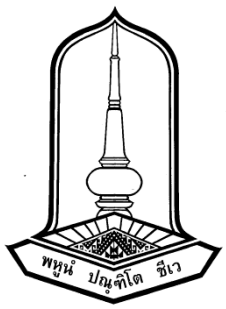


DYNAMIC MANAGEMENT ACCOUNTING ORIENTATION AND FIRM GROWTH: AN EMPIRICALEVIDENCE FROM FOOD BUSINESSES IN THAILAND

BY

KWANCHANOK HANNIMITKULCHAI

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Accounting at Mahasarakham University

March 2018

DYNAMIC MANAGEMENT ACCOUNTING ORIENTATION AND FIRM GROWTH: AN EMPIRICALEVIDENCE FROM FOOD BUSINESSES IN THAILAND

BY

KWANCHANOK HANNIMITKULCHAI

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Accounting at Mahasarakham University

March 2018

The examining committee has unanimously approved this dissertation, submitted by Mrs. Kwanchanok Hannimitkulchai, as a partial fulfillment of the requirements for the degree of the Doctor of Philosophy in Accounting at Mahasarakham University.

Examining Committee

.....	Chairman
(Dr. Muttanachai Suttipun)	(External expert)
.....	Committee
(Assoc. Prof. Dr. Kornchai Phornlaphatrachakorn)	(Advisor)
.....	Committee
(Assoc. Prof. Dr. Karun Pratoom)	(Co-advisor)
.....	Committee
(Assoc. Prof. Dr. Nuttavong Poonpool)	(Faculty graduate committee)
.....	Committee
(Dr. Utis Bhongchirawattana)	(Faculty graduate committee)

Mahasarakham University has granted approval to accept this dissertation as a partial fulfillment of the requirements for the degree of the Doctor of Philosophy in Accounting.

N. Songsrirote	.....
(Asst. Prof. Dr. Nitiphong Songsrirote)	(Prof. Dr. Pradit Terdtoon)
Dean of Mahasarakham Business School	Dean of Graduate School
	March 26, 2018

This dissertation was funded by Mahasarakham Business School,
Mahasarakham University,
Academic Year 2018.

ACKNOWLEDGEMENTS

I would never have been able to finish my dissertation without the support and guidance of my committee members, help from friends, and support from my family and my husband.

I would like to express my deepest gratitude to my advisor, Assoc. Prof. Dr. Kornchai Phornlaphatrachakorn, for his excellent guidance, caring, patience, and providing me with an excellent atmosphere for doing my dissertation. The period of my study has been an opportunity for me to learn from his experience and devotion to research. I would also like to thank Assoc.Prof.Dr.Karun Pratoom for his association in supervising and made important comments and suggestions this project.Besides,I would like to thank all of my dissertation committees for their valuable commentsto make the dissertation more complete.

I wish to thank people who provided their academic knowledge to help me tocomplete the thesis. I also wish to thank the Kasetsart University Chalermphrakiat Sakonnakhon Province Campus, for their financial support and allowing fulltime study.

Certainly, I would like to thank my fellow Ph.D. 10 classmates, who are always willing to help, give their best suggestions, and create an entertainment activity that is helpful to relax during studytime. It would have been a lonely time without them.

Finally, the most important, I have great gratitude to my family; to myfather for inspiring me through all of my life, to my mother who always supporting me and encouraging me with her best wishes, and to my brother for every greatest ideal while doing Ph.D. study.

Special thanks go to my husband, Mr.Sutthisak for his invaluable help in at everystage of my learning process and doing my dissertation. He was always there cheering me up and stood by me through the good times and bad. Thank you.

Kwanchanok Hannimitkulchai

TITLE Dynamic Management Accounting Orientation and Firm Growth: An Empirical Evidence from Food Businesses in Thailand
AUTHOR Mrs. Kwanchanok Hannimitkulchai
ADVISORS Assoc. Prof. Dr. Kornchai Phornlaphatrachakorn and Assoc. Prof. Dr. Karun Pratoom
DEGREE Ph.D. **MAJOR** Accounting
UNIVERSITY Mahasarakham University **DATE** 2018

ABSTRACT

In highly competitive and rapidly changing business environments, firms need to adapt and utilize valuable management tools to deal with such a situation. Management accounting is one of the management tools to help firms achieve competitive advantage and superior performance. Therefore, the development of management accounting role to correspond with this dynamic business environment must be taken into account. The objectiveof this research is to investigate therelationships among dynamic management accounting orientation, managerial information usefulness, decision-making success, operational goal achievement, and firm growth of food businesses in Thailand. Dynamic management accounting orientation comprises of five dimensions, including strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting which derived from the literature review. Moreover, this research also examines the relationships among dynamic management accounting orientation, its antecedents, and the moderating effects of knowledge management intention and innovation culture. The conceptual model draws on the dynamic capability theory and contingency theory. Data collected from a survey of 294 food business accounting executives are used to test the hypotheses, and the twenty-three hypotheses were tested by using the ordinary least squares (OLS) regression analysis.

The results indicate that dynamic management accounting orientation plays a significant role in operational outcomes. In particular, strategic positioning analysis, cost management strategy, modern performance measurement, and market information orientation have positive influences on managerial information usefulness, decision-

making success, operational goal achievement, and firm growth. Except for the last dimension, environmental responsibility reporting does not significantly influence such all consequences. Likewise, the results also show that managerial information usefulness has positively affected on decision-making success; and decision-making success has importantly affected operational goal achievement. The three variables above are critically effected on firm growth. Furthermore, the results also found that knowledge management intention has moderating effects on relationships among dynamic management accounting orientation and its consequences, especially in term of the relationships between modern performance measurement and it's all consequences.

In addition, the results of the relationships among antecedents and each dimension of dynamic management accounting orientation illustrate that the important factors that contribute to the development of dynamic management accounting orientation are business intelligence competency and best management accounting system, respectively. Meanwhile, innovation culture has moderating effects on the relationships among two antecedents (proactive top management vision and market learning capability) and dynamic management accounting orientation.

The distinctive findings in this research make a contribution to the better understanding of the relationship between dynamic management accounting orientation and firm growth, as well as provide helpful insights and useful guidelines to practitioners to develop dynamic management accounting orientation in supporting management under rapidly changing business environment, particularly for food businesses in Thailand and other firms which have the same context. Finally, this research offers several suggestions for future research.

TABLE OF CONTENTS

Chapter **Page**

Chapter **Page**

LIST OF TABLES

Table **Page**

LIST OF FIGURES

Figures **Page**

Figures **Page**

CHAPTER I

INTRODUCTION

Overview

The growthof economic environment has the substantial influence on the changes of the corporate management. Businesses face an increasing environmental uncertainty as advanced technology, increasing global competition, and constantly changing customer preference, thus creating a need for developing management tools in helping them to deal with this situation (Abushaiba and Zainuddin, 2012; Williams and Seaman, 2002).Management accounting is one of management's tool which plays an important role to provide relevant information for managers to conduct their function of management to achieve organization's goal (Hilton and Platt, 2011). Therefore, management accounting is required to provide more related and flexible information to assist the top management in decision making and management control in facing the uncertainty of the environment (Cinquini and Tenucci, 2007). Accounting lite ratures indicated that management accounting practices, which congruent with new management process and focus on external problems such as managing the competition, generating customer value and creating competitive advantages, tend to offer the adequate information and support more for the management of organizations operating in complex situations and high environmental dynamism (Gerdin, 2005; Lääts and Haldma, 2012; Sunarni, 2013; Williams and Seaman, 2002). Thus, developing management accounting practices oriented to be more appropriate fit with the constantly changing business environment are essential for organizations to achieve their growth potential.

The new direction of management accounting should focus on a dynamic approach to assist continuous innovation and create the new competition in the future. This concept has been accepted by a group of scholars who found that the organizations would be more effectiveness and competitive advantage in the market by changing the organizational processes on management accounting (Schiller, 2010; Vaivio, 2008; Williams and Seaman, 2002). The prior literatureare showed that dynamic capabilities

couldbe best conceptualized as tools that enhance existing resource configurations to strengthen long-term competitive advantage, especially in dynamic markets (Teece, 2007; Winter 2003). It focuses on the organization's ability to continuous change their existing resources or capabilities by integrating, build, and reconfigure internal and external competencies to address rapidly changing environments (Eisenhardt and Martin, 2000; Helfat and Peteraf, 2003). It also contributes to the achievement of superior organizational performance by combining and renewing functional competencies(Doving and Gooderham, 2008; Zott, 2003). There is increasing evidence that firm's dynamic capabilities significantly affect firm performance (Griffith et al., 2006; Robert and Grover, 2011; Chien and Tsai, 2012). Thus, creating a dynamic management accounting orientation is also important to increase competitive advantage and optimize firm performance.

Dynamic management accounting orientation in this research refers to the ability of firms to develop accounting information to support and enhance management efficiency under a constantly changing business environment in order to achieve competitive advantage and growth of the organization. Based on dynamic capability perspectives, this concept emphasizes the processes that result in changes in organization capabilities to adaptability and cope with rapidly changing the environment (Teece et al., 1997). It focuses on improving accounting information by apply management accounting practices that enhance management competency and superior performance in dynamic environment.

Accounting literature stated that management accounting practices in a dynamic environment tend to focus on adding value to the organization (Hilton, 2005). Many scholars founded that advanced management accounting techniques have been developed and shifted its focus from simple role of cost determination and financial control to a sophisticated role of creating value through the effective use of resources (Abdul-Aziz et al., 2000; Choe, 2004; Kaynak and Hartley, 2006; Soin et al., 2002; Sisaye, 2003).However, there have been mixed results in this research area. Schwarze and Wüllenweber (2013) mentioned that adoption of new accounting techniques couldbe rejected if it is too costly. There is evidence that advanced management accounting techniques have almost never been used by companies in developing countries such as Malaysia, Indonesia, Singapore, and Nigeria (Chan, 2002; Sunarni,

2013; Omar and Mahfar, 2004).Thus, the recent study highlights a number of changes in the use of broad scope management accounting information. The increasing attention on the external and nonfinancial approaches have positive effects in broadening the view about organizational performance, facilitating the company's adaption to the environment dynamism, and enhance organization value (Abdel-Kader and Luther, 2008; Lääts and Haldma, 2012; Naranjo-Gil and Hartmann, 2007). However, these approaches are limited as they do not reflect how the specific practice implemented that lead to enhance management competency and superior performance in dynamic environment. Moreover, very limited research has taken place in developing countries. Therefore, this research intended to offer additional research evidence by developing a framework that addresses the relationship between dynamic management accounting orientation and firm growth and then examines it empirically. Specifically, it examines dynamic management accounting orientation in five dimensions generate from review literature integration which focuses on broadening the scope of management accounting and adding value to the organization, consisting of 1) strategic positioning analysis, 2) cost management strategy, 3) modern performance measurement, 4) market information orientation, and 5) environmental responsibility reporting.

To capture the conceptual framework of dynamic management accounting orientation, this research focuses on food businesses in Thailand as the population. Because it is in the context of business in developing countries which is important for the economy in Southeast Asia and continues to suffer from the risks of operating business.Currently, the food of Thailand can export to various countries over 200 countries, representing a value food and agricultural products, processed an average of over 800,000 million baht accounted for averaged 8 % in GDP, with an average growth rate of 10.6% per year (Office of Industrial Economics, 2017). So, Thailand's master plan in the year 2010–2014 emphasized to develop the food industry to rapid growth; both manufacturers and exporters in good quality, safety, and product differentiations and varieties; by accelerating technology development and innovation in order to create value-added processing and value added. Thus, it makes them increase their ability to compete in the global market (Lekuthai, 2007). However, Thailand's food industry continues to suffer from the risks in operating business. This is due to the influence of a dynamic business environment change such as advance technological development,

constantly change of customer preference, increasing competitive intensity, as well as political and economic uncertainty and change of climate which causing higher labor cost, oil price fluctuation, raw material price soaring. Relevant and adequate information from dynamic management accounting is therefore essential to help managers in formulating strategies and long-range plans, resource allocation decisions, cost planning and cost control of operations and activities, performance measurement and evaluation of employee to maintain competitive position and enhancing firm performance.

In this research, the dynamic capability theory and the contingency theory are used to develop the theoretical frameworkof dynamic management accounting orientation. Firstly, the dynamic capability theory is used to explain that how dynamic management accounting orientation influences on firm growth. This theory defines dynamic capability as the ability of an organization to integrate, build and reconfigure internal and external competencies to cope with rapid environmental change (Teece et al., 1997). It emphasizes the processes that result in changes in organizational capabilities to adapt and cope with environmental change. It supports that superior performance of organizations accrues due to their ability to renew their resource or capability constantly to prevent their competitors from imitation (Prieto and Easterby-Smith, 2006).
From this theoretical perspective, since management accounting which is one of firm capability is more dynamic, it will contribute to increasing the competitive capability and also link to higher levels of firm performance.

Secondly, the contingency theory used to identify the factors that influence dynamic management accounting orientation and describe the relationships among dynamic management accounting orientation and these factors. This theory states that the best way of the organization to maximize its performance is contingent upon the ability of the firm to design execute structure consistent with internal and external situations (Fiedler, 1967). The contingency theory of management accounting indicates that effectively use and design of an accounting system is that depends on its ability to adapt to changes in the external circumstances and internal factors (Baines and Langfield-Smith, 2003; Haldma and Laats, 2002). Therefore, this research divided the antecedents into two groups: external factors and internal factors. The external factor indicates the features in the external environment that affect the effectiveness of management accounting practice, namely competitive change pressure. Likewise, the

internal factors indicate the features of organizational abilities that affect the effectiveness of management accounting practice, namely proactive top management vision, business intelligence competency, best management accounting system, and market learning capability. Also, the other two internal factors: knowledge management intention and innovation culture are determined as moderator due to they expected to help the relationship among dynamic management accounting orientation, its consequences, and its antecedent stronger.

This research expected contributes to extending the literature in several ways. First, the research introduces a new perspective of management accounting on dynamic capability with five dimensions that consist of strategic positioning analysis, cost management strategy, modern performance measurement, environmental responsibility reporting, and market information accounting, whereas there are rarely included in prior research. Second, the research provides theoretical justification and empirical evidence of the role of dynamic management accounting orientation that influences the growth of the organization via competitive capability by applied dynamic capability theory and contingency theory. Third, the research contributes better understanding the sources of dynamic management accounting orientation that would give organizations to improve their chance of gaining dynamic capability on management accounting practice. Finally, the research demonstrates consequence of dynamic management accounting orientation that may be more critical in management accounting practice to achieve organization's competitive advantage, and succeed in the organization performance in dynamic business environment.

Purposes of the Research

The primary objective of this research is to examine the effects of dynamic management accounting orientation on firm growth. In addition, the specific objectives addressed in this research are following:

1. To investigate the effects of each dimension of the dynamic management accounting orientation on managerial information usefulness, decision-making success, operational goal achievement, and firm growth.,

2. To examine the effects of managerial information usefulness, decision-making success, and operational goal achievement on firm growth.,

3. To study the relationships among proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure on each dimension of dynamic management accounting orientation.,

4. To inspect the moderating effects of knowledge management intention on the relationship among each dimension of dynamic management accounting orientation and managerial information usefulness, decision-making success, operational goal achievement, and firm growth., and

5. To analyze the moderating effects of innovation culture on the relationship among proactive top management vision, business intelligence competency, best management accounting system, market learning capability, competitive change pressure, and each dimension of dynamic management accounting orientation.

Research Questions

The key research question of this research is how dynamic management accounting orientation has an influence on firm performance. In addition, the specific research questions addressed in this research are following:

1. How does each dimension of dynamic management accounting orientation affect managerial information usefulness, decision-making success, operational goal achievement, and firm growth?

2. How do managerial information usefulness, decision-making success, and operational goal achievement influence on firm growth?

3. How do proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure affect each dimension of dynamic management accounting orientation?

4. How does knowledge management intention moderate the relationships among each dimension of dynamic management accounting and managerial information usefulness, decision-making success, operational goal achievement, and firm growth?

5. How does innovation culture moderate the relationships among proactive top management vision, business intelligence competency, best management accounting system, market learning capability, competitive change pressure, and each dimension of dynamic management accounting orientation?

Scope of the Research

The main objective of this research is to investigate the relationship between dynamic management accounting orientation and firm growth. From the conceptual framework, the dependent variable is dynamic management accounting orientation which refers to the ability of firms to develop accounting information to support and enhance management efficiency under a constantly changing business environment, which has the potential to create competitive advantages and grow the organization. It comprises of five dimensions, including 1) strategic positioning analysis refers to the ability of firm to provide accounting information for assessing the potential of the firm to assist in determining competitive position aligned with organization's goals; 2) cost management strategy refers to the ability of the firm to provision and analysis of cost information for use in developing and monitoring the business strategy; 3) modern performance measurement refers to the ability of the firm to provide a variety of indicators or new indicators for evaluating performance consistent with its current operating model; 4) market information orientation refers to the ability of the firm to provide and analyze customers and competitors information for planning and making decision to set competitive strategy to response the market effectively; and 5) environmental responsibility reporting refers to the ability of the firm to provide and present accounting information related to environmental activities by reporting on the costs and benefits of the environmental activities of the firm. The consequences of dynamic management accounting orientation consist of managerial information usefulness, decision-making success, operational goal achievement, and firm growth. In the part of the antecedents, including proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure. Furthermore, knowledge management intention is a moderator of the relationship between the dimensions of dynamic

management accounting orientation and its consequences, while innovation culture is a moderator of the relationship between the antecedences and the dimensions of dynamic management accounting orientation. The dynamic capability theory and contingency theory are applied to explain the phenomena and the positive relationship between variables in the conceptual framework.

In this research, the food businesses in Thailand are selected as the population and sample for investigation. The list of 1,485 firms was provided by the Department of Business Development, the Ministry of Commerce, Thailand (April, 2017). The unit of analysis is firm-level, and the key informant is the accounting executive of each food business (e.g., accounting director, account manager, chief accountant). A survey questionnaire is used as the main method of data collection, and the ordinary least squares (OLS) regression analyses are processed to test all postulated hypotheses.

Organizational of the Research

This research is divided into five chapters; the structures are as follow. Chapter one presents an overview of the research, the purposes of the research, research questions, the scope of the research, and organization of the dissertation. Chapter two reviews the relevant literature on dynamic management accounting orientation, present the theories are used, the analyzed variables, the expected relation between variables, and developing the research hypotheses. Chapter three describes the research method, including the sample selection and the data collection procedure, the variable measurements of each construct, the instrumental verification, the statistics equations to test the hypotheses, the table of definitions, and the operational variables of the constructs. Chapter four exhibits the empirical results and the discussions. Finally, chapter five summarizes the research findings covers the theoretical and managerial contributions, the limitations, and gives some suggestions for future research.

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The previous chapter provides an overview of dynamic management accounting orientation and states the purposes of the research, research questions, and scope of the research. This chapter demonstrates more precisely the understanding of dynamic management accounting orientation by presenting the theoretical foundation, the literature review and conceptual framework, and the hypotheses development. Therefore, this chapter is divided into three sections. The first section discusses principal theoretical perspectives employed to explain the research phenomenon include the dynamic capability theory and contingency theory. The second section reviews the research literature on dynamic management accounting orientation and firm growth. Also, a conceptual model is presented with the definition of all constructs and relevant previous literature. Finally, the third section illustrates the summary of hypotheses relationships among dynamic management accounting orientation, its consequences, and antecedents that are represented in this chapter.

Theoretical Foundation

Management accounting research has used a variety of theoretical perspective to explain development of management accounting practices in dynamic environment such as contingency theory, institutional theory, and dynamic capability theory. Most research regarding management accounting and organizational change use contingency theory to explain a need for a good fit between the management accounting system, external environment and organizational aspects, to improve performance (Baines and Langfield-Smith, 2003; Haldma and Lääts, 2002). In other words, contingency theory perspective is a fundamental theory in identifying factors that influence the development of a management accounting system to be consistent with circumstances. Whereas institutional theory has been used in the accounting literature to study management accounting practices change (Arroyo, 2012; Zoni et al., 2012). This theory serves to explain how institutional and organizational entrepreneurs negotiate the definition and

implementation of new management accounting practices during the process of institutional change (Busco et al., 2007). In addition, institutional theory highlight on describing the state of implementation of new tools rather than analyzing or critically evaluating their effectiveness (Bouma and van der Veen, 2002). However, studies on the agility of organization are consistently derived from theoretical concept in the dynamic capabilities perspective. The foundation idea of the dynamic capabilities theory emphasizes in order to obtain competitive advantage, organizations should also able to integrate and develop their internal and external competencies as capabilities in an inimitable way (Teece et al., 1997; Eisenhardt & Martin, 2000). According to Zahra et al. (2006), the integration existing capability has been extensively referred in management literature as the most relevant competencies to the firm's success. This theory supports that superior performance of organizations accrue due to their ability to renew their resources or capabilities constantly in order to prevent their competitors from imitation and overcome them by attempting for improvement continuously (Prieto and Easterby-Smith, 2006). This means that the organization with superior in management accounting adaptability is more likely to lead to competitive capability and continuous business growth. The view of this theory corresponds to the development of accounting in this research which does not focus solely on the use of new techniques but also on the development of existing techniques.

As mentioned above, this research uses two theoretical perspectives, comprising 1) dynamic capability theory and 2) contingency theory to support and explain how dynamic management accounting orientation develops within organizations and determine the influential factors that influence the development of a management accounting. Each of the applied theories is detailed as follows.

Dynamic Capability Theory

Dynamic capability theory concerns the organization’s ability to integrate, build, and reconfigure their existing resources or capabilities to address rapidly changing environments (Teece et al., 1997). The concept of this theory focuses on the dynamic capability as a set of process that effects on changing current resources or capabilities of an organization in response to the changing environment to create and sustain the competitive advantage over their competitors (Teece, 2007). Dynamic capability theory

differs from other competitive approaches due to it plays a crucial role in achieving competitive advantage in the constantly changing environment. This theory assumes that organizations with more dynamic capability will outperform organizations with less dynamic capability. In other words, developing dynamics capability process in the organization can make the differences between organizational performances by generating new integration of resources and capabilities (Prieto and Easterby-Smith, 2006).

Nowadays, it is found that dynamic capability theory is one of the most influential and cited theories in management to explain how organization accumulates their sustained competitive advantage in proceeding dynamic business environments. Furthermore, this theory is a proficient way to explain how some organizations achieve in organizational performances, business returns, and profits (Drnevich and Kriauciunas, 2011; Moustaghfir, 2008; Zollo and Winter, 2002). Previous researches indicated that dynamic capability could be the best conceptualized as tools that enhance existing resource configurations to strengthen long-term competitive advantage, especially in dynamic markets (Eisenhardt and Martin, 2000).

Dynamic capability theory was developed to explicate the resource-based view of the firm (RBV) which is unclear to describe how the organization improves the sustainable competitive advantage with the uncertainty, complexity and dynamic environment (Ambrosini and Bowman, 2009; Menon, 2008; Wang and Ahmed, 2007). The RBV has been criticized that the valuable, rare, inimitable and non-substitutable resources and capabilities can be duplicated by competitors by using advance technology. It may not be adequate to achieve firm's success in the long run. Organizations need to have outstanding abilities to merge and reconfigure their resources for adapting to cope with the highly dynamic business environment. Therefore, dynamic capability process in organizations could enhance and recreate their valuable resources to sustain their competitive advantage in the changing business environment (Helfat et al., 2007; Makadok, 2001).

Organization resources include all assets, capabilities, organizational processes, firm attributes, information, and knowledge that are available and useful to help organizations perform its operations and responding to market opportunities or threats (Wade and Hulland, 2004). Management accounting is the process of identifying, measuring, analyzing, interpreting and presenting information to assist

management in the process of decision making and creating policy and day to day operation of an organization. Furthermore, the important role of management accounting is providing the relevant information to support business activities and develop the imperative capabilities in order to successful or survival organization. Thus, management accounting is considered as a capability that enables the organizations to achieve their goals.

As described earlier, dynamic capability regards to the organizational processes to utilize their existing resources or capabilities to create growth and adaptation within changing environments. Therefore, in this research, if management accounting will be responsive to the turbulent business environment; beneath the dynamic capability theory perspective; dynamic management accounting would be related better competitive capability (namely; managerial information usefulness, decision-making success, and operational achievement) and also enhances the higher levels of firm performance. Furthermore, the RBV indicates that knowledge is the basis for competition. In order to respond to change of environment of the organization with dynamic capability, it is a requisite for organizations to focus on their knowledge management (Dawson, 2000).Therefore, knowledge management intention can be the moderating role in the relationship between dynamic management accounting orientation and its consequences.

Contingency Theory

This research also considers dynamic management accounting orientation in the context of contingency-based framework. Understanding of this context will enable organizations to determine what factors can support the development of dynamic management accounting orientation in organizations. Therefore, antecedents of dynamic management accounting orientation in this research are identified and justified by utilizes contingency theory. Contingency theory is a behavioral theory which asserts that organizational structures and systems are a function of environmental and firm-specific factors (Chenhall, 2003; Gerdin, 2005). It has been assumed that a single organizational structure is not equally applicable to all organizations. The appropriateness organizational structures and systems depend on organizational context (contingency factors).Additionally, organizational performance will be better when organizational structures and systems congruent to contingency factors.

Under this theoretical perspective, organizational structures and systems are contingent on situations and conditions of its internal and external factors. There are many internal and external factors that can influence the optimum organizational structure. The external factors are associated with environmental or industrial factors such as industry competition, technology change, economic condition, and business environmental uncertainty (Ensley et al., 2006). Internal factors are involved the organization factors such as corporate vision, organizational climate, firm resources, experience, leadership and firm policy, and organization learning (Gong and Tse, 2009).

The contingency theory became the dominant paradigm in empirical management accounting researches (Cadez and Guilding, 2008; Ittner and Larcker, 2001). It has been applied in management accounting research in three issues. These issues are 1) the fit between organizational control and structure, 2) the impact of such fits on performance, and 3) investigation of multiple contingencies and their impact on organizational design (Islam and Hu, 2012). This study focuses on the third issue in order to support conceptual model. Contingency-based management accounting research would suggest that organizations align their systems and processes with their contextual factors (internal and external factors), and the effectiveness of management accounting system will depend on the extent to which the characteristics of management accounting system meet the requirements of the various contingencies faced by the organization (Chenhall, 2003). In another word, the fit between the management accounting system designs and the contingency factors resulted in a more successful system.

Previous works on the contingency theory in management accounting research found that the most internal factors that have been examined the relation to management accounting are organizational size, technology, companies' strategies, cultural, top management team support, and market orientation (Aver and Cadez, 2009; Cadez and Guilding, 2008; Chenhall, 2003; Chenhall, 2006) Additionally, some studies have investigated the influence of external factors such as impact of environmental uncertainty and changing competitive environment. Environmental uncertainty was found to be a major explanatory variable as to whether accounting data was appropriate in evaluating the performance of business units (Delaney and Guilding, 2011;Hartmann, 2000; Chenhall, 2003).Furthermore, the changing competitive environment had a significant

influence on management accounting change to help organizations make better decisions in the face of uncertainty environment (Baines and Langfield-Smith, 2003).

As noted above, to obtain appropriate management accounting system, it should concern with internal and external contexts of the organization. Thus, this research applies contingency theory to explain the effects of antecedent and moderator on dynamic management accounting orientation from important key contingency variables. Five antecedents have been noted as potentially carrying significant implications. These are four internal factors (namely; proactive top management vision, business intelligence competency, best management accounting system, and market learning capability) and one external factor (namely, competitive change pressure). While innovation culture is a moderator between dynamic management accounting orientation and its antecedents.

In summary, the dynamic capability theory is applied to explain dynamic capability of management accounting which provides competitive capability and leads to the growth of the firm. Furthermore, the contingency theory is used to identify and describe the antecedents and moderator effect on dynamic management accounting orientation. These theories demonstrate the relationship among of dynamic management accounting orientation to its antecedents and consequences as shown in Figure 1.

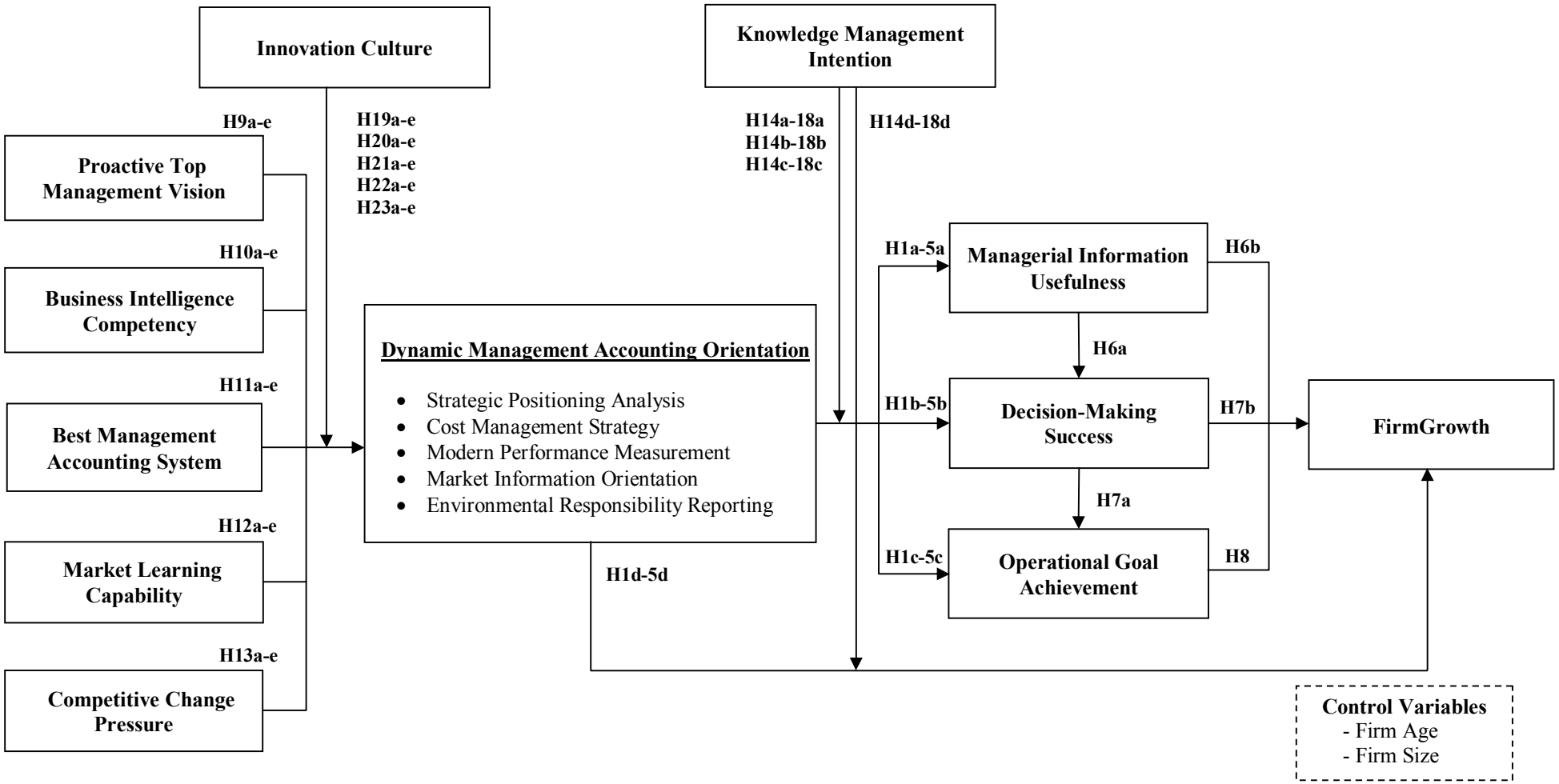
Relevant Literature Review

The theoretical foundations of dynamic capability theory and contingency theory are a valuable guide to develop the conceptual model of the relationship between dynamic management accounting orientation and firm growth. In order to comprehend the conceptual model, all variables in this study are consistent with theoretical concepts. Dynamic management accounting orientation is the main variable and the center of this research. As described earlier, this research purposes that dynamic management accounting orientation is positively associated with managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Managerial information usefulness, decision-making success, and operational goal achievement are supposed to have a positive relationship with firm growth.

Secondly, the five antecedents of dynamic management accounting orientation (proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure) are investigated and expected to positive relationships with dynamic management accounting orientation.

Lastly, this research also purposes that the higher knowledge management intention increases the relationships between dynamic management accounting orientation and its consequences. Furthermore, the strength of innovation culture also increases the relationship between dynamic management accounting orientation and its antecedents. The relationships among dynamic management accounting orientation, antecedents, consequences, and moderating variables are shown in Figure 1.

Figure 1 Conceptual Model of the Relationships between Dynamic Management Accounting Orientation and Firm Growth



Dynamic Management Accounting Orientation

A dynamic and competitive situation urges managers to develop their skills in understanding global competition orientation. Strategic flexibility and rapid response to changes as a prerequisite of working under ever-transforming conditions, where the organization should be in the state of continuous improvement, responding to new technologies, new markets, new businesses, and employees and customers. Organizations must agile and respond effectively to major environmental forces, including technological change, globalization, competition and customer preferences. Management accounting is an essential part of the systems which organizations utilize to deal with changes in their operating environment and to create organizational and customer value. In all organizations, managers rely on management accounting systems to provide information to deal with changes in their operating environment. Therefore, as firms adapt to these technological and management developments, they must design a management accounting system congruent with the new requirements (Gerdin, 2005).

A group of scholars claim that the effective role of management accounting in the rapidly changing business environment may depend on its dynamic capability. The successful organizations are depend on management accounting to provide essential information for planning decision and control to dealing with changing the environment (McWatters and Zimmerman, 2015; Schiller, 2010; Vaivio, 2008; Williams and Seaman, 202). The organization must adapt to dynamic environments, and management accounting must adapt to a changing organization. Therefore, in the search to understand management accounting in rapid changing environments, dynamic capability has become a focus for research. The new design of management accounting system should focus on a dynamic approach so as to function better in an environment of restructuring and globalization. Management accounting system is required to change to satisfy the demands of the current business environment. Many studies have been conducted to examine the role of management accounting system in a changing business environment (Burns and Vaivio, 2001; Gomes et al., 2007; Vamosi, 2003; Williams and Seaman, 2002), however, research on use of dynamic approach to understand management accounting in competitive environments and advance technologies is rather limited. Inadequate attention has been devoted to examining dynamic capability of management accounting in order to create competitive capabilities.

The dynamic capability framework has been developed to understand how organizations achieve and maintain a competitive advantage when faced with rapidly changing environments. Dynamic capabilities are defined as the firm's processes that use resources to match and even create market change (Eisenhardt and Martin, 2000). It is also defined as the intangible resources which enable firms to create, deploy, and protect the ability to achieve a superior long-run business performance (Teece, 2007). The effectiveness of the organizational dynamic capability to address rapidly changing environments has been attracted many management academies (Amit and Zott, 2001; Fukuzawa, 2015; Zahra and George, 2002; Zollo and Winter, 2002). Scholars have argued that the sustainability of competitive advantage and high performance depends on whether a company can develop resources more skillful than its competitors by using dynamic capability rapidly, shrewdly, and coincidentally.

Table 1 summarizes a select group of definitions granted to dynamic capability by several researchers in order to further analyze from the definition standpoint how dynamic management accounting orientation could be.

Table 1 Summary of Definitions of Dynamic Capability

Author(s)	**Definitions of dynamic capability**
Teece and Pisano (1994)	A subset of competencies/abilities that enables a firm to invent new products and processes and rebound to changing market conditions; main arguments which relate route, procedure, and position.
Teece et al. (1997)	The ability of the firm to integrate, to build, and to reconfigure internal and external competences to cope with constantly and rapidly change in the environment.
Teece (2000)	The ability of the firm to recognize and handle the opportunities quickly and fluently.

Table 1 Summary of Definitions of Dynamic Capability (continued)

Author(s)	Definitions of dynamic capability
Eisenhardt and Martin (2000)	Processes of the firms that use resources - especially process to consolidate, establish, add and publish resources - to direct or create market dynamics. The dynamic capabilities are strategic operation and organizational steps by which firms will be reconfigured when new markets occur, clash, segregate, change and extinguish.
Griffith and Harvey (2001)	The worldwide dynamic capabilities are the creation of a mix of difficult-to-emulate resources, including the coordination of the global organization inter-relationships efficiently that can create a competitive advantage.
Lee et al. (2002)	The novel source of competitive advantage in the conceptual framework of how firms are able to manage the environmental changes
Zahra and George (2002)	The ability of adaptation which allows firms to transfer and re-customize their resources to meet customer needs and the changing of competitor strategies
Zollo and Winter (2002)	The dynamic capability is the mastery and the steady form of the overall activity, where the organization methodically creates and adapts the operating procedures for better performance continuously.
Zahra et al. (2006)	The ability to establish the firm's resources and operating procedures in a way that is clear and reasonable by the primary decision maker.
Helfat et al. (2007)	The ability of an organization to willing build, expand or change its resource base.
Teece (2007)	Dynamic capabilities can be divided into potentiality (a) to understand and create opportunities and risks (b) grab the chances; and (c) to sustain the competitiveness through strengthening, merging, preventing, and establishing the intangible and tangible assets of business organizations.

Table 1 Summary of Definitions of Dynamic Capability (continued)

Author(s)	Definitions of dynamic capability
Wang and Ahmed (2007)	The organizational behavioral modulation continuously to compile renewable configurations and creating new resources and capabilities, and the most important developing and renovating core abilities in responsiveness to the changing environments to achieve and maintain a competitive advantage.
Augier and Teece (2009)	The capability to recognize and grab new opportunities, as well as to configure and prevent new knowledge assets, efficacies, and supplementary assets to attain a sustainable competitive advantage.
Mulders et al. (2010)	The ability to impart knowledge through the discreet appeal on a repetitive basis involves questioning the purpose and effectiveness of the routine; this insight serves to create and modify these procedures and processes to address the changing environment and/or create market dynamics.
Barreto (2010)	The firm's ability to solve problems systematically is due to the tendency to perceive opportunities and risks to make decisions and market focus timely including the change the firm's resources.

From the core definitions of dynamic capability, it can summarize that dynamic capability is to, respond to changing market circumstances, cope with environmental change, match and create market change, achieve new resources, competitive advantage, meet customer demands and competitors' strategies, improved effectiveness, maintain competitiveness, sustained competitive advantages, and make market-oriented decisions. This summary emphasizes the relevance and fundamental reasons for developing management accounting in this domain. Furthermore, this summary attempts to trigger interest for an organization in regarding the importance of developing dynamic management accounting orientation in order to achieve sustained competitive advantage.

