

Strategic audit planning and audit quality: an empirical research of CPAs in Thailand

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Keywords

Audit Planning, Strategic Audit Planning, Audit Quality

Abstract

The purpose of this study is to examine the effect of strategic audit planning on audit quality via the mediating influences which include audit efficiency, audit excellence, and audit effectiveness. The author improved a novel component of the strategic audit planning: internal control system evaluation, business risk assessment, audit resource allocation, audit method determining, and audit practice scheduling. Data was collected from 161 CPAs in Thailand by questionnaire mail survey and key informant is CPAs. The statistic used to analyze is the ordinary least square regression. The results of OLS regression reveal that four of five dimensions of strategies audit planning have significant positive influence on auditing outcomes and auditing outcomes have significant positive influence on audit quality. Also, the results indicated that audit vision and audit environment changes as the antecedents of strategies audit planning.

1. Introduction

In 2015, Thailand's economy faces a big challenge, which results in a volatility of economic, money market and capital market effect from external factors and need for better preparedness. In addition, it can be predicted that the Asian currency crisis will occurred next year and also in Thailand because Thailand is confronting to the export slowdown and investment of the private sector has expanded at a lower level (CIMB Thai Bank, 2015). Therefore, many businesses have experienced on financial problems or face bankruptcy (Weisbrot, 2007). All organization needs to survive in the crisis which their managers participate in corruption activities; for example the change in accounting policy in order to create an efficient financial statement of the company's operations. Moreover, many companies are utilizing various strategies (Ghosh and Olsen, 2009), designs of accounting management control systems (Chenhall, 2003). The effort of the company to solve this problem influences on the development of audit methods to enhance the determination of the company (Brocheler et al., 2004).

Recently, the performance of the external auditing plays a major role according to the increasing of stakeholder requirement for more protection from corruption in financial statements (Peecher et al., 2007). In addition, the responsibility of auditor is to inform the quality information including timeliness, accuracy, credibility, completeness and relevance for stakeholders and the data can reflect "Truth and Justice". Therefore, audit planning is a key step for auditor which allows the auditor to gather sufficient and appropriate auditing evidence in order to summarize reasonably of the opinion in the auditing report.

The auditors can be conducted by audit planning to achieved the auditing procedures with various tasks according to the appropriate way for giving the opinion about financial statements and the accuracy of risk assessment and the ability to analyze the risk of the business (Bonner and Pennington, 1991). Moreover, audit planning should present raising level of professional skepticism (Brody et al., 1998). Therefore, the auditor should use their strategic system to enhance the audit judgment for accomplish the needs of society and demands for high performance auditing (Peecher et al., 2007). The professional auditors have a great responded to the main alteration including environment awareness by achieving significant changes in their strategy audit planning by improving their efficiency, skill and knowledge of audit planning strategic in order to enhance the audit performance. Consistent with Lin and Fraser (2003) suggested that auditor who increases the analysis and testing procedures into audit planning have expectations for high audit performance.

The purpose of this study is to examine the effect of the strategic audit planning on audit quality. It will also help the auditor to provide the guidance in appropriate practices that may be useful to adopt.

The remains of this study are structured as follows. The first, the researcher provides the relevant literatures and hypotheses development of all constructs. The second, the researcher explain the methodology including; data collection procedure and measurement, measure validation, and statistical technique. The third, the researcher discusses the results of this study. The fourth, the researcher explain the contributions and directions for future research. Finally, the researcher concludes of this research.

2. Literature review and hypothesis development

To examine the relationships between strategic audit planning and audit quality, the novel components of strategic audit planning include: internal control system evaluation, business risk assessment, audit resource allocation, audit method determining, and audit practice scheduling. The conceptual, linkage, and research model presents the relationship of the mentioned above, as shown in Figure 1

