technology includes learning computer systems, cloud computing and advanced information analysis, which affect audit method adaptation. Therefore, audit method adaptation must have the best plans for developing and creating modern audits that support best audit practices. This idea supports Garavan's (2007) assertion that audit method adaptation creates best audit practices.

In a highly competitive environment with changes in technology the increase in auditor litigation forces auditors to adjust the concept and attitude that are consistent with audit standards, while they have to learn and understand the advanced technology in order to be able to succeed flawlessly for them (Schaffer and McCreight, 2004; and Washington and Hacker, 2005). This is supported and in accordance with the studies of Washington and Hacker (2005) and Done, Voss, and Rytter (2011). Therefore, audit concept change leads to the best audit practices or procedures that can lead to a decision or choice made among alternative audit performance actions (Solomon and Trotman, 2003).

Furthermore, audit process flexibility supports best audit practice in the creation of an effective audit process. Auditors should evaluate accounting evidence that leads to an effective audit opinion and audit report that save time and expenditure. In terms of audit process flexibility, Monden (1983) and Schonberger (1986) found that strategy flexibility saves time and expense. It also transfers the capacity learning objective to best audit practices (Lau, 1996).

Moreover, audit learning dynamism is the main learning factor, which focuses on fast, quality and driven learning processes. This factor develops an effective audit procedure that links with the concepts of Akerlind (2005) and Woolf and Quinn (2008). The concept of Woolf and Quinn (2008) is based on individual learning and development of new audit skills and knowledge. Personal learning emphasizes understanding and learning in both the domestic and international environments (Kaleka and Berthon, 2006 and Luo, 2000). Audit learning dynamism is the facilitative factor that leads to best audit practices. Therefore, the following relationship is hypothesized:

H1a-e: (a) Audit development continuity, (b) audit method adaptation, (c) audit concept change, (d) audit process flexibility and (e) audit learning dynamism have a positive influence on best audit practices.

The importance of audit development continuity through learning has become increasingly recognized in the auditing profession. Accounting and auditing standards of the Federation of Accounting Professions transfer to the audit trails of IFAC. They also launched the new Audit Profession Charter for the quality of international professional service standards as a sign of credibility for information users or stakeholders in asserting their economic freedom. Auditors are continually developing in order to understand events, transactions, and practices that lead to good information that confirms or highlights the mistakes of past assessments of financial statements (IFAC, 2009). This agrees with Watkins, Hillison, and Morecroft (2004) who identified auditors as having developed audit continuity to a high level. Audit development continuity creates the sufficiency and competency of evidential matters that reflect audit information advantage.

In addition, audit method adaptation involves adjusting to business and generally accepted accounting principles. This adaptation offers corrective and credible information for sound financial statements, which furthers the audit information advantage. However, auditors should focus on using a variety of audit methods in their analyses, and collect evidence to be used as information in decision-making concerning the financial statements and audit risk reduction (Budescu, Peecher, and Solomon, 2012).

According to Loebbecke, Eining, and Willingham (1989), changes in the world economy lead to changes in audit concepts and auditing procedure effectiveness is practised based on the generally accepted accounting principles. Audit concept change provides auditing evidence concerning funds and is documented in the total financial statements and audit reports of the firm.

In the current rapidly changing environment, flexibility has become more important as firms have the ability to adjust and identify new opportunities to respond to the changing environment (Birkinshow, 2000). Flexibility provides the direction for the achievement of audit performance: saving time and increasing equipment reliability and enhancing quality (Monden, 1983; and Schonberger, 1986). Audit process flexibility changes the audit process to create an audit information advantage for auditors which is useful for correcting auditing reports. General Accepted Accounting Principles (GAAP) and GAAS both emphasize this point (Al-Ajmi, 2009).

Audit learning dynamism aims to support learning, create auditing skills and develop auditing potential for competition (Sharma, 2000). This is the main point in providing effective and corrective audit evidence that supports auditors' decision-making. Audit information advantage

indicates sound auditing reporting (Davisdson and Neu, 1993). The following relationship is hypothesized:

H2a-e: (a) Audit development continuity, (b) audit method adaptation, (c) audit concept change, (d) audit process flexibility, and (e) audit learning dynamism have a positive influence on audit information advantage.

Audit development continuity creates quality auditors through audit professionalism effectiveness to meet the International Accounting Education Standard: IES 3. The International Accounting Education Standard defines the accounting profession as having two learning outcomes: capability and competence. Auditors' capability has been integrated into their work until they reach an achievable work standard. Integrating capability into work equates the auditor with having work competency. According to Nelson *et al.* (2003), auditors continually develop themselves and search for new knowledge to achieve a standard capability. This leads to the audit professionalism effectiveness of the auditor. In addition, the learning of each individual support team-work leads to co-operation and group discussions that assist teamwork and professionalism, key factors in auditing quality and success in business (Cunningham and Veiles, 2002; and Allen, Francis and Taylor, 2005).

However, audit method adaptation also helps the auditing profession and auditors to perform audit professionalism effectiveness. Joshi, Kathuria, and Porth (2003) found that auditing procedures adapt to high technology. The adaptation effect is fast for auditors as it is concerned with issues such auditing evidence, risk evaluation, and auditing procedures that lead to decision-making on time.

Auditors must be aware of the changes brought about in audit concept change. In addition, professional auditors must have the following qualifications: auditing procedure expertise, autonomy performance, and auditing profession ethics. These qualifications create audit professionalism effectiveness, which, according to previous studies, indicates that auditors who perform auditing under professional standards use their knowledge to provide effective audit judgments and efficient audit practices through audit report quality, so as to increase audit performance (Low, 2004). Similarly, auditors need to concern themselves with any changes in the environment of auditing work to develop the highest professional skills when they serve their clients. Moreover, changing principles and professional standards influence auditors' professionalism (Struweg and Meintijes, 2008).

Audit process flexibility is a key auditing word that create audit professionalism effectiveness for auditors, high potential auditing, competitive advantage and high levels of performance (Grewal and Tansuhaj, 2001; and Verdu-Jover, Llorens-Montes, and Garcia-Morales, 2006).

In addition, the knowledge base of the profession is also an important factor in determining the ability of these professionals to achieve their objectives. Conformity to the concept of continuing professional capability development (IAESB, 2008) is defined as the ability to demonstrate competence in terms of professional knowledge, ethics and attitudes (IAESB, 2008). These will increase the auditing potential and skills of auditors (Real, Leal, and Roldan, 2006; and Wong and Cheung, 2008). For this reason, the audit learning dynamism of an auditor through advanced knowledge continually leads to audit profession effectiveness. The following relationship is hypothesized:

H3a-e: (a) Audit development continuity, (b) audit method adaptation, (c) audit concept change, (d) audit process flexibility, and (e) audit learning dynamism have a positive influence on audit professionalism effectiveness.

## 2.3. Best Audit Practice (BAP)

Corporate scandals and financial crises such as Tyco, Enron, WorldCom, the 1997 Asian economic crisis, and the US sub-prime crisis, in 2007, are examples of accounting information debacles and audit reporting practice failure, all of which had a direct effect on the accounting and auditing professions, and stakeholders who expect credibility and quality of financial reports for making decisions. For this reason, the AICPA also issued SAS No.99 (AICPA, 2002) which mandates that for auditors, their significant audit responsibilities should include the knowledge, skill and ability" to effectively complete those audit tasks. Therefore, auditors must have special ability in audit tasks to train their team and assigning audit members to specific jobs. This includes helping the auditor to properly organize and manage the audit engagement. Best audit practices lead to auditing effectiveness. In addition, best audit practices include techniques for project management that are concerned with the achievement of plans, and those of management to facilitate change (Ramesh, 2003). To ensure that a task is efficiently accomplished, management experts believe that best practices involve audit management. In this study, best audit practice is defined as the best audit procedure that leads to a high level of performance (Bogan and English, 1994; and Zairi, 1996) that focuses on using knowledge capital and the growing importance of intellectual property, developments in technology, particularly communications and innovation, and the changing expectations of stakeholders. These offer sufficient evidence and cover the risks for decision making to address the objectives of monitoring to create confidence and reliability based on accounting and audit standards in the firm's financial statements (Hui and Fatt, 2007; and Obadiah, 2007).

