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Enhancing Audit Management Competency and Sustainable Audit Success: Evidence from Governmental Auditors in Thailand

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Abstract
The objective of this study is to investigate the relationships of enhancing audit management competency on sustainable audit success via the mediating influences of audit value awareness, audit professional proficiency, and efficient audit report. Comprehensive audit professionalism, audit learning commitment, and regulations practice force have become the antecedents of enhancement audit management competency. Also, audit system efficiency is the moderating variable of the relationship between enhancement audit management competency mediating variables. The hypotheses test the variables. Testing data was collected from 328 governmental auditors from the Office of Auditor General of Thailand (OAG). A questionnaire was analyzed by using the Ordinary Least Squares (OLS) regression analysis employed to examine all hypotheses, which indicated that most of variables from enhancing audit management competency were positively significant, and were related to factors relevant to audit value awareness, audit professional proficiency, efficient audit report and sustainable audit success. Specifically, evidence was found that audit value awareness had a positive significance in relationship to audit professional proficiency.

Further, audit professional proficiency also had a positive significance toward efficient audit report. Moreover, comprehensive audit adroitness, audit learning commitment and regulations practice force had a positive effect on enhancing audit management competency. Additionally, audit system efficiency showed partially positive, supporting effects on enhancing audit management competency-mediating variables. The results provide the benefits for increasing auditors' awareness as well as to improve and enhance audit management competency in accordance with environmental change in order to achieve auditor professionalism in the future.

Keywords: Enhancing Audit Management Competency, Sustainable Audit Success, Governmental Auditors in Thailand

1. Introduction

Since the beginning of the 21st century, innovation has been one of the fundamental aspects of industrial and economic development policies in other countries. The change in these factors affects the operation and lifestyle, both individual level and organizational level in order to be able to operate effectively under the constantly changing environment. As well as Eryesil, Esmen and Beduk (2015) state that based on today's rapidly changing dynamic and competitive world, organizations intending to be success need to make necessary changes in a quick and precise way, which will result in a target and to survive under globalization. The rapidly changing of environmental have an affect auditor's performing by causing increasingly difficult and complex operational audit. Therefore, to maintain the audit quality and achieving audit goal, the auditor requires developing their ability in order to adjust audit operation in accordance with environmental change always.

Due to a enhance management framework that will contribute to efficiency, productivity and bring success to meet the target in order to create high performance (Sushil, 2015). In term of auditing context, the auditor will need to adjust or modify audit method validation process new accounts to comply with changes in technology to maintain audit quality. Enhancing audit management is a part of the way to modify to accommodate changes from the original method to a new way by focusing on the issues of agility and a variety of method of operation. Based on the concept that enhance audit management is an important tool that enables them to perform activities quickly, convenient, causing quality and more efficient (Schneider & Spieth, 2014). Likewise, the auditors who working the public sector, and governmental auditors were affected by factors that as a result of globalization. Previous research, there are wildly studying on issues of ability to implement in audit competency in the enterprise widely, but there are a few research focus on enhance audit management competency in individual-level that is governmental auditors in Thailand for fulfilling research gap. (Schneider & Spieth, 2014).

By the year 2012, the office of Anti-Corruption Agencies (ACAs) which is the organization that prevents and suppress corruption and money laundering in Thailand, illustrated that 54.78% has strength of steps taken by Thai government against corruption is at moderate level. Interestingly, 349 numbers of corruption and money cases viewed that local government or municipalities were the most vulnerable to corruption. (OAG, 2012). For this research, governmental auditors are interesting to investigate, that has a role in the added-value economy of the country through creating reliability and confidence of investors to government operations with no corruption. In addition, social and the public as stakeholders expect audit quality for audit reporting to be transparent with accurate and straight forward facts (Mauro, 1998; Li, Xu, and Zou, 2000). Moreover, the qualities of audit practices in the governmental auditors have the effect of reducing corruption and will help build trust and confidence for stakeholders (Li, Xu and Zou, 2000). Based on the aforementioned discussion, this research has interest in studying the enhancement of the audit management competency issue in order to use the research result to gain useful information for improving the performance of governmental auditor in the era of globalization as well. The ability of an auditor will affect the audit success that has achieved the audit objective efficiently and effectively.

In this study, the analysis was based on a sample of government auditors in Thailand, from a list sourced at the Office of the Auditor General in Thailand. Hence, the specific research questions are: (1) How does each dimension of enhancing audit management competency have an effect on sustainable audit success through mediating the relationship among audit value awareness, audit professional proficiency, and efficient audit report?(2) How does audit value awareness have an effect on audit professional proficiency? (3) How does audit professional proficiency have an effect on efficient audit report? (4) How do the antecedents have an influence on each dimension of enhancing audit management competency? And (5) How does audit system efficiency moderate the relationships among enhancing audit management competency and mediating?