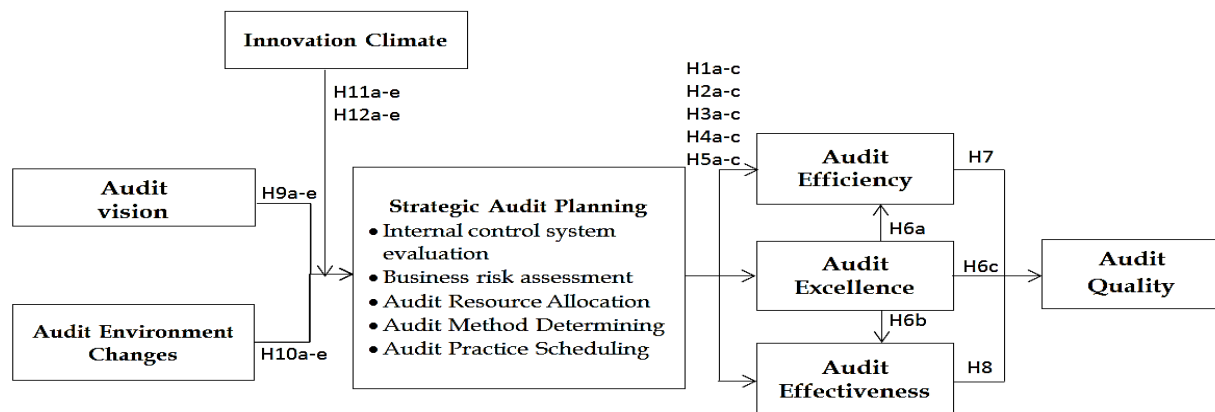


Figure 1: Conceptual Model of Strategic Audit Planning and Audit Quality

2.1 Strategic Audit Planning

In audit work environments, audit planning has become a major activity that the auditor was conducted it in order to achieve the effectiveness of the audit report, gain audit performance, and enhance audit success. The audit planning is designed to allow the auditor to conduct and evaluate business risks and develop specific audit program and scope to test in the audit process (KosmalaMacLulich, 2003). The auditors with greater audit planning are likely to generate more efficient audits that encourage them to maintain the competitive and their clients. Here, strategic audit planning is defined as the auditor's decision-making process about obligations to achieve and determining how it is successful (Phagaphasvivat, 2000). Strategic audit planning is an important driving force of audit quality through both audit efficiency and audit effectiveness (Humphrey and Moizer, 1990). As shown in figure 1, the five components of strategic audit planning that the author defines in this study are internal control system evaluation, business risk assessment, audit resource allocation, audit method determining, and audit practice scheduling

2.1.1 Internal Control System Evaluation

Accounting Oversight Board requires the auditor to report about the assessment of internal control system of the client. Here, internal control system evaluation defined as focuses on depth understanding and featured to assess the internal control system of the client (Richie and Khorwatt 2007). ICAN (2015) stated that evaluation of the client's internal control system can improve the auditor to understanding of the internal control system and can identify the weaknesses of the system that may lead to corruption in the financial statements. It will contribute to determine the scope, time, and how to determine correctly and appropriately. Therefore audit efficiency audit excellence and audit effectiveness are under the influence of internal control evaluation. Thus, the hypothesis is proposed as follows:

Hypothesis 1: The higher the internal control evaluation is, the more likely that auditor will gain greater audit efficiency, (b) audit excellence, and (c) audit effectiveness.

2.1.2 Business Risk Assessment

Risk is defined as the uncertainty associated with the situation especially it makes the business cannot operate to achieve the goal or cause financial insecurities for the firm (Kyra Sheahan, 2015). Risk Assessment improves auditors to increase investment in auditing to the issue where the unqualified opinions on financial statements are issued that cannot be detected material misstatement. Here, business risk assessment refers to the process of considering the uncertainty especially the risks that have the potential to threaten the client's business operations. ISA 315 (2015) has given that stressed the importance of all members of the audit team about understanding the risks that might occur in each client which could lead to a conflict with the facts in the financial statements. Especially the standard can produce the main concept to the auditor. It can indicate the understanding of the business risks that is so useful for audit planning and contributes to audit efficiency and effectiveness. Thus, the hypothesis is proposed as follows:

Hypothesis 2: The higher the business risk assessment is, the more likely that auditors will gain greater (a) audit efficiency, (b) audit excellence, and (c) audit effectiveness.

2.1.3 Audit Resource Allocation

In ISAs section 300, audit planning of financial statements (2006) determines that audit resource allocation is one of the elements of audit planning procedure and audit planning development. Prior researcher has few studies on audit resource allocation. The results suggested that auditors should be balancing method to operate the audit resource (Holter, 1992). Here, audit resource allocation refers to allocation and planning of audit resource as efficiently and effectively under considering the properness of cost. The audit resource allocation consists of assistant auditors that focus on assistant auditor's experience, expertise, and the staffs work for each task (Bedard et al., 1999) Moreover, audit resource allocation focuses on budget allocation and tool of auditing. Holter (1992) stated that audit resource allocation quality will lend to more audit effectiveness and audit efficiency. Therefore audit efficiency, audit excellence, and audit effectiveness are under the influence of audit resource allocation. Thus, the hypothesis is proposed as follows:

Hypothesis 3: The higher the audit resource allocation is, the more likely that auditors will gain greater (a) audit efficiency, (b) audit excellence, and (c) audit effectiveness.

2.1.4 Audit Method Determining

ISAs section 300, audit planning of financial statement (2006) stipulates that the audit method planning is the important process which responded to the inherent risk and control risk from business risk assessment. Moreover, it can operates and increase the audit standard. Here, audit method determining is defined as the capability to manage the audit method for the overall of audit and development plan of audit for the purpose of improve the auditing performance. The audit method presents the important influences on the relationship of audit effectiveness, stakeholder acceptance and audit report performance (Shoosmuangpak and Ussahawanichakit, 2009). Thus, the hypothesis is proposed as follows:

Hypothesis 4: The higher the audit method determining is, the more likely that auditors will gain greater (a) audit efficiency, (b) audit excellence, and (c) audit effectiveness.

2.1.5 Audit Practice Scheduling

Scheduling is the process of converting the plan outlined for the project by the time graphical presentation, defined data about the available resources, time constraints, budget and actual expenses. Here, audit practice scheduling is a form of data table developed by the auditor to guide in the preparation of the information presented in a particular manner that facilitates the audit (Ventureline, 2015). The audit practice scheduling should be completed before starting the auditing to contribute to positive audit outcome. Therefore, audit efficiency audit excellence and audit effectiveness are under the influence of audit practice scheduling. Thus, the hypothesis is proposed as follows:

Hypothesis 5: The higher the audit practice scheduling is, the more likely that auditors will gain greater (a) audit efficiency, (b) audit excellence, and (c) audit effectiveness.