Based on the literature, the lack of effective audit practices might result in the failure of convergence in audit work, an inadequacy in how the processes are generally applicable in finding mistakes in the financial statement (Chaney and Kim, 2007). Moreover, Francis, (2011) and Gomez, (2003) suggest that the auditors collect sufficient evidence to support their opinion and report inherent risk and control risk, report a higher quality audit, and achieve the audit objectives to reflect that the financial statements are accurate and reliable. This leads to decision-making (Solomon and Trotman, 2003) by auditors who have applied practices, judgments, and accuracy in audit performance (Carnaghan, 2006; and Hui and Fatt, 2007). Thus, auditors with the best audit practices have an audit information advantage.

Moreover, best audit practice is an approach to enhance the capability development of the auditor under Thai Accounting and Auditing Standards (TAS). TAS attempts to provide good professional services and techniques adapted to improve performance and to monitor the implementation of effective business processes (Wangcharoendate and Ussahawanitchakit, 2010) to support social and public requirements to convey audit professionalism effectiveness. This concurs with the work of Solomon and Trotman (2003) who posit that best audit practice is an important tool for making decisions or selecting the best choice. In addition, the auditor implements judgment and accuracy in audit performance (Carnaghan, 2006; and Hui and Fatt, 2007) or audit professionalism effectiveness.

Best audit practice increases the efficacy and effectiveness of an organization. Best audit practices promote performance, growth and stability in the long term (Samelon, Lowensohn, and Johnson, 2006). Besides, best audit practices can change the expectations of stakeholders who will demand greater accountability and responsibility from auditors in terms of their trustworthiness through credible financial reporting (Cohnen and Kol, 2004; and Young, 2004). Therefore, the results add value to auditing work and are used to support both audit execution and business process efficiency (Sueyoshi, Shang, and Chiang, 2008). The following relationship is hypothesized:

H4a-c: Best audit practice has a positive influence on (a) audit information advantage, (b) audit professionalism effectiveness, and (c) audit performance.

# 2.4. Audit Information Advantage (AIA)

Audit evidence or audit information is information that is collected by the auditor using generally accepted auditing standards. Audit information includes information found in the accounting records of the financial statements. Not all information is subject to examination. Cumulative audit evidence is the collection of evidence from audit processes and diverse sources such as examination, observation inquiry, confirmation, physical examination, computation and analytical procedures. In addition, good information can help to confirm or reveal the material misstatement in past assessments of the financial statements (IFAC, 2009). Therefore, quality information ought to be accurate, complete, reliable and sufficient for decision-making based on accounting and audit standards. In addition, the type and amount of evidence are crucial when one needs to meet the audit's objectives (Leventis, Weetman, and Caramanis, 2005). This study defines audit information advantage as quality information that is above that of other auditors and that quality information ought to be accurate, complete, reliable, and suffice for decision making, and be based on accounting and audit standards. Quality auditing evidence provides sufficient evidential matter for the auditor to summarize in a quality auditing report.

The literature indicates that an important auditing procedure is the collection of sufficient and competent evidence that builds up the auditor's confidence. Chang, Tsai, Shih, and Hwang (2008) show that the auditor has the audit information advantage to facilitate audit performance. This concurs with Watkins, Hillison, and Morecroft (2004) who suggest that higher audit quality generates higher competency in evidential matters that affects the quality of financial statements. This implies that auditors with high performance also have high credibility. Furthermore, audit information advantage includes reliable information sources that may be used to determine the amount and type of evidence needed to obtain sufficient and appropriate evidence to address the audit objectives in an adequately planned audit job (Leventis, Weetman, and Caramanis, 2005). Therefore, audit information advantage supports audit performance. The following relationship is hypothesized:

H5: Audit Information Advantage has a positive influence on audit performance.

## 2.5. Audit Professionalism Effectiveness (APE)

Audit professionalism is the auditing expertise of the auditor who has knowledge, capacity, procedural autonomy, error protection and strict professional ethics. The auditing profession

factor builds the strength, potentiality, survival, and accomplishment of auditors. The auditor mixes and matches skills: intellectual, technical and functional, interpersonal and communication, and organizational management skills, for creating audit professionalism. McCraken (2003) states that audit professionalism is a significant topic that influences task reliability, reputation in the audit, and the auditor's image, which may be key factors in his/her success. Audit value creation can build a reputation from the audit outcome. Audit professionalism effectiveness is defined as the potential of the auditing procedures to achieve the auditing purpose; namely, financial statement opinion on the financial position status, the overall operation, and the cash flow of enterprises. The auditor further comments on whether the financial statement is correct or incorrect.

The literature indicates that auditors who have audit professionalism effectiveness are likely to improve their efficiency and effectiveness in auditing and audit performance. For example, Arens, Elder, and Beaslsy (2005) show that a higher level of auditor's professionalism in audit independence is needed for public confidence in the quality of the service, whereby a professional is expected to conduct himself or herself at a higher level than other members of society. Similarly, in the professional audit service, the provision of independent verification of the credibility of financial statements to third parties is required. In order to ensure that the audit enhances the credibility of financial statements, it must be of a sufficient quality and result in an effective audit performance (Sucher, Moizer, and Zarova, 1998). In addition, auditors make good judgments to balance the nature and extent of audit work with the desire to maintain good client relations and search for more efficient and effective audit performance (Lin and Fraser, 2008). The following relationship is hypothesized:

H6: audit professionalism effectiveness has a positive influence on audit performance.

## 2.6. Audit Performance (APM)

Audit performance has been defined in numerous ways. These include: (1) the probability that the auditors will not issue an unqualified report for statements that comprise material misstatement (Lee, Liu, and Wang, 1999); (2) the correctness of the information report accumulated by an auditor (Davidson and Neu, 1993); (3) the measure of the ability of the auditor to exclude wrong information and improve accounting data (Wallace, 1980); and (4) and the probability that the auditor will find and present errors in the financial statements (Libby and Luft, 2003). In addition, AICPA (1989) defined audit performance as the outcome of two primary purposes: 1) to acquire sufficient evidence for the audit view; and 2) to be able to provide a quality control function to ensure that the work is undertaken in accordance with generally accepted auditing standards and the firm's own requirements. Therefore, audit performance is an outcome that guarantees there is sufficient audit evidence to serve as a basis for the audit opinion and audit work performed in agreement with GAAS and the firm's own requirements. The use of an audit renewal strategy would likely increase its effectiveness and efficiency. Audit performance then depends on best audit practices, audit information advantage and audit profession effectiveness.

Previous research has focused on the provision of independent verification of whether the financial statements are credible to third parties. Audit performance must be of an effective and sufficient quality for the financial statements (Sucher, Moizer, and Zarova, 1998). A high-

quality audit means that the information can be trusted and, thus, it affects the quality of the financial statements. The higher the performance the more credible the contribution of the auditors (Watkins, Hillison, and Morecroft, 2004). Consequently, high-quality auditing services are of particular importance in establishing the credibility of the financial statements, and this increases the client's confidence. Thus, audit performance influences auditors' best practices under different circumstances (Wilson and Apostolou, 1997). The components of audit performance consist of audit independence and audit judgment (Watkins, Hillison, and Morecroft, 2004). In addition, Salteio (1994) suggests that an auditor with higher audit professional competencies may also have higher audit performance. Firth (2002) found that the ability of the auditor affects audit performance.