IFAC (1998) provides a framework explaining the development of management accounting in terms of a four stage evolution model. The first stage

was cost determination and financial control (pre 1950).The focus of management accounting in that period was calculating product costs that supplemented by budgets and financial control of production process. The second stage was information for management planning and control (pre1965). At that time, management controls were oriented toward manufacturing and internal administrative rather than strategic consideration. The third stage was a reduction of resource waste in business processes (by 1985). The challenge of management accounting at that time was the ability to provide the appropriate information to support management at all levels (Kader and Luther, 2004). The last stage was creating value through efficient resource use that was to be achieved by the use of technologies to examine the drivers of customer value, stakeholder value, and organizational innovation.It should be pointed out that Stages 3 and 4 is the change of focus away from information provision and towards resource management, in the form of waste reduction (Stage 3) and value creation (Stage 4). The use of resources (including information) to create value is seen to be an integral part of the management process in contemporary organizations.

Some of the research in management accounting have been suggested that changes in an organization's external environment should lead to change in an organization's management accounting systems (Haldma and Lääts, 2002; Waweru et al., 2004). Managers need specific forms of management accounting information to support their decision needs within increasingly uncertain environments and to assist them monitor progress against strategies (Baines and Langfield-Smith, 2003).Consistent with many scholars who found management accounting role has shifted its focus from a simple or naive role of cost determination and financial control to a sophisticated role of creating value through improved deployment of resources (Fullerton and McWatters, 2002; Hoque et al., 2001). Interestingly, many organizations have not adopted the advance management accounting techniques, but they choose to adapt more complex techniques to suit the needs of management under various circumstances (Tillema, 2005). These literature indicated that a dynamic of change of management accounting systems is in demand, which should support new management process and the search for a competitive advantage to meet the challenge of global competition. Below is a summary of the review of the key literature on dynamic management accounting orientation as present in Table 2.

Table 2 Summary of Key Literature Reviews on Dynamic Management Accounting Orientation

Author(s)	Type of Research	Key Issue Examine	Main Finding
Hiromoto (1991)	Qualitative research	This article was developed to provide a new theme of management accounting so as to function better in a turbulent business environment by restoring the relevance of management accounting.	In order to restore the relevance of management accounting, changes are needed. Management accounting should help obtain the optimal activities with regard to the current conditions. It must be linking organizational strategies, motivating market-driven cost management, and emphasizing a dynamic approach to stressing the progress of performance all the time.
Williams and Seaman (2002)	Quantitative research	This study explores the indirect effect of management accounting systems change on departmental performance via the intervening effects of managerial-relevant information under dynamic business environments.	Results of this study showed that increases changes in the set of management accounting systems provide value-added information for managerial decision making and control activity, which then facilitates the achievement of operating departments' objectives.

Table 2 Summary of Key Literature Reviews on Dynamic Management Accounting Orientation (continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Baines and Langfield-Smith (2003)	Quantitative research	This study used a survey method and utilized structural equation modeling to examine the relationship between the changing competitive environment and a range of organizational variables as antecedents to management accounting change.	The findings suggested that increased competitive environment has resulted in increased emphasis on differentiation strategies that impact on changing of organizational design and advanced account management. Managers need specific forms of management accounting information to support their decision needs within increasingly uncertain environments and to assist them monitor progress against strategies.
Henri (2006a)	Quantitative research	This study examined the relationships between the use of management control systems (an integral part of management accounting), namely performance measurement systems, and the primary capabilities to gain competitive advantage.	The results suggested that the influence of dynamic tension resulting from the balanced use of performance measurement systems in a diagnostic and interactive fosters the four capabilities such as innovativeness, organizational learning, market orientation, and entrepreneurship, and performance.

Table 2 Summary of Key Literature Reviews on Dynamic Management Accounting Orientation (continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Talha et al. (2010)	Qualitative	This study focuses on the new approach of management accounting in keeping up with the latest information technologies and manufacturing technologies. The research also highlights the emergence of new and more proactive management accounting that is changing despite the emergence of rapidly growing information age.	A new look of management accounting is focused on anticipate future trends of environment and features of business firms. It focuses also on customers' requirement by providing customer satisfaction to gain more profit and more customers. Management accounting practices likely to develop broad scope include performance management, environmental management, financial management, information management and strategic management.
Tuan (2010)	Quantitative	This study investigated the impact of alignment among the changes in external and internal organizational factors, with the changes in management accounting practice on performance from various types of manufacturing companies in Malaysia.	Competitive environment changes and advanced production technology cause of the organizational change, corporate strategy, and management accounting practices. Management accounting changes, including introduction of new techniques, modification of the information output, and modification of technical operation.

Table 2 Summary of Key Literature Reviews on Dynamic Management Accounting Orientation (continued)

Author(s)	Type of Research	Key Issue Examine	Main Finding
Schulz et al. (2010)	Quantitative	This study examined the scope to which firms' use of integrative performance measures and performance-based compensation is responsive to the uncertainty in their competitive environment. It also explores the avenues whereby these management practices affect employee effort and organizational performance.	This study indicated that comprehensive performance measure is the result of the change in accounting contro system in response to business environment uncertainty The results revealed a positive relation between perceived environmental uncertainty and comprehensiv performance measure. It also found that performance-based payout to the mediate relationship between comprehensive performance measures and employee efforts. Finally, the employee's efforts are significant an correlated with the performance of the organization.

From the literature mentioned above, dynamic management accounting orientation play an important role to respond the managerial capabilities in today's business environment. Since a dynamic management accounting is more responsive to a dynamic and turbulent business environment, it should be better related to the competitive advantage and overall firm performance. Therefore, dynamic management accounting orientation is critical to the success of firm. In this research, dynamic management accounting orientation is defined as the ability of firms to develop accounting information to support and enhance management efficiency under a constantly changing business environment in order to achieve competitive advantage and growth of the organization. In order to develop accounting information to support management under changing environment, it is necessary to keep up with the management philosophies, capture the activities of the real business environment, and anticipate future trends of environment and features of business firms to be able to provide essential information for decision-making and achieve operational goals.

Dynamic management accounting orientation in this research is viewed as an effective management accounting practices that respond to management demands by offering the adequate and necessary information in helping managers to make better decisions under constantly changing business environment. Recent accounting literature stated that management accounting practices in a dynamic environment tend to focus on adding value to the organization (Hilton, 2005). It attempts to broaden the scope of management accounting by integrated external information, associate with market dynamism and competition intensity, and management accounting technique to provide information that explains the economic change and facilitates to creating or enhancing organization value (Abdel-Kader and Luther, 2008). Moreover, management accounting in a dynamic environment explicitly focus on improving accounting information by capture the activities of the real business environment and capture new business opportunities to be able to respond to various situations and create a competitive advantage (McWatters and Zimmerman, 2015).

According to the nature of management accounting under a dynamic business environment as mentioned above, the dimension of dynamic management accounting orientation in this research has been developed by applying the management accounting practices that broader scope and help to add value to the organization. From literature

review there are five dimensions associated with these issues, including1) strategic positioning analysis adapted from Hilton (2005) and Roslender and Hart (2003), which focuses to provide information about the potential of the organization in their industry to determine organizational competitive position in the future, 2) cost management strategy adapted from Kumar and Nagpal (2011) and Tontiset and Choojan (2012), which focuses to provide cost information to planning and control management activity to meet strategic goal, 3) modern performance measurement adapted from Ittner et al. (2003) and Schulz et al. (2010), which provides various performance measurements to motivating managers and other employees towards organization's goals, 4) market information orientation adapted from Inglis and Clift (2008) and Helgesen (2007), which focuses on providing information about customers and competitors in order to increase competitive opportunities, and 5) environmental responsibility reporting adapted from Zawawi and Hoque (2010) and Vasile and Man (2012), which focuses on providing the correct environmental information for managing environmental costs for increasing organizational profitability and sustainability development.

Firm Growth

The dynamic competitive models suggested that firm growth is mainly the result of different efficiency/productivity levels (Navaretti et al., 2014). Therefore, in this study firm growth is the administrative efficiency improved steadily of the firm leading to an increase in the firm's performance and value. Firm growth has been one of most widely studied topics in economic literatures (Coad and Hölzl, 2010). Measuring firm growth is necessary to determine the success of any company in the long term because it is related very closely to firm survival. Moreover, firms that experience continuous growth will have a higher probability of surviving in the market (Rodriguez et al., 2003).

Several researchers suggested growth as the important performance measure (Davidsson et al., 2002; Delmar et al., 2003) due to growth being a more accurate and easily accessible performance indicator than accounting measures, and therefore superior to indicators of financial performance. The use of growth as a measure of firm performance is generally based on the belief that growth is an indication of the attainment of sustainable competitive advantages and profitability (Markman, 2002).

However, growth as a measure of firm performance has had mixed results in the literature. There are a number of ways to measure the growth of firm, and no best way to do so. One possible reason for this is that researchers use different measures of growth and that growth itself is heterogeneous in nature (Delmar et al., 2003).

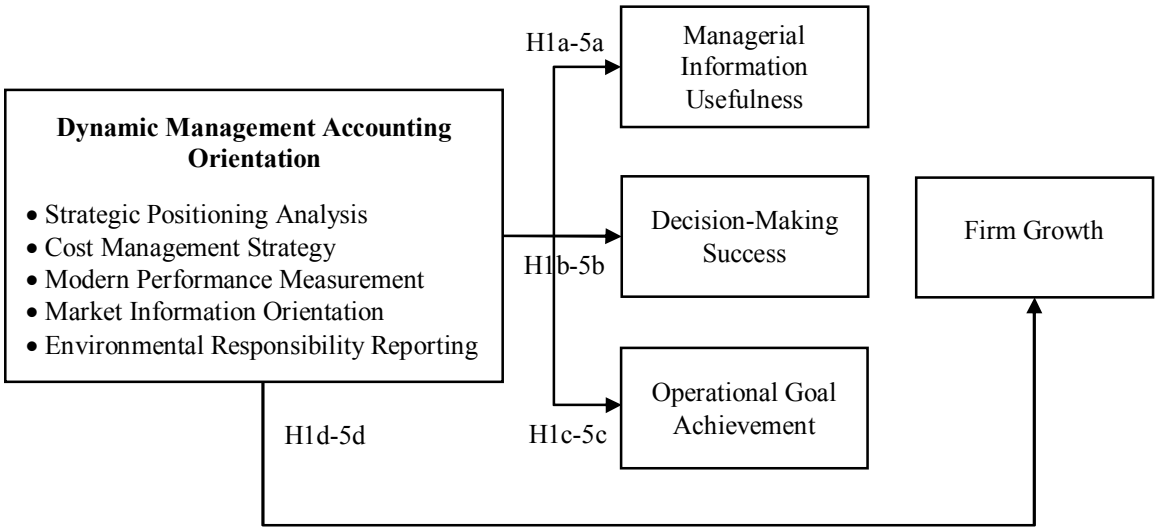
In the empirical literature, there exists a wide range of definitions of firm growth. Some definitions are based on the number of employees (Garnsey et al., 2006; Schreyer, 2000). Whereas others are based on turnover (Daunfeldt, 2010). The most common indicators of firm growth which includes assets, employment, market share, physical output, profits and sales (Fitzsimmons, 2005). Therefore, with respect to the literature reviews, this research defines firm growth as the continuously increase of the operational efficiency outcome in terms of high return on investment, increase incomes, increase market share, customer satisfaction and operating in a more uncertain environment.

The following section shows the investigation of the relationships among dynamic management accounting orientation which includes five dimensions and its consequences, antecedents, and moderator variables. A more detailed is provided below.

The Relationships among Dynamic Management Accounting Orientation and Its Consequences

This section presents the investigation of the relationships among dynamic management accounting orientation, consisting of five dimensions: strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting; and four critical consequences which are managerial information usefulness, decision-making success, operational goal achievement, and firm growth. These relationships are presented as below:

Figure 2 The Relationships among Dynamic Management Accounting Orientation, Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth



Strategic Positioning Analysis

In today's business, the creation of a new form of competitive advantage becomes a key issue in management as the business environment is changing rapidly and unpredictably (Boon-itt, 2009). Based on this challenge, an effective organization strategy must take into account the competitive advantage of the firms over their competitors. Competitive advantage is the extent to which a firm can create a defensible position over its competitors (Abushaiba and Zainuddin, 2012). Due to dynamic capability is intended to develop the organizational capability to achieve competitive advantage under changing business environment. Therefore, strategic positioning analysis became the first component of dynamic management accounting orientation which focuses on enhancing the organization competitiveness via linking accounting information with organizational strategies to create a defensible position over its competitors.

Strategic positioning is the ability of the firm to determine the appropriate generic strategy for its industry and to organize its value-added activities that support the creation of competitive advantage (Ombasa, 2015). It is the output of a complex understanding of market structure and conditions that determine the sustainability of

firm performance (Spanos and Lioukas, 2001). Therefore, in order to successfully in define strategic position, it is necessary for organizations to call up the relevant information necessary for the formulation, implementation, and realization of strategies which add value to the firm and increased efficiency for achieving competitive advantage.

The literature of management accounting systems have found that the formulation of a clear competitive strategy is essential, it must be supported by a proper organizational structure, and management accounting system, information systems to attain competitive advantages and ensure high performance. (Jermias and Gani, 2002). Management accounting system is the provision of information to support strategic decisions in the long term, and performance by providing internal and external information for strategic purposes, i.e., it is defining the strategic position, formulating strategy and controlling the performance (Abushaiba and Zainuddin, 2012). In this sense, management accounting might usefully be employed to analyze strategic positioning to assist management in securing, and subsequently to sustain competitive advantage.

Strategic positioning analysis in this research can be defined as the ability of the firm to provide accounting information for assessing the potential of the firm to shape the operational plans along with the clear competitive position in the industry which is uniquely aligned with organization's goals and leading to the competitive advantage. Strategic position analysis is understood as the extent to which the company can continuously analyze and synthesis of accounting data to assess organizational competitiveness and allocate resources effectively to formulate strategy and business plans of the organization in a competitive environment. Accordingly, strategic position analysis influences on providing information, decision-making, operation, and firm performance.

Prior research refines this understanding by demonstrating that the purpose of management accounting also emphasizes the linkage between management accounting practices and tools with organizational strategy to achieve an organizational strategic objective (Carmen and Corina, 2009). Generally, the role of management accounting for strategic linkage is identified with a generic approach of accounting for strategic positioning (Roslender and Hart, 2003). Results of this linkage, management accounting is a tool in providing useful information and decision-making for an organization in its

efforts of achieving its objectives, creating value and ensuring long-term success (Carmen and Corina, 2009). It also helps the manager to supervise and control operations to continuously improve the activity that is critical to the success of the company (Hillton, 2005). Furthermore, to maintain the organizational competitive position and determine the strategy aimed at improving future competitiveness, contemporary companies should collect the information on current and potential competition (Malinic et al., 2012). According to the concept of dynamic capability theory, such the features of management accounting for strategic positioning analysis is in line with the source of firms' capabilities to renew their competencies to achieve congruence with changing environments. The theory of dynamic capability focuses on an important source of firms' competitive advantage and performance as their capabilities (Teece et al., 1997). Therefore, strategic positioning analysis appears to increase operational efficiency and firm performance. Strategic management literature argues that strategic positioning analysis can help the firm to support decision-making to find the best mixture of strategies to defend a firm against the competitive forces in the industry (Baines et al., 2005). Furthermore, strategic positioning analysis influences firm performance (Kim et al., 2008), and it allows firms to enjoy abnormal returns or help them survive turbulent environments (Spanos and Lioukas, 2001).

Therefore, strategic positioning analysis is the extended arm of dynamic management accounting orientation and is particularly importance source of useful information for obtaining decision-making, which helps firms achieve its operational goals and grow continuously. Thus, the hypotheses are proposed as follows:

Hypothesis 1a: The higher the strategic positioning analysis is, the more likely that firms will gain greater managerial information usefulness.

Hypothesis 1b: The higher the strategic positioning analysis is, the more likely that firms will gain greater decision-making success.

Hypothesis 1c: The higher the strategic positioning analysis is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 1d: The higher the strategic positioning analysis is, the more likely that firms will gain greater firm growth.

Cost Management Strategy

The growing pressures of highly competition, technological innovation, and changes in business processes have made cost management become a critical survival skill for many firms (Kuma, 2013). Firms need useful information about costto enhance their ability to differentiate themselves from their competitors and create new value for their customers (Fu, 2007). Traditional cost management may be not adaptable to these events; costs must be managed strategically (McNair, 2000). Cost management strategy is one of contemporary management accounting techniques that provide cost information usefulness to develop strategic decision making and sustainable competitive advantage crucial to operating more efficiency in the violently competitive environment (Tontiset and Choojan, 2012). Moreover, cost management strategy has a broad focus. It is not only to continuous cost reduction and controlling of costs (traditional cost management) but also to concern with management's use of cost information for decision-making to increase revenues, improve productivity and customer satisfaction. Furthermore, it is also important to organizations because successful organizations in the 21st century tend to focus on improving costs along with revenue and value enhancement (Kumar and Nagpal, 2011). Therefore, cost management strategy becomes the second component of dynamic management accounting orientation in order to maximize the value of organization and support the competitive advantages in turbulent business.

Cost management strategy is defined as the ability of the firm to accurately analyze and predict the production and operation costs in business then using this information to plan and control the expense in accordance with the direction of administration for leading to the effective achievement (Kumar and Nagpal, 2011). It is also the use of cost data based on strategic and marketing information to develop and identify superior strategies that will produce a sustainable competitive advantage (Hansen and Mowen, 2006). Additionally, the concept of cost management strategy is the application of cost management techniques to improve the strategic position of a firm and reduce costs simultaneously (Slagmulder and Cooper, 2003). At this point the

scholars advocate that cost management strategy is a philosophy, an attitude, a set of techniques of cost management and revenue management to improve; productivity, maximize profit, and improve customer satisfaction; in order to contribute to shaping the future of the company (Hilton et al., 2001).

Cost management strategy is one of contemporary management accounting practice that provides useful cost information to develop the strategic decision and the crucial competitive advantage sustainably to operating more efficiently in the fiercely competitive environment (Sulaiman et al., 2005). The role of cost management strategy is the one important key that provides cost information to support the achievement of the firm's objective and strategic goals (Ilić et al., 2010). It is built on both cost accounting and management accounting and assumes knowledge of both that can be helping the better management of resources, and increases competitive advantage in terms of costs, quality and firm performance. Also, continuously collecting and acting upon the overall cost management strategy provide the means to reduce cost, improve operational effectiveness and increase profitability (Anirban, 2011). Cost management literature indicated that cost management strategy has a significant influence on decision making effectiveness. It supported the strategic and operational decisions making effectiveness such as sourcing, changed process, product design, and pricing and product mixing (Chenhall, 2004; Maelah and Lbrahim, 2007). In addition, it can enhance accurate cost information which has yielded most significant benefits useful for managers in understanding and evaluating how resources are used across the firm's value-chains in delivering strategic outcomes, as well as making operational improvements, budgeting planning, and performing evaluation (Anand, 2004; Lawson et al., 2009). Furthermore, cost management strategy also enables the firm to save cost by identifying and removing the major non-value-added activities that give rise to cost in the process and enabling them to control the factors that give rise to customer value and improve firm performance in the long run (Langfield-Smith et al., 2009).

Base on the literature reviewed above, firms with great cost management strategy tend to accomplish the managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Therefore, the hypotheses are proposed as follows:

Hypothesis 2a: The higher the cost management strategy is, the more likely that firms will gain greater managerial information usefulness.

Hypothesis 2b: The higher the cost management strategy is, the more likely that firms will gain greater decision-making success.

Hypothesis 2c: The higher the cost management strategy is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 2d: The higher the cost management strategy is, the more likely that firms will gain greater firm growth.

Modern Performance Measurement

Performance measurement is the important part of the management accounting system that provides the information to support the executives in strategic thinking about how their activities appropriate with other parts of the firms and to assist them in managing their firm's operations (Fullerton and McWatters, 2002; Ittner et al., 2003; Lillis, 2002; Ullrich and Tuttle, 2004;). The performance measurement system represents one of the key roles as the source of information on financial performance and internal operations as reflected in the financial statements (Yeniyurt, 2003). This type of information is useful for the decision-making process.

In a rapidly changing business environment, performance measurement systems have to be more modern and enable firms to address environmental change. Both academics and practitioners have argued that traditional performance measures, which focus on financial measures, are inadequate for meeting the challenges of today's marketplace (Baines and Langfield-Smith, 2003; Henri, 2006b). In today's competitive environment, organizations need a multidimensional performance measurement system that should provide continuous signals as to what is most important in their day-to-day activities and where efforts must be directed (Hoque et al., 2001). Likewise, firms are responded to uncertainty environmental by increasing their use of comprehensive (diverse, balanced and integrated) performance measurement systems (Schulz et al. 2010).This increase helps to expand the use of performance-based compensation

systems and encourages employees to increase their efforts at work. Finally, the increased employee effort positively impacts organizational performance. A set of integrated information should be provided in the performance measures, which is necessary for decision-making and to reward performance in the face of increased competition (Scott and Tiessen, 2001).

From mentioned above, modern performance measurement should be characterized as including: comprehensive and diverse set of performance measures, the integration of measures with strategy and link to value outcomes, and the coverage of performance measures related to different parts of the firm (Ittner et al., 2003; Malina and Selto, 2001; Malmi, 2001; Neely et al., 2005). This research defines modern performance measurement as the ability of the firm to apply performance appraisals consistent with its current operating model with the variety of indicators which covers all dimensions of performance measurement in both financial and non-financial information which are quantitative and qualitative information that leads to increased operational efficiency and long term organizational success. The unique characteristic of modern performance measurement involves increased use a diverse set of performance evaluation, like non-financial and financial, internal and external, qualitative and quantitative, and comparative, that enables an organization to achieve its objectives.

Drawing on these descriptions of modern performance measurement, it is argued that modern performance measurement system can provide the useful information for better decision making in responding to increased uncertainty, which helps the company achieve its operational goals and grow continuously. Increasing diversity or scopes of performance measures in modern performance measurement would further enhance the information that firms and their employees can use in responding to increased uncertainty (Schulz et al., 2010). In addition, the data which are obtained from the modern performance measurement also stimulates more efficient work and ultimately results in higher performance. Modern performance measurement that comprises of mixed financial and non-financial performance may enable a company deal with changing business environment by clearly monitoring core competencies of the organizational process, and help managers to estimate changes in their business environment, determine and evaluate progress towards the firm's goals, and affirm achievement of performance (Stede et al., 2006; Tuan, 2010). Integration of non-

financial and financial measures provides reliable feedback for performance evaluation, and thus allows organizations to deal with external competition (Lee and Yang, 2011).

Based on the literature reviewed above, modern performance measurement has the potential possibility to affect managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Therefore, the hypotheses are proposed as follows:

Hypothesis 3a: The higher the modern performance measurement is, the more likely that firms will gain greater managerial information usefulness.

Hypothesis 3b: The higher the modern performance measurement is, the more likely that firms will gain greater decision-making success.

Hypothesis 3c: The higher the modern performance measurement is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 3d: The higher the modern performance measurement is, the more likely that firms will gain greater firm growth.

Market Information Orientation

In a highly competitive business environment, organizations need marketing information for decision-making and operation to satisfy market expectation and create the competitive advantage. A superior understanding of customer needs, competitive actions, and market trends enables a market-oriented firm to identify and develop capabilities that are necessary for long-term performance (Mokhtari, 2013). Therefore managers need to streamline marketing information that involves making decisions about the set of processes that lead to customer value and the economic value of the customer. A market orientation can help the organization achieve better performance because top management and other employees have both information on customers' implicit and expressed needs and competitors' strengths and a strong motivation to achieve superior customer satisfaction (Kumar et al., 2011). These capabilities can be transformed into a sustainable competitive advantage when a firm uniquely has the

information and uses the market information efficiently and effectively as a part of a process.

Management accounting is demanded to be able to provide relevant information which is more flexible and the techniques really relate to the external information. This external orientation may relate to competition, business partners, and market (assumes the orientation toward offer of services in order to meet customer needs) (Cinquini and Tenucci, 2007). Thus, they seem to be a need for a market-oriented managerial accounting approach that is of practical use to marketing managers and other businessmen, i.e. a managerial accounting system should be furnishing updated decision-relevant information, including for example financial reports, graphic representations and key figures for customers as well as for other selected market-based profitability objects. In this study, market information orientation can be a natural part of a market-oriented accounting. Consequently, market information orientation is one of the important dimensions of dynamic management accounting orientation which focuses on integrating management accounting and marketing in the pursuit of competitive advantage.

There has been a growing interest in market information orientation in terms of market-oriented managerial accounting. Most attention has been directed to customer profitability analysis (economic profit of a customer) such as customer revenues, customer costs, and customer profitability figure (Guilding and McManus, 2002; Helgesen, 2007; Ryals, 2002). Other researchers are focusing on the lifetime economic value of a customer or the balancing of acquisition and retention resources in order to maximize customer profitability (Jacobs et al., 2001; Pfeifer, 2005; Reinartz et al., 2005). Some researchers have been studying relationships between customer profitability and its various antecedents particularly customer retention, customer loyalty and customer satisfaction (Bowman and Narayandas, 2004; Yeung and Ennew, 2000). From literature above, it can indicate that market information orientation regarding with customer accounting consistent with the positive association between market orientation and the application of customer accounting (Guilding and McManus, 2002). Furthermore, under nature of the dynamic environment, external factors such as governmental regulations, economic trends, technology and other business environments have an effect on customer needs and preference (Mokhtari et al., 2013).

Thus, in order to analyze market information orientation should consider including customer and external factors of the industry.

Drawing on previous researches, market information orientation is defined as the ability of the firm to provide and analyze information that relates to competitors' potentiality and profitability of customers through accounting method and using the information for planning and making decision to set competitive strategy to response the market effectively. Market information orientation includes measure concept such as forecasting and analyzing economic profit of customers (customer revenues, customer costs, customer profitability, and customer satisfaction) and the potential of competitors and markets in order to respond market demand effectively. Prior research found that market information orientation in term of customer profitability analysis is mandatory marketing performance metrics which provide updated-relevant information for better decision-making to manage customer relationships in ways that benefit the organization and its stakeholders (Helgesen, 2007). Furthermore, market information orientation which focuses on customer accounting has been suggested as a group of techniques that can provide managers with the information needed to gain a competitive advantage (Reinartz and Kumar, 2003). In line with the extent of market information orientation which is appraised, such as such as customer accounting and it is found that customer accounting can play in providing valuable customer data for business decision-making, and also the significant positive relationship with firm performance (MaManus, 2013).

Based on the literature reviewed above, market information orientation is considered as one dimension of dynamic management accounting orientation which has the potential possibility to affect managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Thus, the hypotheses are elaborated as follow:

Hypothesis 4a: The higher the market information orientation is, the more likely that firms will gain greater managerial information usefulness.

Hypothesis 4b: The higher the market information orientation is, the more likely that firms will gain greater decision-making success.

Hypothesis 4c: The higher the market information orientation is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 4d: The higher the market information orientation is, the more likely that firms will gain greater firm growth.

Environmental Responsibility Reporting

Environmental responsibility reporting is part of environmental management accounting which provides information essential for corporate environmental management. Nowadays, the issue of environmental responsibility is becoming increasingly important because of pressure from a broad group of stakeholders. Organizations which do proactively demonstrate environmental concern can win favour with stakeholders and attain several other benefits, such as improved image and competitiveness, support from banks and insurance companies, new and strengthened business relationships and supply chain involvement (Schaltegger et al., 2003). Therefore, environmental responsibility reporting is important not only for contribute to the company's image, but for environmental management decisions and for all types of routing management activities, such as capital budgeting, supply process, price policy, and performance evaluation (Vasile and Man, 2012)

Environmental responsibility reporting derived from environmental management accounting is broadly useful for many different types of environmental management practices. In management accounting literature stated that environmental management accounting information can help companies identify the benefits of using existing natural assets and the costs occurred as a result of this usage (Bengü and Can, 2009). It also provides extra information to the management by identifying and quantifying measures such as: obligations associated with the significant influences exercised upon the environment; the cost of legal stipulations in the field; the benefits or cost savings achieved as a result of implementing the environmental management systems; the economic advantages of other initiatives (increase of efficiency and improvement in carrying out businesses) (Vasile and Man, 2012). As mentioned, environmental responsibility reporting can increase the added value of enterprises and survive in the competitive environment. Thus, in this research, environmental responsibility reporting

refers to the ability of the firm to provide and present accounting information related to environmental activities by reporting on the costs and benefits of the environmental activities of the firm that can be used as managerial information in various fields that affect the environment (Tanc and Gokoglan, 2015).

In order to assess costs and benefits correctly, environmental responsibility reporting not only displays the information about monetary information on environmental-related cost, earning and savings, but it also display physical information about materials and energy consumptions (the use of energy, water, materials and their renewal rates) (Abiola and Ashamu, 2012). These are extremely valuable information for management. Hidden opportunities such as reduced material and energy consumption and better waste management processes disclosed by environmental responsibility reporting is likely helpful in the development of an effective manufacturing process which in turn leads to higher firm performance.

Prior studies indicated that environmental management accounting information assists managers in identifying environmental costs and benefits which lead to cost savings opportunities, the reduction of environmental and social risks, the improvement of quality performance, and the enhancement of competitive advantage (Burritt et al., 2009; Dunk, 2002; Dunk, 2007; Gale, 2006; Jasch, 2003). Additionally, the use of environmental management accounting information linked to numerous potential benefits such as cost reductions, reputational improvements, improved product pricing, and attraction of human resources (DeBeer and Friend, 2006; Burritt et al., 2002; Gibson and Martin, 2004). For instance, organizations such as Interface Inc. and Baxter International enjoyed from economic benefits gained by environmental management accounting information use which gave them savings of approximately $12 and $14 million per year, respectively (Hansen and Mowen, 2005). Additionally, the existing literature also consistently suggests that environmental responsibility reporting influence market value of the firm (Holm and Rikhardsson, 2008). High-quality environmental responsibility reporting make financial analysts' earnings forecasts more precise and concrete (Aerts et al., 2008). However, some studies provided mixed results and revealed no relationship between environmental and performance, such as the nature and extent of the relationship between environmental responsibility and financial performance depend on the regulatory reporting environment that the company faces (Cormier and Magnan (2007). In this

regard, Hassel et al. (2005) indicated that there are two schools of thought on the relationship between environmental responsibility and firm performance. One is the cost-concerned approach which states that high environmental activities require a lot of investments and thus, lead to decrease in firm revenue and a decrease in market value. Another one is the value-creation approach, which states that high environmental activities provide firm with high competitive advantage, which contributes to higher profitability.

It has been seen that environmental responsibility reporting is critical for management in a highly competitive environment. It adds value to the organization by providing valuable information for decision-making related to environmental management. It also helps increase operational efficiency to achieve the goal with costing plan and the clearly benefit contribute to the competitive advantage of the organization. In summary, based on the studies mentioned above, it appears that an increase in environmental responsibility reporting is expected to increase managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Therefore, the hypotheses are posited as follows:

Hypothesis 5a: The higher the environmental responsibility reporting is, the more likely that firms will gain greater managerial information usefulness.

Hypothesis 5b: The higher the environmental responsibility reporting is, the more likely that firms will gain greater decision-making success.

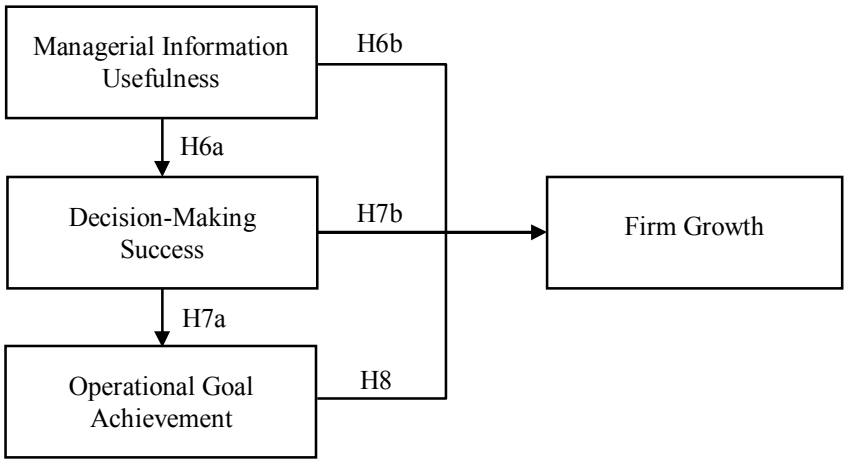
Hypothesis 5c: The higher the environmental responsibility reporting is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 5d: The higher the environmental responsibility reporting is, the more likely that firms will gain greater firm growth.

The Relationships among the Consequences of Dynamic Management Accounting Orientation

This section examines the relationships among the consequences of dynamic management accounting orientation consisting of managerial information usefulness, decision-making success, operational goal achievement, and firm growth. The literature review on the definition of each construct and purposed hypotheses are discussed below.

Figure 3 The Relationships among Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth



Managerial Information Usefulness

The central role for management accounting is to provide useful information for managers in conduction his function in order to achieve organization goals. Management accounting means to identify, collect, measure, and report useful information for the manager in planning, controlling, and making decisions (Hoque, 2003; Atkinson et al., 2004). Definition of management accounting can be showed that it has three fundamental elements appear to stand out:1) a management accounting system is a multidimensional composite of planning and control subsystems, 2) it is intended to provide information for managerial decision making and evaluation, and 3) it is intended to enhance an organization's performance outcomes. This research studies on replacing the first element with dynamic management accounting orientation. The

second and the third elements of management accounting's definition highlight that they are providing managers with useful information to facilitate decision making and enhancing organization's performance. This can imply that managerial information usefulness has a positive influence on decision-making success.

In this research, managerial information usefulness refers to the valuable and relevant information for decision-making that allows managers to manage their works quickly and accurately under various circumstances effectively. In order to make a decisive and relevant decision, the information will have elements of forecast and consideration for the issues that affect the outcome. Furthermore, management accounting information that is useful for management decision-making and contributes to organization performance comprises of four features: 1) broader scope, 2) timeliness, 3) level of aggregation, and 4) the information to assist integration (Gaidienë and Skyrius, 2006). Therefore, management accounting information can measure from the feature of accounting information which has a broader scope, timeliness, and complete and sufficient that is available to operational managers for decision making, monitoring and evaluation their work under various circumstances effectively.

Previous managerial accounting studies found the usefulness of management accounting information enhances effective decision-making, guides strategy development and evaluates existing strategies, focuses on efforts related to improving organizational performance (Kato, 2013; Sousa, 2013; Yeha and Teng, 2012). Thus, the direct effect of managerial information usefulness on decision making success and firm growth is expected to be stronger from the following reasons. First, managerial information usefulness provides more knowledge to managers on possible decision alternatives, which can reduce future uncertainty by enhancing managers' ability to predict situation and allow better decision across the action alternatives that managers are facing (Huang and Zhang, 2012; Wiersma, 2008). Second, it also reduces uncertainty concerning the past actions, which outcomes were realized as information for performance evaluation (Eierle and Schultze, 2013). In addition, the managerial information usefulness and firm growth linkage may be strengthened because more managerial information usefulness is analogous to learning, thus leading to more flexibility, efficiency, and innovative outcomes (Williams and Seaman, 2002).

In summary, based on the studies mentioned above, it appears that once organizations have the useful managerial information they utilize it to enhance effective decision-making and improve their performance. Consequently, an increase in managerial information usefulness is expected to increase decision-making success and firm growth. The following hypotheses express this linkage formally:

Hypothesis 6a: The higher the managerial information usefulness is, the more likely that firms will gain greater decision-making success.

Hypothesis 6b: The higher the managerial information usefulness is, the more likely that firms will gain greater firm growth.

Decision-Making Success

Decision-making is an essential aspect of modern management. It is afundamental part of management. The functions of management start only when the top-level management takes strategic decisions. Without decisions, actions will not be possible, and the resources will not be put to use. Thus decision-making is the primary function of management and consequence for firm performance success (Ireland and Miller, 2004). Decision-making is the process that involves the selection of a course of action from among two or more possible alternative based on values and preferences in order to solve a given problem (Harris, 2012). The process of decision making is based on the available information and businesses choose the best decision from various alternatives after considering factors (Akrani, 2011). One of the alternatives which lead to competitive advantage and achieved objectives of organization would be selected (Talaulicar et al., 2005). Decision-making success can be greatly enhanced by the quality of information. Information for decision-making is dynamic which needs to be constantly updated (Kidane, 2012). Since the purpose of management accounting is to help organizations make better decisions by extracting value from information, this can imply that decision-making success has a positive influence on operational goal achievement.

A primary objective of decision-making is to achieve optimum utilization of the business's capital or resources. Prior researches noted decision-making success is the process of choosing among the alternative solutions available to an action or a problem situation (Raiborn et al., 2006). It is the success of alternatives that lead to achievebusiness goal (Thitiyapramote, 2015). Good and effective decisions provide a variety of approaches, methods, and techniques that are helpful for making high quality of decision and directed to performance improvement (Kidane, 2012). It also propels the organization to success more quickly by finding the easier way to reach its set goals and objectives (Hogan et al., 2008). Moreover, previous works in management research found decision-making success is positively related to firm performance (Ponikvar et al., 2009). Economists assume that decision-makers compare the costs and benefits of alternative choices and then choose options that make them as well off as they can be (Stock, 2013). Decision-makers weigh the costs and benefits associated with any choice in order to maximize the value of some objective. This may, therefore, improve the performance of an organization as costs and benefits will be effectively weighed before a decision is taken (Chaikambang et al., 2012; Dimitratos, 2011).

Consequently, decision-making success in this research refers to the effectiveness of the organization in choosing the best alternatives that enables the organization to achieve its objectives and gain its maximized benefits (Talaulicar et al., 2005).Besides, most researchers show that information provided by management accounting can ensure firm growth through decision-making efficiency related to business strategy decision (Heidmann et al., 2008; Naranjo-Gil and Hartmann, 2006). Based on the literature above, decision-making success is a potential possibility that affects operational goal achievement and firm growth. Therefore, the hypotheses are proposed as follows:

Hypothesis 7a: The higher the decision-making success is, the more likely that firms will gain greater operational goal achievement.

Hypothesis 7b: The higher the decision-making success is, the more likely that firms will gain greater firm growth.

Operational Goal Achievement

Goals are resolutions to achieve the desired result, where they provide a clear understanding of what the company is striving to accomplish based on the organizational mission and strategic objectives. Successful companies set goals in every business plan and become a regular part of ongoing business operations. Plans can help organizations identify what it needs to achieve on a regular basis (Rayport and Jaworksi, 2007). Operational goals are important to the organization, as they clarify the purpose of the business and help identify necessary actions. They are also predetermined and described future results toward which present efforts are directed.