2.2 Mediating of the relationship between Strategic Audit Planning and Audit Quality

The consequence of strategic audit planning in this paper is audit outcomes which consist of audit efficiency, audit excellence, and audit effectiveness.

2.2.1 Audit Excellent

Audit excellent in this study is defined as audit performance of the auditors to ensure compliance with audit standards, can perform with the professionalism, can use variety of auditing tools, and learn new auditing techniques to improve the audit quality. Many researchers found that an audit excellence can indicate the impact of the inherent risk and control risk. It can improve the efficiency of the auditors to discover the uncorrected misstatement materials. In addition, audit excellent is an important factor of the auditor that can reflect the quality of their work because audit report must be prepared in accordance with auditing standards. Consistent with David McNamee (2014) indicated that auditors wish to achieve audit excellent to improve their capabilities because audit excellent will help to achieve the objectives and goals of the auditing. It makes the audit report be acceptable and reliable. Therefore, audit efficiency, audit effectiveness, and audit quality are under the influence of audit excellent. Thus, the hypothesis is proposed as follows:

Hypothesis 6: The higher audit excellent is, the more likely that auditors will gain greater (a) audit efficiency, (b) audit effectiveness, and (c) audit quality.

2.2.2 Audit Efficiency

Efficiency is the ratio of input per output: hours spent per audit report, years spent per audit report. Here, the audit efficiency represented to the auditors who could reserve the resource utilization in the auditing processes. This process is well-timed and accomplishes the standard of auditing performance. Many researchers found that audit efficiency includes resource utilization for the audit is worthwhile, gathering audit evidence according to the audit standards to provide reliability for the audit evidence. Davison and Neu (1993) indicated that audit efficiency will increase the probability that the financial statements contain not shown material misstatements. In accordance with Stice (1991) stated that audit quality presents as a significant factor for investors in capital market. It is due to the investors utilize the financial statements which audited by an author who perform strictly on auditing standard which is one of the basis for investment decisions. Thus, the hypothesis is proposed as follows:

Hypothesis 7: The higher audit efficiency is, the more likely that auditor will gain greater audit quality.

2.2.3 Audit Effectiveness

Audit Effectiveness refers to the achievement of objectives of audit by assembling sufficient and appropriate audit evidence in order to get an opinion on the financial statements in accordance with audit standards. Stakeholders are demanding for the Audit effectiveness (Palmrose, 2006). In particular, investors in securities markets need assurance about the audit effectiveness. The demand of investors can contribute to improve the financial statements that are accurate and reliable. Consistent with Obaidat (2007) pointed out that the financial statement displays useful information for investors to making the decision and creditors. Therefore the financial statements present an enlargement of confidence which the auditor should practice to increase the audit effectiveness and it will lead to greater audit quality. (Obaidat, 2007). Therefore, the hypothesis is proposed as follows:

Hypothesis 8: The higher audit effectiveness is, the more likely those auditors will gain greater audit quality.

2.3 Antecedent of Strategic Audit Planning

From the literature review found that many variables affect Strategic Audit Planning. This section explains the influences of strategic audit planning. There are two antecedents include audit vision and audit environment changes.

2.3.1 Audit Vision

Vision will demonstrate the value of the priorities of stakeholders (Ferreira and Otley, 2009). In the face of environmental change, visions of the mission statements are symbolic of guidelines for decisions-making whether to change or maintain the existing strategies and activities (Chenhell 2003). Previous research suggested that vision refers to the intention of the desired future state which is built from the concept of multidimensional performance, consists of over the long term financial success, long term growth and social commitment (Davidson, 2005). Here, audit vision can be defined that what an auditor's perspective on the future toward the desired audit missions in order to achieve the high level of audit quality. Therefore, audit vision can influence to strategic audit planning. Auditor's perspective on the future toward enhancing appropriation with strategic audit

planning for an environment where changing all the time. Thus, the hypothesis is proposed as follows:

Hypothesis 9: The higher the audit vision is, the more likely that auditor will gain greater (a) internal control system evaluation, (b) business risk assessment, (c) audit resource allocation, (d) audit method determining, and (e) audit practice scheduling.

2.3.2 Audit Environment Changes

Audit environment changes include technological transformation in audit practices or the implantation of audit technologies in professional structures (Robson et. al 2007). The auditing change can be indicated in the meaning of the improvement of understanding about the pursuance of practice alternation in auditing, especially in the relation of audit methodologies including expressed, presented, reflected in and also the enabled through disconnected, textual constructions of the audit company (Khalifa et. al, 2007). In addition Robson et al (2007) indicated that technological changes in auditing are associated with the changes within the organization field of audit. Here, audit environment changes in this study refers to the point of audit environment change for instance new technology, new process of certification of financial statements, and changes to audit methods and procedures including the new accounting standard and auditing standard (Robson, 2007). Therefore, audit environment changes can be provided to influence strategic audit planning. Thus, the hypothesis is proposed as follows:

Hypothesis 10: The higher the audit environment changes is, the more likely that auditors will gain greater (a) internal control system evaluation, (b) business risk assessment, (c) audit resource allocation, (d) audit method determining, and (e) audit practice scheduling.

2.4 Moderating effect of the relationship

This study assigns innovation climate as the moderator of the relationship between the antecedents and strategic audit planning.