Research Objectives

The main objectives of these studies are as follows: (1) to empirically examine the effects of enhancing audit management competency on audit value awareness, audit professional proficiency, and efficient audit report,(2) to examine the mediating effects of three consequences on sustainable audit success, (3) to investigate the association between audit value awareness with audit professional proficiency, (4) to determine the association between audit professional proficiency with efficient audit report, (5) to explore the relationships

among three antecedents on enhancement audit management competency, and (6) to examine the relationships between enhancing audit management competency and consequences by using audit system efficiency as a moderator.

Theoretical Foundation

This study applies the dynamic capability theory and contingency theory to explain the conceptual framework to support how enhancing audit management competency affects consequences and sustainable audit success. The conceptualization of dynamic capability represents an extension of the Resource Based View (RBV) in a response to the critique of RBV. Dynamic capabilities explain how some firms secure competitive advantage in dynamic environmental conditions. Helfat (1997) and Eisenhardt & Martin (2000) indicate that dynamic capabilities are the abilities of a firm that supports creating innovation and competency in manufacturing processes, or in new products, responding to market changes. Moreover Chien & Tsai (2012) found that dynamic capability has a positive influence on performance. This study applied this theory to explain enhanced audit management competency as dynamic capability, in that auditors need to adjust and develop their audit process so as to be consistent with continuously changing circumstances.

The contingency theory is a theory about organizational design and systems, in order to be suitable for the environment that continuously changes. The appropriate action depends on the situation, both internally and externally, and depends on the situation in which one selects the best way to perform, and which is also appropriate for each situation (Ginzberg, 1980). Prior research that adapts the contingency theory posits that the theory enables a researcher to initiate factors to describe or predict expected phenomena. However, the theory is engaged in the setting of sustainable audit success that is based on specific, contingent factors. Comprehensive audit adroitness, audit learning commitment, and regulations practice force are contingent factors. These variables were impact enhancing audit management competency. Likewise, this study attempts to use the structural contingency theory to describe the relationships between the context and structure of audit professionalism and survival in this career (Wangcharoendate, 2015).

2. Literature Review, Conceptual Framework and Hypotheses Development

Currently, the business environment that has rapidly changed has affected the auditor's work with difficulty and more complexity. Therefore, to maintain audit quality, auditors need to increase competency. Dynamic environmental change that impacts audit competency requires development to enhance an efficient audit and is in accordance with rapid environmental change. According to Sigh, Oberoi & Ahuja (2013), it was stated that a very important tool which provides organizations with the ability to change levels of rapid production, is to develop new products and to respond quickly to competitive threats, which enhances audit management competency. The literature distinguishes enhancing audit management competency as one of the management techniques that are useful for explaining why auditors need to adjust and develop their audit process so as to be consistent with continuous changing circumstances. Therefore, the conceptual model of this study is presented as shown in Figure 1.

1. *Enhancing Audit Management Competency*

Enhancing audit management competency (Alissa, Jeanjean & Suca, 2014) refers to the individual ability to develop and create new audit practices or methods for adaptation according to rapid environmental change, based on the efficiency of the audit task. Finally, the goal and the objectives of the firm are achievement.