## 3. RESEARCH METHODOLOGY

# 3.1. Sample Selection and Data Collection Procedure

The study selects a sample of active auditors in 2015 from the database of the Federation of Accounting Profession under the Royal Patronage of His Majesty the King, which controls and directs the role of CPAs in Thailand. The criteria for the sample selection include CPAs in Thailand who understand audit functions, audit renewal strategy and outcomes, including audit performance. The respondents' demographic characteristics include gender, age, marital status, educational level, experience in the audit field, length of audit tenure, audit revenue per year, number of audited firms, types of clients, and employment status.

The database consists of 9,250 CPAs. The sample size for the study is 385 CPAs based on a 95% confidence level (Krejcie and Morgan, 1970). Based on previous accounting research, a 20% response rate for a mail survey is deemed sufficient (Aaker, Kumar, and Day, 2001). The survey questionnaires were directly mailed to 1,925 CPAs ((385/20) X 100) using a simple random sampling procedure. A total of 395 respondents mailed back the questionnaire, representing an overall response rate of 22.47% (391/1,740\*100). A further four returned surveys were incomplete responses that lacked personal or household information, thus resulting in 391 completed questionnaires used in this study.

This study addresses the problems of non-response bias by testing the significant difference in the demographic information between the early respondents and late respondents. This study uses t-test to test between the two groups (Armstrong and Oventon, 1977). As a result, there are no significant differences between the two groups. We can assume that the returned questionnaires exhibit no non-response biases problems.

# 3.2. Variable Measurements

This study used constructs that cannot be directly measured. The constructs in this study are measured by multiple items because: (1) individual items cannot capture the attributes of the constructs;(2) single items tend to categorize samples into small groups, whereas multipleitem scales enable a fine distinction between subjects; and (3) multiple items increased the reliability while lowering measurement error (Churchill, 1979). The variables measurements are summarised in Table 1.

Table 1 Variable Measurements

Variables	Variable Measurements	Item Scale Number and Scale Source
Independent variable		
Audit Renewal Strategy (ARS)	ARS is measured from audit development continuity, audit method adaption, audit concept change, audit process flexibility and audit learning dynamism.	This variable is measured using a 24-item scale that developed as a new scale based on modifications and adapted from GAAS, Professional Education Programs and Strategic renewal.
Dimension of Audit Renewal Strategy	ADC is massured for a direction	This reminds to the second
Audit Development Continuity (ADC)	ADC is measured from the auditor's learning and development through education and training in accounting and auditing programs, communication and/or interactions, such as with clients and others, and conservations among auditors for planning audit work.	This variable is measured using a five-item scale that developed from Professional Education Programs.
Audit Method Adaptation (AMA)	AMA is measured based on the ability to improve audit processes; a preliminary risk assessment, a planning stage, a testing phase and an exit meeting for support of external audit activities, business model change and catching up with technological advances in modern times.	This variable is developed from TSA 330 using a five-item scale.
Audit Concept Change (ACC)	ACC is measured from the transformation concept renewal that is useful for auditors who manage and develop the effective audit process	This variable is developed from the strategic renewal concept and includes five items.
Audit Process Flexibility (APF)	APF is measured from the ability to adjust audit procedures; audit planning, audit practice and making audit reports that agree with the situation while supporting external audit activities, business model changes and catching up with technological advances in modern times and responding in a timely manner.	This variable is developed from strategy flexibility and includes five items.
Audit Learning Dynamism (ALD)	ALD is measured from the effort of the auditor to continually learn under dynamic environments, to gain explicit knowledge and develop the best practice audit process that creates an effective audit performance.	This variable is developed from the concept of Learning dynamics and the concept of continuing professional capability development and includes four items.

contd. table 1

Variables	Variable Measurements	Item Scale Number and Scale Source
Consequence Variables		
Best Audit Practice (BAP)	BAP is measured by the ability to improve the efficiency of the audit, drive both audit execution and business process effectiveness that is in accordance with audit and accounting professional standards.	This variable is measured based on a five-item scale developed from Uachanachit and Ussahawanitchakit (2012).
Audit Information Advantage (AIA)	AIA is measured from the auditors who have quality information that is above other auditors and that quality information ought to be accurate, complete, reliable, suffice for decision making and based on accounting and audit standards.	This variable is measured using a four-item scale based on accounting and audit standards.
Audit Professionalism Effectiveness (APE)	APE is measured from the auditors' ability to detect errors in the audit working paper and correct decisions concerning the presence of management fraud, work quickly, on time, build credibility and trust, recognizing professional standards, ethics, maintain independence and give importance to the profession.	This variable is measured using a four-item scale based on accounting professional standards. (IFAC)
Dependent Variable		
Audit Performance (APM)  Control Variables	APM is measured from audit effectiveness and audit efficiency. Audit effectiveness concerns the auditor's ability to detect errors in the audit working paper and correct decisions concerning the presence of management fraud. Moreover, audit efficiency is described as the auditor's ability to minimize the resource expenditure and accomplish the audit task in less time.	This variable is measured based on a five-item scale developed from Uachanachit and Ussahawanitchakit (2012).
Gender (GEN)	GEN is represented by a dummy variable that includes 0 (female) and 1 (male).	Chung and Monroe (2001).
Audit Tenure (ATN)	ATN is represented by a dummy variable, including $1 > 11$ years- old $0 \le 11$ years- old	Graham and Bedard (2003).

# 3.3. Method

A mailed survey questionnaire is used to acquire the required data. There are three sections in the survey questionnaire. Section one contains a series of questions regarding the respondents' demographic and socio-economic characteristics. Section two seeks the measurement of the

dimensions of an audit renewal strategy. Section three addresses the measurements of the consequences of audit performance. These measurements are measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). All constructs are developed from previous literature reviews.

A pre-test was performed to determine the validity and reliability of the questionnaire. The questionnaire was evaluated by an academic professional in terms of content and face validity. The academic professional reviewed the instrument to ensure that the survey questions used suitable wordings, and all constructs adequately covered the content of the variables. The pretest was conducted based on simple random sampling. Factor loadings of each item are expressed between 0.486 - 0.941. They are greater than the 0.40 cut-off point, indicating the construct validity of the questions (Nunnally and Bernstein, 1994). Moreover, the Cronbach's alphas were between 0.751 and 0.921, greater than the 0.70 cut-off point (Hair *et al.*, 2010). As a result, the constructs in this study exhibit internal consistency reliability. Factor loadings and Cronbach's alpha are presented in Table 2.

Table 2
Results of the Measure Validation of the Pre-Test

Constructs	N	Factor Loadings	Cronbach's Alpha
Audit Performance (APM)	30	0.796-0.854	0.886
Best Audit Practice (BAP)	30	0.694-0.886	0.879
Audit Information Advantage (AIA)	30	0.865-0.931	0.913
Audit Professionalism Effectiveness (APE)	30	0.649-0.924	0.824
Auditing Development Continuing (ADC)	30	0.626-0.873	0.791
Audit Method Adaptation (AMA)	30	0.829-0.941	0.921
Audit Concept Change (ACC)	30	0.623-0.723	0.756
Audit Process Flexibility (APF)	30	0.486-0.872	0.751
Audit Learning Dynamism (ALD)	30	0.742-0.876	0.846

## 3.4. Statistical Estimation

We use ordinary least squares (OLS) method to test our hypotheses (Kutner *et al.*, 2008). All variables in the analysis are based on interval and categorical scales (Hair *et al.*, 2010). Equations (1) to (3) examine the relationships among the five dimensions of audit renewal strategy with best audit practice, audit information advantage and audit professionalism effectiveness:

$$BAP = \alpha_{01} + \beta_{1}ADC + \beta_{2}AMA + \beta_{3}ACC + \beta_{4}APF + \beta_{5}ALD + \beta_{6}GEN + \beta_{7}ATN + \varepsilon_{1}$$
 (1)