2.4.1 Innovation Climate

There is widespread in accord with innovation contributes to positive outcome (Hult, Hurley, and Knight, 2004). Technological progress and the transformation of society and the economy as the driving force for the development of audit planning. Innovation climate in this study refers to conditions of the auditing that is changing about innovation transfer include using modern technology in audit operations, learn and understand the change of rules or guidelines of the auditing standards consistently to enhance the auditing operation more effective. Ussahawanichakit (2007) stated that to understand the importance of innovation, it becomes an important factor used to develop core of strategies in operation. Moreover, Liou (2008) indicated that the application of modern technologies in auditing process allows performing audit more effectively and it can help to develop audit performance. Therefore, innovation climate can be provided to influence the relationship among antecedents (audit vision and audit environment changes) and strategic audit planning. Thus, the hypothesis is proposed as follows:

Hypothesis 11: Innovation climate will result in positive relationships between audit vision and (a) internal control system evaluation, (b) business risk assessment, (c) audit resource allocation, (d) audit method determining, and (e) audit practice scheduling.

Hypothesis 12: Innovation climate will result in positive relationships between audit environment changes and (a) internal control system evaluation, (b) business risk assessment, (c) audit resource allocation, (d) audit method determining, and (e) audit practice scheduling.

3. Methodology

3.1 Sample and Data Collection Procedure

In this study, the sample data comprise certified public accountants (CPAs) in Thailand. The simple of CPAs' in Thailand from Federation of Accounting Professionals under the Royal Patronage of His Majesty the King was 161 participants who had passed an examination that is provided by the Federation of Accounting Professions in Thailand and wish to disclose the address. The questionnaire was evaluated by an academic professional in terms of content validity and face validity. A mail survey process via questionnaire was used for data collection.

3.2 Test of Non-Response Bias

To test non-response bias and to detect and consider possible problems with non-response errors was investigated by t-test that followed to Armstrong and Overton (1977). The researcher was compared early and late responses about total assets, number of employees and the period of time in operating business. The results were not significant between early and late responses. Therefore, it was implied that these received questionnaires show insignificant non-response bias for the analysis in this study.

3.3 Variable Measurement

To measure each construct in the conceptual model, all variables are anchored by five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) excluding control variables. In addition, all constructs are improved for measuring from definition of each constructs and determine the relationship between theoretical framework and previous literature reviews. Therefore, the variables measurements of this study are described as follows:

3.3.1 Dependent Variable

Audit quality is the ending dependent variable in this research affected by audit efficiency, audit excellence, and audit effectiveness. It comprises five items developed as a new scale adapted with some modification from previous research. It measured by both discovering and truthfully reporting material error, misrepresentation, or omissions in client's material financial statement.

3.3.2 Independent Variables

Strategic audit planning refers to the auditor's decision-making process about obligations to achieve and determine how it is successful. This variable includes five dimensions: internal control system evaluation, business risk assessment, audit resource allocation, audit method determining, and audit practice scheduling.

Internal control system evaluation defined as focuses to understand and feature to assess the internal control system of the client (Richie and Khorwatt 2007). This construct is developed as a new scale including five-item scale. Five scale items are developed to determine how auditors learn and review objectives of clients' activities. Moreover, the means of which the activities control their performance are also investigated.

Business risk assessment defined as the process of considering the uncertainty especially the risks that have the potential to threaten the client's business operations. This construct is developed as a new scale including five-item scale. Five scale items are developed to determine how auditors learn and review objectives of clients' activities. Moreover, the means of which the activities control their performance are also investigated.

Audit resource allocation defined as allocation and planning of audit resource as efficiently and effectively under considering the properness of cost. The audit resource allocation composes of staff as assistance of auditor that concentrates on staff experience, expertise, and the staffs work for each task. This construct is developed as a new scale including four-item scale. Four scale items are developed to measure how auditors allocate and plan of resource of timing, staffing, budgets, and tools that use in the auditing.

Audit method determining defined as an ability to set audit method for the overall auditing and auditing development plan for the purpose of performance auditing to be effective. This construct is developed as a new scale including four-item scale. Four scale items are developed to measure how auditors realize audit method determining

Audit practice scheduling refers to a form of data table developed by the auditor to guide and facilitate the preparation of the audit. This construct is developed as a new scale including three-item scale. Three scale items are developed to measure how auditors schedule the audit practice.

3.3.3 Mediating Variables

Audit excellent in this study is defined as operational on auditing of the auditors to ensure compliance with audit standards, can perform with the professionalism, can use variety of auditing tools, and learn new auditing techniques to improve the quality of auditing. This construct is developed as a new scale including four-item scale.

The audit efficiency represented to the auditors who could reserve the resource utilization in the auditing processes. This process is well-timed and accomplishes the standard of auditing performance. This construct is developed as a new scale including four-item scale.

Audit Effectiveness refers to the achievement of objectives of audit by assembling sufficient and appropriate audit evidence in order to get an opinion on the financial statements in accordance with audit standards. This construct is developed as a new scale including three-item scale.

3.3.4 Antecedent Variables

Audit vision in this study refers to an auditor's perspective on the future toward the desired audit missions in order to achieve audit survival in the long-term. This construct is developed as a new scale including four-item scale.

Audit environment changes in this study refers to the approach about audit environment transformation including new technology, new process of financial statement attestation and the alternation of auditing methodologies comprising novel of the accounting and auditing standard (Robson, 2007). This construct is developed as a new scale including three-item scale.