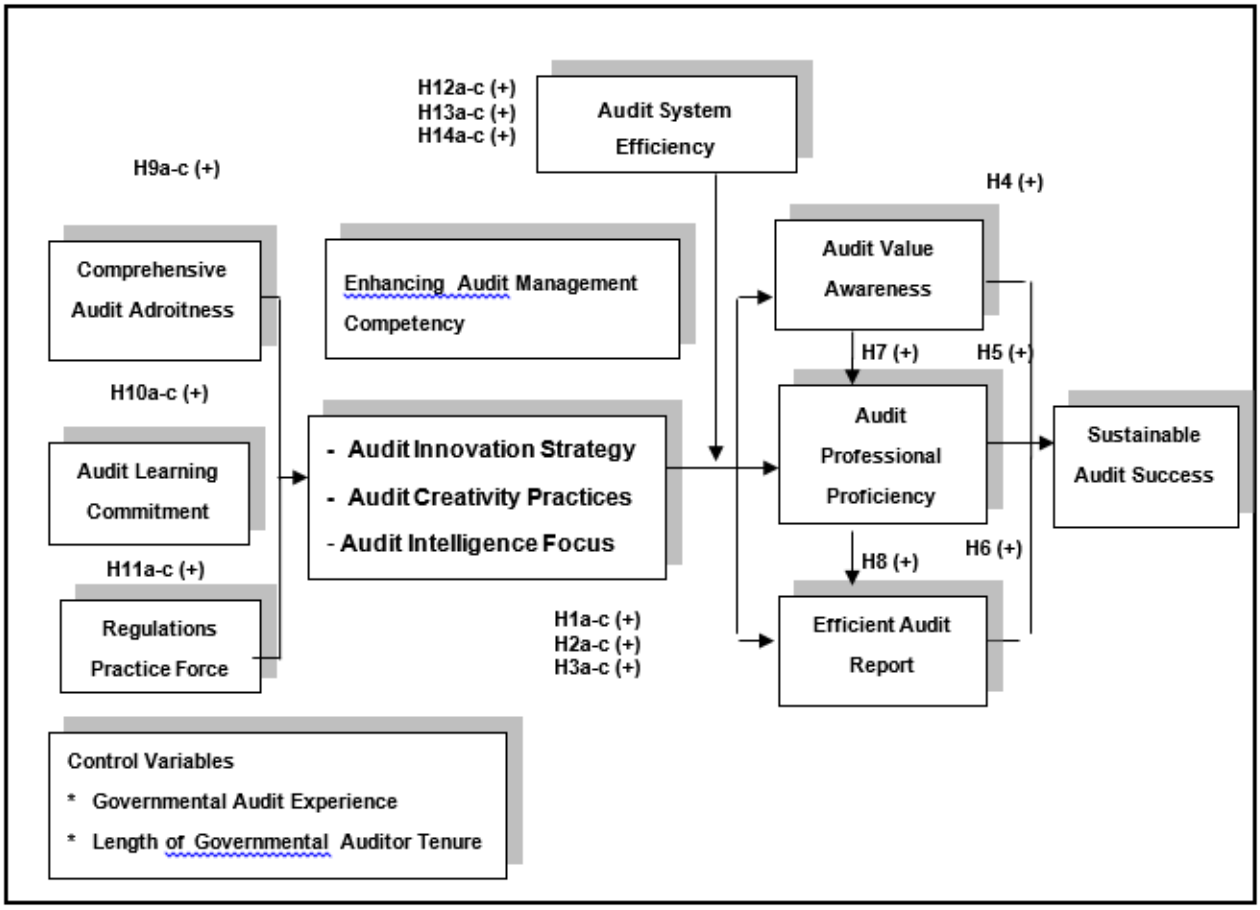

Figure 1: Conceptual Model of Enhancing Audit Management Competency and Sustainable Audit Success: Evidence from Governmental Auditors in Thailand

1.1 Audit Innovation Strategy

Audit innovation strategy (Chan &Vasarhelyi, 2011) refers to expertise applied to new, ingenious audits or techniques, including adopting of appropriate modern technology in order to enhance audit success. Therefore, hypotheses1a-1c have been formulated as follows:

Hypotheses 1a-1c: Audit innovation strategy is expected to improve: (a) audit value awareness, (b) audit professional proficiency, and (c) efficient audit report; to allow businesses to focus more effectively on sustainable audit success.

1.2 Audit Creativity Practices

Audit creativity practices (DeFond & Zhang, 2014)is the ability to efficiently adjust audit operations, modify audit planning, change audit techniques and apply audit methods that are appropriate to situations. Therefore, hypotheses2a-2c have been formulated as follows:

Hypotheses 2a-2c: Audit creativity practices is expected to improve: (a) audit value awareness, (b) audit professional proficiency, and (c) efficient audit report; to allow businesses to focus more effectively on sustainable audit success.

1.3 Audit Intelligence Focus

Audit intelligence focus (Tonge &Willett, 2012) is defined as the expertise of auditors, including specific skills and experience, to perform more complex audit tasks and provide more superior quality service than other auditors. Therefore, hypotheses 3a-3c was formulated as follows:

Hypotheses 3a-3c: Audit intelligence focus is expected to improve: (a) audit value awareness, (b) audit professional proficiency, and (c) efficient audit report; to allow businesses to focus more effectively on sustainable audit success.

2. *Mediating of Relationships between Enhancing Audit Management Competency and Consequences*

2.1 *Audit Value Awareness*

Audit value awareness is defined as the intention to present the audit opinion to provide relevance, reliability, timeliness, and assurance that the financial information is free from material misstatement (Watson & Dow, 2010). Therefore, hypotheses4 and 7wereformulated as follows:

Hypothesis 4: The higher the audit valve awareness is, the more likely that auditors will gain greater sustainable audit success.

*Hypothesis 7: T*here is a positive association between the degree of audit value awareness and audit professional proficiency.

2.2 Audit Professional Proficiency

Audit professional proficiency refers to achieving an audit task by gathering sufficient and appropriate auditing evidence, according to the scope of a work schedule, and complying with related professional standards and regulations (Wangcharoendate, 2016). Therefore, hypotheses 5 and 8were formulated as follows:

Hypothesis 5: The higher the audit professional proficiency is, the more likely that auditors will gain greater sustainable audit success.

Hypothesis 8: There is a positive association between the degree of audit professional proficiency and efficient audit report.