AIA = 
$$\alpha_{02} + \beta_{s}ADC + \beta_{0}AMA + \beta_{10}ACC + \beta_{11}APF + \beta_{12}ALD + \beta_{13}GEN + \beta_{14}ATN + \epsilon_{2}$$
 (2)

$$APE = \alpha_{03} + \beta_{15}ADC + \beta_{16}AMA + \beta_{17}ACC + \beta_{18}APF + \beta_{19}ALD + \beta_{20}GEN + \beta_{21}ATN + \varepsilon_3$$
 (3)

Equations (4) to (6) examine the relationships of the consequences of audit renewal strategy among best audit practice, audit information advantage and audit professionalism effectiveness.

$$AIA = \alpha_{04} + \beta_{22}BAP + \beta_{23}GEN + \beta_{24}ATN + \varepsilon_4$$
 (4)

$$APE = \alpha_{05} + \beta_{25}BAP + \beta_{26}GEN + \beta_{27}ATN + \varepsilon_{5}$$
 (5)

$$APM = \alpha_{06} + \beta_{28}BAP + \beta_{20}AIA + \beta_{30}APE + \beta_{31}GEN + \beta_{32}ATN + \varepsilon_{6}$$
 (6)

#### 4. RESULTS AND DISCUSSION

The descriptive statistics and correlation matrix are presented in Table 3. This study employed both descriptive and inferential statistical techniques, including variance inflation factors (VIFs) to test for multicollinearity among the independent variables, correlation analysis to test the primary correlations between two variables, and OLS to test the hypotheses. The results showed that there are no significant multicollinearity problems in our models since the maximum value of VIF is 3.419, which is below the cut-off value of 10 (Kutner, Nachtsheim, and Neter, 2008). Furthermore, the correlations between each variable are less than 0.90 (Hair *et al.*, 2010). Further, we used the Dubin-Watson statistic to test for autocorrelation in our data. The results of Durbin-Watson d statistics are between 1.679-2.057, which indicates no autocorrelation is present in our data.

Table 3
Descriptive Statistics and Correlation Matrix

Variables	APM	BAP	AIA	APE	ADC	AMA	ACC	APF	ALD	GEN	ATN
Mean	4.07	4.10	4.06	4.09	4.16	4.14	4.14	3.83	4.20	N/A	N/A
S.D.	0.52	0.50	0.53	0.53	0.50	0.55	0.49	0.54	0.50	N/A	N/A
APM	1.000										
BAP	.785***	1.000									
AIA	.785***	.792***	1.000								
APE	.796***	.766***	.801***	1.000							
ADC	.605***	.713***	.665***	.611***	1.000						
AMA	.560***	.667***	.626***	.583***	.744***	1.000					
ACC	.646***	.739***	.694***	.629***	.704***	.774***	1.000				
APF	.587***	.649***	.614***	.532***	.589***	.650***	.636***	1.000			
ALD	.613***	716***	.676***	.639***	.721***	.731***	.732***	.652***	1.000		
GEN	.028	.040	.029	007	.066	.074	.034	.020	.044	1.000	
ATN	076	.013	060	036	.031	.018	016	067	.010	.405***	1.000

*Note:* 391 observations.

Table 4 presents the results of the OLS regression of equations (1) to (3) to test hypotheses 1 to 3. The hypotheses predicted positive relationships between audit development continuity, audit method adaptation, audit concept change, audit process flexibility and audit learning dynamism with best audit practice, audit information advantage, and audit professionalism effectiveness. Firstly, audit development continuity ( $\beta$ 1=0.267, p<0.01), audit concept change ( $\beta$ 3=0.327, p<0.01), audit process flexibility ( $\beta$ 4=0.191, p<0.01), and audit learning dynamism ( $\beta$ 5=0.199, p<0.01) exhibit positive effects on best audit practices. These results are similar to the Generally Accepted Auditing Standards (GAAS) which show that the auditors need to improve their work-related actions, tacit learning, and knowledge-sharing, which are then implemented, to achieve best audit practices (Garavan, 2007; and Wong and Cheung, 2008). Therefore, audit development continuity supported best audit practice.

<sup>\*\*\*</sup> indicates statistical significance at the 1 percent level.

Table 4
Results of the Regression Analysis

Independent Variables	Dependent		
	BAP	AIA	APE
ADC	.267***	.239***	.207***
(H1a - H3a)	(.049)	(.054)	(.060)
AMA	054	047	.002
(H1b - H3b)	(.055)	(.061)	(.067)
ACC	.327***	.299***	.235***
(H1c - H3c)	(.052)	(.058)	(.064)
APF	.191***	.177***	.090
(H1d – H3d)	(.042)	(.047)	(.052)
ALD	.199***	.204***	.260***
(H1e – H3e)	(.051)	(.056)	(.063)
GEN	016	.038	069
	(.068)	(.075)	(.083)
ATN	051	123	045
	(.068)	(.075)	(.083)
Maximum VIF	3.419	3.419	3.419
$\mathbb{R}^2$	0.662	0.587	0.490
Adjusted R <sup>2</sup>	0.656	0.580	0.481
S.E	0.586	0.648	0.719
SSR	258.212	229.034	191.717
F-statistic	107.201	77.851	52.903

Note: 391 observations.

Environmental changes lead to audit concept changes for learning and understanding; the modified audit concept helps auditors to manage and develop the effective audit procedures (Guth and Ginsberg, 1990; Schaffer and McCreight, 2004; and Washington and Hacker, 2005). Consequently, audit concept change leads to the best audit practices by auditors (Solomon and Trotman, 2003).

Audit process flexibility is the important audit process that leads to the best audit practice. The audit process flexibility creates a convenient and flexible audit procedure, timeliness, and safety. It also forms an effective audit procedure (Llorens-Montes and Garcia-Morales, 2006; Monden, 1983 and Schonberger, 1986). Therefore, the abilities of auditors to adjust audit procedures to fit into the changed audit environment show the auditors create audit process flexibility which leads to the best audit practice.

Audit learning dynamism that focuses on fast, quality and driven learning processes in the change of audit environment can support and develop an effective audit approach to best audit practice (Kaleka and Berthon, 2006; Luo, 2000). Thus, audit learning dynamism improves the best audit practice. **Hence, hypotheses 1a, 1c, 1d and 1e are supported.** 

In contrast, audit method adaptations exhibit no significant effect on best audit practice ( $\beta 2 = -0.054$ , p>0.10). The research result shows that auditors lacked the knowledge and understanding of modern audit practices to affect the unadjusted audit methods for different business types and sizes, situations, and audit styles and scope. This result is similar to Rainsbury

<sup>\*\*\*</sup> indicates statistical significance at the 1 percent level.

et al.'s (2009) study in which it was indicated that the audit method adaptations with modern technologies may not lead to best audit practice because the complexity and differences in businesses are reflected in different audit practices. If the auditors lacked the audit skills for audit method adaptations, then their best audit practice would lack effectiveness and efficiency, as supported by Srichanapun, Ussahawanitchakit, and Boonlua (2013), who found that the perception and evaluation of audit practices did not achieve the audit goal. **Therefore, hypothesis 1b is not supported.** 

The second hypothesis investigated whether audit development continuity ( $\beta 8 = 0.239$ , p<0.01), audit concept change ( $\beta 10 = 0.299$ , p<0.01), audit process flexibility ( $\beta 11 = 0.177$ , p<0.01) and audit learning dynamism ( $\beta 12 = 0.204$ , p<0.01) have positive effects on audit information advantage. The result shows that auditors should develop a sufficient level of knowledge to lead to an understanding of the auditing environmental change that confirms or highlights the mistakes of past assessments of financial statements (IFAC, 2009). Therefore, auditors with audit development continuity create credible information that shows they have an audit information advantage (Watkins, Hillison, and Morecroft, 2004).