In business, operational goals are the short-term goals whose achievement brings an organization closer to its long-term goals (Abd El Aziz and Fady, 2013). They are closely related to firm growth, as a business will grow continuously when operational goal has been met. Furthermore, organizations may need to change their goals over time in response to changes in their environment. This demonstrated the need for information from dynamic management accounting. In order to achieve operational goals, managers should think strategically (Hoang, 2007). For example, to set objectives and plan for the next 6 to 12 months, they need to have a deep understanding of business's current position. According to Peter Drucker, that reward such as compensation related to performance measurement to achieve the objectives to motivate employees and to optimize the work (Mulder, 2010). Thus, the operation succeeded in attaining firm's strategy and objectives reveals operational efficiency and effectiveness in the form of well respond to various situations, as well as to manage resources appropriately and systemize the management and operation professionally (Chaikambang et al., 2012). This can imply that operational goal achievement can enhance firm growth.

Operational goal achievement is the representation of the final process in an operation which depends on the ability of the firm to create opportunities through business procedures leading to continuously maximizing their profitability, market share and competitiveness in the long-term (Deepen et al., 2008; Mohamed, 2008). They can involve areas such as profitability, employee and customer satisfaction, and continued growth. Prior research found that operational goals can help an organization to achieve its long term goals. It can also help to improve budgeting. For example, the sales department might set an operational objective, which targets to raise sales revenue

for the next several months (Bianca, 2014). This encourages managers to predict what level of sales revenue will be in the future, and help them to budget better. According to a research conducted by Rodgers and Hunter (1991), management by objectives has been shown to increase productivity. By achieving short term goals, employees might feel a great sense of accomplishment and this would help to improve their motivation. In addition, one of the most important goals of any organization is increasing sales, which is directly related to customers. Therefore, customer service or customer relationship management is a matter in operational goal achievement (Abd El Aziz and Fady, 2013).

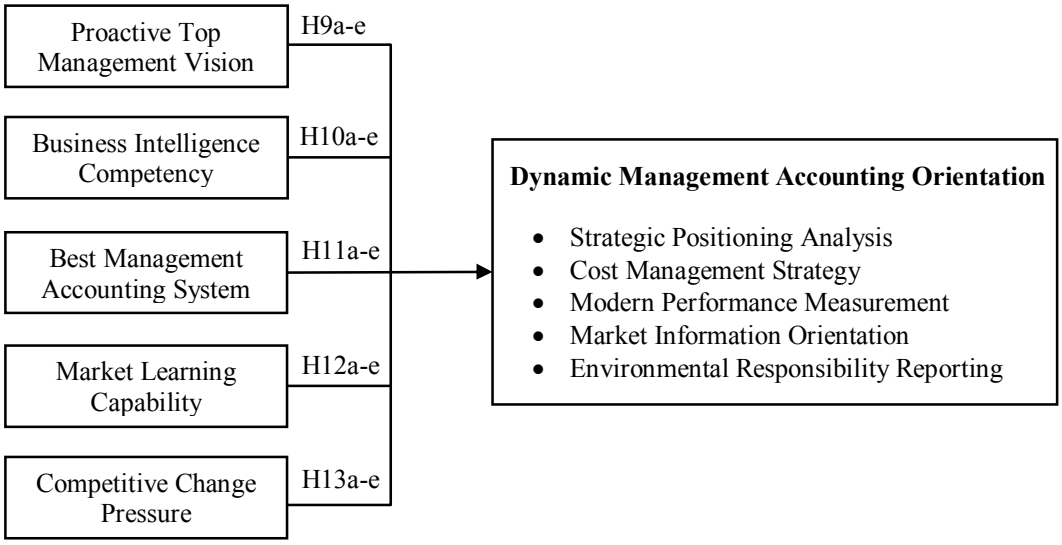
In this study defines operational goal achievement is the ability of the firm to execute the ways that have been planned effectively, consistent with strategy and organizational objectives. Based on the literature reviewed above, when organizations clearly understand the role of goals and objectives, they may have a great time achieving profitability, employee and customer satisfaction, and continued growth. Therefore, operational goal achievement has the potential possibility to affect firm growth. Hence, the hypothesis is proposed as follows:

Hypothesis 8: The higher the operational goal achievement is, the more likely that firms will gain greater firm growth.

The Relationships among the Antecedents and Dynamic Management Accounting Orientation

This section shows the effect of purposed antecedents of dynamic management accounting orientation. Regarding to the contingency theory, this research purposes proactive top management vision, business intelligence competency, best management accounting system, market learning capability, competitive change pressure as the significant antecedents of each dynamic management accounting orientation dimensions: strategic management analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. These relationships are illustrated in Figure 4.

Figure 4 The Relationship among Proactive Top Management Vision, Business Intelligence Competency, Best Management Accounting System, Market Learning Capability, Competitive Change Pressure, and Dynamic Management Accounting Orientation



Proactive Top Management Vision

The simplest vision concept means seeing the future today. Vision is defined as a clear, distinctive, and specific view of the future, and is usually connected with strategic advances for the organization (Boundless, 2017). A vision is meant to inspire the top management and the organization to look into the future prospects of the organization. Top managements are most influential senior executive, such as the Chief Executive Officer (CEO), Chief Operating Officer (COO), and Chief Financial Officer (CFO), with overall responsibility for the organization (Henri, 2006a). They are heavily involved in the strategic decision making of organizations (Collins and Clark, 2003). The decisions and strategies of senior executives reflect their view of what an enterprise can be rather than what is currently (Chuang, 2013; Weiss, 2004). Top management vision is viewed as an idealized goal or image which leaders create to achieve in the future, that emphasizes to achieve organizational outcomes in the long run (Korbangyang and Ussahawanitchkit, 2010). Thus, top management vision is an essential component of an organization's success.

In today's turbulent business environment, top management must be able to create a vision for how to effective positive changes that fit organizational goals and global trends. To create a vision and bring the organization to the next level, top management must have the abilities to recognize and connect global trends with organizational development plans (Lussier, 2005). Such a vision is characterized by proactive vision. Proactive vision is defined as idealized goals to be achieved in anticipate opportunities to develop and introduce valuable newness and find out future market trend (Lumpkin and Dess, 2001). It focuses on looking forward and seeking opportunities to develop current strategies and tactics, and detect future trends in the market (Hughes and Morgan, 2007). Its goal is to secure first-mover advantage in the short term and shape the direction of the market environment in the long term. Top management should have a proactive vision that can be advocated to learn continuity about events and trends in the firm's environment, which, in turn aids market opportunity recognition (Hughes and Morgan, 2007).

In this research, proactive top management vision refers to the forward-looking perspective of the senior executives on future outcomes that are aware of the good preparation for events that expected to happen in the future and to improve performance for achieving the goals continuously. It is the extent to which top managers in the organization focus on creating or controlling a situation by using accounting data to analyze opportunity, threat and competitive environments for improves constantly performance efficiency and goal success. The prior research suggested that proactive vision helps to complement innovativeness by creativity initiatives in management and encouraging collective solve problem in novel ways (Haeckel, 2004). It leverages the firm's responsiveness capability and propensity to act to meet new circumstances (Hughes and Morgan, 2007). It is also associated with the firm's receptiveness to market signals, which yields opportunities for the firm to meet expressed and latent needs ahead of competitors. With regarding top management literature, managers in organizations between prospect positions and defender positions are required different repertoires of skills and competencies. Organizations pursuing prospector strategies attempt to maximize differentiation emphasizing policies and operations to respond to various and changing market demands (Naranjo-Gil and Hartmann, 2007). This latter implies that top managements need to permanently scan the environment in order to

detect new market demands, strategic opportunities, and to provide service or product innovations quicker than competitors.

Certainly, proactive top management vision has an effect on adaptable managerial function, firm requirement to adjust strategic plans of action decision. The accounting literature focuses on the organizational mechanism which supports the strategic changing that is one of the roles of the management accounting system (Gerdin and Greve, 2004). Evidence for mediating role of management accounting system of the relationship between top management team composition and strategic change is shown the broad-scope management accounting system and interactive use of management accounting system are positively related to strategic change for organizations moving towards prospector positions (Naranjo and Hartmann, 2007). Based on the literature reviewed above, firms with higher proactive top management vision tend to obtain greater dynamic management accounting orientation management in each dimension. Hence, the hypotheses are proposed as follow:

Hypothesis 9a: The higher the proactive top management vision is, the more likely that firms will gain greater strategic positioning analysis.

Hypothesis 9b: The higher the proactive top management vision is, the more likely that firms will gain greater cost management strategy.

Hypothesis 9c: The higher the proactive top management vision is, the more likely that firms will gain greater modern performance measurement.

Hypothesis 9d: The higher the proactive top management vision is, the more likely that firms will gain greater market information orientation.

Hypothesis 9e: The higher the proactive top management vision is, the more likely that firms will gain greater environmental responsibility reporting.

Business Intelligence Competency

Management accounting systems facilitate data processing and delivery information to decision makers. However, in a turbulent and dynamic business environment, decision-makers at all levels of the organizational hierarchy require financial and related information with varying degrees of detail and with various levels of analysis (Ismail and Isa, 2011). To survive in the competitive environment, high-level management needs business intelligence information to efficiently manage corporate operations and support their making of decisions (Cheng et al., 2009). In this case, a dedicated business intelligence system will fulfill the shortcomings of the basic analytical capacity of management accounting system. Business intelligence system can provide managers with timely, relevant, and easy-to-use information, which enables better decisions (Hannula and Pirttimaki 2003). It also provides the ability to analyze business information in order to support and improve management decision making across a broad range of business activities (Elbashir et al., 2008)

Business intelligence is a process that drives with technology to analyze data and propose the actionable information to support the corporate executives, business managers, and other end-users for making decisions with more information. It is defined as the capability of the firm to use a variety of technologies and expertise to enable operations to respond to current and future situations effectively (Elbashir et al., 2008). It includes the variety of tools, applications, and methodologies that help the organizations to gather information from internal systems and external sources for preparing the analysis, develop, browse and report generation to provide the appropriate information for decision-makers in the organizations (Dinter, 2013; Elbashir et al., 2011). Organizations have recently begun to further exploit the capabilities of business intelligence through deploying these technologies to support wider business activities (Rogge, 2005). Now, organizations use business intelligence systems for tactical and operational process improvements, supply chain, production and customer service (Elbashir and Williams, 2007; Williams and Williams, 2003). These new developments have allowed line managers to access relevant and timely information (such as daily customer and product updates) and make better and instantaneous decisions. Nowadays, organizations are created a broad range of operational benefits along with their value chain activities by moving in the deployment of business intelligence systems at the

operational level (Elbashir et al., 2008). Thus, business intelligence competency is crucial to enable effective decision making and management support in order to survive and prosper in a turbulent environment.

In this research, business intelligence competency refers to the capability of the firm to use of technology to collect and effectively use the information to improve management accounting effectiveness. Business intelligence competency consists of collecting the data from internal and external sources, data analysis, assessing the situation, filtering out unimportant information, developing solutions, analyze risks and then supporting the decisions made. Dynamic management accounting orientation should address managers' demands for a greater variety of ad hoc information, with various amounts of detail. Business intelligence competency will contribute this competency to the dynamic management accounting orientation. Business intelligence competency will provide the necessary analytical skills required to analyze and provide information in the required way. Therefore, the hypotheses are proposed as follows:

Hypothesis 10a: The higher the business intelligence competency is, the more likely that firms will gain greater strategic positioning analysis.

Hypothesis 10b: The higher the business intelligence competency is,the more likely that firms will gain greater cost management strategy.

Hypothesis 10c: The higher the business intelligence competency is, the more likely that firms will gain greater modern performance measurement.

Hypothesis 10d: The higher the business intelligence competency is, the more likely that firms will gain greater market information orientation.

Hypothesis 10e: The higher the business intelligence competency is, the more likely that firms will gain greater environmental responsibility reporting.

Best Management Accounting System

Management accounting system is adapted to provide relevant information that will assist managers to reach informed economic decisions and achieving the organizational objective (Haldma and Lääts, 2002). It is the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of operational and financial information that guides managerial action, motivates behaviors, and supports and creates the cultural values necessary to achieve an organization objective (Carmen and Corina, 2009; Horngren et al., 2007). In order to develop the role of management accounting to support modern technologies and new management process for a competitive advantage to meet the challenge of global competition, the organization should have an effective management accounting system which is designed to congruent with the manager's new information requirements (Baines and Langfield-Smith, 2003; Gerdin, 2005).

Previous research indicated that an effective management accounting system is the best system that incorporates accounting system process, advanced technology, an appropriate control system to provide value-added information for controlling activities to achieve the firm performance objectives (William and Seaman, 2002; Zhang and Zhou, 2007). It has an important role in providingaccurate and reliable accounting information that involves to decision-making, monitoring, planning, and projections of the firm's needs for goal-setting and operational control in the future (Lata and Ussahawanitchakit, 2015; Wongjinda et al., 2016). In addition, the features of a best management accounting system are flexible and responsive to generate useful reports such as trend analysis or other special reports and easy to use by requiring minimal training time (Nelson et al., 2005).

Based on a literature review, best management accounting system in this study refers to the management accounting process that is consistent with the operational model that supports the organization's success by providing sufficient information that is up-to-date, responsive to the needs of executives under current circumstances effectively. The use of best managerial accounting system is an essential for the successful monitoring of managerial accounting information applications (Strumickas and Valanciene, 2010). Elements of completeness (broad scope information); timeliness, accuracy, and predictive capability of accounting information from best management accounting system can

contribute to strategic sense-making (Heidmann and Strahringer, 2008). These elements of management accounting information are useful in setting the appropriate strategic direction of organizations. Sourcing and leveraging accounting information in these ways reflects on the strength of the functionalities of the dynamic management accounting orientation.

There is strong empirical evidence that implementation of best management accounting system can lead to superior management accounting role in today's dynamic accounting environment. For example, the effectiveness of management accounting system is the advantage of using management accounting systems which create value to support strategic and tactical management for excellence in operations, enabling organizations to compete (Valanciene and Gimzauskiene, 2007). In addition, management accounting has to adapt to a changing environment over time in response to economic and competitive pressures. Changes and adjustments to keep pace with economic transformation can influence the process of management. Therefore, it is predicted that there is a relationship between the change in the external environment and the needs of the effectiveness of management accounting systems (Hussain, 2003).

This situation implies thatbest management accounting system is essential for developing effective management accounting role to be more responding to changes in the business environment. Thus, the hypotheses are proposed below:

Hypothesis 11a: The higher the best management accounting system is, the more likely that firms will gain greater strategic positioning analysis.

Hypothesis 11b: The higher the best management accounting system is, the more likely that firms will gain greater cost management strategy.

Hypothesis 11c: The higher the best management accounting system is, the more likely that firms will gain greater modern performance measurement.

Hypothesis 11d: The higher the best management accounting system is, the more likely that firms will gain greater market information orientation.

Hypothesis 11e: The higher the best management accounting system is, the more likely that firms will gain greater environmental responsibility reporting.

Market Learning Capability

The market-driven firm paradigm argues that firms that are better equipped to learn from market changes and respond to such changes can expect to enjoy long-run competitive (Weerawardena, 2003). Market-driven firms have superior market sensing capabilities. It is suggested that market-focused learning provides a focus for the business's product development and sales growth efforts by enabling the business to develop strong relationships with key customers and insights into opportunities for market development (Slater and Narver, 2000). Thus, market learning capability was seen as a marketing-sensing capability that is consistent with the firm's ability to learn about customers, competitors, and the broader market environment in which it operates continuously. It also can be linked to the firm's revenue and marginal growth (Morgan et al., 2009).

Marketing learning capability is found as the business capacity which searches for information on customer needs, competitor techniques and the marketplace situation; including marketing experts (Jiménez-Jiménez and Cegarra-Navarro, 2007; Kyriakopoulos and Moorman, 2004; Wei and Wang, 2011). But, sometimes it is considered as an ability in managing market knowledge (coming both from customers and competitors), which can drive the organizational market orientation (Cillo, 2003). It consists of these different layers of knowledge and is driven by the ability to integrate external market knowledge, to disseminate it internally, and to recombine different units of knowledge in order to address changing environments. It can be expected that firms with a strong market orientation will tend to attach a relatively high degree of market learning capability.

Previous researchers found that a business that increases its market learning capability will improve its market performance. This espoused significance for market learning capability motivates its examination in an accounting study. Firms with a strong marketing focus can be expected to incur relatively large discretionary marketing costs in areas such as customer support (Guilding and McManus, 2002). This larger expenditure would appear to warrant higher levels of customer accounting; as customer

accounting can inform decisions concerning allocation of the customer support budget. It means that market performance will be improved when a business has increased its market learning. Consequently, the companies' performance measurement system is more market-oriented. Moreover, market learning provides capabilities that lead to the best organizational performance through market sensitivity and communication with customers (Kara et al., 2005). Organizational performance consists of cost-oriented performance scales, which reflect performance after calculating the components of a strategy, and income-oriented performance scales, which do not calculate strategy implementation costs.

For all study above, firms with a high market learning capability have a relatively strong external focus. Conventional management accounting systems have been criticized for an excessive internal orientation. This tendency for an internal orientation can be expected to be tempered in those firms exhibiting a high market-orientation. As a dynamic management accounting orientation focuses on integrated internal and external information in order to respond the various situations in turbulent business. It is expected that dynamic management accounting orientation will tend to be more developed in highly market orientated companies with a high degree of market learning capability.

Therefore, market learning capability in this study refers to the ability of the organization to continuously learn, analyze and evaluate market situations in order to better respond to market needs. Market learning capability is an important internal stimulus that calls for updated decision-relevant information with respect to the set of processes that are leading to customer values and economic profitability. As a result, high level of market learning capability leads to use greater strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. Therefore, the hypotheses are proposed as follows:

Hypothesis 12a: The higher the market learning capability is, the more likely that firms will gain greater strategic positioning analysis.

Hypothesis 12b: The higher the market learning capability is, the more likely that firms will gain greater cost management strategy.

Hypothesis 12c: The higher the market learning capability is, the more likely that firms will gain greater modern performance measurement.

Hypothesis 12d: The higher the market learning capability is, the more likely that firms will gain greater market information orientation.

Hypothesis 12e: The higher the market learning capability is, the more likely that firms will gain greater environmental responsibility reporting.

Competitive Change Pressure

As suggested by the contingency framework, environmental variables influence decisions on the design and use of management accounting system (Burkert et al., 2014; Chenhall,2003). One type of environmental variable is market competition. (Baines and Langfield-Smith, 2003; Waweru et al., 2004). It is argued that marketing competition changes create a heightened need for managers to focus on particular forms of management accounting information to support their decision needs and to help them in monitoring progress against strategies. Consistent with a contingency theory in management accounting research which assumes that an appropriate fit between the environment and organizational system is needed for management accounting systems to change, and to support managers' requirements for up to date information (Chenhall, 2003; Gerdin and Greve, 2004; Lapsley and Pallot, 2000).

Literatures also suggested that the changing competitive environment is a factor that influences management accounting change in the way higher sophistication. For example, the increasingly competitive environment has resulted in influenced changes in organizational design and advanced management accounting practices (Baines and Langfield-Smith, 2003). And, the sophistication level of cost accounting and budgeting systems tends to increase in line with a firm's competition (Haldma and Lääts, 2002). Furthermore, greater competition intensity creates a heightened need of advanced management accounting such as customer accounting to analyze performance

in a manner consistent with providing insights concerning customer desires and how to create value to the customer (Guilding and McManus, 2002). The organizations facing higher competition are likely to use multiple performance measures to support a broader scope of their operation (Lee and Yang, 2011). In addition, firms operating in a competitive environment should be motivated to change their control systems because appropriate costing systems and proper performance monitoring are essential to survival (Hilton and Platt, 2011). This competition increases the scope of information environments for firms as analyst forecast accuracy increases with increase in industry concentration.

In this study, competitive change pressure refers to the influences that are received by the customer, competitor, and industry which affect the behavior and adaptation of the firm that enables the firm to improve its potential to cope with the various situations in order to survive. Change in an organization's external environment should lead to a change in an organization's management accounting systems (Waweru et al., 2004). As the study mentioned above about the effects of changing the competition could be concluded that the competition change in a market exerts a sort of pressure that tends to adopt advanced management accounting. Therefore, firms operating in highly competitive change pressure will be adopted more dynamic management accounting system by focusing on strategic position analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility report. Accordingly, the hypotheses are proposed as follows:

Hypothesis 13a: The higher the competitive change pressure is, the more likely that firms will gain greater strategic positioning analysis.

Hypothesis 13b: The higher the competitive change pressure is, the more likely that firms will gain greater cost management strategy.

Hypothesis 13c: The higher the competitive change pressure is, the more likely that firms will gain greater modern performance measurement.

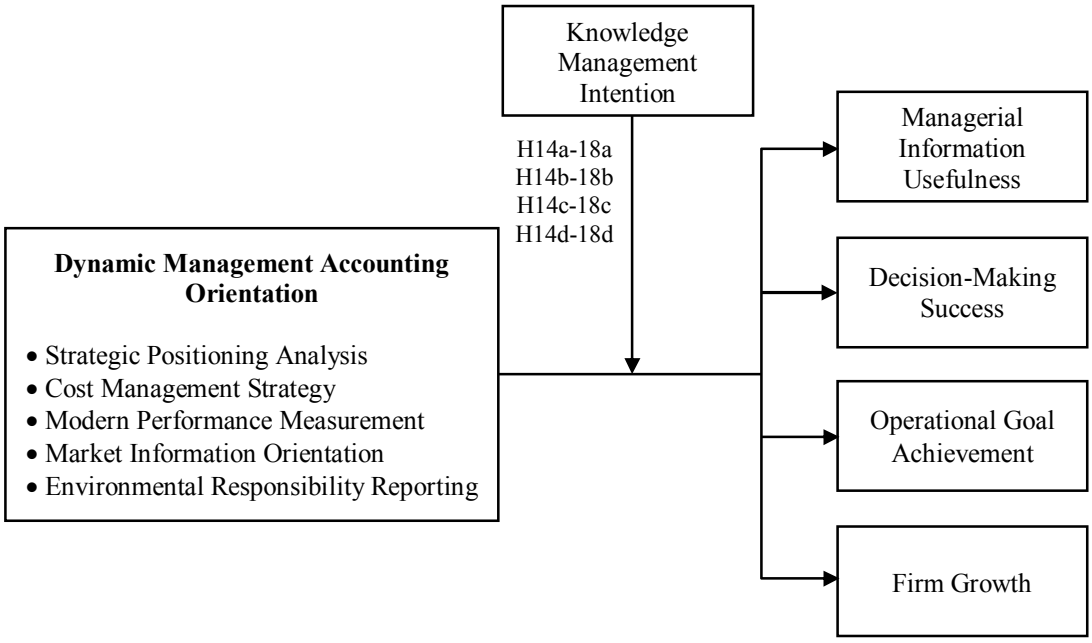
Hypothesis 13d: The higher the competitive change pressure is, the more likely that firms will gain greater market information orientation.

Hypothesis 13e: The higher the competitive change pressure is, the more likely that firms will gain greater environmental responsibility reporting.

The Moderators of Dynamic Management Accounting Orientation

This section illustrates the moderating effects of knowledge management intention on the relationships among each dimension of dynamic management accounting orientation and its consequences as in Figure 5. Also, the moderating effects of innovation culture on the influence of dynamic management accounting orientation antecedents are in Figure 6.

Figure 5 The Moderating Role of Knowledge Management Intention on the Relationship among Dynamic Management Accounting Orientation, Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth



Knowledge Management Intention

Creating and preserving dynamic capability requires special learning mechanisms and forms of organization. Dynamic capability is a result of organizational

learning and stable patterns of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness (Zollo and Winter, 2002). They argued that such mechanisms involve accumulation of experience, knowledge articulation and knowledge codification. From this perspective, firms that do efficiently manage their knowledge resources can expect to reap a wide range of benefits such as reduced workforce and infrastructure costs as well as improved corporate efficiency, effectiveness, innovation, and customer services. (Davenport and Prusak, 2000; Hansen and Oetinger, 2001). Thus, it is apparent that knowledge management is a key issue in supporting dynamic capability.

Knowledge management is at the heart of the effectiveness of organizations. Since the market and competitive environment of all companies is rapidly changing, the value of existing capabilities will quickly decay, resulting in a lack of competitiveness. Knowledge management has been defined as the process of capturing, storing, sharing, and using knowledge (Bock et al., 2005). It is the identification and impact of collective knowledge in an organization to help competitiveness (Alavi and Leidner, 2001). Knowledge management activities are the creation of new knowledge, the demand for external knowledge, storing knowledge in documents instead of routines and instructions, upgrading of knowledge and its dissemination (Alavi and Leidner, 2001). Knowledge management is part of the overall business of the organization and must be presented in all structures with proper treatment of knowledge in organizations and intention to management knowledge; organization achieves greater efficiency. Therefore, knowledge management intention in this research refers to the focusing on integrating and exchanging knowledge both external and internal the organization to deliver systemic ideas which lead to effective implementation. (Svatošova, 2012).

In management accounting literature, Organization can be more effective and have a competitive advantage in the market by changing the processes of management accounting which support by knowledge management activity, as confirmed by the results of research (Becerra-Fernandez and Sabherwal, 2001; Schiller, 2010; Vaivio, 2008). Knowledge management activities are primarily focused on changing the role of accounting from the traditional oriented accounting to strategic oriented accounting. It influences on the performance of the organization through influence on learning and on management accounting. Changes in management accounting can be achieved through

knowledge management activities, so that the emphasis on internal financial information from the past is minimized and the emphasis on a broader scope information is increasing, which include internal and external financial as well as non-financial information to respond turbulent business that is typically for dynamic management accounting orientation (Gornjak, 2014).

From the literature mention above, knowledge management and management accounting are the integral parts of the organizational processes. The knowledge management intention in management accounting systems brings to the organizations a competitive advantage and firm growth. Therefore, dynamic management accounting orientation within higher knowledge management intention is likely to increase competitive capability and firm growth. The hypotheses are proposed as follows:

Hypothesis 14a: Knowledge management intention will positively moderate the relationships between strategic positioning analysis and managerial information usefulness.

Hypothesis 14b: Knowledge management intention will positively moderate the relationships between strategic positioning analysis and decision-making success.

Hypothesis 14c: Knowledge management intention will positively moderate the relationships between strategic positioning analysis and operational goal achievement.

Hypothesis 14d: Knowledge management intention will positively moderate the relationships between strategic positioning analysis and firm growth.

Hypothesis 15a: Knowledge management intention will positively moderate the relationships between cost management strategy and managerial information usefulness.

Hypothesis 15b: Knowledge management intention will positively moderate the relationships between cost management strategy and decision-making success.

Hypothesis 15c: Knowledge management intention will positively moderate the relationships between cost management strategy and operational goal achievement.

Hypothesis 15d: Knowledge management intention will positively moderate the relationships between cost management strategy and firm growth.

Hypothesis 16a: Knowledge management intention will positively moderate the relationships between modern performance measurement and managerial information usefulness.

Hypothesis 16b: Knowledge management intention will positively moderate the relationships between modern performance measurement and decision-making success.

Hypothesis 16c: Knowledge management intention will positively moderate the relationships between modern performance measurement and operational goal achievement.

Hypothesis 16d: Knowledge management intention will positively moderate the relationships between modern performance measurement and firm growth.

Hypothesis 17a: Knowledge management intention will positively moderate the relationships between market information orientation and managerial information usefulness.

Hypothesis 17b: Knowledge management intention will positively moderate the relationships between market information orientation and decision-making success.

Hypothesis 17c: Knowledge management intention will positively moderate the relationships between market information orientation and operational goal achievement.

Hypothesis 17d: Knowledge management intention will positively moderate the relationships between market information orientation and firm growth.

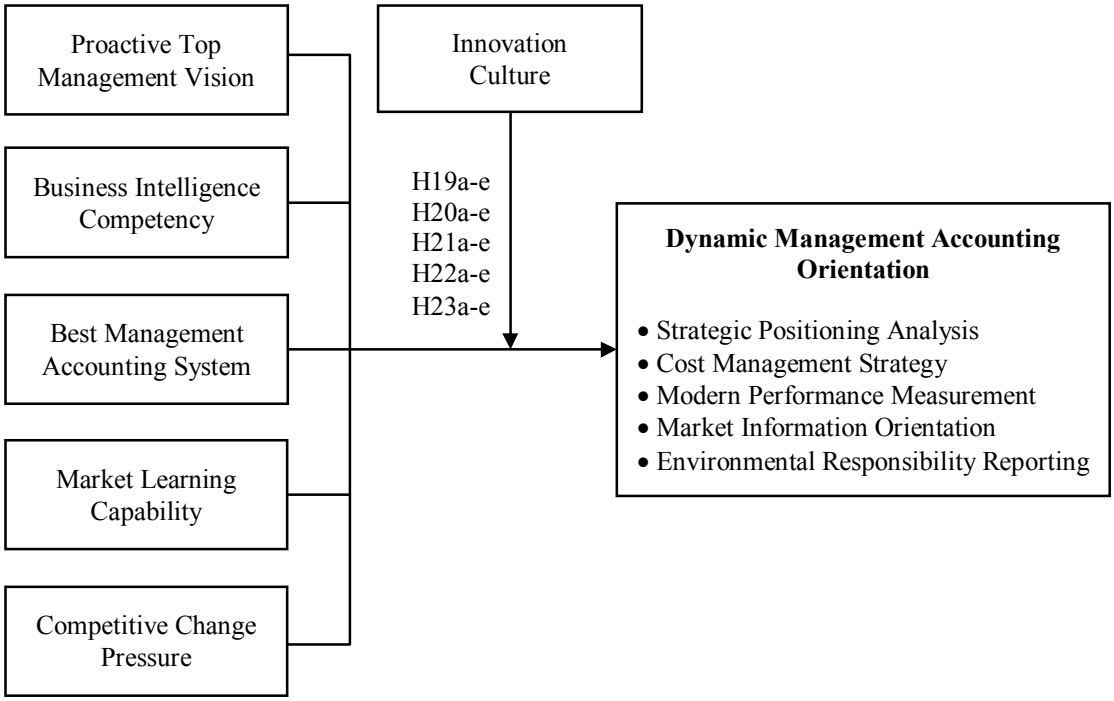
Hypothesis 18a: Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and managerial information usefulness.

Hypothesis 18b: Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and decision-making success.

Hypothesis 18c: Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and operational goal achievement.

Hypothesis 18d: Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and firm growth.

Figure 6 The Moderating Role of Innovation Culture on the Relationship among Dynamic Management Accounting Orientation, Proactive Top Management Vision, Business Intelligence Competency, Best Management Accounting System, Market Learning Capability, and Competitive Change Pressure



Innovation Culture

Innovation culture is the environment for working that leaders try to the implant to retain with the creative thinking and its application. It supports creative thinking and advances efforts to extract economic and social value from knowledge, which help the organization generates new or improved products, services or processes continuously (Hepburn, 2013). In a quickly changing and uncertain world, innovation is the key to competitive advantage. Innovation cultures have been important for organizations that compete in rapidly changing markets. Maintaining the status is insufficient to compete effectively, thus making an innovation culture essential for improving the new process in order to gain business success (Assink, 2006).

Innovation culture is described in the multi-dimensional context which comprises of four dimensions include the determination to be innovative, infrastructure

to support innovation, behaviors in the operational level that necessary to influence a market and value orientation, and the environment of innovation (Dobni, 2008). The culture of innovation reveals that at least the organizations willing to accept the tools and techniques that innovation requires. Moreover, employees; in an innovative culture; are more open to new ideas and more willing to change and adapt (Acur et al., 2010). Thus, innovation culture in this research refers to the characteristic of behavior and belief within the organization that promotes innovation that is conducive to beneficial change in the organization.

Prior research suggested that, in the organizational context, innovation culture may be linked to positive changes in dynamic management accounting orientation. The recent research found the highlight of the innovation culture role in complementary the organization by decoding the innovative activity to contribute to management accounting improvements. Innovation culture, in term of using six sigma innovation tools, can be improved dynamic role of management accounting system by providing appropriate measurement-based systems for various business processes (Busco and Scapens, 2011). Also, innovation culture has a significant positive relationship with management accounting practice only providing the information needed for planning and control (Ahmadabadi and Arabvand, 2015). Moreover, innovativeness implies a firm being proactive by exploring new opportunities rather than merely exploiting current strengths (Menguc and Auh, 2006). Innovation culture, in this way, is important to support the creation of a dynamic model of management accounting. Therefore higher innovation culture is likely to increase the relationship between management accounting orientation and its antecedents. The hypotheses are proposed as follows:

Hypothesis 19a: Innovation culture will positively moderate the relationships between proactive top management vision and strategic positioning analysis.

Hypothesis 19b: Innovation culture will positively moderate the relationships between proactive top management vision and cost management strategy.

Hypothesis 19c: Innovation culture will positively moderate the relationships between proactive top management vision and modern performance measurement.

Hypothesis 19d: Innovation culture will positively moderate the relationships between proactive top management vision and market information orientation.

Hypothesis 19e: Innovation culture will positively moderate the relationships between proactive top management vision and environmental responsibility reporting.

Hypothesis 20a: Innovation culture will positively moderate the relationships between business intelligence competency and strategic positioning analysis.

Hypothesis 20b: Innovation culture will positively moderate the relationships between business intelligence competency and cost management strategy.

Hypothesis 20c: Innovation culture will positively moderate the relationships between business intelligence competency and modern performance measurement.

Hypothesis 20d: Innovation culture will positively moderate the relationships between business intelligence competency and market information orientation.

Hypothesis 20e: Innovation culture will positively moderate the relationships between business intelligence competency and environmental responsibility reporting.

Hypothesis 21a: Innovation culture will positively moderate the relationships between best management accounting system and strategic positioning analysis.

Hypothesis 21b: Innovation culture will positively moderate the relationships between best management accounting system and cost management strategy.

Hypothesis 21c: Innovation culture will positively moderate the relationships between best management accounting system and modern performance measurement.

Hypothesis 21d: Innovation culture will positively moderate the relationships between best management accounting system and market information orientation.

Hypothesis 21e: Innovation culture will positively moderate the relationships between best management accounting system and environmental responsibility reporting.

Hypothesis 22a: Innovation culture will positively moderate the relationships between market learning capability and strategic positioning analysis.

Hypothesis 22b: Innovation culture will positively moderate the relationships between market learning capability and cost management strategy.

Hypothesis 22c: Innovation culture will positively moderate the relationships between best market learning capability and modern performance measurement.

Hypothesis 22d: Innovation culture will positively moderate the relationships between market learning capability and market information orientation.

Hypothesis 22e: Innovation culture will positively moderate the relationships between market learning capability and environmental responsibility reporting.

Hypothesis 23a: Innovation culture will positively moderate the relationships between competitive change pressure and strategic positioning analysis.

Hypothesis 23b: Innovation culture will positively moderate the relationships between competitive change pressure and cost management strategy.

Hypothesis 23c: Innovation culture will positively moderate the relationships between competitive change pressure and modern performance measurement.

Hypothesis 23d: Innovation culture will positively moderate the relationships between competitive change pressure and market information orientation.

Hypothesis 23e: Innovation culture will positively moderate the relationships between competitive change pressure and environmental responsibility reporting.

Summary

In conclusion, chapter two illustrates the conceptual model of dynamic management accounting orientation and firm growth. The foundation of dynamic capability theory and contingency theory are used to support the relationships in the conceptual model.

This chapter also demonstrates the literature review and has proposed a set of 23 testable hypotheses to explain the overall relationships among constructs in the conceptual model. These relationships are categorized into four different groups as follow: the first group constrains the relationship among dynamic management accounting orientation and its consequences, comprised of managerial information usefulness, decision-making success, operational goal achievement, and firm growth. The next group presents the relationships among three consequences of dynamic management accounting orientation and firm sustainability. The third group is relevant to the influences of five antecedents on dynamic management accounting orientation, including proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure. Finally, the fourth group is about the moderating role of knowledge management intention and innovation culture. The summary of proposed hypotheses is presented in Table 3.