2.3 Efficient Audit Report

Efficient audit report refers to the issues of having a correct opinion regarding the client's financial statements, in accordance with the general principles of accounting and auditing at an appropriate level of audit risk (Francis, 2004). Therefore, hypothesis 6 is formulated as follows:

Hypothesis 6: The better the efficient audit report is, the more likely that auditors will gain greater sustainable audit success.

3. Antecedents of Enhancing Audit Management Competency

Enhancing audit management competency is gained from the influence of both endogenous and exogenous individual determinants.

3.1 *Comprehensives Audit Adroitness*

Comprehensive audit adroitness is defined as auditor's action by accumulating variety of knowledge, various direct and indirect experiences and expertise in the audit work that transmits into audit differences that are likely to strengthen in specialization (Wong & Cheung, 2008: 116). Therefore, hypotheses 9a-9cwere formulated as follows:

Hypotheses 9a-9c: Governmental auditors who have comprehensive audit adroitness are more likely to have an effect on enhancing audit management competency to a greater extent.

3.2 *Audit Learning Commitment*

Audit learning commitment refers to an auditor's continuous learning attitude in which a variety of knowledge is acquired mainly through education and training in accounting and auditing programs (Sundgren & Svanstgrom, 2014).Therefore, hypotheses 10a-10cwere formulated as follows:

Hypotheses 10a-10c: Governmental auditors who have audit learning commitment are more likely to have an effect on enhancing audit management competency to a greater extent.

3.3 Regulation Practice Force

Regulation practice force is defined as success in practices regarding the relevant rules of firms including the law, rules, codes of conduct and policy. Therefore, hypotheses 11a-11c were formulated as follows:

Hypotheses 11a-11c: Governmental auditors who have regulation practice force are more likely to have an effect on enhancing audit management competency to a greater extent.

4. Moderating Effects of Relationships

4.1 Audit System Efficiency

Audit system efficiency is defined as the ability of the audit system which provides audit information to facilitate business activities and support audit tasks. Moreover, audit system efficiency can increase the best practices of management auditing, as it encourages the relationships between the executive leadership, employee competency and competitive intensity (Nicolaou, 2000). Therefore, hypotheses 12-14were formulated as follows:

Hypotheses 12-14*:* Audit system efficiency has a moderating effect on the relationship between the dimension of enhancing audit management competency and its consequences.

5. *Dependent Variable*

5.1 Sustainable Audit Success refers to the existence of professional auditors who are evaluated by continuing clients, their creation of new clients, and achievement of their objectives or goals for the long term. In addition, audit success is result of excellence audit performance to achieve an accurate and fair audit report as well as client acceptation, including the image of audit service (Sundgren & Svanstrom, 2014).

6. Control Variables

6.1 Governmental audit experience is measured by the number of years in governmental audit jobs and practice that affects the relationships among audit management competency, audit performance and audit quality. Prior research has suggested those low- experience auditors' consistently found ethically questionable situations presented in the vignettes more acceptable, suggesting that beginner auditors have lower professional audit behavior than senior auditors (Cao, Li & Zang, 2015).

The auditors with more experience in collective knowledge have skills that lead to increased audit competency (Kaplan, O'Donell & Arel, 2008). Therefore, the number of years of audit experience is represented by a dummy variable including which is 0 (less than or equal to 10 years old) or 1 (more than 10 years old) (Graham & Bedard, 2003).

6.2 Length of Governmental Auditor Tenure plays an important role for the audit professional. Due to professional judgment, the audit is essential in a risk context. The auditor makes risk assessments that are primary and which modify in the light of new audit evidence collected throughout the audit process. Thus, this study demonstrates that the length of governmental auditor tenure has an impact on audit management competency and audit success. Therefore, the length of governmental auditor tenure in this study is represented by a

dummy variable that was separated into two groups; 0 is less than 10 years old, and 1 is equal to or more than 10 years olds (Elias, 2008).

3. Research Methodology

The aims of this study were explored through two sets of research method: (1) sample selection and data collection procedure, and (2) questionnaire development.

Sample Selection and Data Collection Procedure

The population of this study was gathered from governmental auditors in Thailand which are chosen from the database of human resources management office, the Office of the Auditor General of Thailand (OAG): https://www.oag.go.th.This data base includes 1,245 auditors (accessed June 16, 2016). The governmental auditors were the key informants.

An appropriate sample size is 295 firms under the 95% confidentiality rule (Krejcie& Morgan, 1970) Based on prior business research, a 20% response rate for a mail survey, without an appropriate follow-up procedure, is deemed sufficient (Aaker, Kuma& Day; 2001). Hence, the sample size is 100% (or 295x100/20), which equals 1,475 governmental auditors that are an appropriate sample for a distributed mail survey. There were 147 surveys that were undeliverable, because of some auditors that had been dismissed or had moved to unknown locations. Thirty-six surveys were incomplete. Thus, the valid mailing was 1,292 surveys from which 328 responses were received as completed surveys. The effective response rate was approximately 25.39%.