Furthermore, continually changing the audit concept to match the accounting and audit standards leads auditors towards quality information such as the accuracy, completeness and reliability sufficient for decision-making. It corresponds to the work of Sumritsakun and Ussahawanitchakit (2009), who suggest that sufficient and appropriate audit information leads to higher competitive advantage over competitors.

Moreover, audit process flexibility has a significant effect on audit information advantage. This is similar to Al-Ajmi's (2009) result that audit process flexibility and efficacy of consolidation and evaluation of auditing evidence create audit information advantage. Thus, auditors show their opinions effectively on the audit report.

Auditors create audit learning dynamism by updating audit knowledge to continually consolidate the audit evidence that leads to audit information advantage. This supports the idea of Davisdson and Neu, (1993) and Sharma (2000) who said that the learning is the main factor that supports audit potentials in consolidating the audit evidence. **Hence, hypotheses 2a, 2c, 2d, and 2e are supported.** 

In contrast, audit method adaptation has no significant effect on audit information advantage ( $\beta 9 = -0.047$ , p>0.10). Audit information advantage is used by auditors who focus on audit method adaptations, accumulation process, evaluation evidence, test, and correction of the audit. Auditors should be sceptical when considering the source and credible evidence. If auditors are not sceptical about the audit method adaptations, then audit reports will be of low quality. **Therefore, hypothesis 2b is not supported.** 

Finally, the results show that audit development continuity ( $\beta15=0.207$ , p<0.01), audit concept change (17=0.235, p<0.01), audit process flexibility ( $\beta18=0.090$ , p>0.10), and audit learning dynamism ( $\beta19=0.260$ , p<0.01) have positive effects on audit professionalism effectiveness. These results were in accordance with IES 4: Professional Values, Ethics and Attitudes, which state that professional accountants must show professional competence and due care, highlighting the necessity for professional accountants to continually develop their performance and their law, statute and technical knowledge for effective professional services.

Nelson et al (2003) agreed that auditors who continually developed themselves increased their performance potential. This created audit professionalism effectiveness which indicates the ability to communicate and/or interact with clients and others, such as theoretical thinking in auditing, careful analysis, professional scepticism, professional decision-making, tolerance, conflict problem-solving, and values and ethics. Therefore, audit development continuity supports audit professionalism effectiveness.

Audit concept change has led to an efficient audit process that forces auditors to exhibit audit professionalism effectiveness. According to Nicolaou (2000) audit environment changes enhance audit development continuity. If audit development continuity in international standards creates audit professionalism effectiveness, then the auditor provides customer satisfaction with their auditing in a working timeline and decreases audit expenses (Craswell, Francis, and Stephen, 1995). Thus, audit concept change supports audit professionalism effectiveness.

Learning is very important in the auditing profession, as it is necessary to progress professionalism. Audit learning dynamism focuses on a fast, quality learning process to support and develop feedback systems for change situations (Marquardt, 2002). Audit learning dynamism leads to audit professionalism effectiveness. It supports and develops learning potential, system approaches, self-learning plans, and changes the learning vision. Audit learning leads to audit professionalism effectiveness for the professional auditor who has audit potential and skills (Real, Leal, and Roldan, 2006; and Wong and Cheung, 2008). Therefore, audit learning dynamism supported audit professionalism effectiveness. **Hence, hypotheses 3a, 3c, and 3e are supported.** 

In contrast, audit method adaptation has no significant effect on audit professionalism effectiveness ( $\beta16=0.002$ , p>0.10). If the auditor cannot apply audit standards to audit method adaptations, this can lead to poor audit professional effectiveness. Poor audit professional effectiveness also occurrs due to the lack of plans and indiscretions by audit professionals. In fact, audit professionalism effectiveness is an indicator of an auditor's performance and reaction. (Liz Logie-MacIver and Piacentini, 2010). **Therefore, hypothesis 3b is not supported.** Audit process flexibility has no significant positive effect on audit professionalism effectiveness (H4c  $\beta18=0.090$ , p> 0.10). If the audit performance process is inflexible, this is because the auditor has strictly followed the Generally Accepted Auditing Standards of International Federation of Accountants. This performance creates confidence, credibility, and completeness with regard to the financial statement, which is good for decision-making. However, audit process flexibility may be unsuitable for a financial audit. If the audit process is too flexible and if the auditor ignores the importance of the audit process, important information will disappear from the audit report (Sampattikorn, Ussahawanichakit, and Boonlua (2012). **Therefore, hypothesis 3d is not supported.** 

Table 5 presents the OLS results of equations (4) to (6) to test hypotheses 4 to 6. Best audit practices have a significant and positive effect on audit information advantage ( $\hat{a}22 = 0.792$ , p <0.01). Best audit practices mean that auditors use a method or technique in excellent audit practice that leads to audit achievement and brings real knowledge usefulness. This result concurred with Obadiah (2007) and Hui and Fatt (2007), who identified that the best audit practices improve the sufficient and reliable evidence in auditing. The sufficient and reliable evidence covers audit risk judgment. Furthermore, Solomon and Trotman (2003) state that best

Table 5
Results of Best Audit Practice Effects, Audit Information Advantage and
Audit Professionalism Effectiveness on Audit Performance

Independent Variables	Dependent \		
	AIA	APE	APM
BAP	.792***	.768***	.321***
(H4a-c)	(.031)	(.033)	(.047)
AIA			.244***
(H5)			(.050)
APE			.353***
(H6)			(.048)
GEN	.065	047	.080
	(.070)	(.074)	(.060)
ATN	171	076	141**
	(.070)	(.074)	(.060)
Adjusted R <sup>2</sup>	.630	.587	.726
Maximum VIF	1.198	1.198	3.602
$\mathbb{R}^2$	0.633	0.590	0.730
Adjusted R <sup>2</sup>	0.630	0.587	0.726
S.E	0.608	0.641	0.522
SSR	246.511	230.558	284.951
F-statistic	221.620	186.538	208.866

Note: 391 observations.

audit practices can increase an evaluation performance of evidence. Best audit practices create audit information advantage in processing and analyzing the financial statement in the account context. This usefulness affects the audit summarization and audit report (Carnaghan, 2006; and Hui and Fatt, 2007). **Thus, hypothesis 4a is supported** 

Best audit practices have a significant and positive impact on audit professionalism effectiveness ( $\beta25 = 0.768$ , p <0.01). Solomon and Trotman (2003) found that the auditor who followed best audit practices used a mind-set of continual audit development, professional commitment and audit experience. Therefore, best audit practices improve audit professionalism, because they create fortitude, capability, survival, success and support the audit professionalism effectiveness of the auditor. These factors support the auditors in achieving audit professionalism effectiveness. Furthermore, best audit practices are techniques for project management, which lead to the effective audit plan (Ramesh, 2003). Audit professionalism effectiveness supports the professional audit capacity for the auditors to have quality, virtues, honesty, be socially responsive, pragmatic with the public, autonomous and achieve a continual knowledge development performance. **Thus, Hypothesis 4b is supported** 

Furthermore, best audit practices have a significant and positive impact on audit performance ( $\beta$ 28 = 0.321, p <0.01). This concurred with Bogan and English (1994) and Zairi (1996) who assert that best audit practices comprise the optimum way to perform audit work processes to achieve a high level of performance. Best audit practices enable auditors to achieve the goal of improving the effectiveness of governance in audit performance (Wong and Cheung, 2008). Therefore, best audit practices are a significant tool for the auditor to enhance efficiency and

<sup>\*\*\*, \*\*</sup> indicate statistical significance at the 1 and 5 percent levels, respectively.

effectiveness and promote their performance, growth, and stability over the long-term (Samelon, Lowensohn, and Johnson, 2006). **Thus, hypothesis 4c is supported** 