Table 3 Summary of Hypothesized Relationships

Hypotheses	Description of Hypothesized Relationships
H1a	The higher the strategic positioning analysis is, the more likely that firms will gain greater managerial information usefulness.
H1b	The higher the strategic positioning analysis is, the more likely that firms will gain greater decision-making success.
H1c	The higher the strategic positioning analysis is, the more likely that firms will gain greater operational goal achievement.
H1d	The higher the strategic positioning analysis is, the more likely that firms will gain greater firm growth.
H2a	The higher the cost management strategy is, the more likely that firms will gain greater managerial information usefulness.
H2b	The higher the cost management strategy is, the more likely that firms will gain greater decision-making success.
H2c	The higher the cost management strategy is, the more likely that firms will gain greater operational goal achievement.
H2d	The higher the cost management strategy is, the more likely that firms will gain greater firm growth.
H3a	The higher the modern performance measurement is, the more likely that firms will gain greater managerial information usefulness.
H3b	The higher the modern performance measurement is, the more likely that firms will gain greater decision-making success.
H3c	The higher the modern performance measurement is, the more likely that firms will gain greater operational goal achievement.
H3d	The higher the modern performance measurement is, the more likely that firms will gain greater firm growth.
H4a	The higher the market information orientation is, the more likely that firms will gain greater managerial information usefulness.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H4b	The higher the market information orientation is, the more likely that firms will gain greater decision-making success.
H4c	The higher the market information orientation is, the more likely that firms will gain greater operational goal achievement.
H4d	The higher the market information orientation is, the more likely that firms will gain greater firm growth.
H5a	The higher the environmental responsibility reporting is, the more likely that firms will gain greater managerial information usefulness.
H5b	The higher the environmental responsibility reporting is, the more likely that firms will gain greater decision-making success.
H5c	The higher the environmental responsibility reporting is, the more likely that firms will gain greater operational goal achievement.
H5d	The higher the environmental responsibility reporting is, the more likely that firms will gain greater firm growth.
H6a	The higher the managerial information usefulness is, the more likely that firms will gain greater decision-making success.
H6b	The higher the managerial information usefulness is, the more likely that firms will gain greater firm growth.
H7a	The higher the decision-making success is, the more likely that firms will gain greater operational goal achievement.
H7b	The higher the decision-making success is, the more likely that firms will gain greater firm growth.
H8	The higher the operational goal achievement is, the more likely that firms will gain greater firm growth.
H9a	The higher the proactive top management vision is, the more likely that firms will gain greater strategic positioning analysis.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H9b	The higher the proactive top management vision is, the more likely that firms will gain greater cost management strategy.
H9c	The higher the proactive top management vision is, the more likely that firms will gain greater modern performance measurement.
H9d	The higher the proactive top management vision is, the more likely that firms will gain greater market information orientation.
H9e	The higher the proactive top management vision is, the more likely that firms will gain greater environmental responsibility reporting.
H10a	The higher the business intelligence competency is, the more likely that firms will gain greater strategic positioning analysis.
H10b	The higher the business intelligence competency is, the more likely that firms will gain greater cost management strategy.
H10c	The higher the business intelligence competency is, the more likely that firms will gain greater modern performance measurement.
H10d	The higher the business intelligence competency is, the more likely that firms will gain greater market information orientation.
H10e	The higher the business intelligence competency is, the more likely that firms will gain greater environmental responsibility reporting.
H11a	The higher the best management accounting system is, the more likely that firms will gain greater strategic positioning analysis.
H11b	The higher the best management accounting system is, the more likely that firms will gain greater cost management strategy.
H11c	The higher the best management accounting system is, the more likely that firms will gain greater modern performance measurement.
H11d	The higher the best management accounting system is, the more likely that firms will gain greater market information orientation.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H11e	The higher the best management accounting system is, the more likely that firms will gain greater environmental responsibility reporting.
H12a	The higher the market learning capability is, the more likely that firms will gain greater strategic positioning analysis.
H12b	The higher the market learning capability is, the more likely that firms will gain greater cost management strategy.
H12c	The higher the market learning capability is, the more likely that firms will gain greater modern performance measurement.
H12d	The higher the market learning capability is, the more likely that firms will gain greater market information orientation.
H12e	The higher the market learning capability is, the more likely that firms will gain greater environmental responsibility reporting.
H13a	The higher the competitive change pressure is, the more likely that firms will gain greater strategic positioning analysis
H13b	The higher the competitive change pressure is, the more likely that firms will gain greater cost management strategy.
H13c	The higher the competitive change pressure is, the more likely that firms will gain greater modern performance measurement.
H13d	The higher the competitive change pressure is, the more likely that firms will gain greater market information orientation.
H13e	The higher the competitive change pressure is, the more likely that firms will gain greater environmental responsibility reporting.
H14a	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and managerial information usefulness.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H14b	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and decision-making success.
H14c	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and operational goal achievement.
H14d	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and firm growth.
H15a	Knowledge management intention will positively moderate the relationships between cost management strategy and managerial information usefulness.
H15b	Knowledge management intention will positively moderate the relationships between cost management strategy and decision-making success.
H15c	Knowledge management intention will positively moderate the relationships between cost management strategy and operational goal achievement.
H15d	Knowledge management intention will positively moderate the relationships between cost management strategy and firm growth.
H16a	Knowledge management intention will positively moderate the relationships between modern performance measurement and managerial information usefulness.
H16b	Knowledge management intention will positively moderate the relationships between modern performance measurement and decision-making success.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H16c	Knowledge management intention will positively moderate the relationships between modern performance measurement and operational goal achievement.
H16d	Knowledge management intention will positively moderate the relationships between modern performance measurement and firm growth.
H17a	Knowledge management intention will positively moderate the relationships between market information orientation and managerial information usefulness.
H17b	Knowledge management intention will positively moderate the relationships between market information orientation and decision-making success.
H17c	Knowledge management intention will positively moderate the relationships between market information orientation and operational goal achievement.
H17d	Knowledge management intention will positively moderate the relationships between market information orientation and firm growth.
H18a	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and managerial information usefulness.
H18b	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and decision-making success.
H18c	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and operational goal achievement.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H18d	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and firm growth.
H19a	Innovation culture will positively moderate the relationships between proactive top management vision and strategic positioning analysis.
H19b	Innovation culture will positively moderate the relationships between proactive top management vision and cost management strategy.
H19c	Innovation culture will positively moderate the relationships between proactive top management vision and modern performance measurement.
H19d	Innovation culture will positively moderate the relationships between proactive top management vision and market information orientation.
H19e	Innovation culture will positively moderate the relationships between proactive top management vision and environmental responsibility reporting.
H20a	Innovation culture will positively moderate the relationships between business intelligence competency and strategic positioning analysis.
H20b	Innovation culture will positively moderate the relationships between business intelligence competency and cost management strategy.
H20c	Innovation culture will positively moderate the relationships between business intelligence competency and modern performance measurement.
H20d	Innovation culture will positively moderate the relationships between business intelligence competency and market information orientation.
H20e	Innovation culture will positively moderate the relationships between business intelligence competency and environmental responsibility reporting.
H21a	Innovation culture will positively moderate the relationships between best management accounting system and strategic positioning analysis.
H21b	Innovation culture will positively moderate the relationships between best management accounting system and cost management strategy.

Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H21c	Innovation culture will positively moderate the relationships between best management accounting system and modern performance measurement.
H21d	Innovation culture will positively moderate the relationships between best management accounting system and market information orientation.
H21e	Innovation culture will positively moderate the relationships between best management accounting system and environmental responsibility reporting.
H22a	Innovation culture will positively moderate the relationships between market learning capability and strategic positioning analysis.
H22b	Innovation culture will positively moderate the relationships between market learning capability and cost management strategy.
H22c	Innovation culture will positively moderate the relationships between market learning capability and modern performance measurement.
H22d	Innovation culture will positively moderate the relationships between market learning capability and market information orientation.
H22e	Innovation culture will positively moderate the relationships between market learning capability and environmental responsibility reporting.
H23a	Innovation culture will positively moderate the relationships between competitive change pressure and strategic positioning analysis.
H23b	Innovation culture will positively moderate the relationships between competitive change pressure and cost management strategy.
H23c	Innovation culture will positively moderate the relationships between competitive change pressure and modern performance measurement.
H23d	Innovation culture will positively moderate the relationships between competitive change pressure and market information orientation.
H23e	Innovation culture will positively moderate the relationships between competitive change pressure and environmental responsibility reporting.

CHAPTER III

RESEARCH METHODS

The previous chapter reviews the research literature on dynamic management accounting orientation. It provides a conceptual framework and hypotheses development by present the theoretical foundations, the variables analyzed, and the relation expected between variables. Consequently, this chapter provides the basis for the design of the research methods that help to clarify the understanding of the hypothesis testing process. It is divided into four sections as follows. The first section discusses sample selection and data collection procedures, including population and sample, data collection, and test of non-response bias are detailed. The second section discusses the variable measurements. The third section, discusses the instrumental verifications, including the test of validity and reliability, and the statistical analysis are presented. Finally, the fourth section provides a summary of definitions and operational variables of the constructs.

Sample Selection and Data Collection Procedures

Population and Sample

In order to capture the conceptual framework of dynamic management accounting orientation, Thailand's food industry is selected as the population of this research. A list of 1,485 food businesses in Thailand was provided by the Department of Business Development, the Ministry of Commerce, Thailand (www.dbd.go.th, accessed April 1, 2017).According to Krejcie and Morgan (1970), the required sample size to be a representative of the food industry in this research is 306, which is a minimum required sample size. However, the organizational research used survey method to collect data; the response rates are typically lower than 100 percent (Bartlett et al., 2001). Additionally, some scholars suggest that the 20 percent response rate for a mail survey, without an appropriate follow-up procedure, is deemed sufficient (Aaker et al., 2001). Therefore, this research assumes a required response rate as 20 percent. To maximize the response rate to 100 percent, adequate sample size is 1,530 firms for a sampling

frame [(306 x 100)/20]; nevertheless, this number exceeds the total population. As a result, this research finally uses 1,485 firms as a sample population.

The questionnaires were directly mailed to 1,485 food business firms which are the successful questionnaires 1,459 and 26 questionnaires were undeliverable because some of these firms had moved to unknown locations. The questionnaires were returned 122 responses in first two weeks, and 175, more responses in next six weeks. So, the total received questionnaires were 297 responses. However, there are 294 which complete and usable questionnaires. Then, this research calculated the response rate for regression analysis which was approximately 20.15 percent. The response rate mail survey, if it is more than 20 percent, it is considered to acceptable level (Aaker et al., 2001). Hence, 294 firms are a sufficient sample size for employing multiple regression analysis. Table 4 shows the detail of questionnaire mailing.

Table 4 Details of Questionnaire Mailing

Details	**Numbers**
Questionnaires Mailed	1,485
Returned Questionnaires	26
Successful Questionnaires Mailed	1,459
Received Questionnaires	297
Incomplete Questionnaires	3
Complete and Usable Questionnaire	294
Response Rate (294/1,459)*100	20.15%

Data Collection

A mail questionnaire is used as the main method of data collection in this research. Questionnaire is widely-used method for large-scale data collection for survey research in management accounting (Van der Stede et al., 2006). Furthermore, a mail questionnaire is the appropriate method to collect information economical way of accumulating information when the sample population is spread over a large territory as a sample population in this research. The advantage of questionnaire mailing is that a

representative sample can be collected from the chosen population in a variety of locations at low cost (Pongpearchan and Ussahawanitchakit, 2011; Snyder and Elliard, 2012).

The key informant who is appointed is the account executive. (e.g., accounting director, account manager, chief accountant) of each food business, as they have the best knowledge and understanding of the nature and format of accounting information, the presentation of accounting information for their administration, and firm performance. Although some researchers claim that many resources are popular for understanding research phenomena (Wagner et al., 2010), other studies have shown that accounting executive can provide reliable and accurate information (Srichanapun et al., 2013).

The questionnaires were directly distributed to the accounting executive of each food business by mail accompanied by a cover letter describing the reason and purpose of this research, and a return envelope. The questionnaires were mailed out to food businesses on June 19, 2016.Then, the completed questionnaires were directly sent back to the researcher by the prepared return envelopes in order to ensure confidentiality. The data were collected in two phase: 1) Data were collected from questionnaires that return to the researcher in the first two weeks. 2) In order to increase the response rate, data were collected from a follow up a questionnaire mailing after two weeks by phone to ask the respondent to return the questionnaire. The coded numbers in the bottom left corner of questionnaires were assigned for the usefulness of a follow-up mailing.

The design of the questionnaire for the study covers major areas within the conceptual model and hypotheses, i.e.,five dimensions of dynamic management accounting orientation, its antecedents, and consequences. Reliability and validity of self-administered questionnaire comprised seven sections. The first section is related to respondents' personal information, including gender, age, marital status, education level, working experience, average monthly income, and working position. The second section is related to organizational characteristics, including business type, business registered capital, total assets of the firm, number of employees, the period of time in operating business, average revenue per year. The purposes of the third to the sixth section are to obtain information about perceptions toward dynamic management accounting orientation, its consequences, antecedents, and other influences. The five-point Likert scale is used for these sections, ranging from 1 = strongly disagree to

5 = strongly agree. The third section consists of a set of questions relating to dynamic management accounting orientation dimensions: strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. The fourth section is related to the consequences of dynamic management accounting orientation, including managerial information usefulness, decision-making success, operational goal achievement, and firm growth. The fifth section is about the antecedents of dynamic management accounting orientation including proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure. The sixth section consists of a set of questions relating to knowledge management intention and innovation culture that affect the relationship among dynamic management accounting orientation, itsantecedents and consequences. For the seventh section provides an open-ended question to gather key respondent suggestions and opinions. The questionnaire is attached in Appendix G and H (questionnaire in the Thai and English version, respectively).

Test of Non-Response Bias

Mail surveys are considered to be particularly sensitive to bias from non-responses since sample members can decide themselves whether or not to fill in and return the questionnaire. Sample members who have a greater interest to answer the question may be more inclined to complete and return the questionnaire than those who are less interested to answer (Wåhlberg and Poom, 2015). Hence, non-response is considered a source of possible bias, which increases with the size of the non-responding group. It is important to make sure that the data are free from these types of error to ensure that the analyzed data will produce valid and reliable results.

The test of non-response bias is how to protect from possible response bias problem between respondent and non-respondent. A non-response bias is tested by comparing the pattern of answers received between early and late responses by using a t-test comparison of the demographic information between early and late responses (Armstrong and Overton, 1977). A non-response bias test is used to confirm that non-respondents are not different from all respondents. If the t-test the result shows no significant differences between the two groups of respondents, it indicates that the

non-response bias does not cause a major problem. The samples are representative, and respondents' error is not an issue in this research (Lewis et al., 2013; Zikmund, 2003).

A total of 294 received questionnaires weredivided into two groups according to early and late responses. Completed questionnaires received after the initial posting 122 responses areconsidered as early responses (the first group) and those which received after the second reminder 172, were considered as late responses (the second group). By employing a t-test statistic, the differences about the demographics of firm characteristics in terms of business registered capital, total assets of the firm, number of employees, the period of time in operating business, and average revenue per year are compared.

The results show that there is no statistically significant difference between the two groups at a 95% confidence level, details are as follows: business registered capital ($t = .525$, $p > .05$), total assets of the firm ($t = .187$, $p > .05$), number of employees ($t = .497$, $p > .05$), the period of time in operating business ($t = -.189$, $p > .05$), and average revenue per year ($t = .584$, $p > .05$). Therefore, it can be stated that the non-response bias is not problem in this research (Armstrong and Overton, 1977). The results of non-response bias are demonstrated in Appendix E.

Measurements

All constructs in this research are the abstract that cannot be directly observed or measured. Measurement of each construct in the conceptual model requires that the conceptual definitions are translated into an operational definition. An operational definition of a construct links the conceptual definition to more concrete indicators. The role of the operational definition is to precisely describe how to measure the characteristics of a construct. Therefore, in this research, all constructs are transformed to the operational variables by using multiple items to provide a wider range of the content of conceptual definition and improvement of reliability (Neuman, 2006). All variables are derived from the definition and previous literature as shown in Table 6, and measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). All operational definitions of each construct which are comprised of the dependent variable, the independent variables, the moderating variables, and the controlled variables, are described below.

Dependent Variable

Firm Growth

Firm growth is the continuous increase of the operational efficiency outcome. This construct is measured by the perception of high return on investment, increasing incomes, increasing market share, customer satisfaction, and operating in a more uncertain environment. Five-item scales are used to measure firm growth which modifies from the instrument of Hongsombud et al. (2012). The instrument asks respondents to rate the extent of their firm's growth relative to their past performance.

Independent Variables

Strategic positioning analysis

Strategic positioning analysis is the development and application of accounting information to determine the clear operational direction and uniquely competitive position in order to achieve goals and competitive advantage (Roslender and Hart, 2003). It is measured by the extent to the firm's ability to use accounting information to help in evaluating the potential and competitiveness of the organization and to determine the competitive position in the industry clearly, including the use of account information to determine the best practices and allocate resources efficiently that will help to achieve its goals and lead to long-term profitability. These scales are newly implemented from the definition and literature review, including the four-item scale.

Cost management strategy

Cost management strategy is the firm's ability to accurately analyze and predict the production and operation costs in business then using this information to plan and control the expense in accordance with the direction of administration for leading to the effective achievement (Kumar and Nagpal, 2011). It is measured by the ability of the firm to effectively collect, analyze, and present production and operation cost which is used to plan and improve operational performance aligns with organization's goals and help organizations quickly respond to the changing circumstances. These scales are newly implemented from the definition and literature review, including the four-item scale.

Modern performance measurement

Modern performance measurement refers to the application of performance appraisals consistent with its current operating model with the variety of indicators which covers all dimensions of performance measurement to increased operational efficiency and long-term organizational success (Schulz et al., 2010). It is measured by firm's ability to use performance indicators across multiple dimensions aligns with current operations that include both monetary and non-monetary indicators which are quantitative and qualitative indicators from within and outside the organization, to maximize performance and achieve goals. These scales are newly implemented from the definition and literature review, including the five-item scale.

Market information orientation

Market information orientation is about providing and analyzing information that relates to customers and competitors through accounting method and using the information for planning and making a decision to set competitive strategy to response the market effectively (Inglis and Clift, 2008).It is measured by the ability of the firm to gather competitors and customers information to assess competitors' competencies, as well as to analyze customer costs and profits which are for planning and deciding to operate in accordance with the present and future market situation effectively. These scales are newly implemented from the definition and literature review, including the four-item scales.

Environmental responsibility reporting

Environment responsibility reporting is the preparation and presentation of accounting data related to environmental activities by reporting on the costs and benefits of the environmental activities of the firm that can be used as managerial information in various fields that affect the environment (Tanc and Gokoglan, 2015; Vasile and Man, 2012). It is measured by the ability of the firm to produce and deliver information relevant to the organization's environmental activities which are both financial and non-financial information by reporting on the costs and benefits of improving and maintaining the environment for planning and deciding on the environment issue effectively. These scales are newly implemented from the definition and literature review, including the four-item scales.

Consequential Variables

Managerial information usefulness

Managerial information usefulness is the valuable and relevant information for decision-making that allows managers to manage their works quickly and accurately under various circumstances effectively. It is measured by the accounting information feature which has a broader scope, timeliness, and complete and sufficient that is available to operational managers for making a decision, monitoring and evaluating their work under various circumstances effectively. These scales are newly implemented from the definition and literature review, including the four-item scales.

Decision-making success

Decision-making success is the effectiveness of the organization in choosing the best alternative that enables the organization to achieve its objectives and gain its maximized benefits (Kidane, 2012; Raiborn et al., 2006). It is evaluated by the effectiveness of the organization in choosing the best alternatives quickly from various alternatives by using relevant and useful information under crisis situation. These scales are newly implemented from the definition and literature review, including the four-item scales.

Operational goal achievement

Operational goal achievement refers to the firm's ability to execute the ways that have been planned effectively, consistent with strategy and organizational objectives (Bianca, 2014; Deepen et al., 2008). It is measured by firm's ability to execute the plan in achieving their objectives efficiently and effectively. Item scales include firms can operate in accordance with the strategic plan and organizational objectives; improve and develop their operational processes continuously and well respond to various environments, manage internal resources appropriately, and systemize the management and operation professionally that is acceptable to customers, social, and stakeholders. Four-item scales are used to measure operational goal achievement which modifies from the instrument of Chaikambang et al. (2012).

Antecedent Variables

Proactive top management vision

Proactive top management vision is the forward-looking perspective of the senior executives on future outcomes and seeking opportunities to develop current strategies and tactics, and detect future trends in the market (Hughes and Morgan, 2007). It is measured by the extent to which top managers in the organization focus on creating or controlling a situation by using accounting data to analyze opportunity, threat and competitive environments for improves constantly performance efficiency and goal success. These scales are newly implemented from the definition and literature review, including the four-item scales.

Business intelligence competency

Business intelligence competency refers to the capability of the firm to use a variety of technologies and expertise to enable operations to respond to current and future situations effectively (Elbashir et al., 2008; Tamandeh, 2016). It is evaluated by the capability of the firm to use a variety of technologies and expertise to support data collection, data analysis, develop and run queries against the data, and create reports to provide appropriate information with timely, relevant, and easy-to-use information, which enables better decisions. These scales are newly implemented from the definition and literature review, including the four-item scales.

Best management accounting system

Best management accounting systemis the management accounting procedure that is designed to comply with operational style and provides sufficient information that is up-to-date responsive to the needs of executives under current circumstances effectively (Lata and Ussahawanitchakit, 2015). It is measured by the degree of the firm which focuses on applying and developing the accounting system to comply with operational style and the capability to provide the completeness, accuracy, and current information for better planning, controlling and decision making. Four-item scales are used to measure best management accounting system which modifies from the instrument of Wongjinda et al. (2016).

Market learning capability

Market learning capability refers to the ability of the organization to continuously learn, analyze and evaluate market situations in order to better respond to market needs (Guilding and McManus; 2002). It is evaluated by the ability of the firm to continuously learn, analyze and evaluate market situations about customers, competitors, and the broader market environment in which it operates. These scales are newly implemented from the definition and literature review, including the four-item scales.

Competitive change pressure

Competitive change pressure is the influence from intense competition which affects the behavior and adaptation of the firm that enables the firm to improve its potential to cope with the various situations in order to survive (Malinic et al., 2012). It is measured by the perceived intensity of competition facing organizations consisting of selling and distribution, quality and variety of products, price, and market share that result in the adaptation of the organization. These scales are newly implemented from the definition and literature review, including the four-item scales.

Moderating Variables

Knowledge management intention

Knowledge management intention is the focusing on integrating and sharing knowledge both external and internal the organization to deliver systemic ideas which lead to effective implementation (Bock et al., 2005; Svatošová, 2012). It is measured by the focusing on integrating and exchanging knowledge both external and internal the organization to create new knowledge and use of knowledge in the decision-making process and management which lead to effective implementation. These scales are newly implemented from the definition and literature review, including the four-item scales.

Innovation culture

Innovation culture refers to the behavior and belief within the organization that promotes innovation that is conducive to beneficial change in the organization (Nagirikandalage and Binsardi, 2017). It is measured bythe degree to which the firm has innovation readiness, creativity and entrepreneurship, organizational learning, and

market orientation. These scales are newly implemented from the definition and literature review, including the five-item scales.

Control Variables

Two control variables: firm age and firm size, are included in this research. These control variables are the characteristic that may influence the hypothesized relationships. The measurement of each control variable is detailed as follows.

Firm age

Firm age is a proxy for the firm's experience which is measured by the number of years since the company was established. (Laonamtha et al.,2013). In the dynamic capabilities literature indicates that the experience of firm affects continuous improvement in an organization by finding new ways to introduce changes and search for problem-solving methodology through using historical experiences(Anand et al., 2009).There are also studies suggesting that older firms have better financial performance because they are more experienced and enjoy the benefits of learning by doing (Coad et al., 2013), and the older firms have progressed toward performance and survival in areas such as new investments, learning, and developing (Talebnia et al.,2010). Thus, it can be assumed that firm age also affects organizational dynamic capability, especially the dynamic capabilities of the management accounting system. Therefore, in this research, firm age is one of the control variables to be represented by dummy variables in which 0 means the firm has been in business less than or equal to 15 years, and 1 means the firm been in business more than 15 years (Prempree et al.,2013).

Firm size

Firm size is the total asset of the firm. Size is common control variable in studies on management accounting (Perren and Grant, 2000; Reid and Smith, 2000). Previous research indicated that firm size is an important factor that affects the application of the management accounting system (Abdel-Kader and Luther, 2008; Haldma and Lääts, 2002), and also affects to the dynamic capability of the firm to compete in turbulent markets (Chi and Choi, 2017). Larger firms often claim to have sophisticated accounting procedures to manage the complexity operation (Cadez and

Guilding, 2008). Thus, it can be assumed that firm size also affects dynamic capabilities of the management accounting system. In this research has to control firm size by using the total asset as a proxy. Firm size is represented as a dummy variable in which 0 refers to a firm has total assets less than or equal to 100,000,000 baht, and 1 refers to a firm has total assets more than 100,000,000 baht (Prempree et al., 2013).

Methods

In this research, data is collected by using a questionnaire which is adapted from a literature review to gain truthfulness and credibility. To improve the quality of the questionnaire, it should always be conducted to assert the validity and reliability of the questionnaire before sending to the respondents (Van der Stede et al., 2006). Therefore, the questionnaire was improved by first confirming the content validity. It was sent to two academic experts to review and revise the questionnaire so that the respondents could understand it correctly and clearly. And more importantly, the question covers the content that needs to be measured. Then, the pre-test method was conducted to assert the construct validity and reliability of the questionnaire to check for clear and accurate understanding of the questionnaire before using real data collection.

Validity and Reliability

Validity

Validity is defined as the degree to which measurement accurately evinces the concept of consideration (Hair et al., 2010). In order to verify the quality of this research instrument, content validity and constructs validity are two ways to evaluate the absoluteness and accuracy of the questionnaire.

Content validity

Content validity refers to the extent to which the elements within a measurement procedure are relevant and representative of the construct that they will be used to measure (Haynes et al., 1995). Content validity requires the use of recognized subject matter experts to evaluate whether all items in the questionnaire correspondence and cover the topics and operational definition that has been defined in the research (Cooper

and Schindle, 2006). Therefore, this research improved content validity by an extensive review of the literature questionnaires (Hair et al., 2010). Two professionals in academic research were requested to evaluate the instrument in order to ensure that all constructs are sufficient to cover the contents of the variables. When they had suggested; and then revised these suggestions to attain a quality measurement. After that, the updated version of the questionnaires were mailed to sample companies.

Construct validity

Construct validity refers to the measurement method that confirms whether or not the item is an accurate scale as to the logical theory in the conceptual framework (Hair et al., 2010). It is assessing congruence between a theoretical concept and a specific identify measurement for the dynamic management accounting orientation context. In this research, factor analysis is used todetermine the construct validity of the survey item. The factor loading of the items are significantly correlated to the specified construct that will contribute to the construct validity comprehension. As a rule-of-thumb, the factor loadings should be above 0.40 (Nunnally and Bernstein, 1994). Table 5 shows the results of factor loadings of multi-item scales. It indicates that each item of all variables is loaded on a single factor and the range of factor loading is between 0.579 – 0.939. These values are greater than 0.40, which demonstrate the acceptable construct validity (see Appendix B).

Reliability

Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair et al., 2010). Reliability estimates are used to evaluate the equivalence of sets of items from the same test (internal consistency) or of different observers scoring a behavior or event using the same instrument. The Cronbach's alpha coefficient is used as the measure of the internal consistency or reliability of the constructs (Hair et al., 2010). Cronbach's alpha coefficients range from 0.00 to 1.00, with higher coefficients indicating higher levels of reliability. Cronbach's alpha should be greater than 0.70 to ensure the internal consistency suggested by (Nunnally and Bernstein 1994; Hair et al., 2006). In this research, the first 30 returned questionnaires have been used for testing the validity and reliability. The results of Cronbach's alpha coefficient are between

0.766 – 0.931, which greater than 0.70. As a result, the questionnaire was accepted and admissible. Table 5 shows the results of the reliability (see also Appendix B).

Item total correlation is the approach assesses the consistency between multi-item measurements in the same construct, where its high value points out a more reliable scale (Hair et al., 2010). The scale of item-total correlation should exceed 0.3 to indicate acceptance of item reliability (Thoumrungroje,2013). As shown in Table 5, the item-total correlations were scaled from 0.466 to 0.997 in that all scales exceed 0.3; this result demonstrates that item reliability is acceptable.

Table 5 Results of Validity and Reliability Testing

Variables	**Validity (Factor Loadings)**	**Item total correlation**	**Reliability (Cronbach's Alpha)**
Strategic Positioning Analysis (SPA)	0.629 – 0.911	0.466 – 0.774	0.799
Cost Management Strategy (CMS)	0.738 – 0.848	0.615 – 0.913	0.778
Modern Performance Measurement (MPM)	0.672 – 0.909	0.711 – 0.910	0.894
Market Information Orientation (MIO)	0.579 – 0.856	0.629 – 0.947	0.769
Environmental Responsibility Reporting (ERR)	0.843 – 0.930	0.817 – 0.964	0.915
Firm Growth (FG)	0.764 – 0.937	0.740 – 0.967	0.931
Managerial Information Usefulness (MIU)	0.783 – 0.909	0.699 – 0.791	0.870
Decision-Making Success (DMS)	0.614 – 0.893	0.712 – 0.728	0.807
Operational Goal Achievement (OGA)	0.725 – 0.832	0.548 – 0.845	0.795
Proactive Top Management Vision (PTM)	0.865 – 0.888	0.791 – 0.950	0.895
Business Intelligence Competency (BIC)	0.841 – 0.899	0.785 – 0.997	0.891
Best Management Accounting System (BMS)	0.803 – 0.830	0.583 – 0.809	0.825
Market Learning Capability (MLC)	0.722 – 0.835	0.583 – 0.910	0.766
Competitive Change Pressure (CCP)	0.827 – 0.933	0.661 – 0.765	0.879
Knowledge Management Intention (KMI)	0.714 – 0.939	0.610 – 0.986	0.884
Innovation Culture (IC)	0.724 – 0.862	0.730 – 0.959	0.878

n = 30

Statistical Techniques

In this research, the statistical techniques composed of descriptive statistics, correlation analysis, and multiple regression analysis, each of these methods is discussed below.

Descriptive statistics

Descriptive statistics: mean, percentage, and standard deviation, are used to describe the basic features of key informants characteristics and characteristics of food businesses in Thailand. Moreover, they are used to describe the basic features of the data of each construct in this research.

Correlation analysis

Correlation analysis is the process that is used to test the correlation among all variables. A strong, or high, correlation means that two or more variables have a strong relationship with each other, while a weak or low correlation means that the variables are hardly related. The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient can range from -1 (perfectly related in a negative linear sense) to +1 (perfectly related in a positive linear sense).In multiple regressions, the independent variables are allowed to highly correlate with the dependent variables than with other independent variables (Hoyt et al., 2006).If the independent variables become highly correlated, the correlation coefficient is greater than 0.8 and shows significance; then multicollinearity may occur (Hair et al., 2010). Consequently, factor analysis is used to group highly-correlated variables together, and the factor score of all variables are prepared to avoid the multicollinearity problem.

Multiple regression analysis

The ordinary least squares (OLS) regression analysis is used to test the hypotheses in this study because it is appropriate for investigating the relationships among the dependent variables and independent variables using data qualified as interval and categorical scales (Hair et al., 2010).It is often used to test a theory about causal influences on the outcome measure (Jaccard et al., 2006). Moreover, it can be

used to test the hypothesis of linear associations among variables, to examine associations among pairs of variables while controlling for potential confounds, and to test complex associations among multiple variables (Hoyt et al., 2006).In order to avoid error in the result of regression analysis, the basic assumptions are employed to verify, such as outliner, linearity, normality, heteroscedasticity, and multicollinearity (see Appendix F). As a result, all proposed hypotheses in this research are transformed into 21 statistical equations. Each equation conforms to the hypothesis development described in the previous chapter. Two control variables (firm age and firm size) are used to test all hypotheses. The detail of each equation is presented as follow.

The statistical equations examining the effects of the five dimensions of dynamic management accounting orientation on managerial information usefulness, decision-making success, operational goal achievement, and firm growth are presented in Equation 1 - 4 as shown:

Equation 1: MIU $= \alpha_{01} + \beta_1 SPA + \beta_2 CMS + \beta_3 MPM + \beta_4 MIO + \beta_5 ERR + \beta_6 FA + \beta_7 FS + \varepsilon$

Equation 2: DMS $= \alpha_{02} + \beta_8 SPA + \beta_9 CMS + \beta_{10} MPM + \beta_{11} MIO + \beta_{12} ERR + \beta_{13} FA + \beta_{14} FS + \varepsilon$

Equation 3: OGA $= \alpha_{03} + \beta_{15} SPA + \beta_{16} CMS + \beta_{17} MPM + \beta_{18} MIO + \beta_{19} ERR + \beta_{20} FA + \beta_{21} FS + \varepsilon$

Equation 4: FG $= \alpha_{04} + \beta_{22} SPA + \beta_{23} CMS + \beta_{24} MPM + \beta_{25} MIO + \beta_{26} ERR + \beta_{27} FA + \beta_{28} FS + \varepsilon$

The statistical equations investigating the role of knowledge management intention, which moderates the relationship between five dimensions of dynamic management accounting orientation and its consequences (managerial information usefulness, decision-making success, operational goal achievement, and firm growth) are presented in equation 5-8 as shown:

Equation 5: MIU $= \alpha_{05} + \beta_{29} SPA + \beta_{30} CMS + \beta_{31} MPM + \beta_{32} MIO + \beta_{33} ERR + \beta_{34} KMI + \beta_{35}(KMI * SPA) + \beta_{36}(KMI * CMS) + \beta_{37}(KMI * MPM) + \beta_{38}(KMI * MIO) + \beta_{39}(KMI * ERR) + \beta_{40} FA + \beta_{41} FS + \varepsilon$

Equation 6: DMS $= \alpha_{06} + \beta_{42} SPA + \beta_{43} CMS + \beta_{44} MPM + \beta_{45} MIO + \beta_{46} ERR + \beta_{47} KMI + \beta_{48}(KMI * SPA) + \beta_{49}(KMI * CMS) + \beta_{50}(KMI * MPM) + \beta_{51}(KMI * MIO) + \beta_{52}(KMI * ERR + \beta_{53} FA + \beta_{54} FS + \varepsilon$

Equation 7: OGA $= \alpha_{07} + \beta_{55} SPA + \beta_{56} CMS + \beta_{57} MPM + \beta_{58} MIO + \beta_{59} ERR + \beta_{60} KMI + \beta_{61}(KMI * SPA) + \beta_{62}(KMI * CMS) + \beta_{63}(KMI * MPM) + \beta_{64}(KMI * MIO) + \beta_{65}(KMI * ERR + \beta_{66} FA + \beta_{67} FS + \varepsilon$

Equation 8: FG $= \alpha_{08} + \beta_{68} SPA + \beta_{69} CMS + \beta_{70} MPM + \beta_{71} MIO + \beta_{72} ERR + \beta_{73} KMI + \beta_{74}(KMI * SPA) + \beta_{75}(KMI * CMS) + \beta_{76}(KMI * MPM) + \beta_{77}(KMI * MIO) + \beta_{78}(KMI * ERR + \beta_{79} FA + \beta_{80} FS + \varepsilon$

The statistical equation investigating the impact of managerial information usefulness on decision-making success is presented in equation 9 as shown:

Equation 9: DMS $= \alpha_{09} + \beta_{81} MIU + \beta_{82} FA + \beta_{83} FS + \varepsilon$

The statistical equation investigating the impact of decision-making success on operational goal achievement is presented in equation 10 as shown:

Equation 10: OGA $= \alpha_{10} + \beta_{84} DMS + \beta_{85} FA + \beta_{86} FS + \varepsilon$

The statistical equation investigating the impact of managerial information usefulness, decision-making success, and operational goal achievement on firm growth is presented in equation 11 as shown:

Equation 11: FG $= \alpha_{11} + \beta_{87} MIU + \beta_{88} DMS + \beta_{89} OGA + \beta_{90} FA + \beta_{91} FS + \varepsilon$

The statistical equations examining the effects of five antecedents namely, proactive top management vision, business intelligent competency, best management accounting system, market learning capability, and competitive change pressure on five dimensions of dynamic management accounting orientation are presented in equation 12-16 as shown:

$$\textbf{Equation 12: SPA} = \alpha_{12} + \beta_{92}PTV + \beta_{93}BIC + \beta_{94}BMS + \beta_{95}MLC + \beta_{96}CCP + \beta_{97}FA + \beta_{98}FS + \varepsilon$$

$$\textbf{Equation 13: CMS} = \alpha_{13} + \beta_{99}PTV + \beta_{100}BIC + \beta_{101}BMS + \beta_{102}MLC + \beta_{103}CCP + \beta_{104}FA + \beta_{105}FS + \varepsilon$$

$$\textbf{Equation 14: MPM} = \alpha_{14} + \beta_{106}PTV + \beta_{107}BIC + \beta_{108}BMS + \beta_{109}MLC + \beta_{110}CCP + \beta_{111}FA + \beta_{112}FS + \varepsilon$$

$$\textbf{Equation 15: MIO} = \alpha_{15} + \beta_{113}PTV + \beta_{114}BIC + \beta_{115}BMS + \beta_{116}MLC + \beta_{117}CCP + \beta_{118}FA + \beta_{119}FS + \varepsilon$$

$$\textbf{Equation 16: ERR} = \alpha_{16} + \beta_{120}PTV + \beta_{121}BIC + \beta_{122}BMS + \beta_{123}MLC + \beta_{124}CCP + \beta_{125}FA + \beta_{126}FS + \varepsilon$$

The statistical equations examining the role of the moderator, namely, innovation culture, which moderates among five antecedents (proactive top management vision, business intelligent competency, best management accounting system, market learning capability, and competitive change pressure) and five dimensions of dynamic management accounting orientation are presented in equations 17-21 as shown:

$$\textbf{Equation 17: SPA} = \alpha_{17} + \beta_{127}PTV + \beta_{128}BIC + \beta_{129}BMS + \beta_{130}MLC + \beta_{131}CCP + \beta_{132}IC + \beta_{133}(IC * PTV) + \beta_{134}(IC * BIC) + \beta_{135}(IC * BMS) + \beta_{136}(IC * MLC) + \beta_{137}(IC * CCP) + \beta_{138}FA + \beta_{139}FS + \varepsilon$$

$$\textbf{Equation 18: CMS} = \alpha_{18} + \beta_{140}PTV + \beta_{141}BIC + \beta_{142}1BMS + \beta_{143}MLC + \beta_{144}CCP + \beta_{145}IC + \beta_{146}(IC * PTV) + \beta_{147}(IC * BIC) + \beta_{148}(IC * BMS) + \beta_{149}(IC * MLC) + \beta_{150}(IC * CCP) + \beta_{151}FA + \beta_{152}FS + \varepsilon$$

$$\textbf{Equation 19: MPM} = \alpha_{19} + \beta_{153}\,PTV + \beta_{154}BIC + \beta_{1551}BMS + \beta_{156}MLC + \beta_{157}CCP + \beta_{158}IC + \beta_{159}(IC * PTV) + \beta_{160}(IC * BIC) + \beta_{161}(IC * BMS) + \beta_{162}(IC * MLC) + \beta_{163}(IC * CCP) + \beta_{164}FA + \beta_{165}FS + \varepsilon$$

$$\textbf{Equation 20: MIO} = \alpha_{20} + \beta_{166}\,PTV + \beta_{167}BIC + \beta_{1681}BMS + \beta_{169}MLC + \beta_{170}CCP + \beta_{171}IC + \beta_{172}(IC * PTV) + \beta_{173}(IC * BIC) + \beta_{174}(IC * BMS) + \beta_{175}(IC * MLC) + \beta_{176}(IC * CCP) + \beta_{177}FA + \beta_{178}FS + \varepsilon$$

$$\textbf{Equation 21: ERR} = \alpha_{21} + \beta_{179}\,PTV + \beta_{180}BIC + \beta_{1811}BMS + \beta_{182}MLC + \beta_{183}CCP + \beta_{184}IC + \beta_{185}(IC * PTV) + \beta_{186}(IC * BIC) + \beta_{187}(IC * BMS) + \beta_{188}(IC * MLC) + \beta_{189}(IC * CCP) + \beta_{190}FA + \beta_{191}FS + \varepsilon$$

Where;

SPA	=	Strategic Positioning Orientation
CMS	=	Cost Management Strategy
MPM	=	Modern Performance Measurement
MIO	=	Market Information Orientation
ERR	=	Environmental Responsibility Reporting
MIU	=	Managerial Information Usefulness
DMS	=	Decision-Making Success
OGA	=	Operational Goal Achievement
FG	=	Firm Growth
PTV	=	Proactive Top Management Vision
BIC	=	Business Intelligence Competence
BMS	=	Best Management Accounting System
MLC	=	Market Learning Capability
CCP	=	Competitive Change Pressure
KMI	=	Knowledge Management Intention
IC	=	Innovation Culture
FA	=	Firm Age
FS	=	Firm Size
α	=	Constant
β	=	Regression Coefficient
ε	=	Error Term

Summary

The aspect of this empirical study is based on a review of dynamic management accounting literature. A survey is used as the method for data collection in order to investigate the relationship among dynamic management accounting orientation, its antecedents, consequences, and the effect of moderating variable in Thailand's food industry. A total list of 1,485Thailand food businesses was provided by the Department of Business Development, the Ministry of Commerce of the Thai government. The key informants completing questionnaire are chief accounting executive, accounting director, or accounting manager. A structured survey questionnaire was designed to cover all areas of the conceptual model and developed hypotheses. In order to ensure a high quality of the survey design, this study uses a framework which includes questionnaire design, the use of pre-testing, follow-up procedures and non-response bias analysis (Van der Stede et al., 2007).Moreover, a valid and reliable questionnaire is the primary instrument of data collection. This chapter also provides the measurements of each construct in the model, which are based on the existing literature. For multiple regression analysis, testable eighteen statistical equations are formulated. Finally, a summary of the constructs' definitions and the operational explanation is given in Table 6.