Questionnaire Development

In this study, several constructs and multiple scale items are developed from new scales, and the literature reviews. Therefore, a pre-test method is appropriately conducted to assert the validity and reliability of the questionnaire. The instrument was then pretested among thirty, random key informants from a population frame that must not be included in the sampling (Hewett, Roth & Roth, 2003).

Five parts of the questionnaire include the following. Part one presents demograph while part two indicates dimensions of enhancing audit management competency construct. Part three discusses the construct of consequences and sustainable audit success. Part four demonstrates the construct of the antecedents. Part five presents the audit system efficiency construct for the moderating effect. The final part is an open-ended question for suggestions and opinions. All of the variables were obtained from the survey and were measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Reliability and Validity

Table 1, shows that all variables have factor loading scores between 0.621 and 0.847, indicating that there is construct validity. Also, the Cronbach's alpha coefficients for all variables range from 0.634 to 0.832, indicating that these constructs are at an accepted reliability level (Cronbach, 1951).

Table 1: The Results of Measure Validation and Reliability

Variables	Items	Factor Loading	Cronbach's Alpha
Sustainable Audit Success (SAS)	SAS1	0.795	0.815
	SAS2	0.728	
	SAS3	0.847	
	SAS4	0.731	
Audit Innovation Strategy (AIS)	AIS1	0.728	0.832
	AIS2	0.833	
	AIS3	0.847	
	AIS4	0.756	
Audit Creativity Practices (ACP)	ACP1	0.806	0.816
	ACP2	0.822	
	ACP3	0.761	
	ACP4	0.789	
Audit Intelligence Focus (AIF)	AIF1	0.802	0.798
	AIF2	0.792	
	AIF3	0.740	
	AIF4	0.766	
Audit Value Awareness (AVA)	AVA1	0.828	0.744
	AVA2	0.816	
	AVA3	0.798	
	AVA4	0.782	
Audit Professional Proficiency (APP)	APP1	0.803	0.805
	APP2	0.795	
	APP3	0.814	
	APP4	0.754	
Efficient Audit Report (EAR)	EAR1	0.811	0.724
	EAR2	0.806	
	EAR3	0.794	
	EAR4	0.763	
Comprehensive Audit Adroitness (CAA)	CAA1	0.752	0.726
	CAA2	0.650	
	CAA3	0.790	
	CAA4	0.782	
Audit Learning Commitment (ALC)	ALC1	0.692	0.717
	ALC2	0.685	
	ALC3	0.633	
	ALC4	0.621	
Regulation Practice Force (RPF)	RPF1	0.664	0.634
	RPF2	0.655	
	RPF3	0.675	
	RPF4	0.689	
Audit System Efficiency (ASE)	ASE1	0.723	0.702
	ASE2	0.711	
	ASE3	0.702	
	ASE4	0.719	

This research employed both descriptive and inferential statistical techniques, including variance inflation factors (VIFs) which were applied to test for multicollinearity among the dependent variables. Correlation analysis tested the primary correlations between two variables, and multiple regression analysis was operated to statistically estimate the coefficient of hypothesis- testing following the conceptual model because both dependent and independent variables in this study are categorical data and interval data. Therefore, the equation models of the relationships are shown as follows:

Equation 1: $AVA = \alpha_1+\beta_1AIS+ \beta_2ACP + \beta_3AIF + \beta_4ASE +\beta_5(AIS*ASE)+ \beta_6(ACP*ASE)+ \beta_7(AIF*ASE) +\beta_8GAE +\beta_9LGAT+\varepsilon$

Equation 2: $APP = \alpha_2+\beta_{10}AIS+ \beta_{11}ACP + \beta_{12}AIF + \beta_{13}ASE +\beta_{14}(AIS*ASE)+ \beta_{15}(ACP*ASE)+ \beta_{16}(AIF*ASE) +\beta_{17}GAE +\beta_{18}LGAT+\varepsilon$

Equation 3: $EAR = \alpha_3+\beta_{19}AIS+ \beta_{20}ACP + \beta_{21}AIF + \beta_{22}ASE +\beta_{23}(AIS*ASE)+ \beta_{24}(ACP*ASE)+ \beta_{25}(AIF*ASE) +\beta_{26}GAE +\beta_{27}LGAT+\varepsilon$

Equation 4: $SAS = \alpha_4+ \beta_{28}AVA + \beta_{29}APP + \beta_{30}EAR + \beta_{31}GAE +\beta_{32}LGAT+\varepsilon$

Equation 5: $APP = \alpha_5 + \beta_{33}AVA+ \beta_{34}GAE +\beta_{35}LGAT+\varepsilon$