3.3.5 Moderating Variable

Innovation climate in this study refers to conditions of the auditing from the internal environment that is changing about innovation transfer includes using modern technology in audit operations, learn and understand the change of rules or guidelines of the auditing standards consistently to enhance the audit operation more effective. This construct is developed as a new scale including four-item scale.

3.3.6 Control Variables

Gender (GEN), previous research indicates that the differences of gender are composed of impersonal qualities from the argument of woman insufficiency from the Senior management positions. This is due to the properties of female character and behavior patterns that produce more less-suited in women than in men for leadership position (Hull and Umansky, 1997). Thus, this research shows that gender is one of an important factor which impacted on audit intelligence and audit survival. For analysis, gender is represented by a dummy variable including 0 (male), and 1 (female).

Audit experience (AEXP) refers to both direct experiences and indirect experiences including the individual learning from the success and misconception can develop and collect the persuasive knowledge of the auditor for increase the value of audit experience. For analysis, audit experience represented by a dummy variable including 0 (less than or equal to 10 years), and 1 (more than 10 years).

3.4 Reliability and Validity

The researcher used Cronbach's alpha to test the reliability of the measurement. Coefficient alpha indicates the degree of internal consistency among items in questionnaires that should be greater than 0.70 (Nunnally and Berstein, 1994). In this study, convergent validity was tested by the factor loading, each construct should be greater than the 0.40 cut-off and all factors are statistically significant (Nunnally and Berstein, 1994).

Variable	Factor Loadings	Cronbach's Alpha
Internal Control System Evaluation (ICSE)	0.77-0.87	0.86
Business Risk Assessment (BRA)	0.73-0.83	0.84
Audit Resource Allocation (ARA)	0.76-0.82	0.80
Audit Method Determining (AMD)	0.71-0.81	0.77
Audit Practice Scheduling (APS)	0.89-0.92	0.89
Audit Excellent (AEX)	0.79-0.86	0.84
Audit Efficiency (AEFI)	0.63-0.83	0.76
Audit Effectiveness (AEFE)	0.81-0.90	0.82
Audit quality (AQ)	0.78-0.91	0.88
Audit Vision (AV)	0.79-0.86	0.84
Audit Environment Changes (AEC)	0.78-0.92	0.81
Innovation Climate (IC)	0.78-0.85	0.81

Table 1: Result of Measure Validation

3.5 Statistical Techniques

All dependent and independent variables in this study are the metric scale. Therefore, OLS regression is the appropriate technique to test all hypotheses. From the conceptual model and hypotheses, the following eight equation models are formulated:

$$\text{Equation 1: } AEX = \beta_0 + \beta_1 ICSE + \beta_2 BRA + \beta_3 ARA + \beta_4 AMD + \beta_5 APS + \beta_6 Gen + \beta_7 AEXP + \varepsilon_1$$

$$\text{Equation 2: } AEFI = \beta_8 + \beta_9 ICSE + \beta_{10} BRA + \beta_{11} ARA + \beta_{12} AMD + \beta_{13} APS + \beta_{14} AEX + \beta_{15} Gen +$$

$$\beta_{16}AEXP + \varepsilon_2$$

Equation 3: $AEFE = \beta_{17} + \beta_{18}ICSE + \beta_{19}BRA + \beta_{20}ARA + \beta_{21}AMD + \beta_{22}APS + \beta_{23}AEX + \beta_{24}Gen + \beta_{25}AEXP + \varepsilon_3$

Equation 4: $AQ = \beta_{26} + \beta_{27}AEX + \beta_{28}AEFI + \beta_{29}AEFE + \beta_{30}Gen + \beta_{31}AEXP + \varepsilon_4$

Equation 5: $ICSE = \beta_{32} + \beta_{33}AV + \beta_{34}AEC + \beta_{35}IC + \beta_{36}(AV*IC) + \beta_{37}(AEC*IC) + \beta_{38}Gen + \beta_{39}AEXP + \varepsilon_5$

Equation 6: $BRA = \beta_{40} + \beta_{41}AV + \beta_{42}AEC + \beta_{43}IC + \beta_{44}(AV*IC) + \beta_{45}(AEC*IC) + \beta_{46}Gen + \beta_{47}AEXP + \varepsilon_6$

Equation 7: $ARA = \beta_{48} + \beta_{49}AV + \beta_{50}AEC + \beta_{51}IC + \beta_{52}(AV*IC) + \beta_{53}(AEC*IC) + \beta_{54}Gen + \beta_{55}AEXP + \varepsilon_7$

Equation 8: $AMD = \beta_{56} + \beta_{57}AV + \beta_{58}AEC + \beta_{59}IC + \beta_{60}(AV*IC) + \beta_{61}(AEC*IC) + \beta_{62}Gen + \beta_{63}AEXP + \varepsilon_8$

Equation 9: $APS = \beta_{64} + \beta_{65}AV + \beta_{66}AEC + \beta_{67}IC + \beta_{68}(AV*IC) + \beta_{69}(AEC*IC) + \beta_{70}Gen + \beta_{71}AEXP + \varepsilon_9$