Audit information advantage has a significant and positive impact on audit performance. These results are in accordance with Watkins, Hillison, and Morecroft (2004) who suggest that higher audit quality generates higher sufficiency and competence in evidential matters that have an impact on the quality of financial statements, which means that auditors with high performance also have high credibility. **Thus, hypothesis 5 is supported.** 

Finally, audit professionalism effectiveness has a positive effect on audit performance ( $\beta$ 29 = 0.353, p <0.01). This result is supported whenever auditors use full knowledge, abilities, and skills in the audit process to enhance their performance. Audit professionalism effectiveness is positively reflected in audit performance. This is supported by the study of Ashton and Ashton (1988) and Gibbins and Jamal (1993) who found that auditors performed their work using techniques gained through experience, knowledge, and the ability to achieve high performance. **Thus, hypothesis 6 is supported.** 

#### 5. CONCLUSIONS

The competitive environment in the world economy and the commencement of ASEAN affect the audit profession in Thailand so there is a need to adapt and change the auditing concepts, working modes, and become aware of work effectiveness. With this in mind, the instrument most appropriate for handling these competitive environment changes is an audit renewal strategy. This study investigates the effect of an audit renewal strategy on audit performance. The dynamic capabilities theories of the firm are applied to develop hypotheses to explain the phenomenon of an audit renewal strategy at the individual level and the relationship between the audit renewal strategy and its consequences. The empirical results show that the dimension of an audit renewal strategy has a significant and positive effect on best audit practices, audit information advantages, and audit professionalism effectiveness, but does not affect audit method adaptation. Furthermore, best audit practices, audit information advantage, and audit professionalism effectiveness have a positive effect on audit performance.

This study provides new dimensions to cover additional facets of the audit renewal strategy. The auditor's audit renewal strategy is an important tool for success in an audit career. The study shows that an audit renewal strategy has an influence on best audit practice, audit information advantage, audit professionalism effectiveness, and audit performance. The study finding helps auditors to understand how to achieve and survive in the audit market. Auditors should acquire other best ways to continually preserve the quality and credibility of audit work. This study helps auditors to identify and justify key components that may add importance to the competitive environment within the audit market. Furthermore, the findings may be a useful guideline for auditors in the audit practice to establish an effective audit renewal strategy. Therefore, an audit renewal strategy is an important tool for auditors who want to be successful in their auditing career.

The study has some limitations that warrant further investigation as they may lead to opportunities for future research directions. The results show that one dimension of an audit renewal strategy-audit method adaptation-has no significant effect on best audit practice, audit

information advantage, and audit professionalism effectiveness. Moreover, auditors in Thailand were the only respondent group in this research. As a result, the need for future research is to seek new moderating variables to clearly examine the relationship of an audit renewal strategy and audit performance. Moreover, the methodology does not account for the external or exogenous environmental factor and could be a limitation. Therefore, future research could incorporate the exogenous environmental factor and its implications of analytical results.

Future research should collect data from a larger sample and use different auditing professionals, such as tax auditors (TAs), internal auditors (IAs), and governmental auditors (GAS). Furthermore, future research should be conducted to cover a broader area, such as other countries in Asia, in order to generalize from the findings. An in-depth interview for understanding the positive characteristics of audit renewal strategy may provide a wider ground for the validity and reliability of the research.

## References

- Aaker, D.A., Kumar, V. and Day, G.S. (2001), "Marketing Research", New York: John Wiley and Sons.
- Agarwal, R. and Helfat, C. E, (2009), "Strategic Renewal of Organizations", Organization Science, 20: 281-293.
- Al-Ajmi, J, (2009), "Audit Firm, Corporate Governance and Audit Quality: Evidence from Bahrain, Advances in Accounting, Incorporating Advances in International Accounting", 25: 64-74.
- Akerlind, S. G, (2005), "Academic Growth and Development-how do University Academics Experience it?" The International Journal of Higher Education and Education Planning, 50(1): 1-32.
- Allen, T. C., Francis, J.R., Taylor. S. L, (2005), "Auditor Brand Name Reputations and Industry Specializations," *Journal of Accounting and Economics*, 297-322.
- American Institute of Certified Public Accountants (AICPA), (1989), "Illegal by Client: Statement on Auditing Standards No. 54", AICPA, New York, NY.
- American Institute of Certified Public Accountants (AICPA), (2002), "Codification of statement on Auditing Standards", New York, NY: AICPA.
- Arens, A. A., R. J. Elder and M. S. Beasley, (2005), "Auditing and Assurance Services: An Integrated Approach", New Jersey: Prentice Hall.
- Armstrong, J. S. and Overton, T. S, (1977), "Estimating Non-Response Bias in Mail Surveys", *Journal of Marketing Research*, 14(3): 396-402.
- Ashton, A, (1991), "Experience and Error Frequency Knowledge as Potential Determinants of Audit Expertise," *The Accounting Review*, 66 (2): 218–239.
- Baden-Fuller, C. W. and Volberda, H, (1997), "Strategic Renewal, How large Complex Organizations Prepare for the Future", *International Studies of Management and Organization*, 27: 95-120.
- Bharadwaj, S. G., Varadarajan, P. R. and Fahy, J, (1993), "Sustainable Competitive Advantage in Service Industries: A Conceptual Model and Research Propositions", *Journal of Marketing*, 57(4): 83-99.
- Birkinshaw, J, (2000), "Network Relationships Inside and Outside the Firm, and The Development of Capabilities", In The Flexible Firm: Capability Management in Network Organizations, Edited by J. Birkinshaw and P. Hagstrom, New York: Oxford, UK, 4-18.
- Bogan C, English M, (1994), "Benchmarking for Best Practices: Winning through Innovative Adaptation", New York: McGraw-Hill.
- Budescu, D. V., Peecher, M. and Solomon, I, (2012), "The Joint Influence of the Extent and Nature of Audit Evidence, Materiality Thresholds, and Misstatement Type on Achieved Audit Risk", Auditing: A Journal of Practice and Theory, 31(2): 19-41.