Equation 6: $EAR = \alpha_6+ \beta_{36}APP+ \beta_{37}GAE +\beta_{38}LGAT+\varepsilon$

Equation 7: $AIS = \alpha_8+ \beta_{44}CAA+\beta_{45}ALC +\beta_{46}RPF+ \beta_{47}GAE +\beta_{48}LGAT+\varepsilon$

Equation 8: $ACP = \alpha_9+ \beta_{49}CAA+\beta_{50}ALC +\beta_{51}RPF+ \beta_{52}GAE +\beta_{53}LGAT+\varepsilon$

Equation 9: $AIF = \alpha_{10}+ \beta_{54}CAA+\beta_{55}ALC +\beta_{56}RPF+ \beta_{57}GAE +\beta_{58}LGAT+\varepsilon$

3. Results and Discussion

Respondent Characteristics

The respondents' characteristics are described by the demographic characteristics of governmental auditors (including gender, age, marital status, education level); governmental audit experience, length of governmental auditor tenure, working position and work place; all of which are shown in Table 2. The results presented the demographic characteristics of 328 key participants. More than half of the participants are female in gender, which is about 70.12 percent, while 29.88 percent are male. The range of age of most respondent participants is more than 40 years old (55.18 percent). Most participants are single (56.71percent) and the education level is bachelor's degree (76.52 percent). They have less than five years' experience in government audit (32.32 percent). The government auditor tenure is less than five years (44.82 percent). Finally, the work place is headquarters (56.71 percent).

Table 2: Key Participant Characteristics

Description	Categories	Frequencies	Percentage
1. Gender	Male	98	29.88
	Female	230	70.12
	Total	328	100.00
2. Age	Less than 30 years old	51	15.55
	30-35 years old	59	17.98
	36-40 years old	37	11.29
	More than 40 years old	181	55.18
	Total	328	100.00
3. Marital Status	Single	186	56.71
	Married	125	38.11
	Divorced	17	5.18
	Total	328	100.00
4. Educational Level	Bachelor's Degree	251	76.52
	Higher than bachelor's degree	77	23.48
	Total	328	100.00
5.Governmental Audit Experience	Less than 5 years	106	32.32
	5-10 years	85	25.91
	11-15 years	36	10.98
	More than 15 years	101	30.79
	Total	328	100.00
6. Length of governmental auditor tenure	Less than 5 years	147	44.82
	5-10 years	69	21.03
	11-15 years	44	13.42
	More than 15 years	68	20.73
	Total	328	100.00
7. Workplace	Headquarters	186	56.71
	Provincial Audit Office	142	43.29
	Total	328	100.00

Result of Correlation Analysis

The descriptive statistics and correlation matrix for all variables are shown in Table 3. Variance inflation factors (VIFs) ranged from 2.356 to 3.189 (Table 4), which are well below the cut-off value of 10 as recommended by Hair, Black, Babin & Anderson, (2006), meaning that the independent variables are not correlated with each other. Accordingly, there are no significant multicollinearity problems confronted.

Table 3: Descriptive Statistics and Correlation Matrix

Variables	AIS	ACP	AIF	AVA	APP	EAR	SAS	CAA	ALC	RPF	ASE	GAE	LGAT
Mean	4.42	4.32	4.14	4.10	4.26	4.05	4.29	4.22	4.11	4.17	3.54	3.56	3.22
S.D.	0.498	0.540	0.581	0.679	0.586	0.607	0.528	0.518	0.489	0.552	0.543	0.438	.519
AIS	1.000												
ACP	0.891**	1.000											
AIF	0.722**	0.815**	1.000										
AVA	0.721**	0.759**	0.779**	1.000									
APP	0.740**	0.761**	0.785**	0.715**	1.000								
EAR	0.594**	0.634**	0.629**	0.644**	0.526**	1.000							
SAS	0.768**	0.809**	0.785**	0.754**	0.785**	0.811**	1.000						
CAA	0.741**	0.762**	0.816**	0.800**	0.790**	0.803**	0.911**	1.000					
ALC	0.836**	0.861**	0.866**	0.765**	0.812**	0.640**	0.811**	0.844**	1.000				
RPF	0.610**	0.659**	0.672**	0.746**	0.537**	0.627**	0.658**	0.761**	0.716**	1.000			
ASE	0.718**	0.634**	0.688**	0.795**	0.661**	0.748**	0.682**	0.618**	0.738**	0.757**	1.000		
GAE	0.334*	0.409*	0.315*	0.257*	0.264*	0.303*	0.261*	0.358*	0.418*	0.412*	0.394*	1.000	
LGAT	0.238*	0.284*	0.266*	0.365*	0.272*	0.314*	0.294*	0.463*	0.259*	0.364*	0.338*	0.298*	1.000