4. Results and Discussion

Variables	ICSE	BRA	ARA	AMD	APS	AEX	AEFI	AEFE	AQ	AV	AEC	IC
Mean	3.89	3.96	3.94	4.18	4.02	3.88	3.96	4.04	3.78	4.00	4.21	4.01
S.D.	0.57	0.59	0.55	0.50	0.59	0.52	0.47	0.52	0.62	0.56	0.59	0.56
ICSE	1											
BRA	.593**	1										
ARA	.498**	.593**	1									
AMD	.606**	.596**	.608**	1								
APS	.469**	.494**	.675**	.657**	1							
AEX	.576**	.554**	.537**	.582**	.428**	1						
AEFI	.539**	.502**	.531**	.659**	.457**	.701**	1					
AEFE	.517**	.464**	.523**	.425**	.425**	.621**	.802**	1				
AQ	.494**	.520**	.468**	.491**	.491**	.576**	.618**	.561**	1			
AV	.487**	.545**	.464**	.540**	.540**	.418**	.528**	.554**	.522**	1		
AEC	.405**	.356**	.326**	.249**	.249**	.392**	.444**	.427**	.249**	.464**	1	
IC	.442**	.600**	.545**	.534**	.534**	.520**	.535**	.508**	.536**	.710**	.418**	1

*** p<.01, ** p<.05

Table 2: Descriptive Statistics and Correlation Matrix

Table 2 shows descriptive statistics and correlation matrix for all variables. Correlation coefficients of variables are ranging from 0.418-0.593. With respect to potential problems relating to multicollinearity, variance inflation factors (VIF) were used to test the intercorrelations among independent variables. In this study, the VIFs range from 1.08 to 3.47, well below the cut-off value of 10 (Hair et al., 2010), meaning the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems found in this study.

Independent Variables	Dependent Variables			
	AEX (1)	AEFI (2)	AEFE (3)	AQ (4)
ICSE	.262*** (.080)	.058 (.072)	.093 (.079)	
BRA	.171** (.083)	-.031 (.074)	-.056 (.081)	
ARA	.209** (.088)	.098 (.079)	.174** (.087)	
AMD	.251*** (.091)	.351*** (.082)	.325*** (.090)	
APS	-.088 (.088)	-.039 (.077)	-.068 (.085)	
AEX		.448*** (.071)	.356*** (.078)	.270** (.087)
AEFI				.325** (.113)
AEFE				.129 (.104)
GEN	.172 (.122)	-.088 (.108)	-.247** (.119)	-.069 (.128)
AEXP	-.059 (.056)	-.025 (.050)	.023 (.055)	.004 (.058)
Adjusted R ²	0.450	0.575	0.487	0.412
Maximum VIF	2.396	2.516	2.516	3.467

***p<.05, **p<.01, * Beta coefficients with standard errors in parenthesis.

Table 3: Results of Regression Analysis^a

Table 3 shows the results of OLS regression analysis for 4 equations. The results indicate the relationship between strategic audit planning dimensions, audit efficiency, audit excellence, audit effectiveness, and audit quality.

For the strategic audit planning dimensions, the results show that Internal Control System Evaluation (ICSE) has a significant positive influence on audit excellent ($\beta_1 = 0.262$, $p < 0.01$), but it is not significantly related to audit efficiency ($\beta_9 = 0.058$, $p > 0.05$) and audit effectiveness ($\beta_{18} = -0.093$, $p > 0.05$). Thus, hypothesis 1b is supported, but hypotheses 1a and 1c are not supported.

The second dimension of strategic audit planning, business risk assessment (BRA) has a significant positive influence on audit excellent ($\beta_2 = 0.171$, $p < 0.05$), but it is not significantly related

to audit efficiency ($\beta_{10} = -0.031, p > 0.05$) and audit effectiveness ($\beta_{19} = -0.056, p > 0.05$). Thus, hypothesis 2b is supported, but hypotheses 2a and 2c are not supported.

Audit Resource Allocation (ARA) has a significant positive influence on audit excellent ($\beta_3 = 0.209, p < 0.05$) and audit effectiveness ($\beta_{20} = 0.174, p < 0.05$), but it is not significantly related to audit efficiency ($\beta_{11} = 0.098, p > 0.05$). Thus, hypothesis 3b and 3c are supported, but hypothesis 3a is not supported.

Next dimension of strategic audit planning, audit method determining (AMD) has a significant positive influence on audit excellent ($\beta_4 = 0.251, p < 0.01$), audit efficiency ($\beta_{12} = 0.351, p > 0.01$) and audit effectiveness ($\beta_{21} = 0.325, p > 0.01$). Thus, hypothesis 4a, 4b, and 4c are supported.

The last dimension of strategic audit planning, audit practice scheduling (APS) is not significantly related to audit excellent ($\beta_5 = -0.088, p > 0.05$), audit efficiency ($\beta_{13} = -0.039, p > 0.05$) and audit effectiveness ($\beta_{22} = -0.068, p > 0.05$). Thus, hypotheses 5a, 5b and 5c are not supported.

In summary of strategic audit planning, the results indicated that four of five dimensions of strategic audit planning (internal control system evaluation, business risk assessment, audit resource allocation, and audit method determining) have significant positive influence on auditing outcomes. Consistent with prior research suggested that evaluation of the client's internal control system and business risk assessment can help the auditor understand the internal control system, understand risks that might occur in each client which is useful for audit planning and contributes to positive audit outcome (ICAN 2015). Then, audit resource allocation quality will lend to more audit effectiveness (Holter 1992). Moreover, audit method has an effect on audit effectiveness and audit report quality (Shoosmuangpak and Ussahawanichakit, 2009). In contrast, audit practice scheduling does not influence on audit efficiency audit excellence and audit effectiveness. It may be due to auditors who could not perform according to the plan outlined.