- Carnaghan, C, (2006), "Business Process Modelling Approaches in the Context of Process Level Audit Risk Assessment: An Analysis and Comparison", *International Journal of Accounting Information Systems*, 7: 170-204.
- Chakravarthy, B. S. (1984), "Strategic Self-Renewal: A Strategic Planning Framework for Today", Academy of Management Review, 9(3): 536-547.
- Chakravarthy, B. S. and Doz, Y, (1992), "Strategy Process Research: Focusing on Corporate Self-Renewal", Strategic Management Journal, 13: 5-14.
- Chaney, C. and Kim, G, (2007), "The Integrated Auditor", The Internal Auditor, 64(4): 46.
- Chang, S., C. Tsai, D. Shin and C. Hwang, (2008), "The Development of Audit Detection Risk Assessment Systems: Using the Fuzzy Theory and Audit Risk Model," Expert Systems with Applications. 35: 053-1067.
- Chien, S.Y. and Tsai, C.H, (2012), "Dynamic Capability, Knowledge", Learning and Firm Performance", *Journal of Organizational Change Management*, 25(3): 434-444.
- Chung, J. and Monroe, G. S, (2001), "Gender Differences in Information Processing: An Empirical Test of the Hypothesis-Confirming Strategy in an Audit Context," *Accounting and Finance*, 38 (2), 265–279.
- Churchill, G. A., (1979), "A Paradigm for Developing Better Measures of Marketing Constructs", Journal of Marketing Research, 16: 67-73.
- Cohen, A. and Y. Kol, (2004), "Professionalism and Organizational Citizenship Behaviour: An Empirical Examination among Israeli Nurses," *Journal of Managerial Psychology*, 19(4): 386-405.
- Craswell, T. A., Jere, R. F. and Stephen, L. T, (1995), "Auditor Brand Name Reputation and Industry Specializations", *Journal of Accounting and Economics*, 20(3): 297-322.
- Crossan, M.M. and Berdrow, I. (2003), "Organizational learning and strategic renewal," *Strategic Management Journal*, 24: 1087–1105.
- Cunningham, P. and Ve Iles, P, (2002), "Managing learning climates in a financial services organization", The *Journal of Management Development*, 21(3): 477-92.
- Davidson, R. A. and Neu, D, (1993), "A Note on the Association between Audit Firms Size and Audit Quality", *Contemporary Accounting Research*, 9(2): 479-488.
- Done, A., Voss, C. and Rytter, N.G. (2011), "Best Practice Interventions: Short-term Impact and Long-term Outcomes", *Journal of Operations Management*, 29 (Special Issue on Field Research in Operations and Supply Chain Management), 500-513.
- Eisenhardt, K.M. and Martin, J.A, (2000), "Dynamic Capabilities: What are they?" *Strategic Management Journal*, 21(10/11): 1105-1121.
- Federation of Accounting Professions of Thailand, (FAP), (2014), "ASEAN Economic Community; AEC", Retrieved March 10 from http://www.fap.or.th/index.php.
- Firth, M, (2002), "Auditor-Provided Consultancy Services and Their Associations with Audit Fees and Audit Opinions", *Journal of Business Finance & Accounting*, 29(5): 661-693.
- Floyd, S. W. and Wooldridge, B, (2000), "Building Strategy from the Middle: Econceptualizing Strategy Process", Thousand Oaks, CA, SAGE.
- Francis, J. R, (2011), "A Framework for Understanding and Researching Audit Quality. Auditing", *A Journal of Practice & Theory*, 30(2): 125–152.
- Garavan, T, (2007), "A Strategic Perspective on Human Resource Development", Advances in Developing Human Resource, 9(1): 11-30.
- Garcia, Benau, M.A. and Zorio, A, (2006), "Audit Reports on Financial Statements Prepared According to IASB Standards: Empirical Evidence from the European Union", *International Journal of Auditing*, 8: 237-252.

- Gibbins, M., and K. Jamal, (1993), "Problem-centred Research and Knowledge-based Theory in the Professional Accounting Setting", *Accounting, Organizations and Society* 18 (5): 451–466.
- Goh, S. and Richards, G. (1997), "Benchmarking the Learning Capacity of Organizations", *Journal of European Management*, 15(5): 575-583.
- Gomez, G. D, (2003), "The Usefulness of the Audit Report in Investments and Financial Decision", *Managerial Auditing Journal*, 18(6): 549-559.
- Graham, L. and J. C. Bedard, (2003), "Fraud Risk and Audit Planning," *International Journal of Auditing*, 7: 55-70.
- Griffth, D.A., Noble, S. and Chen, Q, (2006), "The Performance Implications of Entrepreneurial Proclivity: a Dynamic Capabilities Approach", *Journal of Retailing*, 82(1): 51-62.
- Grewal, R. and Tansuhaj, P, (2001), "Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility", *Journal of Marketing*, 65: 67-80.
- Guiral, A., Ruiz, E. and Rodgers, W, (2011), "To What Extent are Auditors' Attitudes Toward The Evidence Influenced by the Self-Fulfilling Prophecy?" Auditing: A Journal of Practice and Theory, 30(1): 173-190.
- Guth, W. D. and Ginsberg, A, (1990), "Corporate Entrepreneurship: Introduction", *Strategic Management Journal*, 11: 5-15.
- Hair, J. F., Black, W. C., Babin B. J. and Anderson, R. E, (2010), "Multivariate Data Analysis. Seventh Edition", Prentice Hall, Upper Saddle River, New Jersey.
- Hill, C. W. L. and Rothaermel, F. T, (2003), "The Performance of Incumbent Firms in the Face of Radical Technological Innovation", *Academy of Management Review*, 28(2): 257-274.
- Huff, J. O., Huff, A. S. and Thomas, H, (1992), "Strategic Renewal and the Interaction of Cumulative Stress and Inertia", *Strategic Management Journal*, 13: 55-75.
- Hui, L. T. and Fatt, Q.K, (2007), "Strategic Organizational Conditions for Risks Reduction and Earnings Management: A Combined Strategy and Auditing Paradigm", Accounting Forum, 31: 179-201.
- International Accounting Education Standards Board (IAESB), (2008), "International Education standard 8, Competence Requirements for Audit Professionals", New York: International Accounting Education Standards Board, International Federation of Accountants.
- International Federation of Accountants (IFAC), (2009), "Framework for International Education Standards for Professional Accountants", http://www.org/sites/default/files/meeting/files/5046.pdf: Date accessed (retrieved) needed here.
- International Federation of Accountants (IFAC), 2010, "TSA 330, The Auditor's Responses to Assessed Risks that offers sufficient audit evidences," International Federation of Accountants.
- Jiraphatthanaponsin. T,(2016), "Audit Renewal Strategy and Audit Performance: An Empirical Investigation of Certified Public Accountants (CPAs) in Thailand", Mahasarakham Business School, Mahasarakham, Thailand: Mahasarakham Business School, Mahasarakham University.
- Joshi, M., Kathuria, R. and Porth, S.J. (2003), "Alignment of Strategic Priorities and Performance: An Integration of Operations and Strategic Management Perspectives", *Journal of Operations Management*, 21(3): 353-369.
- Kaleka, A. and Berthon, P, (2006), "Learning and Locale: The Role of Information, Memory and Environment in Determining Export Differentiation Advantage", *Journal of Business Research*, 59(9): 1016-1024.
- Krejcie, R.V. and Morgan, D.W, (1970), "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 30: 607-610.
- Kutner, M. C., Nachtsheim, C. and Neter, J, (2008), "Applied Linear Regression Models (4th ed.)", New York: McGraw Hill.
- Lacetera, N., Cockburn, I. M. and Henderson, R, (2004), "Do Firms Change Capabilities by Hiring New People?", A Study of the Adoption of Science-Based Drug Discovery. In Baum, J.A.C and McGahan, A. M. (Eds.),