** Correlation is significant at the 0.05 level (2 tailed)

Table 4 presents the results of OLS regression analysis, based on equations 1-3, which show that the hypotheses predictions positively affect the dimensions of enhancing audit management competency on the consequences (audit value awareness). In equation 1, the results indicate that audit innovation strategy ($b_1 = 0.256$, $p < 0.05$), audit creativity practices ($b_2 = 0.183$, $p < 0.05$), and audit intelligence focus ($b_3 = 0.182$, $p < 0.05$) have positive, significant effects on audit value awareness. Thus, hypotheses 1a-1cwere supported, but only audit system efficiency ($b_4 = 0.132$, $p > 0.05$) is not supported. Bradts (2007) found that audit innovation strategy can help audit performance to be more effective, more productive and ultimately add more value for firms' performance.

Meanwhile in equation 2, the results show that audit innovation strategy ($b_{10} = 0.234$, $p < 0.05$), has a positive, significant effects on audit professional proficiency. Thus, hypotheses 2a was supported but hypothesis 2b-2c was not supported. Moreover, in equation 3, the results show that audit innovation strategy ($b_{19} = 0.180$, $p< 0.05$), audit creativity practices ($b_{20} = 0.172$, $p < 0.05$), and audit intelligence focus($b_{21} = 0.204$, $p > 0.05$)have positive, significant effects on efficient audit report. However, the results show that audit system efficiency ($b_{22} = 0.193$, $p < 0.05$) have insignificant an effect on efficient audit report. This is consistent with prior studies which suggest that intelligence audit working paper processes into the overall audit management cycle, which is a best practice that can help reduce audit function and help enhance an effective audit execution process.

Thus, hypotheses 3a-3c was supported. In summary, these findings reveal that three dimensions of enhancement audit management competency influence directly upon its consequence variables. Equation 4 results showed that audit value awareness, audit professional proficiency, and efficient audit report are positively significant to sustainable audit success. ($b_{28} = 0.293$, $p< 0.05$; $b_{29} = 0.187$, $p< 0.05$; and $b_{31} = 0.213$, $p< 0.05$). These results are consistent with the prior research of Garcia-Benau & Zorio (2004) who state that auditors who work efficiently are more likely to be accepted by the stakeholder, gain high reputation, take pride in their work, and will achieve audit success. Therefore, hypotheses 4-6 were supported.

Table 4: The results of OLS Regression Analysis[a]

Independent Variables	Dependent Variables			
	E 4: Sustainable Audit Success	**E 1: Audit Value Awareness**	**E 2: Audit Professional Proficiency**	**E 3: Efficient Audit Report**
Audit Innovation Strategy (AIS)		0.256** (0.079)	0.234** (0.083)	0.180** (0.085)
Audit Creativity Practices (ACP)		0.183** (0.089)	0.061 (0.089)	0.172** (0.093)
Audit Intelligence Focus (AIF)		0.182** (0.085)	0.093 (0.088)	0.204** (0.091)
Audit System Efficiency (ASE)		0.132 (0.080)	0.167** (0.090)	0.193** (0.093)
AIS x ASE		0.154** (0.071)	0.127** (0.060)	-0.073 (0.077)
ACP x ASE		0.184** (0.083)	0.165** (0.093)	-0.052 (0.077)
AIF x ASE		0.084* (0.067)	0.066* (0.033)	0.051* (0.081)
Audit Value Awareness (AVA)	0.293** (0.092)		0.158** (0.078)	
Audit Professional Proficiency (APP)	0.187** (0.090)			0.196** (0.070)
Efficient Audit Report (EAR)	0.213** (0.087)			
Governmental Audit Experience (GEA)	0.05 (0.093)	0.22** (0.106)	0.31** (0.123)	0.190* (0.106)
Length of Governmental Auditor Tenure (LGAT)	0.100 (0.094)	-0.11 (0.016)	-0.172 (0.012)	-0.151 (0.106)
Adjusted R square	0.301	0.369	0.384	0.432
Maximum VIF	2.356	3.189	3.189	3.189

**p< 0.05, *p < 0.10 [a] Beta coefficients with standard errors in parenthesis.

The equation 5 result shows that audit value awareness was positively and significantly related to audit professional proficiency (b_{33} = 0.158, p< 0.05). Moreover, in equation 6, the result shows that audit professional proficiency was positively and significantly related to efficient audit report (b_{36} = 0.196, p< 0.05). Thus, hypotheses 7 and 8 were supported. The result is consistent with Okab (2013) who found that audit value awareness enables auditors to detect fraud, and improves the efficiency and capability of an audit performance. Finally, in Table 5, variance inflation factors (VIFs) shows a range of 1.098 to 1.499, meaning that the independent variables are not correlated with each other. Accordingly, there are no significant multicollinearity problems confronted in this study.