The effect of auditing outcomes on audit quality reveal in model four of table three. The results found that audit excellent and audit efficiency are positive effect on audit quality ($\beta_{27} = 0.270, p < 0.05$; $\beta_{28} = 0.325, p < 0.05$), but audit effectiveness is not significantly related to audit quality ($\beta_{29} = -0.129, p > 0.05$). Thus, hypotheses 6c and 7 are supported, but hypothesis 8 is not supported. In addition, audit excellent has a significant positive influence on audit efficiency and audit effectiveness ($\beta_{14} = 0.448, p < 0.01$; $\beta_{23} = 0.356, p < 0.01$). Therefore, hypotheses 6a and 6b are supported. The finding reveals that strategic audit planning has an indirect influence on the audit quality via the mediating influences which include audit efficiency, and audit excellence. Consistent with prior research indicated that audit excellent and audit efficiency will increase the probability that the financial statements contain no material misstatements. It helps the auditors to achieve the objectives and goals of the auditing (Davison and Neu, 1993; David McNamee, 2014).

Independent Variables	Dependent Variables				
	ICSE (5)	BRA (6)	ARA (7)	AMD (8)	APS (9)
AV	.289** (.101)	.213** (.090)	.131 (.097)	.383*** (.081)	.344*** (.097)
AEC	.216* (.079)	.114 (.071)	.089 (.076)	.200** (.064)	-.041 (.076)
IC	.146 (.099)	.376*** (.089)	.386*** (.095)	.253** (.080)	.303** (.096)
AV*IC	-.015 (.069)	.149** (.062)	.184* (.066)	.103* (.056)	.024 (.066)
AEC*IC	.033 (.073)	.026 (.066)	-.112 (.070)	-.109* (.059)	-.016 (.071)
GEN	-.025 (.142)	-.039 (.127)	.161 (.136)	.097 (.115)	.137 (.137)
AEXP	.041 (.066)	-.027 (.059)	.021 (.063)	.036 (.053)	.013 (.064)
Adjusted R ²	0.261	0.409	0.322	0.519	0.314
Maximum VIF	2.205	2.205	2.205	2.205	2.205

p < .05, *p < .01, * Beta coefficients with standard errors in parenthesis.

Table 4: Results of Regression Analysis^a

The results of antecedent variables, Audit Vision (AV) has a significant positive influence on internal control system evaluation, business risk assessment, audit method determining, and audit practice scheduling ($\beta_{33} = 0.289, p < 0.05$; $\beta_{41} = 0.213, p < 0.05$; $\beta_{57} = 0.383, p < 0.01$; $\beta_{65} = 0.344, p < 0.01$), but it is not significantly related to audit resource allocation ($\beta_{49} = 0.131, p > 0.05$). Thus, hypotheses 9a, 9b, 9d and 9e are supported, but hypothesis 9c is not supported.

Audit Environment Changes (AEC) has a significant positive influence on internal control system evaluation and audit method determining ($\beta_{34} = 0.216, p < 0.1$; $\beta_{58} = 0.200, p < 0.05$), but it is not significantly related to business risk assessment, audit resource allocation and audit practice

scheduling ($\beta_{42} = 0.114$, $p > 0.05$; $\beta_{50} = 0.089$, $p > 0.05$; $\beta_{66} = -0.041$, $p > 0.05$). Thus, hypotheses 10a and 10d are supported, but hypotheses 10b, 10c and 10e are not supported.

In the past of moderating effect, all interaction among innovation climate (IC) and two antecedents are predicted to have positive effect on all five dimensions of strategic audit planning. The results found that innovation climate has significant positive moderation effect on audit vision and business risk assessment ($\beta_{44} = 0.149$, $p < 0.05$), audit resource allocation ($\beta_{52} = 0.184$, $p < 0.10$), and audit method determining ($\beta_{60} = 0.103$, $p < 0.10$). Thus, Hypotheses 11b, 11c and 11d are supported, other hypotheses are not supported.

In summary of antecedent, the results indicated that there are two antecedents include audit vision and audit environment changes that have direct effect on strategic audit planning. Consistent with prior research indicated that auditor's perspective on the future toward audit environment changes to enhance appropriation with strategic audit planning for an environment where changing all the time. Moreover, innovation climate (IC) and audit vision have positive effect on strategic audit planning.

5. Contributions

5.1 Theoretical Contribution

This research contributes several theoretical implications. The first, this study expands to the literature of strategic audit planning. Secondly, this study confirms the previous research about the link between the strategic audit planning dimensions and audit quality. Finally, this study extends the holistic view of strategic audit planning that attempts to examine the relationship of strategic audit planning and audit quality.

5.2 Managerial Contribution

This research provides the first empirical evidence that CPAs use novel constructs of strategies audit planning that could be significant in the audit efficiency, audit excellent, and audit effectiveness. It can lead to audit quality. Furthermore, to maximize benefits of strategies audit planning, CPAs who required satisfactory achievement will gain audit vision and audit environment changes to encourage their work and increase audit quality.