- Business Strategy over the Industry Lifecycle: Advances in Strategic Management, 21. Boston, MA, Elsevier.Lau, R. M. S, (1996), "Strategic flexibility: A New Reality for World-class Manufacturing", Advanced Management Journal, 61: 11-15.
- Lee, C-W. J., Liu, C. and Wang, T, (1999), "The 150-Hour Rule", Journal of Accounting and Economics, 27: 203-228.
- Leonard-Barton, D, (1993), "Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development", *Strategic Management Journal*, 13(summer): 111-125.
- Leventis, S., Weetman, P. and Caramanis, C, (2005), "Determinants of Audit Report Lag: Some Evidence from the Athens Stock Exchange", *International Journal of Auditing*, 9: 45-58.
- Libby, R. and Luft, J, (2003), "Determinants of Judgment Performance in Accounting Settings: Ability, Knowledge, Motivation and Environment", *Accounting, Organizations and Society*, 425-450.
- Lin, R. Z. and I. A. M. Fraser, (2008), "Auditors' Ability to Resist Client Pressure and Culture: Perceptions in China and the United Kingdom," *Journal of International Financial Management and Accounting*, 19(2): 61-183.
- Loebbecke, J. K., Eining, M. M. and Willingham, J. J. (1989), "Auditors' Experience with Material Irregularities: Frequency, Nature, and Detectability", *A Journal of Practice and Theory*, 9(1): 1–28.
- Low, K.Y, (2004), "The effects of Industry Specialization on Audit Risk Assessments and Audit-planning Decisions", *The Accounting Review*, 79(1): 201-219.
- Luo, Y, (2000), "Dynamic Capabilities in International Expansion", Journal of World Business, 35(4): 355-378.
- Marquardt, M, (2002), "Five Elements of Learning", Executive Excellence, 19(9), 15, Retrieved from Business Source Premier database. Date needed here
- McCracken, S. A, (2003), "Auditors' Strategies to Protect their Litigation Reputation: A Research Note. Auditing", A Journal of Practice & Theory, 22 (1): 165-179.
- Menon, A. G, (2008), "Revisiting Dynamic Capability", IIMB Management Review, 22-33.
- Monden, Y, (1983), "The Toyota Production System". Portland, Productivity Press.
- Mullins, L. J, (2002), "Management and Organizational Behaviour", Sixth edition, London, Financial Times/ Prentice Hall.
- Nelson, M. W, (2003), "Behavioural Evidence on the Effects of Principles-and Rules-Based Standards", Accounting Horizons, 17(1): 91–104.
- Nicolaou, I. A, (2000), "A Contingency Model of Perceived Effectiveness in Accounting Information Systems: Organizational Coordination and Control Effects", *International Journal of Accounting Information Systems*, 1(2): 91-105.
- Nunally, J. and Bernstein, I.H, (1994), "Psychometric Theory", (3rd ed.), New York, McGraw-Hill.
- Nunally, J. C, (1970), "Introduction to Psychological measurement", New York: McGraw-Hill.
- Obaidat, A. N, (2007), "Accounting Qualitative Characteristics Gap: Evidence from Jordan", *International Management Review*, 3(2): 26-32.
- Pauwels, P., and Matthyssens, P., (2004), "Strategic Flexibility in export expansion: Growingthrough withdrawl", *Internationnal Marketing Review*, 21(4-5): 496-498.
- Peecher, M.E., Schwartz, R. and Solomon, I, (2007), "It's All about Quality: Perspectives on Strategic-Systems Auditing", *Accounting, Organizations and Society*, 32(4): 463-486.
- Pennekamp, P., and Vlasveld, P. J. J. (2006), "Reforming the Audit Function: A Dutch Government Audit Group Redefines its Role in the Organization and Broadens the Department's Sphere of Influence", Internal Auditor, 63(2): 69-73.

- Radu, L, (2011), "Changes in Accounting and Financial Auditing Activities in the Context of Economic Globalization", Published in: Innovation and Knowledge Management: A Global Competitive Advantage, 1-4: 1056-1064.
- Rainsbury, E. A., Bradbury, M. and Cahan, S. F, (2009), "The Impact of Audit Committee Quality on Financial Reporting Quality and audit Fees", *Journal of Contemporary Accounting & Economics*, 5, 20-33.
- Rameesh, K, (2003), "Best Practices for Internal Audit in Government Departments", Centre for Good Governance Collected, Working Paper, 2: 1-15.
- Real, J. C., Leal, A. and Roldan, J. L., (2006), "Information Technology as a Determinant of Organizational Learning and Technological Distinctive Competencies", *Industrial Marketing Management*, 35: 505-52.
- Salterio, S, (1994), "Researching for Accounting Precedents: Learning, Efficiency, and Effectiveness", Contemporary Accounting Research, 11: 515-542.
- Salvato, C. (2009), "Capabilities unveiled: the role of ordinary activities in the evolution of product development processes", Organization Science, 20: 384–409.
- Sampattikorn, S., Ussahawanitchakit, P. and Boonlua, S, (2012), "Best Internal Audit Practices and Goal Achievement Sustainability: An Empirical Examination of Thai listed Firms", *Journal of International Business and Economics*, 12(5): 40-66.
- Samelson, D. P., S. Lowensohn, and L. E. Johnson, (2006), The Determinants of Auditee Satisfaction and Perceived Audit Quality in Local Government", *Journal of Public Budgeting, Accounting and Financial Management* 18 (2): 139–166.
- Schaffer, R. H. and McCreight, M. K, (2004), "Build Your Own Change Model. Business Horizons", Maylune
- Schonberger, R.J, (1986), "World Class Manufacturing, The Lessons of Simplicity Applied", New York: Free Proces
- Sharma, S, (2000), "Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy", *Academy Management Journal*, 43(4): 681–697.
- Shih, C. F. and Jue, F. W, (2006), "Effects of Organizational Culture and Learning on Manufacturing Strategy Selection: An Empirical Study", *International Journal of Management*, 23(3).
- Solomon, I. and Trotman, K.T. (2003), "Experimental Judgment and Decision Research In Auditing: The First 25 Years of AOS", Accounting, Organizations and Society, 28: 395-412.
- Srichanapun, P., Ussahawanitchakit, P. and 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.
- Struweg, L. N. and Meintjes, C, (2008), "The Professionalism Debate in South African Public Relations", *Public Relations Review*, 34(3): 224-229.
- Sucher, P., Moizer, P. and Zarova, M, (1998), "Factors Affecting the Assessment of the Quality of a Company's Auditors: The Case of the Czech Republic", *International Journal of Auditing*, 2(1): 7-20.
- Sueyoshi, T., J. Shang and W. C. Chiang, (2008), "A Decision Support Framework for Internal Audit Prioritization in a Rental Car Company: A Combined use Between DEA and AHP," European Journal of Operational Research, 45(23): 34-56.
- Sumritsakun, C. and Ussahawanitchakit, P, (2009), "Audit Innovation Learning, Audit Performance and Audit Reputation of CPAs in Thailand", *International Journal of Business Research*, 11(4): 1555-1296.
- Teece, D.J., Pisano, G. and Schuen, A, (1997), "Dynamic Capabilities and Strategic Management", *Strategic Management Journal*, 18(7): 509.
- Teece, D. and Gary P.P. (1994), "The Dynamic Capabilities of Firms: An Introduction. Industrial and Corporate Change", 3(3): 537-556.

- Uachanachit, D. and Ussahawanitchakit, P, (2012), "Intelligent Learning, Internal Audit Report and Internal Audit Performance: Empirical Evidence from Thai-Listed Firms", *Journal of International Finance and Economics*, 12(4): 49-60.
- Verdu-Jover, A. J., Llorens-Montes, F. S. and Garcia-Morales, V. J, (2006). "Environment-Flexibility Coalignment and performance: An analysis in large versus small firms", *Journal of Small Business Management*, 44: 334-349.
- Wallace, W. A, (1980), "The Economic Role of the Audit in Free and Regulated Markets", University of Rochester, New York.
- Wangcharoendate, S. and Ussahawanitchakit, P, (2010), "Best audit practices of CPAs in Thailand: Effects on audit independence, judgment, performance and credibility", *International Journal of Business Research*, 10(6): 1-23. Washington, M. and Hacker, M, (2005). "Why Change Fails: Knowledge Counts", Leadership and Organization Development Journal, 26.
- Watkins, A. L., Hillison, W. and Morecroft, S. E, (2004), "Audit Quality: A Synthesis of Theory and Empirical Evidence", *Journal of Accounting Literature*, 23: 153-193.
- Willson, T. E., Apostolou, B. and Apostolou, N.G, (1997), "An Examination of the Effect of Regulatory Action on Client Retention", *International Journal of Auditing*, 1(1): 31-41.
- Wong, P. S. P. and Cheung, S. O, (2008), "An Analysis of Relationship between Learning Behaviour and Performance Improvement of Contracting Organizations", *International Journal of Project Management*, 26: 112-123.
- Woolf, N. and Quinn, J, (2008), "Learners' Perceptions of Instructional Design Practice in a Situated Learning Activity", *Educational Technology Research and Development*, 57(1): 25-43.
- Young, S. (2004), "Professionalism is Illustrated through Your Actions," *The Canadian Appraiser*. 48(1): 22-23.
- Zairi M, (1996), "Benchmarking for Best Practice", Oxford: Butterworth-Heinemann.
- Zollo, M, and Winter, S. G, (2002), "Deliberate Learning and the Evolution of Dynamic Capabilities", Organization Science, 13: 339-351.