This table also presents the results of OLS regression analysis based on the positive relationship between the antecedents of enhancement audit management competency. In equations 7-9, the result shows that comprehensives audit adroitness has significant and positive effects on audit innovation strategy (b_{44} = 0.173, p< 0.05), audit creativity practices (b_{49} = 0.179, p< 0.10), and audit intelligence focus (b_{54} = 0.293, p< 0.05). This finding supports that auditors must require all professional auditors to take steps under the capability of their authority, to proficiently undertake the work they perform. Thus, hypotheses 9a-9c were supported.

However, audit learning commitment has significant positive effects on audit innovation strategy (b_{45} = 0.198, p< 0.05) and audit creativity practices (b_{50} = 0.252, p< 0.05). Thus, hypotheses 10a-10bwere supported but hypothesis 10c was not supported. Moreover, regulation practice force has significant positive influences on audit intelligence focus (b_{56} = 0.179, p< 0.05). The results provide that auditors should intend to implement completeness to relate all rules that will achieve their legal responsibilities and fulfill their management function as successful professionals. Thus, hypotheses 11c was supported, but hypothesis 11a-11b were not supported.

Table 5: OLS Regression result of antecedents on Enhancing Audit Management Competency[a]

Independent Variables	**(5) AIS AIF**	**(6) ACP**	**(7)**
CAA	0.173**		0.179**
	0.293**		
	(0.093)	(0.093)	(0.086)
ALC	0.198**	0.252**	0.027
	(0.089)	(0.089)	(0.070)
RPF	0.039	0.104	0.179*
	(0.091)	(0.090)	(0.098)
Governmental Audit Experience (GEA)	-0.021	0.001	0.014
	(0.068)	(0.069)	(0.071)
Length of Governmental Auditor Tenure (LGAT)	-0.011	0.023	-0.012
	(0.069)		(0.056)
	(0.065)		
Maximum VIF	1.098	1.499	1.499
Adjusted R^2	0.246		0.295
	0.307		

**p< 0.05, *p < 0.10 [a] Beta coefficients with standard errors in parenthesis.

Implications of Research

This study provides a better understanding of relationships among enhancing audit management competency and sustainable audit success in the context of governmental auditors in Thailand. Especially, the results of this study extends to an auditor who operates audit processes according to creative audit practices, intelligence focus, application audit innovation, and awareness in audit change in order to develop audit competency for achieving the audit goal. Moreover, governmental auditors with enhanced audit management competency tend toward successful auditing. Consequently, the government auditors, regulators, and the Office of Auditor General (OAG) are responsible for encouraging audit management competency; that is, the abilities of audit proficiency, best audit practice, audit productivity, audit quality, and audit excellence.

4. Conclusion

The rapidly changing environment had an effect auditor's performance by causing increasingly difficult and complex operational audits. Thus, to maintain an audit quality guarantee and achieving audit goals, the auditor is required to always develop their ability in order to adjust audit performance in accordance with environmental change. Therefore, this study focuses on audit management competency for filling the gap at the individual-level,

which are governmental auditors in Thailand. The results of OLS regression analysis indicate that enhancing audit management competency is a positive influence on its consequences. In addition, audit value awareness, audit professional proficiency, and efficient audit report are an influence on sustainable audit success.

Moreover, audit value awareness positively affects audit professional proficiency and audit professional proficiency (which positively affect efficient audit report). For the influences of antecedent variables, this study finds that most of them positively affect each dimension of enhancing audit management competency. Finally, it was found that the relationships between each dimension of enhancing audit management competency and its consequences are partial by the moderating effect of audit system efficiency which provides the opportunity to extend studies in future research. This study provides benefits for increasing auditors' awareness, and to improve and develop audit management competency in accordance with environmental change in order to achieve future auditor professionalism. Furthermore, the findings may be a useful guideline for regulators and organizations to strengthen their audit department by enhancing the management competency of auditing.

5. Limitations and Suggestion for Future Research

This study has some issues as to limitations. Firstly, the undelivered mailed surveys may contain key answers to more support of the hypotheses. Secondly, the majority of literature reviews are prior studies that are obtained from a foreign country; but this study is an empirical study in a Thailand context. Future research may be needed to for a closer investigate on of other mediating variables on the relationships between each dimension of enhancing audit management competency and its consequences, such as audit intelligence and audit proficiency. Moreover, this study provides other moderating variables on the relationships between enhancing audit management competency and consequences, such as technology adaptation capability and environmental munificence. Moreover, this study uses only questionnaires for the data collection. Thus, future research might use other approaches such as case studies and in-depth interviews, in order to completely understand the effect of enhancing audit management competency on sustainable audit success. Finally, future study may suggest new theoretical frameworks that examine enhancing audit management competency in Thailand in order to increase the level of reliable results.

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