Table 6 Definitions and Operational Variables of Constructs

Constructs	Definitions	Operational Variables	Scale Source
Dependent variable			
Firm growth (FG)	The administrative efficiency improved steadily of the firm leading to an increase in the firm's performance and value.	The continuously increase of the operational efficiency outcome in terms of high return on investment, increase incomes, increase market share, customer satisfaction, and operating in a more uncertain environment.	Hongsombudet al.(2012)
Independent variables			
Strategic positioning analysis (SPS)	The ability of the firm to provide accounting information for assessing the potential of the firm to shape the operational plans along with the clear competitive position in the industry which is uniquely aligned with organization’s goals and leading to the competitive advantage.	The extent to the firm's ability to use accounting information to help in evaluating the potential and competitiveness of the organization and to determine the competitive position in the industry clearly, including the use of account information to determine the best practices and allocate resources efficiently that will help to achieve its goals and lead to long-term profitability.	New Scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Cost management strategy (CMS)	The ability of the firm to accurately analyze and predict the production and operation costs in business then using this information to plan and control the expense in accordance with the direction of administration for leading to the effective achievement.	The extent to the firm's ability to effectively collect, analyze, and present production and operation cost which is used to plan and improve operational performance align with organization's goals and helps organizations quickly respond to changing circumstances.	New Scale
Modern performance measurement (MPM)	The ability of the firm to apply performance appraisals consistent with its current operating model with the variety of indicators which covers all dimensions of performance measurement in both financial and non-financial information which are quantitative and qualitative information that leads to increased operational efficiency and long-term organizational success.	The extent to which the firm's ability to use performance indicators across multiple dimensions aligns with current operations that include both monetary and non-monetary indicators which are quantitative and qualitative indicators from within and outside the organization, to maximize performance and achieve goals.	New Scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Market information orientation (MIO)	The ability of the firm to provide and analyze information that relates to competitors' potentiality and profitability of customers through accounting method and using the information for planning and making the decision to set competitive strategy to response the market effectively.	The extent of the firm's ability to gather competitor and customer information to assess competitors' competencies, as well as to analyze customer costs and profits which are for planning and deciding to operate in accordance with the present and future market situation effectively.	New Scale
Environmental responsibility reporting (ERR)	The ability of the firm to provide and present accounting information related to environmental activities by reporting on the costs and benefits of the environmental activities of the firm that can be used as managerial information in various fields that affect the environment.	The extent of the firm's ability to produce and deliver information relevant to the organization's environmental activities which are both financial and non-financial information by reporting on the costs and benefits of improving and maintaining the environment for planning and deciding on the environment issue effectively.	New Scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Mediating variables			
Managerial information usefulness (MIU)	The valuable and relevant information for decision-making that allows managers to manage their works quickly and accurately under various circumstances effectively.	The feature of accounting information which has a broader scope, timeliness, and complete and sufficient that available to operational managers for making a decision, monitoring, and evaluating their work under various circumstances effectively.	New Scale
Decision-making success (DMS)	The effectiveness of the organization in choosing the best alternative that enables the organization to achieve its objectives and gain its maximized benefits.	The perception of decision Comprehensiveness and speed in choosing the appropriate alternative by using relevant and useful information under a crisis situation.	New Scale
Operational goal achievement (OGA)	The ability of the firm to execute the ways that have been planned effectively, consistent with strategy and organizational objectives.	The operation succeeded in attaining firm's strategy and objectives in the form of well respond to various situations, as well as to manage resources appropriately and systemize the management and operation professionally.	Chaikambang et al.(2012)

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Antecedent variables			
Proactive top management vision (PTV)	The forward-looking perspective of the senior executives on future outcomes that are aware of the good preparation for events that expected to happen in the future and to improve performance for achieving the goals continuously.	The extent to which top managers in the organization focus on creating or controlling a situation by using accounting data to analyze opportunity, threat and competitive environments for improving constantly performance efficiency and goal success.	New Scale
Business intelligence competence (BIC)	The capability of the firm to use a variety of technologies and expertise to enable operations to respond to current and future situations effectively.	The level of effectiveness and efficient application of information technology to support data collection, data analysis, develop and run queries against the data, and create reports to provide appropriate information with timely, relevant, and easy-to-use information, which enables better decisions.	New Scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Best management accounting system (BMS)	The management accounting process that is consistent with the operational model that supports the organization's success by providing sufficient information that is up-to-date, responsive to the needs of executives under current circumstances effectively.	The degree of the firm which focuses on applying and developing the accounting system to comply with operational style and the capability to provide the completeness, accuracy, and current information for better planning, controlling and decision making.	Wongjinda et al.(2016)
Market Learning Capability (MLC)	The ability of the organization to continuously learn, analyze and evaluate market situations in order to better respond to market needs.	The degree of firm's ability to learn about customers, competitors, and the broader market environment in which it operates continuously.	New Scale
Competitive change pressure (CCP)	The influences that are received by the customer, competitor, and industry which affect the behavior and adaptation of the firm that enables the firm to improve its potential to cope with the various situations in order to survive.	The perceived intensity of competition facing organizations consisting of selling and distribution, quality and variety of products, price, and market share that result in the adaptation of the organization.	New Scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Source
Moderating variables			
Knowledge management intention (KMI)	The focusing on integrating and exchanging knowledge both external and internal the organization to deliver systemic ideas which lead to effective implementation.	The creation of new knowledge, the demand for external knowledge, knowledge retention, and the use of knowledge in the decision-making process and management.	New Scale
Innovation culture (IC)	The characteristic of behavior and belief within the organization that promotes innovation that is conducive to beneficial change in the organization.	The degree to which the organization has innovation readiness, creativity and entrepreneurship, organizational learning, and market orientation.	New Scale
Control variables			
Firm age (FG)	The number of years since the company was established.	Dummy variable 0 = 15 years or less, 1 = more than 15 years	Prempree et al. (2013)
Firm size (FS)	The total assets of the firm.	Dummy variable 0 = less than or equal to 100,000,000 Baht, 1 = higher than 100,000,000 Baht	Prempree et al. (2013)

CHAPTER IV

RESULTS AND DISCUSSION

The previous chapter presented the research methods comprising population and sample selection, data collection, and the test of non-response bias. Moreover, data analysis and hypotheses testing are described. Consequently, this chapter demonstrates the findings of data analysis and results of hypotheses testing. This chapter is organized as follows. The first section presents the analysis of respondent characteristics, sample characteristics using the descriptive statistics. The second section is related to describe the correlation matrix among the hypothesized variables, and hypotheses testing are discussed in section. The final presents a summary of all hypotheses testing is given in Table 14.

Respondent Characteristics and Descriptive Statistics

Respondent Characteristics

The respondents are the accounting executives (e.g., accounting director, accounting manager, and chief accountant) of food businesses in Thailand who have the best knowledge and understanding of the nature and format of accounting information, the presentation of accounting information for their administration, and their firm performance. This is because they can give the data according to the objective of this research. The characteristics of respondents are described by demographic characteristicsinclude gender, age, marital status, education level, working experience, average monthly income, and working position. The demographic characteristics of the 294 respondents are as follows. The 84.69 percent of respondents are female. The majority of respondents is between 41 and 50 years of age (39.80 percent) and married (55.10 percent). Their education, 62.24 percent have a bachelor’s degree or lower degree. In addition, most respondents' experience is more than 15 years (45.58 percent). An average monthly income is less than 75,000 baht (44.90 percent). The working position of the respondents at present is accounting manager of equal 57.48 percent (see Appendix C).

Firm Characteristics

The characteristics of the firm are described by demographic characteristics include business type, business registered capital, total assets of the firm, number of employees, the period of time in operating business, average revenue per year.

The results from the demographic characteristics of the 294 food businesses indicate that the majority of the firm respondents is in the category of a limited company (70.41 percent). Most of the firms have a registered business capital less than 25,000,000 baht (35.03 percent), and total assets more than 150,000,000 baht (40.81 percent). Most of them employ more than 150 employees (43.20 percent). The duration of business over 15 years is 52.38 percent, and the average revenue per year more than 75,000,000 baht is 68.71 percent.

Correlation Analysis

This research employs a bivariate correlation analysis of Pearson correlation with all variables for two purposes: exploring the relationships among variables and examining multicollinearity problems. Table 7 shows the results of the correlation analyses of all variables. The results indicate that none of correlations exceed 0.80, which may not be concerned about multicollinearity problems (Hair et al., 2006). The details are as follows.

The result of the Pearson Correlation Coefficient of five dimensions of dynamic management accounting orientation (strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting) is between $r = 0.370 – 0.661$, $p < 0.01$. The Pearson correlation coefficient of five antecedents of dynamic management accounting orientation (proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure)are between $0.478 – 0.690$, $p < 0.01$. The results indicate that none of correlations exceed 0.80. Thus multicollinearity problem is not concerned.

In parts of correlation among independent variables and dependent variables, it is found that there hasa significant and positive relationship as follows. Dimensions of dynamic management accounting orientation and its consequences (managerial information usefulness, decision-making success, operational goal achievement, and

firm growth) have a significant and positive relationship ($r = 0.307 – 0.612$, $p < 0.01$). The correlations among five antecedents and five dimensions of dynamic management accounting orientation are significant and positive relationship ($r = 0.334 – 0.581$, $p < 0.01$). Moreover, the moderating effect of knowledge management intention hasa significant and positive relationship with five dimensions of dynamic management accounting orientation and its consequences ($r = 0.404 – 0.682$, $p < 0.01$). Finally, the moderating effect of innovation culture has a significant and positive relationship with five antecedents and five dimensions of dynamic management accounting orientation ($r = 0.437 – 0.694$, $p < 0.01$).

Table 7 Descriptive Statistics and Correlation Matrix of Dynamic Management Accounting Orientation and all Constructs

Variables	SPA	CMS	MPM	MIO	ERR	MIU	DMS	OGA	FG	PTM	BIC	BMS	MLC	CCP	KMI	IC	FA	FS
Mean	4.283	4.187	3.837	3.898	3.604	3.950	3.876	3.818	3.615	4.014	3.876	4.084	4.082	4.028	3.819	4.085	n/a	n/a
S.D.	0.558	0.590	0.622	0.650	0.797	0.598	0.602	0.595	0.696	0.664	0.665	0.589	0.587	0.653	0.630	0.508	n/a	n/a
SPA	1.000																	
CMS	.584***	1.000																
MPM	.450***	.570***	1.000															
MIO	.370***	.489***	.570***	1.000														
ERR	.392***	.405***	.603***	.661***	1.000													
MIU	.558***	.498***	.433***	.421***	.408***	1.000												
DMS	.482***	.453***	.551***	.487***	.429***	.664***	1.000											
OGA	.483***	.484***	.552***	.612***	.536***	.658***	.684***	1.000										
FG	.341***	.307***	.501***	.468***	.387***	.391***	.615***	.565***	1.000									
PTM	.369***	.344***	.511***	.498***	.546***	.457***	.535***	.567***	.553***	1.000								
BIC	.442***	.418***	.522***	.545***	.518***	.438***	.488***	.552***	.393***	.690***	1.000							
BMS	.531***	.466***	.489***	.426***	.482***	.562***	.555***	.559***	.412***	.591***	.664***	1.000						
MLC	.376***	.431***	.472***	.507***	.467***	.424***	.443***	.483***	.431***	.605***	.593***	.619***	1.000					
CCP	.334***	.359***	.379***	.581***	.490***	.372***	.459***	.483***	.464***	.614***	.535***	.478***	.659***	1.000				
KMI	.456***	.404***	.522***	.583***	.682***	.478***	.532***	.597***	.470***	.693***	.628***	.610***	.572***	.565***	1.000			
IC	.437***	.486***	.597***	.603***	.694***	.431***	.491***	.607***	.469***	.639***	.692***	.660***	.621***	.603***	.790***	1.000		
FA	.047	-.045	.020	.056	.109	-.002	.021	.003	-.027	.034	.063	.086	.034	.044	.072	.040	1.000	
FS	.038	-.037	.034	.172***	.096	-.001	-.007	.012	-.001	.030	.104	.121**	.058	-.015	.043	.084	.481***	1.000

*** Correlation is significant at the 0.01 level (2-tailed), ** Correlation is significant at the 0.05 level (2-tailed).

Hypotheses Testing and Results

This research uses multiple regressions by ordinary least squares (OLS) regression to investigate the hypotheses. All hypotheses in this research are transformed into 21 equations. In addition, two dummy variables namely, firm age and firm size, are also included in the equations for testing hypotheses. The results of both descriptive statistics and hypotheses test are reported as follows.

The Relationship among Each Dimension of Dynamic Management Accounting Orientation, Its Consequences, and Moderating Role of Knowledge Management Intention.

Figure 7 illustrates the effect of dynamic management accounting orientation on its consequences as proposed in Hypotheses 1(a-d) to Hypotheses 5(a-d). Each hypothesis is proposed in a positive relationship. These hypotheses are transformed into the regression equation in Equation 1 - 4. In addition, the moderating role of knowledge management intention is also proposed to have positive influence on the relationships among each dimension of dynamic management accounting orientation and its consequences which are presented in Hypotheses 14(a-d) to Hypothesis 18(a-d). These hypotheses are transformed into the regression equation in Equation 5 - 8.

Figure 7 The Relationships between Each Dimension of Dynamic Management Accounting Orientation, Its Consequences, and Moderating Role of Knowledge Management Intention

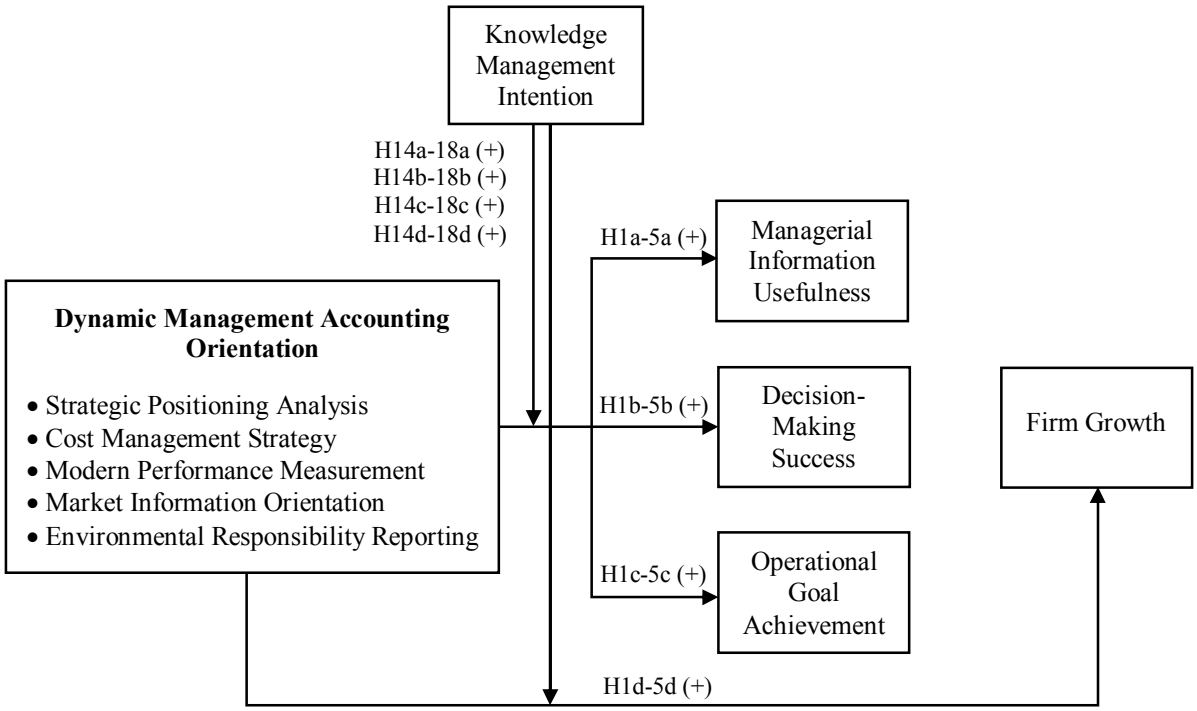


Table 8 presents the correlation coefficients among each dimension of the dynamic management accounting orientation and its consequences: managerial information usefulness, decision-making success, operational goal achievement, and firm growth. For the first dimension of dynamic management accounting orientation, the results indicate that strategic positioning analysis is significantly and positively correlated with managerial information usefulness ($r = 0.558$, $p < .01$), decision-making success ($r = 0.482$, $p < .01$), operational goal achievement ($r = 0.483$, $p < .01$), and firm growth ($r = 0.341$, $p < .01$). For the second dimension of dynamic management accounting orientation, cost management strategy is significantly and positively correlated with managerial information usefulness ($r = 0.498$, $p < .01$), decision-making success ($r = 0.453$, $p < .01$), operational goal achievement ($r = 0.484$, $p < .01$), and firm growth ($r = 0.307$, $p < .01$). For the third dimension of dynamic management accounting orientation, modern performance measurement is significantly and positively correlated with managerial information usefulness ($r = 0.433$, $p < .01$), decision-making success

($r = 0.551$, $p < .01$), operational goal achievement ($r = 0.552$, $p < .01$), and firm growth ($r = 0.501$, $p < .01$). For the fourth dimension of dynamic management accounting orientation, market information orientation is significantly and positively correlated with managerial information usefulness ($r = 0.421$, $p < .01$), decision-making success ($r = 0.487$, $p < .01$), operational goal achievement ($r = 0.612$, $p < .01$), and firm growth ($r = 0.468$, $p < .01$). Finally, the fifth dimension of dynamic management accounting orientation, environmental responsibility reporting is significantly and positively correlated with managerial information usefulness ($r = 0.408$, $p < .01$), decision-making success ($r = 0.429$, $p < .01$), operational goal achievement ($r = 0.536$, $p < .01$), and firm growth ($r = 0.387$, $p < .01$).

For the correlation coefficients among five dimensions of dynamic management accounting orientation which are independent variables, the results from Table 8 also show that all correlations are less than 0.80. Additionally, table 9 point out the maximum values of variance inflation factors (VIFs) (Equation 1-8) is 3.735, which is below the cutoff value of 10 (Hair et al., 2010). Consequently, overall, the multicollinearity problems are not a concern for this analysis.

Table 8 Descriptive Statistics and Correlation Matrix of Each Dimension of Dynamic Management Accounting Orientation, Its Consequences, and Knowledge Management Intention

Variables	SPA	CMS	MPM	MIO	ERR	MIU	DMS	OGA	FG	KMI	FA	FS
Mean	4.283	4.187	3.837	3.898	3.604	3.950	3.876	3.818	3.615	3.819	n/a	n/a
Standard Deviation	0.558	0.590	0.622	0.650	0.797	0.598	0.602	0.595	0.696	0.630	n/a	n/a
Strategic Positioning Analysis (SPA)	1.000											
Cost Management Strategy (CMS)	.584***	1.000										
Modern Performance Measurement (MPM)	.450***	.570***	1.000									
Market Information Orientation (MIO)	.370***	.489***	.570***	1.000								
Environmental Responsibility Reporting (ERR)	.392***	.405***	.603***	.661***	1.000							
Managerial Information Usefulness (MIU)	.558***	.498***	.433***	.421***	.408***	1.000						
Decision-Making Success (DMS)	.482***	.453***	.551***	.487***	.429***	.664***	1.000					
Operational Goal Achievement (OGA)	.483***	.484***	.552***	.612***	.536***	.658***	.684***	1.000				
Firm Growth (FG)	.341***	.307***	.501***	.468***	.387***	.391***	.615***	.565***	1.000			
Knowledge Management Intention (KMI)	.456***	.404***	.522***	.583***	.682***	.478***	.532***	.597***	.470***	1.000		
Firm Age (FA)	.047	-.045	.020	.056	.109	-.002	.021	.003	-.027	.072	1.000	
Firm Size (FS)	.038	-.037	.034	.172**	.096	-.001	-.007	.012	-.001	.043	.481***	1.000

*** Correlation is significant at the 0.01 level (2-tailed), ** Correlation is significant at the 0.05 level (2-tailed).

Table 9 Results of Regression Analysis for the Effects of Dynamic Management Accounting Orientation on Its Consequences

Independent Variables	Dependent Variables							
	MIU		DMS		OGA		FG	
	Equation 1	Equation 5	Equation 2	Equation 6	Equation 3	Equation 7	Equation 4	Equation 8
Strategic Positioning Analysis (SPA: H1 a-d)	**.363*** (.058)**	**.341*** (.063)**	**.219*** (.051)**	**.207*** (.057)**	**.211*** (.053)**	**.134** (.056)**	**.160** (.062)**	.104 (.066)
Cost Management Strategy (CMS: H2 a-d)	**.153** (.065)**	.108 (.067)	**.176** (.057)**	**.155** (.060)**	**.104* (.061)**	.009 (.059)	**.125* (.068)**	**.177** (.071)**
Modern Performance Measurement (MPM: H3 a-d)	.056 (.066)	.005 (.066)	**.168** (.058)**	**.131** (.060)**	**.166** (.060)**	**.121** (.059)**	**.346*** (.069)**	**.280*** (.070)**
Market Information Orientation (MIO: H4 a-d)	**.126* (.067)**	**.134* (.069)**	**.357*** (.059)**	**.392*** (.062)**	**.361*** (.061)**	**.362*** (.061)**	**.298*** (.071)**	**.263*** (.073)**
Environmental Responsibility Reporting (ERR: H5 a-d)	.092 (.067)	-.040 (.075)	-.002 (.059)	-.063 (.067)	.045 (.059)	-.041 (.066)	-.022 (.071)	-.113 (.079)
Moderator: Knowledge Management Intention (KMI)		**.219** (.066)**		.089 (.060)		**.293*** (.059)**		**.277*** (.070)**
SPA*KMI (H14 a-d)		**.135* (.075)**		-.069 (.059)		**.210*** (.058)**		**.171** (.069)**
CMS*KMI (H15 a-d)		.021 (.063)		-.043 (.057)		-.027 (.056)		-.053 (.067)
MPM*KMI (H16 a-d)		**.179** (.067)**		**.161** (.060)**		**.214*** (.059)**		**.138* (.071)**
MIO*KMI (H17 a-d)		-.116 (.081)		.028 (.073)		-.045 (.072)		**.156* (.086)**
ERR*KMI (H18 a-d)		-.079 (.065)		-.017 (.068)		.098 (.067)		**.184** (.080)**
Control Variables: Firm Age (FA)	-.027 (.106)	-.051 (.104)	.023 (.093)	-.014 (.094)	-.013 (.097)	-.062 (.092)	-.068 (.112)	-.104 (.110)
Firm Size (FS)	-.070 (.108)	-.020 (.108)	**.231** (.095)**	**.188* (.098)**	-.139 (.099)	-.036 (.096)	-.114 (.114)	-.024 (.114)
Adjusted R^2	**.379**	**.419**	**.517**	**.524**	**.479**	**.540**	**.306**	**.345**
Maximum VIF	**2.125**	**3.735**	**2.125**	**3.735**	**2.125**	**3.735**	**2.125**	**3.735**

Beta coefficients with standard in parenthesis, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The results of the OLS regression analysis of the effects of each dimension of dynamic management accounting on its consequences are shown in table 9. Firstly, the result indicates that strategic positioning analysis (the first dimension) positively influences all four outcomes: managerial information usefulness ($\beta_1 = 0.363$, $p < .01$), decision-making success ($\beta_8 = 0.219$, $p < .01$), operational goal achievement ($\beta_{15} = 0.211$, $p < .01$), and firm growth ($\beta_{22} = 0.160$, $p < .05$). A positive relationship between strategic positioning analysis and its consequences indicated that strategic positioning analysis enables firms to gain greater managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Consistent with prior research, strategic positioning analysis which is supported by relevant management accounting can provide necessary information for the formulation, implementation, and realization of strategies to achieving competitive advantage (Roslender and Hart, 2003). It provides useful information for decision-making and planning to assist managers to continuous improvement value added to achieving its objectives, and ensuring long-term success (Carmen and Corina, 2009). In addition, strategic management literature found that strategic positioning analysis can help the firm to support decision-making to find the best mixture of strategies to defend a firm against the competitive forces in the industry (Baines et al., 2005). Furthermore, strategic positioning analysis influences firm performance (Kim et al., 2008), and it allows firms to enjoy abnormal returns or help them survive turbulent environments (Spanos and Lioukas, 2001). **Thus, Hypotheses 1a, 1b, 1c, and 1d are supported.**

Secondly, it is found that cost management strategy (the second dimension) also shows significant and positive effects on all four outcomes: managerial information usefulness ($\beta_2 = 0.153$, $p < .05$), decision-making success ($\beta_9 = 0.176$, $p < .05$), operational goal achievement ($\beta_{16} = 0.104$, $p < .10$), and firm growth ($\beta_{23} = 0.125$, $p < .10$). It can be seen that cost management strategy has the potential to help firm gain greater managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Consistent with previous research, cost management strategy is an important contemporary management accounting approach that provides cost information used to develop strategic decision making and sustainable competitive advantage crucial to operating more efficiently in the intensely competitive environment (Chenhall, 2004; Maelah and Lbrahim, 2007; Tontiset and Choojan, 2012). The role of cost management

strategy is critical in providing cost information to support organization activities and managerial functions in order to achieve organization goal (Chaikambang et al., 2012; Jun and Yu, 2002). It enables the firm to improve firm performance in the long run by identifying and removing the major non-value-added activities that reduce cost in the process (Langfield-Smith et al., 2009).Additionally, cost management strategy consists of cost management and revenue management, which help the firm to improve productivity, maximize profit, and customer satisfaction (Hilton et al., 2001). **Thus, Hypotheses 2a, 2b, 2c, and 2d are supported.**

Thirdly, unlike the first two dimensions, modern performance measurement (the third dimension) is significantly and positively related to some of its consequences: decision-making success ($\beta_{10} = 0.168$, $p < .05$), operational goal achievement ($\beta_{17} = 0.166$, $p < .05$), and firm growth ($\beta_{24} = 0.346$, $p < .01$). These results show the evidence that firms use more modern performance measurement tend to accomplish the decision-making success, operational goal achievement, and firm growth. In term of modern performance measurement, managerial accounting literature suggests that it is a multi-dimensional performance measurement system comprises the use of financial as well as non-financial performance measures linked to the firm's strategy, firm's structure and perceived environment uncertainty (Ittner et al., 2003; Schulz et al., 2010).As a result, the finding of this research support previous study which found that contemporary or integrated performance measurement systems help managers make a better decision and learn about how to best improve their performance when appropriate feedback mechanisms are in place (Tuomela, 2005). In addition, it also provides the information that allows the firm to identify the strategies offering the highest potential for achieving the firm's objectives (Ittner et al., 2003). Furthermore, a firm with more comprehensive performance measurement system, especially include objective and subjective non-financial measure and link to firm's strategy, have higher performance (Gosselin, 2005; Stede et al., 2006). **Thus, Hypotheses 3b, 3c, and 3d are supported.** However, for the relationship between modern performance measurement and managerial information usefulness, the finding reveals a non-significant result ($\beta_3 = 0.056$, $p > 0.10$). The cause may due to information overload from multi-dimensional performance measurement system. The potential drawbacks from the performance measurement diversity are that it would increase system complexity (Lipe and Salterio, 2000). It also increases the

burden of considering information from different measures. Finally, information from multi-dimensional measures is also potentially conflicting (Moer, 2005). **Therefore, hypothesis 3a is not supported.**

Fourthly, the finding indicates that market information orientation (the fourth dimension) shows significant positive effects on all of its outcomes: managerial information usefulness ($\beta_4 = 0.126$, $p < .10$), decision-making success ($\beta_{11} = 0.357$, $p < .01$), operational goal achievement ($\beta_{18} = 0.361$, $p < .01$), and firm growth ($\beta_{25} = 0.298$, $p < .01$). The positive relationships between market information orientation and four consequences indicated that firm with more extensive market information orientation would have higher managerial information usefulness, decision-making success operational goal achievement and firm growth. In term of market information orientation is consistent with management literature, which suggests that it is a market-oriented managerial accounting system which aims to provide updated and relevant information about firm's customers and competitors (Inglis, 2008; Inglis and Clift, 2008). The findings mentioned above support prior research, which found that market-oriented accounting such as customer accounting provides updated-relevant information for better decision-making to manage customer relationships in a way that benefits organizations and stakeholders, and also the significant positive relationship with firm performance (Helgesen, 2007; McManus, 2013). Similarly, there is a positive association between accounting-marketing integration and organizational performance (Opute and Madichie, 2017). Furthermore, Market orientation can help the firm achieve higher performance competency because top management and other employees have both information on customers' implicit and expressed needs and competitors' strengths and a strong motivation to gain superior customer satisfaction (Kumar et al., 2011). **Thus, Hypotheses 4a, 4b, 4c, and 4d are supported.**

Finally, the research reveals that there are no relationships among environmental responsibility reporting (the fifth dimension) and all four outcomes: managerial information usefulness ($\beta_5 = 0.092$, $p > .10$), decision-making success($\beta_{12} = -0.002$, $p > .10$), operational goal achievement ($\beta_{19} = 0.045$, $> .10$), and firm growth ($\beta_{26} = -0.022$, $p > .10$). Surprisingly, the results show that environmental responsibility reporting does not have effects on managerial information usefulness, decision-making success, operational goal achievement, and firm growth. These results imply that environmental

responsibility reporting appears to be not primarily tool that used to enhance useful information to the management of making-decision that relevant the goals and growth of the organization. The possible reason could be that most of the company in Thailand lack of knowledge about environmental management accounting practices for environmental cost identification (Setthasakko, 2010). It is causing firms might not be disclosed actual environmental costs and this information tend to be hidden in manufacturing overhead costs, as well as lack of physical information about the uses of materials and energy consumptions (Tsui, 2014). Hence, they have faced difficulties in making environmental management related decisions and hard to meet hidden opportunities such as reduced material and energy consumption and better waste management processes which in turn leads to increase operational efficiency and more profit of firms. Moreover, the study of Cormier and Magnan (2007) suggested that relation between the report on environmental performance and firm value depends on reporting context which the firm is facing. Therefore, another reason may be due to the fact that in terms of nature of disclosures, companies in the developing countries may be giving much priority to report environmental responsibility to meet legal requirements and compliance requirements more than provide valuable information for management or used to enhance the image and reputation of companies. In line with Nazli Nik Ahmad and Sulaiman (2004), the most important factor influencing the reporting of environmental information by companies operating in developing countries is their legal compliance, whilst customer and supplier concerns are among the least important.
In addition to identifying and reporting high environmental activities require costly investments (Hassel et al., 2005). It is, therefore, possible that environmental responsibility reporting does not appear to be affect information usefulness, decision-making success, operational goal achievement, and firm growth in this research. **Thus, hypotheses 5a, 5b, 5c,and 5d are not supported.**

For the control variables, firm age has no significant relationship with four outcomes. It implies that longer period of time in operation does not influence on managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Likewise, firm size illustrates no significant relationships with managerial information usefulness, operational goal achievement, and firm growth, excluding decision-making success. The result of Equation 2 finds that firm size has a

significant positive effect on decision-making success (β_{14} = .231, p < .05). It implies that a larger firm can facilitate the management accounting practices for decision-making more than a smaller firm. Moreover, previous research suggests that larger firms have greater used sophisticated management accounting practices to providing better decision-making information in operation (Abdel-Kader and Luther, 2008).

The Moderating Role of Knowledge Management Intention

From the findings in Table 9, the moderating effect of knowledge management intention on the relationships among the five dimensions of dynamic management accounting orientation and its consequences are as follows. It can be seen that knowledge management intention has some significant moderating effects on the relationship between strategic positioning analysis (the first dimension) and its consequences: managerial information usefulness (β_{35} = 0.135, p < .10), operation goal achievement (β_{61} = 0.210, p < .01), firm growth (β_{74} = 0.171, p < .05). These results indicate that when firm emphasized on knowledge management intention, strategic positioning analysis would have positive effects on managerial information usefulness, operation goal achievement, and firm growth. Consistent with prior research suggests that knowledge management impact on the change in management accounting process which provides the useful information and creates new knowledge in management accounting among all employees in the organization to improve the process and enhance the competitive advantage of the firm (Gornjak, 2014). **Thus, hypotheses 14a, 14c, 14d are supported.** On the other hand, knowledge management intention does not moderate the relationship between strategic positioning analysis and decision-making success (β_{48} = -0.069, p > .10). The explanation of this uncommon finding might be because of knowledge management intention, which focuses on gathering and processing knowledge via computerized programs, usually provides knowledge for routine decisions but it could not utilize in the different situations (Mubarak, 2013). **Therefore, hypothesis 14a is not supported.**

Secondly, the results also present the non-significant moderating effects of knowledge management intention on the relationships among cost management strategy (the second dimension) and managerial information usefulness (β_{36} = 0.021, p > .10), decision-making success (β_{49} = -0.043, p > .10), operation goal achievement (β_{62} =

-0.027, p > .10), and firm growth (β_{75} = -0.053, p > .10). The results show that knowledge management intention does not affect the relationships among cost management strategy and its outcomes. These findings are not consistent with the prior research which stated that knowledge management intention could improve cost management strategy to provide information for effective strategic decision making and control to gain competitive advantage (Silvi, 2012). It is possible that existing knowledge of food businesses in Thailand insufficient for developing knowledge management and cannot use them for cost management strategy. Based on the previous research found that cost management strategy is an integrated approach to value management, which relying on knowledge management to streamline existing processes or in creating new processes for enhancing more value management (Hooshyar, 2010). However, according to the report of the Strategic Framework for Food Management in Thailand (Office of the Secretary Food and Drug Administration, 2017) indicated that knowledge management intention of food business focuses on knowledge in food quality and safety production rather than knowledge of cost management to improve production for adding value to the organization. Thus, in this research, knowledge management does not catalyst the relationship among cost management strategy and managerial information usefulness, decision-making success, operation goal achievement, and firm growth. **Therefore, hypotheses 15a, 15b, 15c, and 15d are not supported.**

Thirdly, the results of the moderating effect of knowledge management intention have significant positive effects on the relationship among modern performance measurement (the third dimension) and all four consequences: managerial information usefulness (β_{37} = 0.179, p < .05), decision-making success (β_{50} = 0.161, p < .05), operation goal achievement (β_{63} = 0.214, p < .01), and firm growth (β_{76} = 0.138, p < .10). These results indicate that when firm dedicated more on knowledge management intention, modern performance measurement would have positive effects on managerial information usefulness, decision-making success, operation goal achievement, and firm growth. It is due to knowledge management intention; particular knowledge sharing process is important for performance measurement system. Prior research suggests that when knowledge sharing process becomes more explicit, firms are more likely to have a formal performance measurement system that provides the essential information to effective management processes (Rowe and Widener, 2011). It is implied that the

interactive relationship between modern performance measurement and knowledge management intention can aid firm with the effective management and be achieving firm growth. **Thus, hypotheses 16a, 16b, 16c, and 16d are supported.**

Fourthly, the result shows significant moderating effects of knowledge management intention on the relationship between market information orientation (the fourth dimension) and firm growth (β_{77} = 0.156, p < .10). This result indicates that interactive relationship between knowledge management intention and market information orientation would have a positive effect on firm growth. Consistent with the previous research found that when marketing department stresses more on using the information from management accounting and control system (such as budget achievement ratio, sale growth rate, customer satisfaction, and customer response time) with knowledge management would have a positive effect on market performance (Lu et al., 2011). **Therefore, hypothesis 17d is supported**. Nevertheless, there are three non-significant results of the moderating effects of knowledge management intention on the relationship between market information orientation and managerial information usefulness (β_{38} = -0.116, p > .10), decision-making success (β_{51} = 0.028, p > .10), operation goal achievement (β_{64} = -0.045, p > .10). This is probably due to the fact that knowledge management intention of the food businesses in Thailand, which acquires the information from outside the organization, such as market information, customer and competitor information is not complete and not enough to analyze the current situation (Office of the Secretary Food and Drug Administration, 2017). It may be causing knowledge management intention cannot enhancing market information orientation to provide efficient information for decision making and operating to gain competitive advantage. Furthermore, knowledge management intention with the low application on external knowledge would provide insufficient novel industrial information for continuously analyses market information and store it for future decision making to achieving competitive advantage (Lu et al., 2011). Therefore, knowledge management intention does not moderate the relationship between management information orientation and three outcomes. **Thus, hypotheses 17a, 17b, and 17c are not supported.**

Finally, the result also shows statistically significant moderating effects of knowledge management intention on the relationship between environmental responsibility reporting(the fifth dimension) and firm growth (β_{78} = 0. 184, p < .05).

This finding illustrates that environmental responsibility reporting with knowledge management intention perform higher firm performance. Previous research found that the use of environmental accounting and reporting of these results will contribute to the firm's image and the added value of the firm (Tanc and Gokoglan, 2015). While creating environmental knowledge management by sharing and transferring explicit environmental knowledge could help firms to understand and identify their eco-efficiency and waste management. It implies that when firm dedicated more on knowledge management intention, environmental responsibility reporting would have positive effects on firm growth (Beljić et al., 2013). **Thus, hypothesis 18d is supported**. Moreover, knowledge management intention has no moderating effect on the relationships among environmental responsibility reporting and information usefulness (β_{39} = -0.079, p > .10), decision-making success (β_{52} = -0.017, p > .10), and operation goal achievement (β_{65} = 0.098, p > .10). It is possible that knowledge management has insufficient in environmental knowledge because there is no guidance on environmental management accounting in Thailand (Setthasakko, 2010). Therefore, interactive relationship between knowledge management intention and environmental responsibility reporting would not have effects on managerial information usefulness, decision-making success, and operational goal achievement. **Thus, hypotheses 18a, 18b, and 18c are not supported.**

For the control variables, firm age has no significant influences on the moderating effect of knowledge management intention on the relationship among five dimensions of dynamic management accounting orientation and it's all consequences: managerial information usefulness (β_{40} = -0.051, p > .10), decision-making success (β_{53} = -0.014, p > .10), operation goal achievement (β_{66} = -0.062, p > .10), and firm growth (β_{79} = -0.104, p > .10). Thus, the moderating effect of knowledge management intention on the relationship among five dimensions of dynamic management accounting orientation and its consequences are not influenced by firm age.

Furthermore, firm size has no significant influences on the moderating effect of knowledge management intention on the relationship among five dimensions of dynamic management accounting orientation and it's all consequences: managerial information usefulness (β_{40} = -0.020, p > .10), operation goal achievement (β_{66} = -0.036, p > .10),and firm growth (β_{79} = -0.024, p > .10). Except decision-making success

(β_{79} = 0.188, p < .10). Thus, the moderating effect of knowledge management intention on the relationship between five dimensions of dynamic management accounting orientation and decision-making success is affected by firm size. Previous research suggests that larger firms, in comparison with small and medium-sized ones, have greater used knowledge management in providing efficient decision-making process to innovate the managerial systems (Litvaj and Stancekova, 2015). It can be claimed that the larger firm more concerned in dynamic management accounting orientation with knowledge management to achieve decision-making success.