6. Conclusion

The purpose of this study is to examine the effect of strategies audit planning on audit quality via the mediating influences which include audit excellent, audit efficiency, and audit effectiveness. Moreover, this study assigns audit vision and audit environment changes as the antecedents of strategies audit planning by using innovation climate as the moderator of the relationship between the antecedents and strategies audit planning. The results indicated that four of five dimensions of strategies audit planning have significant positive influence on auditing outcomes and auditing outcomes have significant positive influence on audit quality. Also, the results found that audit vision and audit environment changes as the antecedents of strategies audit planning are related.

This study has some limitation that is the measurement is not in-depth interview from firm's practitioners. As a result, some constructs do not have significant influences. Future research may also investigate other variables to extend the relationships between strategies audit planning, audit excellent, audit efficiency, and audit effectiveness that affect audit quality.

References

- Bedard, Jean, Theodore Mock, and Arnold Wright., 1999. Evidential planning in auditing: A review of the empirical research, *Journal of Accounting Literature*.18; 96-142.
- Brocheler V., Maijoor S., Wittelstuijn A. V., 2004. Auditor human capital and audit firm survival: The Dutch audit industry in 1930-1992. *Accounting, Organizations and Society*, 29(7): 627-646.
- Brody, R.G., Golen, S.P. and Reckers, P.M.J., 1998. An empirical investigation of the interface between internal and external auditors. *Accounting and Business Research*, 28(3): 160-171.
- Bonner, Sarah E., Pennington, Nancy., 1991. Cognitive Processes and Knowledge as Determinants of Auditor Expertise. *Journal of Accounting Literature*, 10: 1-50.
- Chenhall, R.H., 2003. Management control systems design within its organizational context: Finding from contingency studies and directions for future research. *Accounting, Organizations and Society*, 28(2-3): 127-168.

- Davison, Ron A. and Neu, Dean., 1993. A Note on the Association Between Audit Firm Size and Audit Quality. *Contemporary Accounting Research*, 9: 479-488.
- Holter, Norma C., 1992. Audit-firm conflict in the defense contracting industry: An empirical study of the contributing factors to the perceived imbalance of power, Ph.D. diss., The George Washington University.
- Hull, R. P. and Umansky, P. H., 1997. An Examination of Gender Stereotyping as an Explanation for Vertical Job Integration in Public Accounting, *Accounting, Organizations and Society*, Vol. 22 No. 6, pp. 507 - 528.
- Humphrey, C. and Moizer, P., 1990. From techniques to ideologies: an alternative perspective on the audit function. *Critical Perspective on Accounting*, 1(3): 217-238.
- ICAN., 2015. Audit planning and control. The Institute of Chartered Accountants of Nigeria. <http://icanig.org/documents/aaa.pdf>, (May 15, 2015).
- Khalifa, R., Sharma, N., Humphrey, C. and Robson, K., 2007. Discourse and audit change Transformations in methodology in the professional audit field. *Accounting, Auditing and Accountability Journal*, 20 (6): 825-854.
- Kosmala, M. K., 2003. The emperor's new clothes? New audit regimes: insights from Foucault's technologies of the self. *Critical perspective on accounting*, 14(8): 791-811.
- Kyra Sheahan., 2015. Business Risk Assessment, Houston Chronicle, source <http://smallbusiness.chron.com/business-risk-assessment-97.html> (May 15, 2015).
- Lin, Z.K. and Fraser, I.A.M., 2003. The use of analytical procedures by external auditors in Canada. *Journal of International Accounting Auditing & Taxation*, 12: 153-168.
- Nunnally, J.C. and I. H. Bernstein., 1994. *Psychometric Theory*. New York. NY: McGraw Hill.
- Obaidat, a. N., 2007. Auditors Compliance with International Standard on Auditing (ISAs): Evidence from Jordan, *Journal of Social Sciences*. 3(4) ; 185-189.
- Peecher E. M., Schwartz R., and Solomon I., 2007. It's all about audit quality: Perspective on strategic-system auditing, 32: 463-485.
- Phagaphasvivat, Somjai., 2000. *Strategic Management*. Bangkok, Amerin
- Rhee, Jaehoon, Park Taedyung and Do Hyung Lee., 2010. Driver of Innovativeness and Performance for Innovative SMEs in South Korea: Mediation of Learning Orientation, *Technovation*. 30: 65-75.
- Ritchie B. and Khorwatt E., 2007. The attitude of Libyan auditors to inherent control risk assessment. *The British Accounting Review*, 39: 39-59.
- Robson, K., Humphrey, C., Khalifa, R. and Johnes, J., 2007. Transforming audit technologies: Business risk audit methodologies and the audit field. *Accounting, Organizations and Society*, 32: 409-438.
- Shoommuangpak, Pornitp and PhapurkeUssahawanichakit., 2009. Audit strategy of CPAs in Thailand: Audit effectiveness and Stakeholder acceptance, *International Journal of Business strategy*. 9; 136-258.
- Stice, J. D., 1991. Using Financial and Market Information to Identify Pre-engagement Factors Associated with Lawsuits Against Auditors. *The Accounting Review*, 66(3): 516-533
- Ussahawanichakit, Phapurke., 2007. Linking Entrepreneurial Orientation to Competitiveness: How do Thai SMEs Make It Works Successfully?, *International Journal of Business Strategy*.
- Weisbrot, M., 2007. Ten Years After: The Lasting Impact of the Asian Financial Crisis. *Center for Economic and Policy Research*, 1-8.