The Relationships among Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth

As mentioned in Chapter 2, dynamic management accounting orientation consequences consist of(1) managerial information usefulness, (2) decision-making success, (3) operational goal achievement, and (4) firm growth. This research proposes that managerial information usefulness has positive influences on decision-making success, and decision-making success has positive influences on operational goal achievement as proposed in Hypotheses 6a - 7a. In addition, this research proposes that managerial information usefulness, decision-making success, and operational goal achievement have an effect on firm growth in positive direction as proposed in Hypotheses 6b, 7b, and 8. These hypotheses are transformed into the regression equation in Equation 9 - 11 as shown in Figure 8.

Figure 8 The Relationships among Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth

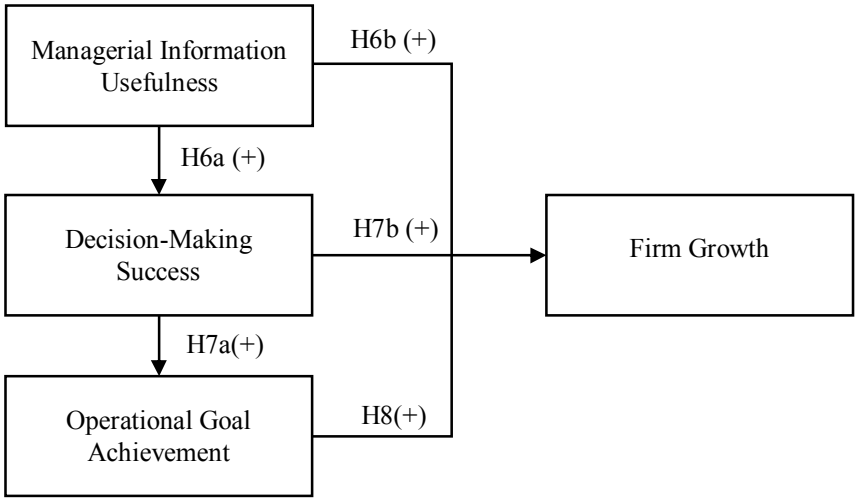


Table 10 Descriptive Statistics and Correlation Matrix of Managerial Information Usefulness, Decision-Making Success, Operational Goal Achievement, and Firm Growth

Variables	MIU	DMS	OGA	FG	FA	FS
Mean	3.950	3.876	3.818	3.615	n/a	n/a
Standard Deviation	0.598	0.602	0.595	0.696	n/a	n/a
Managerial Information Usefulness (MIU)	1.000					
Decision-Making Success (DMS)	.664***	1.000				
Operational Goal Achievement (OGA)	.658***	.684***	1.000			
Firm Growth (FG)	.391***	.615***	.565***	1.000		
Firm Age (FA)	-.002	.021	.003	-.027	1.000	
Firm Size (FS)	-.001	-.007	.012	-.001	.481***	1.000

*** Correlation is significant at the 0.01 level (2-tailed),
** Correlation is significant at the 0.05 level (2-tailed).

Table 10 shows the correlation coefficient between managerial information usefulness, decision-making success, operational goal achievement, and firm growth. The results indicated that managerial information usefulness has a positive significant correlation with decision-making success and decision-making success has positive

significant correlation with operational goal achievement($r = 0.664$, $p < .01$; $r = 0.684$, $p < .01$, respectively).Moreover, the results also indicate that managerial information usefulness, decision-making success, and operational goal achievement have the positive significant correlation with firm growth ($r = 0.391$, $p < .01$; $r = 0.615$, $p < .01$; $r = 0.565$, $p < .01$, respectively).All of these correlation coefficients are less than 0.8. In addition, the maximum VIF values of Equation 9 to 11show in Table 11are between 1.302 - 2.220, which is below the cutoff value of 10 (Hair et al., 2010). Consequently, overall, the multicollinearity problems are not a concern for this analysis.

Table 11 Result of Regression Analysis for the Effects among Managerial Information Usefulness, Decision-Making Success, and Operational Goal Achievement on Firm Growth

Independent Variables	**Dependent Variables**		
	DMS	**OGA**	**FG**
	Equation 9	Equation 10	Equation 11
Managerial Information Usefulness (MIU: H6a-b)	**.653*** (.043)**		**.152** (.064)**
Decision-Making Success (DMS: H7a-b)		**.696*** (.043)**	**.501*** (.067)**
Operational Goal Achievement (OGA: H8)			**.327*** (.066)**
Control Variable: Firm Age (FA)	.064 (.099)	-.051 (.098)	-.098 (.102)
Firm Size (FS)	-.044 (.099)	.059 (.098)	.044 (.102)
Adjusted R^2	**.436**	**.464**	**.420**
Maximum VIF	**1.302**	**1.303**	**2.220**

Beta coefficients with standard in parenthesis, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

For the hypothesis testing, the results of OLS regression analysis are identified in table 11. It is found that managerial information usefulness has significant positive effects on decision-making success ($\beta_{81} = 0.653$, $p < .01$), and firm growth ($\beta_{87} = 0.152$, $p < .05$). The finding demonstrates that the higher managerial information usefulness helps the firm to gain greater decision-making success and firm growth. Management accounting helps organizations make better decisions by extracting value from information. Management accounting information which has a broader scope, timeliness, complete and sufficient is the valuable and suitable information in facilitating and

influencing to the effective decision-making and can improve the performance, estimation and prediction of the firm (Kato, 2013; Sousa, 2013; Yeha and Teng, 2012). It can reduce future uncertainty by enhancing manager's ability to predict situation and allow better decision across the action alternatives facing manager(Huang and Zhang, 2012; Wiersma, 2008; Williams and Seaman, 2002). It also reduces uncertainty concerning the past actions, which outcomes were realized as information for performance evaluation (Eierle and Schultze, 2013). Moreover, it provides economic, external, and future-oriented information to support an organization's ability for creating appropriate business strategies to enhance organization value and firm performance (Correia et al., 2008). Thus, the managerial information usefulness can thus be regarded as a valuable source of reliable information for decision-making success and firm growth. **Therefore, Hypotheses H6a and 6b are supported.**

The finding also shows that decision-making success has significant positive effects on operational goal achievement (β_{84} = 0.696, p < .01), and firm growth (β_{88} = 0.501, p < .01). Decision-making is the process whereby the decision-maker identifies and chooses alternatives based on values and preferences (Harris, 2012). The process of decision making is based on the information available, and businesses choose the best decision from various alternatives after considering factors (Akrani, 2011). Consequently, decision-making success is the effectiveness of the organization in choosing the best alternatives that involve the most revenue or the least amount of cost that lead to competitive advantage, achieved the objective of business (Talaulicar et al., 2005). Economists make a basic assumption about the way people make choices: decision-makers weigh the costs and benefits associated with any choice in order to maximize the value of some objective (Stock, 2013). This may, therefore, improve the organizational performance as costs and benefits will be effectively weighed before a decision is taken (Chaikambang et al., 2012; Dimitratos, 2011). Moreover, making good decisions will propel the organization to success more quickly by finding it easier way to reach its set goals and objectives (Hogan et al., 2008). Thus, decision-making success is a potential possibility that affects operational goal achievement (Kidane, 2012; Thitiyapramote, 2015). **Therefore, hypotheses 7a and 7b are supported.**

In addition, the finding indicates that the relationship between operational goal achievement and firm growth has shown the significant positive relationship (β_{89} =

0.327, $p < .01$). This result implies that the firm's ability to operate successfully in line with the targets that have been planned to achieving their objectives can help firms to increase firm's performance and value. Consistent with prior studies, operational goals are the short-term tactics design that can help an organization to achieve its long-term strategy (Abd El Aziz and Fady, 2013; Bianca, 2014). The achievement of the goals and objectives of the company demonstrates operational efficiency and effectiveness in the form of well respond to various situations, as well as to manage resources appropriately and systemize the management and operation professionally (Chaikambang et al., 2012). Consequently, it is the representation of the final process in an operation which leads to the competitive advantage in the long-term and creates organizational opportunities to continue maximizing their profitability, market share, and stakeholder's satisfaction (Deepen et al., 2008; Mohamed, 2008).**Thus, Hypothesis H8 is supported.**

For the control variables, the results indicate that firm age has no statistically significant effects on decision-making success, operational achievement, and firm growth (β_{82}= 0.064, $p > .10$; β_{85}= -0.051, $p > .10$; β_{90} = -0.098, $p > .10$, respectively). Moreover, firm size has no statistically significant effects on decision-making success, operational achievement, and firm growth (β_{32}= -0.044, $p > .10$; β_{44}= 0.059, $p > .10$; β_{48} = 0.044, $p > .10$, respectively). Thus, the consequence relationships of dynamic management accounting orientation are not influenced by firm age and firm size.

The Relationships among the Antecedents, EachDimension of Dynamic Management Accounting Orientation, and Moderating Role of Innovation Culture

Figure 9 illustrates the relationships among five antecedents include: proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure with five dimensions of dynamic management accounting orientation as proposed in Hypotheses 9(a-e) to Hypotheses 13(a-e). The relationship of each hypothesis is proposed in a positive direction. These hypotheses are transformed into the regression equation in Equation 12-16.

Figure 9 The Relationships among the Antecedents, Each Dimension of Dynamic Management Accounting Orientation, and Moderating Role of Innovation Culture

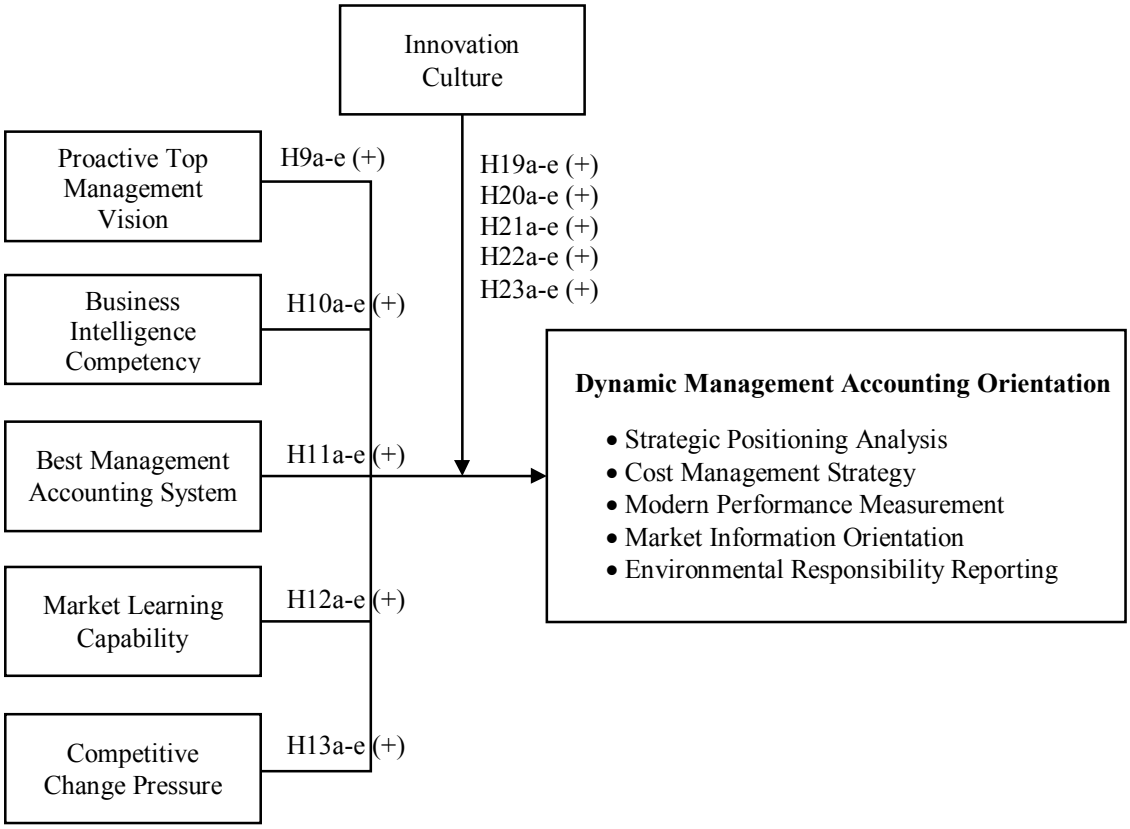


Table 12 shows the correlation coefficients among five antecedents and each dimension of the dynamic management accounting orientation. The results indicate that all antecedents are positively correlated with all dynamic management accounting orientation dimensions. For the first antecedent, proactive top management vision is significantly and positively correlated with strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting ($r = 0.369$, $p < .01$; $r = 0.344$, $p < .01$; $r = 0.511$, $p < .01$; $r = 0.498$, $p < .01$; $r = 0.546$, $p < .01$, respectively). Secondly, business intelligence competence is significantly and positively correlated with strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting ($r = 0.442$, $p < .01$; $r = 0.418$, $p < .01$; $r = 0.522$, $p < .01$; $r = 0.545$, $p < .01$; $r = 0.518$, $p < .01$,

respectively). Thirdly, best management accounting system is significantly and positively correlated with strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting ($r = 0.531$, $p < .01$; $r = 0.466$, $p < .01$; $r = 0.489$, $p < .01$; $r = 0.426$, $p < .01$; $r = 0.482$, $p < .01$, respectively). Fourthly, market learning capability is significantly and positively correlated with strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting ($r = 0.376$, $p < .01$; $r = 0.431$, $p < .01$; $r = 0.472$, $p < .01$; $r = 0.507$, $p < .01$; $r = 0.467$, $p < .01$, respectively). Finally, competitive change pressure is significantly and positively correlated with strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting ($r = 0.334$, $p < .01$; $r = 0.359$, $p < .01$; $r = 0.379$, $p < .01$; $r = 0.581$, $p < .01$; $r = 0.490$, $p < .01$, respectively).

In the part of the correlation coefficients among five antecedences of dynamic management accounting orientation, the results from Table 12 also show that all correlations are less than 0.80. Furthermore, the maximum VIF values of Equation 12 to 21show in Table 13 is 3.101, which is below the cutoff value of 10 (Hair et al., 2010). Consequently, there are no significant multicollinearity problems appearing in this analysis.

Table12 Descriptive Statistics and Correlation Matrix of Antecedences, Dimension of Dynamic Management Accounting Orientation, and Innovation Culture

Variables	SPA	CMS	MPM	MIO	ERR	PTM	BIC	BMS	MLC	CCP	IC	FA	FS
Mean	4.283	4.187	3.837	3.898	3.604	4.014	3.876	4.084	4.082	4.028	4.085	n/a	n/a
Standard Deviation	0.558	0.590	0.622	0.650	0.797	0.664	0.665	0.589	0.587	0.653	0.508	n/a	n/a
Strategic Positioning Analysis (SPA)	1.000												
Cost Management Strategy (CMS)	.584***	1.000											
Modern Performance Measurement (MPM)	.450***	.570***	1.000										
Market Information Orientation (MIO)	.370***	.489***	.570***	1.000									
Environmental Responsibility Reporting (ERR)	.392***	.405***	.603***	.661***	1.000								
Proactive Top Management Vision (PTM)	.369***	.344***	.511***	.498***	.546***	1.000							
Business Intelligence Competency (BIC)	.442***	.418***	.522***	.545***	.518***	.690***	1.000						
Best Management Accounting System (BMS)	.531***	.466***	.489***	.426***	.482***	.591***	.664***	1.000					
Market Learning Capability (MLC)	.376***	.431***	.472***	.507***	.467***	.605***	.593***	.619***	1.000				
Competitive Change Pressure (CCP)	.334***	.359***	.379***	.581***	.490***	.614***	.535***	.478***	.659***	1.000			
Innovation Culture (IC)	.437***	.486***	.597***	.603***	.694***	.639***	.692***	.660***	.621***	.603***	1.000		
Firm Age (FA)	.047	-.045	.020	.056	.109	.034	.063	.086	.034	.044	.040	1.000	
Firm Size (FS)	.038	-.037	.034	.172***	.096	.030	.104	.121**	.058	-.015	.084	.481***	1.000

*** Correlation is significant at the 0.01 level (2-tailed), ** Correlation is significant at the 0.05 level (2-tailed).

Table 13 Result of Regression Analysis for the Effects of the Antecedent and Moderator on Dynamic Management Accounting Orientation

Independent Variables	Dependent Variables									
	SPA		CMS		MPM		MIO		ERR	
	Equation 12	Equation 17	Equation 13	Equation 18	Equation 14	Equation 19	Equation 15	Equation 20	Equation 16	Equation 21
Proactive Top Management Vision (PTM: H9 a-e)	-.018 (.077)	-.009 (.082)	-.071 (.078)	.008 (.082)	**.206** (.074)**	**.222** (.078)**	.047 (.068)	.033 (.070)	.036 (.071)	-.011 (.074)
Business Intelligence Competency (BIC: H10 a-e)	**.145* (.077)**	.126 (.081)	**.151* (.079)**	.114 (.080)	**.207** (.075)**	**.193** (.076)**	**.265*** (.069)**	**.264*** (.070)**	**.147** (.073)**	**.146** (.073)**
Best Management Accounting System (BMS: H11 a-e)	**.415*** (.072)**	**.392*** (.076)**	**.281*** (.074)**	**.249** (.075)**	**.153** (.070)**	**.128* (.072)**	**.129* (.068)**	**.160** (.068)**	-.022 (.064)	.081 (.069)
Market Learning Capability (MLC: H12 a-e)	.001 (.076)	-.012 (.081)	**.162** (.077)**	.060 (.081)	**.152** (.073)**	.089 (.077)	**.360** (.103)**	**.316** (.100)**	**.232** (.072)**	**.196** (.075)**
Competitive Change Pressure (CCP: H13 a-e)	.067 (.071)	.079 (.074)	.083 (.072)	.106 (.073)	-.032 (.069)	.010 (.070)	**.373*** (.063)**	**.434*** (.064)**	**.181** (.067)**	**.175** (.067)**
Moderator: Innovation Culture (IC)		**.103* (.057)**		**.161** (.056)**		**.151** (.054)**		**.117** (.049)**		**.208*** (.052)**
PTM*IC (H19a-e)		.092 (.080)		**.264** (.079)**		**.149** (.067)**		**.155** (.062)**		**.131** (.065)**
BIC*IC (H20a-e)		-.008 (.075)		.047 (.075)		-.004 (.071)		.041 (.065)		.111 (.068)
BMS*IC (H21a-e)		-.098 (.078)		-.123 (.078)		-.065 (.074)		-.071 (.066)		.021 (.071)
MLC*IC (H22a-e)		-.007 (.083)		**.191** (.083)**		**.200** (.079)**		**.161** (.072)**		-.092 (.076)
CCP*IC (H23a-e)		.001 (.071)		.072 (.071)		.065 (.076)		.079 (.069)		-.084 (.073)
Control Variable: Firm Age (FA)	.031 (.113)	.054 (.116)	-.106 (.115)	-.022 (.115)	-.018 (.109)	.044 (.109)	-.132 (.101)	-.079 (.100)	.113 (.107)	.112 (.105)
Firm Size (FS)	-.066 (.115)	-.084 (.116)	-.134 (.117)	-.161 (.115)	-.034 (.111)	-.084 (.109)	.082 (.068)	.058 (.071)	.064 (.108)	.038 .105
Adjusted R^2	**.283**	**.282**	**.256**	**.297**	**.332**	**.363**	**.430**	**.456**	**.365**	**.409**
Maximum VIF	**2.449**	**3.101**	**2.449**	**3.101**	**2.449**	**3.101**	**2.449**	**3.101**	**2.449**	**3.101**

Beta coefficients with standard in parenthesis, *** p < 0.01, ** p < 0.05, * p < 0.1

The results of the OLS regression analysis are described in table 13 as follows. Firstly, the results demonstrate positive and significant relationship between proactive top management vision (the first antecedent) and modern performance measurement (β_{106} = 0.206, p < .05). The result is in line with prior research found that proactive vision helps to complement innovativeness by creating the initiatives in management and encouraging collective solve problem in novel ways (Haeckel, 2004). Top management teams of firms that rely on adaptability and readiness to attain growth, innovation, and creativity tend to be associated with a greater diversity of performance measurement (Henri, 2006b).Therefore it can be concluded that proactive top management vision in a positive direction, which in turn impacted modern performance measurement in a positive direction. **Thus, hypothesis 9c is supported.** However, the interesting aspect of this finding are non-significant results in the relationship among proactive top management vision and four dimensions of dynamic management accounting orientation: strategic positioning analysis (β92 = -0.018, p > .10), cost management strategy (β99 = -0.071, p > .10), market information orientation (β113 = 0.047, p > .10), environmental responsibility reporting (β120 = 0.036, p > .10). This evidence show that proactive top management vision did not increase strategic positioning analysis, cost management strategy, market information orientation, and environmental responsibility reporting in the organization. The reasons for this unanticipated finding may be related to the development and design of management accounting system which cannot directly be influenced by top management team vision. The previous study found that top management team heterogeneity (consists of managers with varying backgrounds and competencies, systematically varies with the organization's inclination and ability to engage in strategic change) has no significant influence on the broad-scope design of management accounting system. Especially, broad scope design of management accounting system which is crucial for managerial decision making when organizations are facing complex situations, high environmental dynamism and strategic uncertainty (Naranjo-Gil and Hartmann, 2007). **Thus, hypotheses 9a, 9b, 9d, and 9e are not supported.**

Secondly, the results also show that business intelligence competency (the second antecedent) has significant positive effects on all dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{93} = 0.145, p < .10),

cost management strategy (β_{100} = 0.151, p < .10), modern performance measurement (β_{107} = 0.207, p < .05), market information orientation (β_{117} = 0.265, p < .01), and environmental responsibility reporting (β_{121} = 0.147, p < .05). It can be seen that firms with more business intelligence competency will be increasingly strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. The finding of this study was in line with previous studies which stated that business intelligence system could enhance the capability of dynamic accounting information system (Prasad and Green, 2015). Moreover, business intelligence competency has typically been associated with collecting, integrating, analyzing, and presentation of business information (Elbashir et al., 2008). It helps management accounting system to provide efficient information and support decision-making in business activities related to the business environment, the organization itself, the market situation, customers, and competitors (Tamandeh, 2016).**Therefore, hypotheses 10a, 10b, 10c, 10d, and 10e are supported.**

Thirdly, the findings demonstrate that best management accounting system (the third antecedent) has significant positive effects on four dimension of dynamic management accounting orientation; strategic positioning analysis (β_{94} = 0.415, p < .01), cost management strategy (β_{101} = 0.281, p < .01), modern performance measurement (β_{108} = 0.153, p < .05), and market information orientation (β_{115} = 0.129, p < .10).As predicted in hypothesis H11a, 11b, 11c,and 11d, the findings reveal that higher best management accounting system will be increasingly strategic positioning analysis, cost management strategy, modern performance measurement, and market information orientation. This is consistent with the evidence from previous studies, which indicated that the effectiveness of management accounting system leading to an increase in the effective performance measures, more accurate cost data analysis, and corporate practice efficiency (Lata and Ussahawanitchakit, 2015). In addition, management accounting system effectiveness which comprises of information quality and system quality create an information context that could be useful for strategic sense-making (Heidmann et al., 2008). Moreover, best management accounting system has a positive significance on modern managerial accounting capability, which is the ability of organizations to adopt new methods of management accounting to their goals in a dynamic business environment (Jantarajaturapath et al., 2017). **Therefore, hypotheses**

11a, 11b, 11c, and 11d are supported. On the other hand, the finding shows non-significant result between best management accounting systemand environmental responsibility reporting (β_{122} = -0.022, p > .10). This result means that best management accounting system may not directly affect environmental responsibility reporting. Although, best management accounting system is an important source support managerial accounting capability (Jantarajaturapath et al., 2017). One reason for this finding may be the lack of guidance on environmental management accounting. Prior research found that absence of guidance on environmental management accounting is one of the root causes of barriers to the integration of environmental issues into accounting systems in Thailand, which is difficult for management accounting system to effectively collect, identify, analyze and evaluate environment-related data (Setthasakko, 2010). This may result in restrictions on environmental responsibility reporting. **Therefore, hypotheses 11e is not supported.**

Fourthly, the finding illustrate that market learning capability (the fourth antecedent) has significant relationships with cost management strategy (β_{102}= 0.162, p < .05), modern performance measurement (β_{109} = 0.152, p < .05), market information orientation (β_{116} = 0.360, p < .05), and environmental responsibility reporting (β_{123} = 0.232, p < .05). The positive direction of these relationships mean that increased market learning capability will result in increased cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. Consistent with the management accounting literature, market-focused learning can drive organizational market orientation (Cillo, 2003). It holds that planning and coordination of all company activities are focused on the primary goal of satisfying customer needs (Jiménez-Jiménez and Cegarra-Navarro, 2007). Consequently, organizations are more likely to use cost management strategy to improve productivity and cost savings to meet customer satisfaction (Kumar and Nagpal, 2011). In addition, organizations pursuing market-oriented trend to use modern performance measurement (multi-dimensional measurement system include: financial and non-financial measure) to provide useful information that helps organizations to offer products/services to meet customers' needs and achieve high performance (Mohamed, 2014).Furthermore, Guilding and McManus (2002) found a positive relationship between market orientation and the application of market-oriented accounting in term of customer accounting.

Moreover, prior research found that market orientation impacts environmental performance through green supply chain management practices (Green et al., 2015). Accordingly, firms with a market learning capability and strong market orientation will be quick to implement environmental sustainability programs and report output to support such practices and lead to high performance. **Therefore, hypotheses 12b, 12c, 12d, and 12e are supported.** On the other hand, the unexpected research finding shows a non-significant relationship between market learning capability and strategic positioning analysis (β_{95} = 0.001, p > .10). This finding implies that market learning orientation did not increase strategic positioning analysis in the organization. Some previous research stated that there is no relationship between market-oriented and strategic management accounting (Cadez and Guilding, 2008). The explanation from previous research suggested that it is possible that manufacturing firm with market orientation has started emphasizing in high productivity and reducedcost to meet customer needs along with maximizing profitability. Therefore, market learning capability can drive another dynamic management accounting dimension more than strategic positioning analysis. **Thus, hypothesis 12ais not supported.**

Finally, the finding shows that competitive change pressure (the fifth antecedent) has positive significant effects on market information orientation (β_{117} = 0.373, p < .01), and environmental responsibility reporting (β_{124} = 0.181, p < .05). These results mean that higher competitive change pressure has affected more market information orientation and environmental responsibility reporting. The finding is in line with previous studies (Guilding and McManus, 2002; Malinic et al., 2012). Their studies found that higher competition intensity could increase demand for market-oriented accounting such as customer accounting and competitor accounting to provide information about customer's cost and revenue, as well as the estimation of amount and structure of competitor's costs in order to do business more effectively and produce higher value for customers in relation to other companies. **Thus, hypothesis 13d is supported.**
In addition, firms in more competitive business environments have more incentives to invest in corporate environmental responsibility because it could actually help firms to build a good reputation, attract consumers, and reduce costs, and create new market opportunities, thereby achieving competitive advantage and increasing profitability (Meng et al., 2016). As a result, it can be concluded that firm with high competitive

change pressure would be increasingly environmental responsibility reporting. **Therefore, hypothesis 13e is supported.**

Interestingly, competitive change pressure has no significant effects on strategic positioning analysis (β_{96} = 0.067, p > .10), cost management strategy (β_{103} = 0.083, p > .10), modern performance measurement (β_{110} = -0.032, p > .10).These results fail to accept hypotheses 13a - 13c which posits that high competitive change pressure will be increasingly strategic positioning analysis, cost management strategy, and modern performance measurement. Williams and Seaman (2001) and Waweru and Uliana (2005) arrived at similar conclusions. Their studies had proven that intense competition was not correlated with changes in management accounting that covered strategic planning, performance measurement, and costing system into the advanced approach. They explained that the inconsistency result mightbecome from the use of contingency theory in management accounting change research. It is not clear whether competition intensity, which is called contingent variables, affected management accounting directly or through the impact on the organizational structure (include organizational culture). Moreover, the empirical evidence research stated that the competitive intensity has an indirect effect on management accounting change through the organizational structure (Waweru,2008). As a result, it can conclude that there are no significant relationships among competitive change pressure and strategic positioning analysis, cost management strategy, and modern performance measurement. **Thus, hypotheses 13a, 13b, 13c are not supported.**

The Moderating Role of Innovation Culture

As shown in Table 13, the moderating effect of innovation culture on the relationships among antecedents and each dimension of dynamic management accounting orientation elaborated as follows. Firstly, the results demonstrate that innovation culture has positive significant effect on the relationship between proactive top management vision (the first antecedent) and four dimensions of dynamic management accounting: cost management strategy (β_{146} = 0.264, p < .05), modern performance measurement (β_{159} = 0.149, p < .05), market information orientation (β_{172} = 0.155, p < .05), and environmental responsibility reporting (β_{185} = 0.131, p < .05). These findings imply that the effect of proactive top management vision on cost management

strategy, modern performance measurement, market information orientation, and environmental responsibility reporting would be stronger when the level of innovative culture is higher. This support previous research, stronger innovative culture enhances the effect of transformational leadership on technological innovation to strengthen customer value (Chen et al., 2012), which technological innovation correspond to cost management strategy, modern performance measurement, and market information orientation in this research. In addition, innovation culture is able to promote a positively innovative attitude for the manager to adopt unique and sophisticated cost accounting systems for management more than local culture (Nagirikandalage and Binsardi, 2017). Moreover, innovation culture as an important context to support creating a new concept of environmental management for business sustainability and is also associated with the implementation of a corporate sustainability strategy (Van Bommel, 2011). **Thus, hypotheses 19b, 19c, 19d, and 19e are supported.** On the other hand, innovation culture does not moderate the relationship between proactive top management vision and strategic positioning analysis (β_{133} = 0.092, p > .10). It is possible that the moderating role of innovation culture has been reduced when top management vision focuses on cost leadership strategy. A firm that pursuing a cost leadership strategy does not concentrate on innovation to achieve competitive advantage(Chang et al., 2015). Thus it causes the vision of top management in such firm does not place a high emphasis on innovation to supported management accounting system to provide necessary information for the formulation and implementation strategies to achieve competitive advantage. **Therefore, hypothesis 19a is not supported.**

Secondly, innovation culture has no significant moderating effects on the relationship between business intelligence competency (the second antecedent) and all dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{134} = -0.008, p > .10), cost management strategy (β_{147} = 0.047, p > .10), modern performance measurement (β_{160} = -0.004, p > .10), market performance measurement (β_{173} = 0.041, p > .10), and environmental responsibility reporting (β_{186} = 0.111, p > .10). Although innovation culture influences employees' behavior to accept innovation as a fundamental value of the organization and lead them open to new ideas (Acur et al., 2010) which support business intelligence competency. However, innovative culture may be inhibited by hierarchical organizational structure which is a

barrier to information flow, sharing of new knowledge, and participation (Naranjo-Valencia et al., 2016). Thus it causes innovation culture does not moderate the relationships between business intelligence competency and dynamic management accounting orientation's dimensions. **Therefore, hypotheses 20a, 20b, 20c, 20d, and 20e are not supported.**

Thirdly, innovation culture failed to illustrate the significant moderating effect on the relationships among best management accounting system (the third antecedent) and all of five dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{135} = -0.098, p > .10), cost management strategy (β_{148} = -0.123, p > .10), modern performance measurement (β_{161} = -0.065, p > .10), market performance measurement (β_{174} = -0.071, p > .10), and environmental responsibility reporting (β_{187} = 0.021, p > .10). The result indicates innovation culture does not increase the information about accounting management for leading to the support of the dynamic management accounting orientation. Appropriate management accounting system does not rely on advance technique form innovation but depend on using the sophisticated technique in line with circumstances (Tillema, 2005). Thus innovation culture does not effect the relationships between best management accounting system and all five dimensions of dynamic management accounting orientation. **Therefore, hypotheses 21a, 21b, 21c, 21d, and 21e are not supported.**

Fourth, innovation culture shows a moderating role on the relationship between market learning capability (the fourth antecedent) and three dimensions of dynamic management accounting orientation: cost management strategy (β_{149} = 0.191, p < .05), modern performance measurement (β_{162} = 0.200, p < .05), and market performance measurement (β_{175} = 0.161, p < .05). These findings are consistent with prior research which notes a positive association between market orientation and the application of management accounting techniques that cover strategic cost management, and integrated performance measurement (Cadez and Guilding, 2008). Moreover, firms should have the ability to engage in organizational learning processes to reach long-term operational competency, by encouraging innovation, particularly within dynamic business environments (Farrell, 2000). Therefore, these findings imply that market learning under innovation culture can enlarge dynamic management accounting in the dimension of cost management strategy, modern performance measurement, and market

information orientation. **Hypotheses 22b, 22c, and 22d are supported.** However, innovation culture failed to illustrate the significant moderating effect on the relationships among market learning capability, strategic positioning analysis (β_{136} = -0.007, p > .10), and environmental responsibility reporting (β_{188} = -0.092, p < .10).This finding can be explained by the fact that although organizations in Thailand have a clear vision of innovation. However, it is unclear whether the organization's strategy and innovation goals will lead to real implementation. Therefore, innovation culture insufficiently moderates the relationship between market learning capability ability and strategic positioning analysis. Moreover, due to the lack of environmental accounting guidance in Thailand, it is difficult for innovation culture to moderate the relationship between market learning capability and environmental responsibility reporting (Setthasakko, 2010). **Thus, hypotheses 22a and 22e are not supported**.

Likewise, in hypotheses 23a to 23e, the non-significant moderating effects of innovation culture are also found on the relationships between competitive change pressure (the fifth antecedent) and all dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{137} = 0.001, p > .10), cost management strategy (β_{150} = 0.072, p > .10), modern performance measurement (β_{163} = 0.065, p > .10), market performance measurement (β_{176} = 0.079, p > .10), and environmental responsibility reporting (β_{189} = -0.084, p > .10). It is possibly stated that although in management accounting literature indicated that both innovation culture and competitive change pressure are important factors that influence the ability of the firm to design and implement a management accounting system (Erserim, 2012; Williams and Seaman, 2001). Internal organizational determinants may limit its effects on external industry variables (Calantone et al., 2002). Thus it causes the moderating effects of innovation culture on the relationships between competitive change pressure and dynamic management accounting orientation's dimensions were not significant. **Therefore, hypotheses 23a, 23b, 23c, 23d, and 23e are not supported.** For the control variables, firm age has no significant influences on the moderating effect of innovation culture on the relationship among five antecedents and dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{138} = 0.054, p > .10), cost management strategy (β_{151} =-0.022, p > .10), modern performance measurement (β_{164} = 0.044, p > .10), market performance measurement (β_{177} = -0.079,

p > .10), and environmental responsibility reporting (β_{190} = 0.112, p > .10). Moreover, firm size also illustrates no significant influences on the moderating effect of innovation culture on the relationship among five antecedents and dimensions of dynamic management accounting orientation: strategic positioning analysis (β_{139} = -0.084, p > .10), cost management strategy (β_{152} = -0.161, p > .10), modern performance measurement (β_{165} = -0.084, p > .10), market performance measurement (β_{178} = 0.058, p > .10), and environmental responsibility reporting (β_{191} = 0.038, p > .10). Thus, the moderating effect of innovation culture on the relationships among five antecedents and dynamic management accounting orientation's dimensions are not influenced by firm age and firm size.

Summary

In this chapter, descriptive statistics for respondent characteristics and sample characteristics were reported. The multiple regression analysis and specific correlation analysis were used to test the hypotheses developed in the study, as well as to investigate the relationships among the variables. The results revealed that three dimensions of dynamic management accounting orientation include: strategic positioning analysis, cost management strategy, and market information orientation have a strong positive impact on its all consequences (managerial information usefulness, decision-making success, operational goal achievement, and firm growth). While the third dimension, modern performance measurement has a partially positive effect on its all consequences except on managerial information usefulness. Interestingly, the last dimension, environmental responsibility reporting is not significant to all consequences. In addition, managerial information usefulness, decision-making success, and operational goal achievement have a strong positive impact on firm growth.

In the antecedent factors, business intelligence competency is the majority influential determinants of five dimensions of dynamic management accounting orientation. In addition, best management accounting system and market learning capability have positive significant on four dimensions except on environmental responsibility and strategic positioning analysis, respectively. Meanwhile, market learning capability has positive effects on market information orientation and environmental

responsibility reporting. And proactive top management vision has an only positive effect on market performance measurement.

The results of moderate effects of knowledge management intention show that knowledge management intention plays the mediating role on the relation between four dimensions of dynamic management accounting orientation (strategic positioning analysis, modern performance measurement, market information orientation, and environmental responsibility reporting)and its consequences. Meanwhile, innovation culture plays the mediating role on the relation between two antecedents (proactive top management vision and market learning capability) and five dimensions of dynamic management accounting orientation.

In conclusion, Hypotheses 1, 2, 3, 4, 6, 7, 8, 10 and 16 are supported, Hypotheses 9, 11, 12, 13, 14, 17, 18, 19,21, and 22 are partially supported, and Hypotheses 5, 15, 20, 21 and 23 are not supported. The summary of the hypotheses testing results is shown in Table 14.The implications of these results, the contributions, limitations, and further research are discussed in greater details in the next chapter.

Table 14 The Results Summary of Hypotheses Testing

Hypotheses	**Description of Hypothesized Relationships**	**Results**
H1a	The higher the strategic positioning analysis is, the more likely that firms will gain greater managerial information usefulness.	Supported
H1b	The higher the strategic positioning analysis is, the more likely that firms will gain greater decision-making success.	Supported
H1c	The higher the strategic positioning analysis is, the more likely that firms will gain greater operational goal achievement.	Supported
H1d	The higher the strategic positioning analysis is, the more likely that firms will gain greater firm growth.	Supported
H2a	The higher the cost management strategy is, the more likely that firms will gain greater managerial information usefulness.	Supported
H2b	The higher the cost management strategy is, the more likely that firms will gain greater decision-making success.	Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H2c	The higher the cost management strategy is, the more likely that firms will gain greater operational goal achievement.	Supported
H2d	The higher the cost management strategy is, the more likely that firms will gain greater firm growth.	Supported
H3a	The higher the modern performance measurement is, the more likely that firms will gain greater managerial information usefulness.	Not Supported
H3b	The higher the modern performance measurement is, the more likely that firms will gain greater decision-making success.	Supported
H3c	The higher the modern performance measurement is, the more likely that firms will gain greater operational goal achievement.	Supported
H3d	The higher the modern performance measurement is, the more likely that firms will gain greater firm growth.	Supported
H4a	The higher the market information orientation is, the more likely that firms will gain greater managerial information usefulness.	Supported
H4b	The higher the market information orientation is, the more likely that firms will gain greater decision-making success.	Supported
H4c	The higher the market information orientation is, the more likely that firms will gain greater operational goal achievement.	Supported
H4d	The higher the market information orientation is, the more likely that firms will gain greater firm growth.	Supported
H5a	The higher the environmental responsibility reporting is, the more likely that firms will gain greater managerial information usefulness.	Not Supported
H5b	The higher the environmental responsibility reporting is, the more likely that firms will gain greater decision-making success.	Not Supported
H5c	The higher the environmental responsibility reporting is, the more likely that firms will gain greater operational goal achievement.	Not Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H5d	The higher the environmental responsibility reporting is, the more likely that firms will gain greater firm growth.	Not Supported
H6a	The higher the managerial information usefulness is, the more likely that firms will gain greater decision-making success.	Supported
H6b	The higher the managerial information usefulness is, the more likely that firms will gain greater firm growth.	Supported
H7a	The higher the decision-making success is, the more likely that firms will gain greater operational goal achievement.	Supported
H7b	The higher the decision-making success is, the more likely that firms will gain greater firm growth.	Supported
H8	The higher the operational goal achievement is, the more likely that firms will gain greater firm growth.	Supported
H9a	The higher the proactive top management vision is, the more likely that firms will gain greater strategic positioning analysis.	Not supported
H9b	The higher the proactive top management vision is, the more likely that firms will gain greater cost management strategy.	Not supported
H9c	The higher the proactive top management vision is, the more likely that firms will gain greater modern performance measurement.	Supported
H9d	The higher the proactive top management vision is, the more likely that firms will gain greater market information orientation.	Not supported
H9e	The higher the proactive top management vision is, the more likely that firms will gain greater environmental responsibility reporting.	Not supported
H10a	The higher the business intelligence competency is, the more likely that firms will gain greater strategic positioning analysis.	Supported
H10b	The higher the business intelligence competency is, the more likely that firms will gain greater cost management strategy.	Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H10c	The higher the business intelligence competency is, the more likely that firms will gain greater modern performance measurement.	Supported
H10d	The higher the business intelligence competency is, the more likely that firms will gain greater market information orientation.	Supported
H10e	The higher the business intelligence competency is, the more likely that firms will gain greater environmental responsibility reporting.	Supported
H11a	The higher the best management accounting system is, the more likely that firms will gain greater strategic positioning analysis.	Supported
H11b	The higher the best management accounting system is, the more likely that firms will gain greater cost management strategy.	Supported
H11c	The higher the best management accounting system is, the more likely that firms will gain greater modern performance measurement.	Supported
H11d	The higher the best management accounting system is, the more likely that firms will gain greater market information orientation.	Supported
H11e	The higher the best management accounting system is, the more likely that firms will gain greater environmental responsibility reporting.	Not Supported
H12a	The higher the market learning capability is, the more likely that firms will gain greater strategic positioning analysis.	Not Supported
H12b	The higher the market learning capability is, the more likely that firms will gain greater cost management strategy.	Supported
H12c	The higher the market learning capability is, the more likely that firms will gain greater modern performance measurement.	Supported
H12d	The higher the market learning capability is, the more likely that firms will gain greater market information orientation.	Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H12e	The higher the market learning capability is, the more likely that firms will gain greater environmental responsibility reporting.	Supported
H13a	The higher the competitive change pressure is, the more likely that firms will gain greater strategic positioning analysis	Not Supported
H13b	The higher the competitive change pressure is, the more likely that firms will gain greater cost management strategy.	Not Supported
H13c	The higher the competitive change pressure is, the more likely that firms will gain greater modern performance measurement.	Not Supported
H13d	The higher the competitive change pressure is, the more likely that firms will gain greater market information orientation.	Supported
H13e	The higher the competitive change pressure is, the more likely that firms will gain greater environmental responsibility reporting.	Supported
H14a	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and managerial information usefulness.	Supported
H14b	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and decision-making success.	Not Supported
H14c	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and operational goal achievement.	Supported
H14d	Knowledge management intention will positively moderate the relationships between strategic positioning analysis and firm growth.	Supported
H15a	Knowledge management intention will positively moderate the relationships between cost management strategy and managerial information usefulness.	Not Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H15b	Knowledge management intention will positively moderate the relationships between cost management strategy and decision-making success.	Not Supported
H15c	Knowledge management intention will positively moderate the relationships between cost management strategy and operational goal achievement.	Not Supported
H15d	Knowledge management intention will positively moderate the relationships between cost management strategy and firm growth.	Not Supported
H16a	Knowledge management intention will positively moderate the relationships between modern performance measurement and managerial information usefulness.	Supported
H16b	Knowledge management intention will positively moderate the relationships between modern performance measurement and decision-making success.	Supported
H16c	Knowledge management intention will positively moderate the relationships between modern performance measurement and operational goal achievement.	Supported
H16d	Knowledge management intention will positively moderate the relationships between modern performance measurement and firm growth.	Supported
H17a	Knowledge management intention will positively moderate the relationships between market information orientation and managerial information usefulness.	Not Supported
H17b	Knowledge management intention will positively moderate the relationships between market information orientation and decision-making success.	Not Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H17c	Knowledge management intention will positively moderate the relationships between market information orientation and operational goal achievement.	Not Supported
H17d	Knowledge management intention will positively moderate the relationships between market information orientation and firm growth.	Supported
H18b	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and decision-making success.	Not Supported
H18c	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and operational goal achievement.	Not Supported
H18d	Knowledge management intention will positively moderate the relationships between environmental responsibility reporting and firm growth.	Supported
H19a	Innovation culture will positively moderate the relationships between proactive top management vision and strategic positioning analysis.	Not Supported
H19b	Innovation culture will positively moderate the relationships between proactive top management vision and cost management strategy.	Supported
H19c	Innovation culture will positively moderate the relationships between proactive top management vision and modern performance measurement.	Supported
H19d	Innovation culture will positively moderate the relationships between proactive top management vision and market information orientation.	Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H19e	Innovation culture will positively moderate the relationships between proactive top management vision and environmental responsibility reporting.	Supported
H20a	Innovation culture will positively moderate the relationships between business intelligence competency and strategic positioning analysis.	Not Supported
H20b	Innovation culture will positively moderate the relationships between business intelligence competency and cost management strategy.	Not Supported
H20c	Innovation culture will positively moderate the relationships between business intelligence competency and modern performance measurement.	Not Supported
H20d	Innovation culture will positively moderate the relationships between business intelligence competency and market information orientation.	Not Supported
H20e	Innovation culture will positively moderate the relationships between business intelligence competency and environmental responsibility reporting.	Not Supported
H21a	Innovation culture will positively moderate the relationships between best management accounting system and strategic positioning analysis.	Not Supported
H21b	Innovation culture will positively moderate the relationships between best management accounting system and cost management strategy.	Not Supported
H21c	Innovation culture will positively moderate the relationships between best management accounting system and modern performance measurement.	Not Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H21d	Innovation culture will positively moderate the relationships between best management accounting system and market information orientation.	Not Supported
H21e	Innovation culture will positively moderate the relationships between best management accounting system and environmental responsibility reporting.	Not Supported
H22a	Innovation culture will positively moderate the relationships between market learning capability and strategic positioning analysis.	Not Supported
H22b	Innovation culture will positively moderate the relationships between market learning capability and cost management strategy.	Supported
H22c	Innovation culture will positively moderate the relationships between market learning capability and modern performance measurement.	Supported
H22d	Innovation culture will positively moderate the relationships between market learning capability and market information orientation.	Supported
H22e	Innovation culture will positively moderate the relationships between market learning capability and environmental responsibility reporting.	Not Supported
H23a	Innovation culture will positively moderate the relationships between competitive change pressure and strategic positioning analysis.	Not Supported
H23b	Innovation culture will positively moderate the relationships between competitive change pressure and cost management strategy.	Not Supported

Table 14 The Results Summary of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H23c	Innovation culture will positively moderate the relationships between competitive change pressure and modern performance measurement.	Not Supported
H23d	Innovation culture will positively moderate the relationships between competitive change pressure and market information orientation.	Not Supported
H23e	Innovation culture will positively moderate the relationships between competitive change pressure and environmental responsibility reporting.	Not Supported

CHAPTER V

CONCLUSION

The previous chapter has examined the outcome of the data and hypotheses testing. This chapter provides the overview of all findings, including the summary of the findings and hypothesis testing, contributions to the theoretical knowledge and also a contribution to practice, research limitations, and further research that could be extended.

This research investigates the effect of dynamic management accounting orientation on managerial information usefulness, decision-making success, operational goal achievement, and firm growth of food businesses in Thailand. Besides, proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure are assigned as the antecedents of dynamic management accounting orientation. In addition, the moderating effect of knowledge management intention and innovation culture is also examined. Meanwhile, knowledge management intention is designed to moderate the relationships among five dimensions of dynamic management accounting orientation, managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Innovation culture is designed to moderate the relationships among the antecedents and each dimension of dynamic management accounting orientation.

The key research question of this research is “how does dynamic management accounting orientation affect firm growth?” In details, there are seven specific research questions as follows: 1) How does each dimension of dynamic management accounting orientation affect managerial information usefulness, decision-making success, operational goal achievement, and firm growth? 2) How doesmanagerial information usefulness influence on decision-making success and firm growth? 3) How does decision-making success influence on operational goal achievement and firm growth? 4) How does operational goal achievement affect firm growth? 5) How do proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure affect each dimension of dynamic management accounting orientation? 6) How does knowledge management intention moderate the relationships among each dimension of dynamic management accounting

and managerial information usefulness, decision-making success, operational goal achievement, and firm growth? 7) How does innovation culture moderate the relationships among proactive top management vision, business intelligence competency, best management accounting system, market learning capability, competitive change pressure, and each dimension of dynamic management accounting orientation?

The conceptual framework of this research was supported by two theories, including dynamic capability theory and contingency theory. Dynamic capability theory is used to describe the phenomena of the relationship of dynamic management accounting orientation dimensions which affects its consequence and firm growth. The contingency theory is used to describe the five antecedents of and two moderators chosen in the conceptual framework. For research investigation, food businesses in Thailand were selected as the research population due to the concern of dynamic managerial accounting orientation for the adaptability of the firm. The sample of this investigation was selected from the database of the Department of Business Development, the Ministry of Commerce of Thailand on its website, http://www.dbd.go.th.As of April 1, 2017. Data were collected by mail questionnaire,and 1,485 questionnaires were sent to the accounting executive (e.g., accounting director, accounting manager, and chief accountant) as the key informant. The mail survey resulted in 20.15% response rate. For statistical analysis, multiple regression analysis is used to analyze the data.

Summary of Results

The results of hypotheses testing demonstrated that a majority of the hypotheses was partially supported. The results of each hypothesis according to specific research questions are summarized and shown in Table 15 and Figure 10.

According to the first specific research question, the results indicate that strategic positioning analysis, cost management strategy, and market information orientation have positive relationships with all of its consequences, inculding managerial information usefulness, decision-making success, operational goal achievement, and firm growth. Meanwhile, modern performance measurement has positive relationships with decision-making success, operational goal achievement, and firm growth. Surprisingly, environmental responsibility reporting does not significantly

influence all of its consequences. Thus, the relationships among each dimension of dynamic management accounting orientation and its consequences based on Hypotheses 1-5,are partially supported.

For the second specific research question, the finding showed that managerial information usefulness positively influences decision-making success and firm growth. In the third specific research question, the findings illustrated that decision-making success has positively affected operational goal achievement and firm growth. Moreover, for the fourth specific research question, the result indicated that operational goal achievement has a strongly positive effect on firm growth. Therefore, Hypotheses 6-8 are fully supported.

For the fifth specific research question, the relationships among the antecedents and dynamic management accounting orientation, the finding shows that proactive top management vision has a significant positive effect on only modern performance measurement. Meanwhile, business intelligence competency has a significant positive effect on all dynamic management accounting orientation dimensions. Additionally, best management accounting systemhas a positive effect on all dimensions except on environmental responsibility reporting. Also, market learning capability has positive influences on all dimensions except strategic positioning analysis. Moreover, competitive change pressure has positive influences on market information orientation and environmental responsibility reporting. Therefore, Hypotheses 9-13 are partially supported.

According to the six specific research questions, the finding also illustrated the moderating role of knowledge management intention; it found that knowledge management intention has significant moderating effects on the relationships among strategic positioning analysis, modern performance measurement, market information orientation, environmental responsibility reporting and all of its consequences. Hence, Hypotheses 14 to 18 are partially supported.

For the seventh specific research question, the result shows that innovation culture plays a significant moderating role on the relationships among proactive top management vision, market learning capability, and four dimensions of dynamic management accounting orientation (cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting). Hence, hypotheses 19 to 23are partially supported.

Table 15 Summary of Results in All Research Questions

Research Questions	Hypotheses	Results	Conclusions
Specific Research Question			
(1) How does each dimension of dynamic management accounting orientationhavea effect on managerial information usefulness, decision-making success, operational goal achievement, andfirm growth?	H1a-d	- Strategic positioning analysis has strong positive effects on managerial information usefulness, decision-making success, operational goal achievement, and firm growth.	Partially Supported
	H2a-d	- Cost management strategy positively influences on managerial information usefulness, decision-making success, operational goal achievement, and firm growth.	
	H3a-d	- Modern performance measurement positively affects decision-making success, operational goal achievement, and firm growth.	
	H4a-d	- Market information orientation has positive effects on managerial information usefulness, decision-making success, operational goal achievement, and firm growth.	
	H5a-d	- Environmental responsibility reporting does not influence all consequences and firm growth.	

Table 15 Summary of Results in All Research Questions (continued)

Research Questions	Hypotheses	Results	Conclusions
(2) How does managerial information usefulness influence on decision-making success and firm growth?	H6a-b	- Managerial information usefulness has positive influences on decision-making success and firm growth.	Fully Supported
(3) How does decision-making success influence on operational goal achievement and firm growth?	H7a-b	- Decision-making success has positive effects on operational goal achievement and firm growth.	Fully Supported
(4) How does operational goal achievement affect firm growth?	H8	- Operational goal achievement has a positive effect on firm growth.	Fully Supported
(5) How do proactive top management vision, business intelligence competency, best management accounting system, market learning capability, and competitive change pressure affect each dimension of dynamic management accounting orientation?	H9a-e H10a-e	- Proactive top management vision has positive influences on market information orientation, and environmental responsibility reporting. - Business intelligence competency has positive effects on strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting.	Partially Supported

Table 15 Summary of Results in All Research Questions (continued)

Research Questions	Hypotheses	Results	Conclusions
	H11a-e	- Best management accounting system has positive influences on strategic positioning analysis, cost management strategy, modern performance measurement, and environmental responsibility reporting.	
	H12a-e	- Market learning capability has positive effects on cost management strategy and modern performance measurement.	
	H13a-e	- Competitive change pressure has positive effects on market information orientation, and environmental responsibility reporting.	
(6) How does knowledge management intention moderate the relationships among each dimension of dynamic management accounting and managerial information usefulness, decision-making success, operational goal achievement, and firm growth?	H14a-d	- Knowledge management intention positively and significantly moderates the relationships between strategic positioning analysis (dimension 1) and operational goal achievement, and firm growth.	Partially Supported

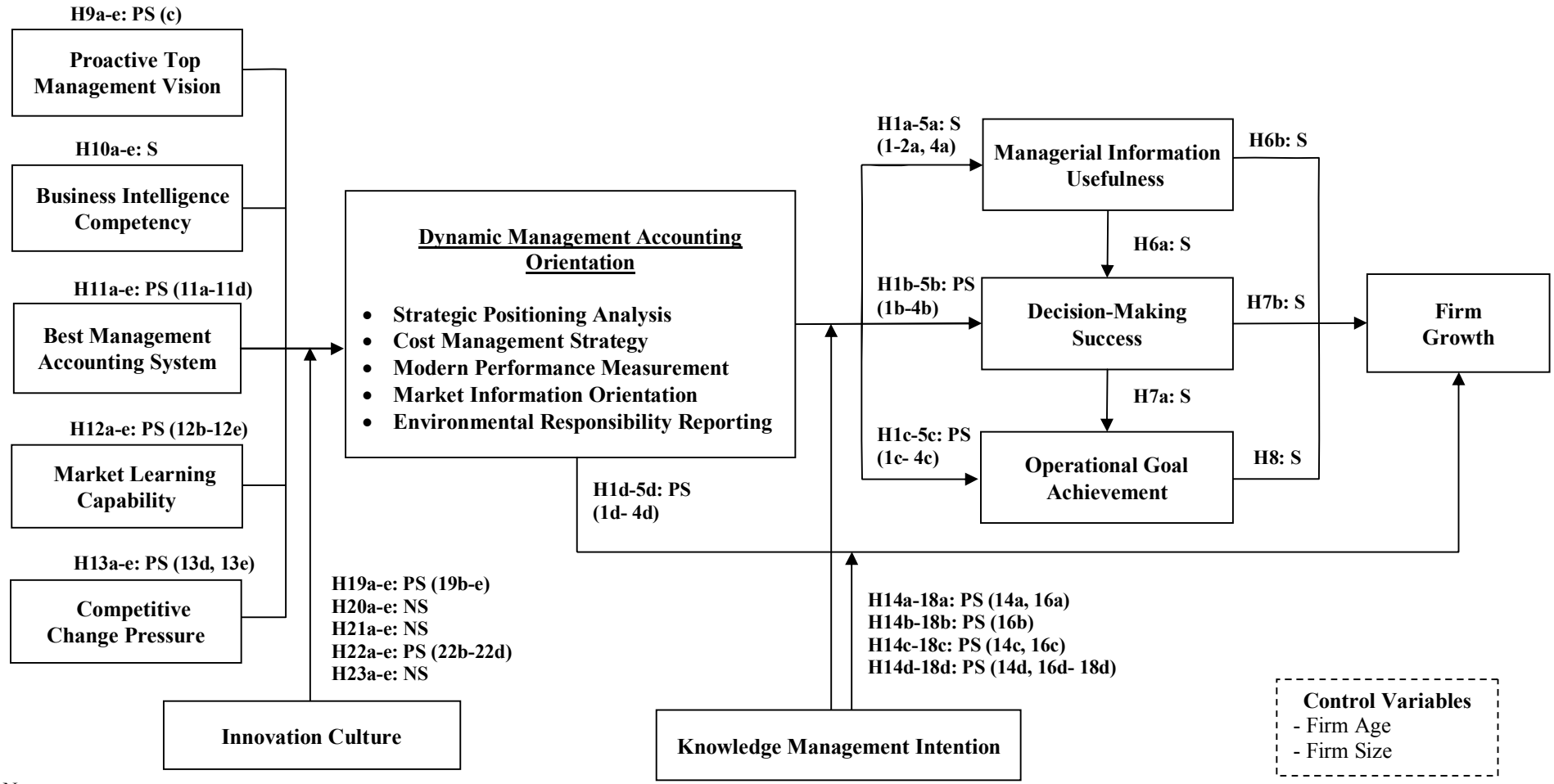
Table 15 Summary of Results in All Research Questions (continued)

Research Questions	Hypotheses	Results	Conclusions
	H15a-d	- Knowledge management intention does not affect relationships between cost management strategy (dimension 2) and all consequences.	
	H16a-d	- Knowledge management intention positively and significantly moderates the relationships between modern performance measurement (dimension 3) and managerial information usefulness, decision-making success, operational goal achievement, and firm growth.	
	H17a-d	- Knowledge management intention positively and significantly moderates the relationships between market information orientation (dimension 4) and firm growth.	
	H18a-d	- Knowledge management intention positively and significantly moderates the relationships between environmental responsibility reporting (dimension 4) and managerial information usefulness, and firm growth.	

Table 15 Summary of Results in All Research Questions (continued)

Research Questions	Hypotheses	Results	Conclusions
(7) How does innovation culture moderate the relationships among proactive top management vision, business intelligence competency, best management accounting system, market learning capability, competitive change pressure, and each dimension of dynamic management accounting orientation?	H19a-e	- Innovation culture positively and significantly moderates the relationships between proactive top management vision and cost management strategy.	Partially Supported
	H20a-e	- Innovation culture does not affect relationships between business intelligence competency and five dimensions.	
	H21a-e	- Innovation culture positively and significantly moderates the relationships between best management accounting system and market information orientation.	
	H22a-e	- Innovation culture positively and significantly moderates the relationships between market learning capability and cost management strategy, modern performance measurement, and market information orientation.	
	H23a-e	- Innovation culture positively and significantly moderates the relationships between competitive change pressure and modern performance measurement, market information orientation, and environmental responsibility reporting	

Figure 10 A Summary of the Results of Hypotheses Testing



Note:
(S) = Hypotheses Supported (6 Hypotheses)
(PS) = Hypotheses Partial Supported (15 Hypotheses)
(NS) = Hypotheses Not Supported (2 Hypotheses)

Theoretical and Managerial Contributions

The contributions of this study to the existing body of knowledge in the management accounting area are divided into theoretical and practical contributions. Each of these contributionsis discussed below.

Theoretical contributions

This study makes contributions to literature in management accounting and organizational dynamic capability in three main respect. Firstly, this research expands the management accounting literature related to management accounting practice in the dynamic business environment, especially in Thailand's food businesses. Previous research on such issues has largely neglected studies in developing countries.The main purpose of this research is to createmore effective management accounting practice to support and enhance management effectiveness and organizational growth under a constantly changing business environment. Thus, this research has designed a dynamic management accounting orientation by combining the concept of dynamic capability and management accounting practices in a dynamic environment as a new conceptual framework for organizations growth. The results indicate that the food businesses in Thailand intend to develop dynamic management accounting orientation to meet appropriate information needs, to effectively enhance internal management decisions, and for more effective operational goal achievement. In addition, the results also suggest that developing a dynamic management accounting orientation can add value to an organization. By adopting such a system, it would support continuous growth organizations capable of creating firm value both immediately and in the future such as high return on investment, increase incomes, increase market share, customer satisfaction, and operate effectively in an uncertain environment. These results contribute to the evidence that maintaining a dynamic capability improves organizations' business processes by showing that management process performance improves in the presence of a dynamic management accounting orientation, which is consistent with the existing theory and literature, especially dynamic capability theory.

Secondly, this research also contributes to management accounting literature by examining the components of the dynamic management accounting orientation in the

companies in a developing country context. Base on the concept of dynamic capability theory, the organization should focus on the processes that result in extending an organization's existing capabilities to change and be able to cope with environmental change (Teece, 2007). This research examining to identify the key dimensions of management accounting practices that in line with such a process. The results suggest that the dynamic management accounting orientation can be developed through the synergy of four practices: having 1) strategic positioning analysis, 2) market information orientation, 3) cost management strategy, and 4) modern performance measurement, respectively. These practices are incorporated in the dynamic management accounting orientation to provide information that explains the economic change, efficient use of resources, and facilitates to creating or enhancing organization value. Although this study integrates environmental responsibility reporting in the dynamic management accounting orientation conceptual framework for environmental cost and benefit identification and report. However, the results do not cover environmental responsibility reporting-which is a management accounting practices that significant concern to society and environment. This result indicates that environmental responsibility reporting does not help in assigning environmental costs to each production activity where actual costs are consumed, and the result is that the business does not meet data accuracy needs for management. Therefore, management accounting practice that can explain the economic change, facilitates to using resources efficiently and creating or enhancing organization value is an important dimension for dynamic management accounting orientation in order to help the organization achieve firm growth.

Finally, this research contributes to management accounting literature by improving factors that influence the development of dynamic management accounting orientation based on contingency theory. The finding of this research provides a better understanding whether the effective development of dynamic management accounting orientation depends on the ability to adapt to the changes from internal factors especially, business intelligence competency, best management accounting system, and market learning capability, respectively. The result of this research revealed that using broad scope accounting instruments, like dynamic management accounting orientation, require effective broad-scope information systems in the design and implementation of

management accounting system more than the driving force of top management vision or pressures from the external competitive environment.

Managerial contributions

The results of this research contribute to providing helpful insights and useful guidelines to develop management accounting practices in order to help the organization to achieve competitive advantage and firm growth under the constantly changing business environment, which is difficult to predict future events. The results suggest that the organization can grow in a dynamic business environment by achieving three key performance efficiency, including decision-making success, operational goal achievement, and managerial information usefulness. This outcome can be achieved when the organization focuses on develops the dynamic management accounting orientations with the ability to analytical strategic positioning, cost management strategy, modern performance measurement, and market information orientation. These competencies of dynamic management accounting orientation would allow decision makers to gain sufficient information in choosing the best way for operation and would have a positive impact on the growth of the organizations. Especially, its four dimensions, including strategic positioning analysis, strategic cost management, market information orientation, and modern performance measurement are the important way to help the organization added value and performance to the organizations continuously. They assist the organization to evaluate the potential and competitiveness of the organization to determine the competitive position in the industry clearly, as well as provide information that relates to cost in business, competitors' potentiality, and profitability of customers for planning and making the decision to set competitive strategy to response the market effectively that will help to achieve its goals and lead to long-term profitability. While modern performance measurement is also important dimension as well, but the organization must be careful in its application. Because of using modern performance measurement, which has a variety of indicators, it may cause the problem of information overload and cause confusion and conflict in performance as a whole.

Therefore, in order to enhance management accounting competency into dynamic capability and contribute to the successful business outcomes, firstly, the

organization should develop management accounting system with an emphasis on strategic positioning analysis to analyze and access the potential and competitiveness that will help to set the clear direction and prominent operational plan in the industry. The organization can develop this practice by attention to the use of accounting information to help analyze and synthesize the strengths, weaknesses, opportunities, obstacles, and the competitiveness of the organization in setting strategic, direction and business plan in a systematic and concrete way. As well as commits to using accounting information for setting good practices and to allocate resources efficiently which will help achieve the goals and lead to longer-term profitability.

Secondly, the organization has to highlight strategic cost management that can help the firm to analyze and report production cost and operation cost with clear classification. So firms can plan and control the operation efficiently and consistent with the management direction and achieve the goals of operating under intense competition. Thus the organization should attend to the analysis of components of production and operation cost to be accurate which will make the planning of operations more efficient. The use of appropriate accounting techniques and procedures in planning and controlling costs and aligning with the direction of corporate governance will allow management to adapt effectively to the situation. Also, the business should support the development of a database and analysis of various types of costs systematically to guide effective management strategies.

Thirdly, the organization has to emphasize market information orientation to supports the marketing operation, and management that consistent with the current marketing need for adding value to organizations at all times. Thus, in market information orientation, the organization should pay attention to the accounting information related the marketing operation such as the analysis of information related to the competitor's potential and competency continuously, the analysis of costs and expenses associated with providing customer service, analyze the costs and expenses associated with providing customer service that will allow the company to plan and manage its profits more efficiency and effectiveness.

Fourthly, the organization also has to emphasize modern performance measurement in the management accounting practice to increased operational efficiency and long-term organizational success. The organization can develop this dimension by

apply new performance appraisals consistent with its current operating model with the variety of indicators, covers all dimensionsof performance measurement in both monetary and non-monetary measurement which are quantitative and qualitative information to stimulate and attract personnel for acceptance and actively working to achieve more goals. Also, it includes the application of benchmarking in the operation of the business that increases more capacity and competitiveness.

Finally, for the environmental responsibility reporting, the result did not find the relationship between environmental responsibility reporting and the overall success of the organization. It can imply that environmental responsibility reporting is not a major issue in developing dynamic management accounting. It is used to create a corporate image for stakeholders, rather than bringing the information into management. Thus, to achieve maximum effectiveness, the organization should improve dynamic management accounting orientation, focusing on four dimensions such as strategic positioning analysis, cost management strategy, modern performance measurement, and market information orientation.

In addition, the results also indicate that the effectiveness of dynamic management accounting orientation depends on internal factors, which are the context of organizational capabilities such as business intelligence competency, best management accounting system, and market learning capability. These internal factors can drive the organization to emphasize dynamic management accounting orientation more than external factor such as competitive change pressure. Thus, the organization should emphasize on the application of information technology to the systematic management of information, having the availability of modern accounting software which is in line with the corporate operating system, as well as enhancing the organization's ability to analyze market trends will help firm to get the right information and allow to better databases preparation and supports to improve management accounting system to be more modern that will help firm to get the up to date and consistent information with actual situation is concrete.

Furthermore, this research suggests that knowledge management intention has a moderating role on the relationship between modern performance measurement and firm performance efficiency, including decision-making success, operational goal achievement, managerial information usefulness, and firm growth. Knowledge

management intention can be creating new knowledge, integrating and exchanging knowledge both external and internal the organization to deliver systemic ideas which lead to effective implementation. Thus, the organization should focus on knowledge management in the organization by encouraging sharing of knowledge in the organization and integration of potential concepts and operational approaches to help organizations find new accounting practices better than ever to keep up with the current situation.

Limitations and Future Research Directions

When interpreting the outcomes of this research several limitations need to be considered. Firstly, although the usable sample size in this research meets the required sample size, however, it was only a minimum sample size which is required to meet the reliable research results. So it is possible that it will affect the results of hypothesis testing. If the data is more available than this, then it can provide much stronger evidence than the minimum sample size. Therefore, in future research, it would increase more efficient methods for data collection and follow-up such as pre-notification to the respondents that they will be contacted and paves the way for the caller to make credibility with them before sent questionnaire. Furthermore, it would be useful to repeat the conducted survey not only in Thai food businesses but also in the other industry or beyond in dynamic economies. The comparison across the industry or countries could expand the knowledge of dynamic management accounting orientation in a dynamic economic context; and at the same time, to gain more research credibility and confirm the generalizability of the research.

Secondly, data was collected at one point in time rather than longitudinally. The cross-sectional research design limits the extent to which inferences can be made about the causal ordering of variables. Thus, the research could not account for time-lag effects of changes in dynamic management accounting orientation on performance, because changes to these factors may not directly affect the performance of the organization after the change took place. Therefore, further similar studies could use longitudinal case studies to extend and complement this research finding.

Thirdly, as the results of this research show that some hypotheseshave no significant effects, for example, the last dimension of dynamic management accounting

orientation has no significant impact on all of the consequence. Therefore, in future research, other research methodology may be conducted to examine this conceptual framework to the understanding of this subject phenomenon. For example, a qualitative approach such as case study and in-depth interview might be conducted to shed further light on this issue. A case study among certain companies might reveal the actual dynamic management accounting orientation for detailed investigation. Also, any obstacles or problems associated with failures in the change process can be easily identified and tested, providing the greater understanding of the subject phenomena.

Finally, the results of this research found weak moderating effects of both moderating roles of knowledge management intention and innovation culture in the conceptual framework. As a result, further research might consider related factors and also explore other moderating variables that may affect the relationship between dynamic management accounting and firm growth, and the role of contingency factors on dynamic management accounting orientation such as organization structure or organizational strategy.

BIBLIOGRAPHY

BIBLIOGRAPHY

Aaker, D. A., Kumar, V. and Day, T. X. (2001). *Marketing research*, New York: John Wiley and Sons.

Abd El Aziz, R., and Fady, R. (2013). Business improvement using organizational goals, Riva technique and e-business development stages: A case study approach. *Journal of Enterprise Information Management*, 26(5), 577-595.

Abdel-Kader, M., and Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, 40(1), 2-27.

Abdul-Aziz, Z., Chan, J. F. L., and Metcalfe, A. V. (2000). Quality practices in the manufacturing industry in the UK and Malaysia. *Total Quality Management*, 11(8), 1053-1064.

Abiola, J. O., and Ashamu, S. O. (2012). Environmental management accounting practice in Nigeria: National petroleum corporation (NNPC). *European Scientific Journal, ESJ*, 8(9), 76-93.

Abushaiba, I. B. and Zainuddin, Y. (2012). Performance measurement system design, competitive capability, and performance consequences - A conceptual like. *International Journal of Business and Social Science*, 3(11), 1-10.

Acur, N., Kandemir, D., Weerd-Nederhof, D., Petra, C., and Song, M. (2010). Exploring the impact of technological competence development on speed and NPD program performance. *Journal of Product Innovation Management*, 27(6), 915-929.

Aerts, W., Cormier, D., and Magnan, M. (2008). Corporate environmental disclosure, financial markets and the media: An international perspective. *Ecological Economics*, 64(3), 643-659.

Ahmadabadi, M.N., and Arabvand, F. (2015). The relationship between organizational culture and management accounting practices (Case study: Industrial companies of Shokouhieh). *Global Journal of Management Studies and Researches*, 2(3), 142- 151.

Akrani, G. (2011). *What is Decision Making*. [Online]. Available from: http://kalyan-city.blogspot.in/2011/08/what-is-decision-making-meaning.html. [accessed January 15, 2017].

Alavi, M., and Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MISQuarterly*, 25(1), 107–136.

Ambrosini, V., and Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management?. *International Journal of Management Reviews*, 11(1), 29-49.

Amit, R., and Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22(6-7), 493-520.

Anand, G., Ward, P. T., Tatikonda, M. V., and Schilling, D. A. (2009). Dynamic capabilities through continuous improvement infrastructure. *Journal of Operations Management*, 27(6), 444-461.

Anand, M. (2004). A Review of research on the theory and practice of cost management. *South Asian Journal of Management,* 11(1), 59-95.

Anirban, G. (2011). Total cost management: A new approach to cost control. *Advances in Management*, 4(12), 63.

Armstrong, J. S. and Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396-402.

Arroyo, P. (2012). Management accounting change and sustainability: an institutional approach. *Journal of Accounting & Organizational Change*, 8(3), 286-309.

Assink, M. (2006). Inhibitors of disruptive innovation capability: a conceptual model. *European Journal of Innovation Management*, 9(2), 215-233.

Atkinson, A.A., Kaplan, R.S., Young, S.M. (2004). *Management Accounting*. n.p.: Pearson Education, Inc.

Augier, M., and Teece, D. J. (2009). Dynamic capabilities and the role of managers in business strategy and economic performance. *Organization Science*, 20(2), 410-421.

Aver, B., and Cadez, S. (2009). Management accountants' participation in strategic management processes: a cross-industry comparison. *Journal for East European Management Studies*, 14(3), 310-322.

Baines, A., and Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, Organizations and Society*, 28(7), 675-698.

Baines, T., Kay, G., Adesola, S., and Higson, M. (2005). Strategic positioning: an integrated decision process for manufacturers. *International Journal of Operations & Production Management*, 25(2), 180-201.

Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36(1), 256-280.

Bartlett, J. E.II.,Kotrlik, J.W. and Higgins, C.C.(2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.

Becerra-Fernandez, I., Sabherwal, R. (2001). Organizational knowledge management: A contingency perspective. *Journal of Management Information systems*, 18(1), 23-55.

Beljić, M., Panapanaan, V., Linnanen, L., and Uotila, T. (2013). Environmental knowledge management of Finnish food and drink companies in eco-efficiency and waste management. *Interdisciplinary Journal of Information, Knowledge, and Management*, 8, 99-119.

Bengü, H., Can, A.V. (2009). Çevre muhasebesinin muhasebenin temel kavramlarından sosyal sorumluluk kavramı bağlamında temellendirilmesi, Celal Bayar Ü. *Sosyal Bilimler Enstitüsü Dergisi*, 7(1), 155-160.

Bianca, A. (2014). *The Importance of Objectives in Organizations*. [Online]. Available from: https://yourbusiness.azcentral.com/importance-objectives-organizations-2613.html [accessed July 3, 2017].

Bock, G. W., Zmud, R. W., Kim, Y. G., and Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 87-111.

Boon-itt, S. (2009). The cumulative model of competitive capabilities: An empirical analysis in Thai automotive industry. *NIDA Development Journal*, 49(3), 19-43.

Bouma, J. J., and van der Veen, M. (2002). Wanted: a theory for environmental management accounting. In *Environmental Management Accounting: Informational and Institutional Developments*. Springer, Dordrecht.

Boundless. (2017). *A Leader's Vision*. [Online]. Available from: https://www.boundless.com/management/textbooks/boundless-management-textbook/leadership-9/defining-leadership-68/a-leader-s-vision-341-880/ [accessed April 6, 2017].

Bowman, D., and Narayandas, D. (2004). Linking customer management effort to customer profitability in business markets. *Journal of Marketing Research*, 41(4), 433-447.

Burkert, M., Davila, A., Mehta, K., and Oyon, D. (2014). Relating alternative forms of contingency fit to the appropriate methods to test them. *Management Accounting Research*, 25(1), 6-29.

Burns, J., and Scapens, R. W. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), 3-25.

Burns, J., and Vaivio, J. (2001). Management accounting change. *Management Accounting Research*, 12(4), 389-402.

Burritt, R. L., Hahn, T., and Schaltegger, S. (2002). Towards a comprehensive framework for environmental management accounting-Links between business actors and environmental management accounting tools. *Australian Accounting Review*, 12(27), 39-50.

Burritt, R. L., Herzig, C., and Tadeo, B. D. (2009). Environmental management accounting for cleaner production: the case of a Philippine rice mill. *Journal of Cleaner Production*, 17(4), 431-439.

Busco, C., and Scapens, R. W. (2011). Management accounting systems and organizational culture: Interpreting their linkages and processes of change. *Qualitative Research in Accounting & Management*, 8(4), 320-357.

Busco, C., Quattrone, P., and Riccaboni, A. (2007). Management accounting: issues in interpreting its nature and change. *Management Accounting Research*, 18(2), 125-149.

Cadez, S., and Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, 33(7), 836-863.

Calantone, R. J., Cavusgil, S. T. and Zhao, Y. (2002). Leaming orientation, firm innovation capability and firm performance. *Industrial Marketing Management,* 31(6), 515-524.

Carmen, A. A., and Corina, G. (2009). A strategic approach of management accounting. *Annals of the University of Oradea*, *Economic Science Series*, 18(3), 736-741.

Chaikambang, C., Ussahawanitchakit, P., and Boonlua, S. (2012). Strategic cost management and goal achievement: Evidence from food businesses in Thailand. *International Journal of Business Strategy*, 12(4), 1-27.

Chan, Y.k. (2002). *Management Accounting Practice in Singapore*. Asian Management Accounting Forum, Fukuoka, Japan.

Chang, H., Fernando, G. D., and Tripathy, A. (2015). An empirical study of strategic positioning and production efficiency. *Advances in Operations Research*. [Online]. Available from: http://dx.doi.org/10.1155/2015/347045. [accessed 2015].

Chen, M. Y. C., Lin, C. Y. Y., Lin, H. E., and McDonough, E. F. (2012). Does transformational leadership facilitate technological innovation? The moderating roles of innovative culture and incentive compensation. *Asia Pacific Journal of Management*, 29(2), 239-264.

Cheng, H., Lu, Y. C., and Sheu, C. (2009). An ontology-based business intelligence application in a financial knowledge management system. *Expert Systems with Applications*, 36(2), 3614-3622.

Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2), 127-168.

Chenhall, R. H. (2004). The role of cognitive and affective conflict in early implementation of activity-based cost management. *Behavioral Research in Accounting*, 16(1), 19-44.

Chenhall, R. H. (2006). Theorizing contingencies in management control systems research. *Handbooks of Management Accounting Research*, 1, 163-205.

Chi, C. K., and Choi, K. J. (2017). The impact of firm size on dynamic incentives and investment. *The RAND Journal of Economics*, 48(1), 147-177.

Chien, S. Y., and Tsai, C. H. (2012). Dynamic capability, knowledge, learning, and firm performance. *Journal of Organizational Change Management*, 25(3), 434-444.

Choe, J. M. (2004). Impact of management accounting information and AMT on organizational performance. *Journal of Information Technology*, 19(3), 203-214.

Chuang, S. F. (2013). Essential skills for leadership effectiveness in diverse workplace development. *Online Journal for Workforce Education and Development,* 6(1), 5.

Cillo, P. (2003). Market learning capability and innovation. An explorative empirical study in the fashion industry. In *Proceedings of the 3rd International Congress Marketing Trends*. Venice, 1-12.

Cinquini, L., and Tenucci, A. (2007). Is the adoption of strategic management accounting techniques really "strategy-driven"? Evidence from a survey. *Munich Personal RePEc Archive*, 1-27.

Coad A, Segarra-Blascoand A and Teruel M. (2013). Like milk or wine: does firm performance improve with age?. *Structural Change and Economic Dynamics*, 24, 173-189.

Coad, A., Hölzl, W. (2010). Firm growth: Empirical analysis. *Papers on Economics and Evolution*, No. 1002.

Collins, C. J., and Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of management Journal*, 46(6), 740-751.

Cooper, D. R. and Schindler, P. S. (2006). *Business Research Methods*. 9th ed. New York: McGraw-Hill.

Cormier, D., and Magnan, M. (2007). The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective. *Ecological Economics*, 62(3), 613-626.

Correia, C., Langfield-Smith, K., Thorne, H. and Hilton, W.R. (2008). *Management Accounting: Information for Managing and Creating Value*. New York: McGraw-Hill.

Davenport, T.H. and Prusak, L. (2000). *Working Knowledge: How Organizations Manage What They Know*. Cambridge, MA: Harvard Business School Press.

Davidsson, P., Kirchhoff, B., Hatemi–J, A., and Gustavsson, H. (2002). Empirical analysis of business growth factors using Swedish data. *Journal of Small Business Management*, 40(4), 332-349.

Dawson, R. (2000). Knowledge capabilities as the focus of organizational development and strategy. *Journal of Knowledge Management*, 4(4), 320-327.

Deepen, J. M., Goldsby, T. J., Knemeyer, A. M., and Wallenburg, C. M. (2008). Beyond expectations: an examination of logistics outsourcing goal achievement and goal exceedance. *Journal of Business Logistics*, 29(2), 75-105.

Delaney, D. and Guilding, C. (2011). An examination of budgetary roles in the context of sponsorship management: a contingency perspective. *Journal of Applied Management Accounting Research*, 9(2), 21-42.

Delmar, F., Davidsson, P., and Gartner, W. B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189-216.

Dimitratos, P., Petrou, A., Plakoyiannaki, E., and Johnson, J. E. (2011). Strategic decision-making processes in internationalization: Does national culture of the focal firm matter?. *Journal of World Business*, 46(2), 194-204.

Dinter, B. (2013). Success factors for information logistics strategy-An empirical investigation. *Decision Support Systems*, 54 (3): 1207–1218.

Dobni, C. B. (2008). Measuring innovation culture in organizations: The development of a generalized innovation culture construct using exploratory factor analysis. *European Journal of Innovation Management*, 11(4), 539-559.

Døving, E., and Gooderham, P. N. (2008). Dynamic capabilities as antecedents of the scope of related diversification: the case of small firm accountancy practices. Strategic Management Journal, 29(8), 841-857.

Drnevich, P., and Kriauciunas, A. (2011). Clarifying the conditions and limits of the contributions of ordinary and dynamic capabilities to relative firm performance. *Strategic Management Journal*, 32(3), 254-279.

Eierle, B. and Schultze, W. (2013). The role of management as a user of accounting information: Implications for standard setting. *Accounting and Management Information Systems*, 12(2), 155-189.

Eisenhardt, K. M. and Martin, J. A. (2000). Dynamic capabilities: What are they?, *Strategic Management Journal*, 21(10-11), 1105-1121.

Elbashir, M. Z., Collier, P. A., and Davern, M. J. (2008). Measuring the effects of business intelligence systems: The relationship between business process and organizational performance. *International Journal of Accounting Information Systems*, 9(3), 135-153.

Elbashir, M. Z., Collier, P. A., and Sutton, S. G. (2011). The role of organizational absorptive capacity in strategic use of business intelligence to support integrated management control systems. *The Accounting Review*, 86(1), 155-184.

Elbashir, M., and Williams, S. (2007). BI impact: The assimilation of business intelligence into core business process. *Business Intelligence Journal*, 12(4), 45-54.

Ensley, M. D., Pearce, C. L., and Hmieleski, K. M. (2006). The moderating effect of environmental dynamism on the relationship between entrepreneur leadership behavior and new venture performance. *Journal of Business Venturing*, 21(2), 243-263.

Erserim, A. (2012). The impacts of organizational culture, firm's characteristics and external environment of firms on management accounting practices: an empirical research on industrial firms in Turkey. *Procedia-Social and Behavioral Sciences*, 62, 372-376.

Farrell, M. A. (2000). Developing a market-oriented learning organization. *Australian Journal of Management*, 25(2), 201-222.

Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. New York: McGraw-Hill.

Fitzsimmons, J.R., Steffens, P. R., and Douglas E. J. (2005). Growth and profitability in small and medium sized Australian firms. *AGSE Entrepreneurship Exchange*, Melbourne.

Fu, Y. (2007). Strategic Cost Management in E-supply chain. *Asia-Pacific Management Accounting Journal*, 2(1), 89-127.

Fukuzawa, M. (2015). Dynamic capability as fashion. *Annals of Business Administrative Science*, 14(2), 83-96.

Fullerton, R. R., and McWatters, C. S. (2002). The role of performance measures and incentive systems in relation to the degree of JIT implementation. *Accounting, Organizations and Society,* 27(8), 711-735.

Gale, R. (2006). Environmental management accounting as a reflexive modernization strategy in cleaner production. *Journal of Cleaner Production*, 14(14), 1228-1236.

Garnsey, E., Stam, E., and Heffernan, P. (2006). New firm growth: Exploring processes and paths. *Industry and Innovation*, 13(1), 1-20.

Gerdin, J. (2005). Management accounting system design in manufacturing departments: An empirical investigation using a multiple contingencies approach. *Accounting, Organizations and Society*, 30(2), 99-126.

Gerdin, J., and Greve, J. (2004). Forms of contingency fit in management accounting research-A critical review. *Accounting, Organizations and Society*, 29(3-4), 303-326.

Gibson, K. C., & Martin, B. A. (2004). Demonstrating value through the use of environmental management accounting. *Environmental Quality Management,* 13(3), 45-52.

Gomes, C. F., Yasin, M. M., and Lisboa, J. V. (2007). The dimensionality and utilization of performance measures in a manufacturing operational context: Organizational change implications. *Cross Cultural Management: An International Journal*, 14(4), 286-306.

Gong, M. Z., and Tse, M. S. C. (2009). Pick, mix or match? A discussion of theories for management accounting research. *Journal of Accounting Business and Management*, 16(2), 54-66.

Gornjak, M. (2014). Knowledge Management and Management Accounting. In *Human Capital without Borders: Knowledge and Learning for Quality of Life; Proceedings of the Management, Knowledge and Learning International Conference*. Portorož. 1349-1359.

Gosselin, M. (2005). An empirical study of performance measurement in manufacturing firms. *International Journal of Productivity and Performance Management*, 54(5/6), 419-437.

Green, K. W., Toms, L. C., and Clark, J. (2015). Impact of market orientation on environmental sustainability strategy. *Management Research Review*, 38(2), 217-238.

Griffith, D. A., and Harvey, M. G. (2001). An intercultural communication model for use in global inter organizational networks. *Journal of International Marketing*, 9(3), 87-103.

Griffith, D. A., Noble, S. M., and Chen, Q. (2006). The performance implications of entrepreneurial proclivity: A dynamic capabilties approach. *Journal of Retailing*, 82(1), 51-62.

Guilding, C., and McManus, L. (2002). The incidence, perceived merit and antecedents of customer accounting: An exploratory note. *Accounting, Organizations and Society*, 27(1-2), 45-59.

Haeckel, S. H. (2004). Peripheral vision: Sensing and acting on weak signals making meaning out of apparent noise: The need for a new managerial Framework. *Long Range Planning*, 37(2), 181-189.

Hair, J. F., Black, B., Babin, B.J., Anderson, R. E., and Tatham, R. L. (2006). *Multivariate Data Analysis*. 6th ed. New Jersey: Pearson Education.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis: A Global Perspective*. 7th ed. New Jersey: Pearson Prentice Hall.

Haldma, T., and Lääts, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management accounting Research*, 13(4), 379-400.

Hannula, M., and V. Pirttimaki. (2003). Business intelligence empirical study on the top 50 Finnish companies. *Journal of American Academy of Business* 2(2): 593-599.

Hansen, D. R., and Mowen, M. M. (2005). *Environmental Cost Management, Management Accounting*. Mason, OH: Thomson-South Western.

Hansen, D.R. and Mowen, M.M. (2006). *Cost Management: Accounting and Control*. USA.: Thompson- South Western.

Hansen, M.T. and Von Oetinger, B. (2001). Introducing T-shaped managers: Knowledge management's next generation. *Harvard Business Review,*79(3), 106-116.

Harris, R. (2012). *Introduction to Decision Making*. [Online]. Available from: http://www.virtualsalt.com/crebook5.htm. [accessed June 25, 2017].

Hartmann, F.G.H. (2000). The appropriateness of RAPM: Toward the further development of theory. *Accounting, Organizations and Society*, 25(4/5), 451-482.

Hassel, L., Nilsson, H., and Nyquist, S. (2005). The value relevance of environmental performance. *European Accounting Review*, 14(1), 41-61.

Haynes, S. N., Richard, D. C. S., and Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment*, 7(3), 238-247.

Heidmann, M., Schäffer, U., and Strahringer, S. (2008). Exploring the role of management accounting systems in strategic sense making. *Information Systems Management*, 25(3), 244-257.

Helfat, C. E., and Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997-1010.

Helfat. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D and Winter, S. (2007). Managers, markets and dynamic capabilities. In *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Oxford: Blackwell.

Helgesen, Ø. (2007). Customer accounting and customer profitability analysis for the order handling industry-A managerial accounting approach. *Industrial Marketing Management*, 36(6), 757-769.

Henri, J. F. (2006a). Management control systems and strategy: A resource-based perspective. Accounting, *Organizations and Society*, 31(6), 529-558.

———. (2006b). Organizational culture and performance measurement systems. *Accounting, Organizations and Society*, 31(1), 77-103.

Hepburn, N. (2013). *What is a Culture of Innovation?* [Online]. Available from: https://www.marsdd.com/news-and-insights/what-is-a-culture-of-innovation/#other-authors (accessed February 20, 2017).

Hilton, R.W. (2005). *Managerial Accounting: Creating Value in a Dynamic Business Environment*, 6th edition, Boston: Mc Graw Hill.

Hilton, R. W., Maher, M., and Selto, F. H. (2001). *Cost Management: Strategies for Business Decisions*. McGraw-Hill/Irwin.

Hilton, R.W., and Platt, D.E. (2011). *Managerial Accounting: Creating Value in a Global Business Environment*. 9th ed. New York, USA: McGraw-Hill Irwin.

Hiromoto, T. (1991). Restoring the relevance of management accounting. *Journal of Management Accounting Research*, 3(3), 1-15.

Hogan, K., Lakhani, D. and Marti, M. (2008). *The 12 Factors of Business Success: Discover, Develop, and Leverage your Strengths.* Canada: John Wiley & Sons, Inc.

Holm, C., and Rikhardsson, P. (2008). Experienced and novice investors: does environmental information influence investment allocation decisions?. *European Accounting Review*, 17(3), 537-557.

Hongsombud, A., Ussahawanitchakit, P. and Muenthaisong, K. (2012). Accounting quality control and firm growth: An empirical investigation of corporate governance awarded firms in Thailand. *Journal of Academy of Business and Economics*, 12(5).

Hooshyar, B. (2010). Strategic Knowledge Management and its effects on Cost Management in projects. In *Proceedings of the 2nd International Conference on Manufacturing Engineering, Quality and Production Systems*.

Hoque, Z., Mia, L., and Alam, M. (2001). Market competition, computer-aided manufacturing and use of multiple performance measures: An empirical study. *The British Accounting Review*, 33(1), 23-45.

Horngren, C., Sundem, G., Stratton, W., Burgstahler, D., and Schatzberg, J. (2007). *Introduction to Management Accounting*. 14th ed. New Jersey: Pearson Prentice Hall.

Hoyt, W.T., Leierer, S., and Millington, M. J. (2006). Analysis and interpretation of findings using multiple regression techniques. *Rehabilitation Counseling Bulletin*, 49(4), 223-233.

Huang, Y., and Zhang, G. (2012). An examination of the incremental usefulness of balance-sheet information beyond earnings in explaining stock returns. *Journal of Accounting, Auditing and Finance*, 27(2), 267-293.

Hughes, M., and Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651-661.

Hussain, M.M. (2003). The impact of economic conditions on management accounting performance measures: Experience with banks. *Managerial Finance*, 29(2/3), 23-41.

Hyvönen, J. (2007). Strategy, performance measurement techniques and information technology of the firm and their links to organizational performance. *Management Accounting Research*, *18*(3), 343-366.

Ilić, B., Milićević, V., and Cvetković, N. (2010). Strategic cost management and the product life cycle concept. *Megatrend Review*, 7(1), 193-207.

Inglis, R. M. (2008). Exploring accounting and market orientation: an interfunctional case study. *Journal of Marketing Management*, 24(7-8), 687-710.

Inglis, R., and Clift, R. (2008). Market-orientated accounting: information for product-level decisions. *Managerial Auditing Journal*, 23(3), 225-239.

International Federation of Accountants. Financial and Management Accounting Committee. (1998). *International Management Accounting Practice Statement: Management Accounting Concepts*. The Federation.

Islam, J., and Hu, H. (2012). A review of literature on contingency theory in managerial accounting. *African Journal of Business Management*, 6(15), 5159-5164.

Ismail, K., and Isa, C. R. (2011). The role of management accounting systems in advanced manufacturing environment. *Australian Journal of Basic and Applied Sciences*, 5(9), 2196-2209.

Ittner, C. D., and Larcker, D. F. (2001). Assessing empirical research in managerial accounting: A value-based management perspective. *Journal of Accounting and Economics*, 32(1-3), 349–410.

Ittner, C. D., Larcker, D. F., and Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, *28*(7), 715-741.

Jaccard, J., Guilamo-Ramos, V., Johansson, M., and Bouris, A. (2006). Multiple regression analyses in clinical child and adolescent psychology. *Journal of Clinical Child and Adolescent Psychology*, 35(3), 456-479.

Jacobs, F. A., Johnston, W., and Kotchetova, N. (2001). Customer profitability: Prospective vs. retrospective approaches in a business-to-business setting. *Industrial Marketing Management*, 30(4), 353-363.

Jantarajaturapath, N., Ussahawanitchakit, P., and Janjarasjit, S. (2017). Modern Managerial Accounting Capability of Textile Export Businesses in Thailand: An Empirical Investigation of Antecedents. *Journal Submission Manual-ASEAN Journal of Management & Innovation*, 4(1), 97-109.

Jermias, J., and Gani, L. (2002). Linking Strategic Priorities, Organizational Configurations and Management Accounting Systems with Business Unit Effectiveness: Experience from Indonesian Publicly Held Companies. In *Proceedings of the 3rd Conference AAA, 27-29 October, Nagoya, Japan.*

Jiménez-Jiménez, D., and Cegarra-Navarro, J. G. (2007). The performance effect of organizational learning and market orientation. *Industrial Marketing Management*, *36*(6), 694-708.

Jun Lin, Z. and Z. Yu. (2002). Responsibility cost control system in China: a case of management accounting application. *Management Accounting Research*, 13(4), 447-467.

Kara, A., Spillan, J. E., and DeShields, O.W. (2005). The effect of a market orientation on business performance: A study of small-sized service retailers using MARKOR scale. *Journal of Small Business Management*, 43(2), 105–118.

Kato, T. (2013). Usefulness of the information contained in the prediction sample for the spatial error model. *Journal of Real Estate and Financial Economics*, 47(1), 169-195.

Kaynak, H., and Hartley, J. L. (2006). Using replication research for just-in-time purchasing construct development. *Journal of Operations Management*, *24*(6), 868-892.

Kidane, F. (2012). Decision making and the role of management accounting function–A review of empirical literature. *Radix International Journal of Banking*, *Finance and Accounting*, 1(4), 77-97.

Kim, Y. J., Song, J., and Koo, C. (2008). Exploring the effect of strategic positioning on firm performance in the e-business context. *International Journal of Information Management*, 28(3), 203-214.

Korbangyang, S. and Ussahawanitchakit, P. (2010). Organization adaptability competency and its antecedents and consequences: An empirical investigation of hotel businesses in Thailand. *Journal of International Business and Economics*, 10(2), 1-27.

Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.

Kuma, C. (2013). Integrating activity-based costing (ABC) and theory of constraint (TOC) for improved and sustained cost management. *Journal of Modern Accounting and Auditing*, *9*(8), 1046- 1058.

Kumar, A. and Nagpal, S (2011). Strategic cost management-suggested framework for 21st Century. *Journal of Business and Retail Management Research*, 5(2), 118-130.

Kumar, V., Jones, E., Venkatesan, R., and Leone, R. P. (2011). Is market orientation a source of sustainable competitive advantage or simply the cost of competing?. *Journal of Marketing*, 75(1), 16-30.

Kyriakopoulos, K., and Moorman, C. (2004). Tradeoffs in marketing exploitation and exploration strategies: The overlooked role of market orientation. I*nternational Journal of Research in Marketing*. 21(3), 219-240.

Lääts, K., and Haldma, T. (2012). Changes in the scope of management accounting systems in the dynamic economic context. *Economics and Management*, 17(2), 441-447.

Langfield-Smith, K., Thorne, H., and Hilton, R. (2009). *Management Accounting 5E: Information for Creating and Managing Value*. Sydney: McGraw-Hill.

Laonamtha, U., Ussahawanitchakit, P., and Boonlua, S. (2013). Modern Cost Management Capability and Firm Performance: An Empirical Assessment of Auto Parts Businesses in Thailand. *Review of Business Research*, 13(4), 77-102.

Lapsley, I., and Pallot, J. (2000). Accounting, management and organizational change: A comparative study of local government. *Management Accounting Research*, 11(2), 213-229.

Lata, P., and Ussahawanitchakit, P. (2015). Management accounting system effectiveness and goal achievement: evidence from automotive businesses in Thailand. *The Business & Management Review*, 7(1), 322-334.

Lawson, R., Stratton, W., Desroches, D., and Hatch, T. (2009). Best practices in cost and profitability systems. *Cost Management*, *23*(5), 13-19.

Lee, C. L., and Yang, H. J. (2011). Organization structure, competition and performance measurement systems and their joint effects on performance. *Management Accounting Research*, *22*(2), 84-104.

Lee, J., Lee, K., and Rho, S. (2002). An evolutionary perspective on strategic group emergence: A genetic algorithm-based model. *Strategic Management Journal*, 23(8), 727-746.

Lekuthai, S. (2007). The Importance of the Food Industry to the Thai Economy: An Input-Output Perspective. *ASEAN Economic Bulletin*, 24(2), 238-253.

Lewis, E. F., Hardy, M., and Snaith, B. (2013). An analysis of survey reporting in the imaging professions: Is the issue of non-response bias being adequately addressed?. *Radiography*, 19(3), 240–245.

Lillis, A. M. (2002). Managing multiple dimensions of manufacturing performance - An exploratory study. *Accounting, Organizations and Society*, 27(6), 497- 529.

Lipe, M. G., and Salterio, S. E. (2000). The balanced scorecard: Judgmental effects of common and unique performance measures. *The Accounting Review*, *75*(3), 283-298.

Litvaj, I., and Stancekova, D. (2015). Decision-making, and their relation to the knowledge management, use of knowledge management in decision-making. *Procedia Economics and Finance*, 23, 467-472.

Lu, C. T., Zhu, D. S., and Chang, Y. W. (2011). The moderating role of the interactive use of Management Control Systems (MCS) on the relation between knowledge management types and marketing project performance. *African Journal of Business Management*, 5(3), 687-698.

Lumpkin, G. T., and Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429-451.

Lussier, R. N. (2005). *Human Relations in Organization*. New York, NY: McGraw-Hill Irwin.

Maelah, R., and Ibrahim, D. N. (2007). Factors influencing activity based costing (ABC) adoption in manufacturing industry. *Investment Management and Financial Innovations*, *4*(2), 113-124.

Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387-401.

Malina, M. A., and Selto, F. H. (2001). Communicating and controlling strategy: An empirical study of the effectiveness of the balanced scorecard. *Journal of Management Accounting Research*, 13(1), 47-90

Malinic, S., Jovanovic, D., and Jankovic, S. (2012). Competitive management accounting: Response to the challenges of strategic business decision making. *Economics and Organizations*, 9(3), 297-309.

Malmi, T. (2001). Balanced scorecards in Finnish companies: A research note. *Management Accounting Research*, 12(2), 207-220.

Markman, G. D., and Gartner, W. B. (2002). Is extraordinary growth profitable? A study of Inc. 500 high-growth companies. *Entrepreneurship Theory and Practice*, 27(1), 65-75.

McManus, L. (2013). Customer accounting and marketing performance measures in the hotel industry: Evidence from Australia. *International Journal of Hospitality Management*, 33, 140-152.

McNair, C. J. (2000). Defining and shaping the future of cost management. *Journal of Cost Management*, 14(5), 28-32.

McWatters, C. S., and Zimmerman, J. L. (2015). *Management Accounting in a Dynamic Environment*. NY: Routledge.

Meng, X. H., Zeng, S. X., Xie, X. M., and Qi, G. Y. (2016). The impact of product market competition on corporate environmental responsibility. *Asia Pacific Journal of Management*, 33(1), 267-291.

Menguc, B., and Auh, S. (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the Academy of Marketing Science*, 34(1), 63–73.

Menon, A. G. (2008). Revisiting dynamic capability. *IMB Management Review*, 20(1), 22-33.

Moers, F. (2005). Discretion and bias in performance evaluation: the impact of diversity and subjectivity. *Accounting, Organizations and Society*, 30(1), 67-80.

Mohamed, B. (2008). Corporate Sustainability/CSR Communication and value Creation: A Marketing Approach. *The International Journal of Accounting, 14*(52), 145-160.

Mohamed, R. (2014). The Effect of Multi-Dimensional Performance Measurement System on Market Orientation. *International Journal of Trade, Economics and Finance*, 5(2), 195.

Mokhtari, A., Moghadam, M. R. H., Borhani, M. M., and Sabaghian, S. (2013). The effect of market orientation and international experience on performance with regard to the mediating role of global marketing strategy. *International Journal of Economy, Management and Social Sciences*, 2(10), 864-875.

Morgan, N. A., Vorhies, D. W., and Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*. 30(8), 909-920.

Moustaghfir, K. (2008). The dynamics of knowledge assets and their link with firm performance. *Measuring Business Excellence*, 12(2), 10-24.

Mubarak, A. (2013). Knowledge Management and Management Accounting Decisions-Experimental Study. *Journal of Organizational Knowledge Management*, 2013(20113), 1-14.

Mulders, D.E. M., Berends, P.A. J., and Romme, A.G. L. (2010). Dynamic capability and staff induction practices in small firms. *Society and Business Review*, 5(2), 155-169.

Nagirikandalage, P., Binsardi, B., and Binsardi, B. (2017). Inquiry into the cultural impact on cost accounting systems (CAS) in Sri Lanka. *Managerial Auditing Journal*, 32(4/5), 463-499.

Naranjo-Gil, D., and Hartmann, F. (2006). How top management teams use management accounting systems to implement strategy. *Journal of Management Accounting Research*, 18(1), 21-53.

———. (2007). Management accounting systems, top management team heterogeneity and strategic change. *Accounting, Organizations and Society*, 32(7-8), 735-756.

Naranjo-Valencia, J. C., Jiménez-Jiménez, D., and Sanz-Valle, R. (2016). Studying the links between organizational culture, innovation, and performance in Spanish companies. *Revista Latinoamericana de Psicología*, 48(1), 30-41.

Navaretti, G. B., Castellani, D., and Pieri, F. (2014). Age and firm growth: evidence from three European countries. *Small Business Economics*, 43(4), 823-837.

Nazli Nik Ahmad, N., and Sulaiman, M. (2004). Environment disclosure in Malaysia annual reports: A legitimacy theory perspective. *International Journal of Commerce and Management*, *14*(1), 44-58.

Neely, A., Gregory, M., and Platts, K. (2005). Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*, 25 (12), 1228-1263.

Nelson, R. R., Todd, P. A., and Wixom, B. H. (2005). Antecedents of information and system quality: an empirical examination within the context of data warehousing. *Journal of Management Information Systems*, 21(4), 199–235.

Neuman, W.L. (2006). *Social research Methods: Qualitative and Quantitative Approaches*. Toronto: Pearson.

Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theory*. New York: McGraw-Hill.

Office of Industrial Economics. (2017). *Annual report 2017*. [Online]. Available from: http://www.oie.go.th/publications/report. [accessed 20 March 2017].

Office of the Secretary Food and Drug Administration. (2017). *The Strategic Framework for Food Management in Thailand*. [Online]. Available from: http://food.fda.moph.go.th/lgtfdapv/data/Strategy.pdf. [accessed March 25, 2017].

Omar, N. H., and Mahfar, R. (2004). *The Current State of Management Accounting Practice in Selected Malaysian Companies*. University Tenaga National International Business Management Conference, Malaysia.

Ombasa, H. (2015). The effects of customer satisfaction in strategic positioning in the insurance industry in Kenya: A survey of selected insurance firms. *Strategic Journal of Business & Change Management,* 2(27), 516-545.

Opute, A. P., and Madichie, N. O. (2017). *Accounting-marketing Integration Dimensions and Antecedents: Insights from a Frontier Market.*[Online]. Available from: https://doi.org/10.1108/JBIM-10-2016-0246 (accessed September 14, 2017).

Perren, L. and Grant, P. (2000). The evolution of management accounting routines in small businesses: a social construction perspective. *Management Accounting Research*, 11(4), 391-411.

Pfeifer, P. E. (2005). The optimal ratio of acquisition and retention costs. *Journal of Targeting Measurement and Analysis for Marketing*, 13(2), 179−188.

Pongpearchan, P. and Ussahawanitchakit, P. (2011). Strategic entrepreneurship management competency and firm success: A comparative study of SMEs in auto and electronic parts in Thailand. *International Journal of Business Strategy*, 11(2), 197-227.

Prasad, A., and Green, P. (2015). Organizational competencies and dynamic accounting information system capability: impact on AIS processes and firm performance. *Journal of Information Systems*, 29(3), 123-149.

Prempree, K., Ussahawanitchakit, P. and Boonlua, S. (2013). Management accounting governance and firm value of textile manufacturing businesses in Thailand. *International Journal of Business Strategy*, 13(4), 41-72.

Prieto, I. M., and Easterby-Smith, M. (2006). Dynamic capabilities and the role of organizational knowledge: an exploration. *European Journal of Information Systems*, 15(5), 500-510.

Raiborn, C. A., Kinney, M. R. and Prather-Kinsey, J. (2006). *Cost Accounting*. 6th ed. Singapore: Thomson South-Western.

Reid, G.C. and Smith, J.A. (2000). The impact of contingencies on management accounting system development. *Management Accounting Research*, 11(4), 427-450.

Reinartz, W. J., and Kumar, V. (2003). The impact of customer relationship characteristics on profitable lifetime duration. *Journal of Marketing*, 67(1), 77–99.

Reinartz, W., Thomas, J. S., and Kumar, V. (2005). Balancing acquisition and retention resources to maximize customer profitability. *Journal of Marketing*, 69(1), 63-79.

Roberts, N. and Grover, V. (2011), Investigating firm's customer agility and firm performance: the importance of aligning sense and respond capabilities, *Journal of Business Research*, 64(3), 1-7.

Rodriguez, A. C., Molina, M. A., Pérez, A. L. G., and Hernández, U. M. (2003). Size, age and activity sector on the growth of the small and medium firm size. *Small Business Economics*, 21(3), 289-307.

Rogge, E. (2005). Aligning business and IT to improve performance. *Operational Research Intelligence*. n.p.: n.p.

Roslender, R., and Hart, S. J. (2003). In search of strategic management accounting: Theoretical and field study perspectives, *Management Accounting Research*, 14(3), 255-279.

Rowe, B. J., and Widener, S. K. (2011). Where performance measurement and knowledge management meet: Evaluating and managing corporate knowledge. *Journal of Accounting and Finance*, 11(2), 91-106.

Ryals, L. (2002). Are your customers worth more than money?. *Journal of Retailing and Consumer Services*, 9(5), 241-251.

Schaltegger, S. Burritt, R. and Peterson, H. (2003). *An Introduction to Corporate Environmental Management: Striving for Sustainability*. Sheffield: Greenleaf Publishing, Sheffield.

Schiller, S. (2010). Management accounting in a learning environment. *Journal of Accounting & Organizational Change*, 6(1), 123–148.

Schreyer, P. (2000). High growth firms and employment, *OECD Science, Technology and Industry Working Papers,* 3, 1-48.

Schulz, A. K., Wu, A., and Chow, C. W. (2010). Environmental uncertainty, comprehensive performance measurement systems, performance-based compensation, and organizational performance. *Asia-Pacific Journal of Accounting & Economics*, 17(1), 17-39.

Schwarze, F., Wuellenweber, K., and Hackethal, A. (2007). *Drivers and Barriers to Management Accounting Change*. [Online]. Available from: http://dx.doi.org/10.2139/ssrn.1003371[accessed December 3, 2017].

Scott, T. W., and Tiessen, P. (1999). Performance measurement and managerial teams. *Accounting, Organizations and Society*, 24(3), 263-285.

Setthasakko, W. (2010). Barriers to the development of environmental management accounting: An exploratory study of pulp and paper companies in Thailand. *EuroMed Journal of Business*, 5(3), 315-331.

Silvi, R. (2012). Knowledge management: a strategic cost management perspective. *Economia Aziendale Online*, 1, 1-26.

Sisaye, S. (2003). Process innovation and adaptive institutional change strategies in management control systems: Activity based costing as administrative innovation. *Advances in Management Accounting, 11*, 251-285.

Slagmulder, R., and Cooper, R. (2003). Strategic cost management: Expanding scope and boundaries. *Journal of Cost Management*, 17(1), 23-30.

Slater, S. F., and Narver, J. C. (2000). Market Oriented is More Than Being Customer-Led. *Strategic Management Journal*, 20(12), 1165-1168.

Snyder,D.R. and Elliard,M. (2012). The effect of non-immediate incentives and sponsoring organization size on mail survey response quality. *Review of Business Research*, 12(5), 177-183.

Soin, K., Seal, W., and Cullen, J. (2002). ABC and organizational change: an institutional perspective. *Management Accounting Research*, 13(2), 249-271.

Sousa, R. G. D., Vasconcelos, A. F. D., Caneca, R. L. and Niyama, J. K. (2013). Accrual basis accounting in the Brazilian public sector: Empirical research on the usefulness of accounting information. *Revista Contabilidade and Finanças*, 24(63), 219-230.

Spanos, Y. E., and Lioukas, S. (2001). An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22(10), 907–934.

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), 111-113.

Stede, W. A. V. D., Chow, C. W., and Lin, T. W. (2006). Strategy, choice of performance measures, and performance. *Behavioral Research in Accounting*, 18(1), 185-205.

Stock, W.A. (2013). *Introduction to Economics: Social Issues and Economic Thinking*. 2nd ed. Montana State University.

Strumickas, M. and Valanciene, L. (2010). Development of modern management accounting system. *Engineering Economics*, 21(4), 377-386.

Sulaiman, M., Nazli Nik Ahmad, N., and Mohd Alwi, N. (2005). Is standard costing obsolete? Empirical evidence from Malaysia. *Managerial Auditing Journal*, 20(2), 109-124.

Sunarni, C. W. (2013). Management accounting practices and the role of management accountant: Evidence from manufacturing companies throughout Yogyakarta, Indonesia. *Review of Integrative Business and Economics Research*, 2(2), 616.

Svatošová, V. (2012). Possibilities of knowledge management in supporting marketing activities of firms. *Management, Knowledge and Learning (Make Learn) International Conference 2012*, Celje, Slovenia.

Talaulicar, T., Grundei, J., and Werder, A. V. (2005). Strategic decision making in start-ups: the effect of top management team organization and processes on speed and comprehensiveness. *Journal of Business Venturing*, 20(4), 519-541.

Talebnia, G., Salehi, M., Valipour, H., and Shafiee, S. (2010). Empirical study of the relationship between ownership structure and firm performance: some evidence of listed companies in Tehran Stock Exchange. *Journal of Sustainable Development*, *3*(2), 264-270.

Talha, M., Raja, J. B., and Seetharaman, A. (2010). A new look at management accounting. *Journal of Applied Business Research*, 26(4), 83-96.

Tamandeh, S. H. (2016). The Effect of Business Intelligence on Management Accounting Information System. *European Online Journal of Natural and Social Sciences*, 5(1), 190.

Tanc, A., and Gokoglan, K. (2015). The Impact of Environmental Accounting on Strategic Management Accounting: A Research on Manufacturing Companies. *International Journal of Economics and Financial Issues*, 5(2), 566-573.

Teece D. (2000). *Managing Intellectual Capital: Organizational, Strategic, and Policy Dimensions*. Oxford: Oxford University Press.

———. (2007). Explicating dynamic capabilities: The nature and microfoundations of sustainable enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.

Teece, D. J., Pisano, G., and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509 533.

Thitiyapramote, N. (2015). Managerial Accounting Practice Capability and decision Making Success: A Conceptual Model. *Proceedings of 19th ISERD International Conference, Kyoto, Japan*. 9-13.

Thoumrungroje, A. (2013). *Handbook of Research Methodology in International Business*. Thailand: Triple Education.

Tillema, S., 2005. Towards an integrated contingency framework for MAS sophistication: Case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, 16(1), 101–129.

Tontiset N. and Choojan J. (2012). The successful of strategic cost management of electronics manufacturing businesses in Thailand: An empirical research of its antecedents and consequences. *International Journal of Business Strategy*, 12(3), 133-149.

Tsui, C. S. (2014). A Literature Review on Environmental Management Accounting (EMA) Adoption. *Web Journal of Chinese Management Review*, 17(3), 1-19.

Tuan M. T. (2010). *Management Accounting and Organizational Change: Impact of Alignment of Management Accounting System, Structure and Strategy on Performance* [Online]. Available from: http://ro.ecu.edu.au/theses/149 [accessed April 10, 2017].

Tuomela, T., (2005). The interplay of different levers of control: a case study of introducing a new performance measurement system. *Management Accounting Research*, 16, 293–320.

Ullrich, M. J., and Tuttle, B. M. (2004). The effects of comprehensive information reporting systems and economic incentives on managers' time-planning decision. *Behavioral Research in Accounting*, 16(1), 89-105.

Vaivio, J. (2008). Qualitative management accounting research: rationale, pitfalls and potential. *Qualitative Research in Accounting & Management*, 5(1), 64–86.

Valanciene, L., and Gimzauskiene E. (2007). Does implementation of modern management accounting conceptions ensure corporate value creation? *Economics and Management*, 12, 154-164.

Vamosi, T. (2003). The role of management in a company transition from command to market economy. *Journal of Small Business and Enterprise Development*, 10(2), 194-209.

Van Bommel, H. W. (2011). A conceptual framework for analyzing sustainability strategies in industrial supply networks from an innovation perspective. *Journal of Cleaner Production*, 19(8), 895-904.

Van der Stede, W. A., Young, S. M., and Chen, C. X. (2006). Doing management accounting survey research. *Handbooks of Management Accounting Research*, 1, 445-478.

Vasile, E., and Man, M. (2012). Current dimension of environmental management accounting. *Procedia-Social and Behavioral Sciences*, 62, 566-570.

Wade, M., and Hulland, J. (2004). Review: The resource-based view and information systems research: review, extension, and suggestions for future research. *MIS Quarterly*, 28(1), 107-142.

Wagner, S. M., Rau, C. and Lidemann, E. (2010). Multiple informant methodology: A critical review and recommendations. *Sociological Methods & Research*, 38(4),582-618.

Wåhlberg, A. E., and Poom, L. (2015). An empirical test of nonresponse bias in internet surveys. *Basic and Applied Social Psychology*, 37(6), 336-347.

Wang, C. L., and Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews*, 9(1), 31-51.

Waweru, N. (2008). Predicting change in management accounting systems: The effects of competitive strategy. *Global Journal of Business Research*, 2(1), 25-41.

Waweru, N. M., and Uliana, E. (2005). Predictors of management accounting change in South Africa: Evidence from five retail companies. *South African Journal of Accounting Research*, 19(1), 37-71.

Waweru, N. M., Hoque, Z., and Uliana, E. (2004). Management accounting change in South Africa: Case studies from retail companies. *Accounting, Auditing and Accountability Journal*, 17(5), 675-704.

Weerawardena, J. (2003). Exploring the role of market learning capability in competitive strategy. *European Journal of Marketing*, 37(3/4), 407-429.

Wei, Y. S., and Wang, Q. (2011). Making sense of a market information system for superior performance: The roles of organization responsiveness and innovation strategy, *Industrial Marketing Management*, 40(2), 267-277.

Weiss, W. H. (2004). Effective leadership: What are the requisites. *Supervision*, 65(1), 14-17.

Wiersma, E. (2008). An exploratory study of relative and incremental information content of two non-financial performance measures: Field study evidence on absence frequency and on-time delivery. *Accounting, Organizations and Society*, 33(2), 249-265.

Williams, J. J., and Seaman, A. E. (2001). Predicting change in management accounting systems: national culture and industry effects. *Accounting, Organizations and Society*, 26(4), 443-460.

———. (2002). Management accounting systems change and departmental performance: The influence of managerial information and task uncertainty. *Management Accounting Research*, 13(4), 419-445.

Williams, S., and Williams, N. (2003). The business value of business intelligence. *Business Intelligence Journal*, 8(4), 30–39.

Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24(10), 991-995.

Wongjinda, C., Ussahawanitichakit, P., and Janjarasjit, S. (2016). Managerial Accounting Control Orientation and Firm Performance: An Empirical Investigation of Garment Manufacturing Businesses in Thailand. *AU-GSB e-JOURNAL*, 9(2), 1-20.

Yeh, R. K. J., and Teng, J. T. (2012). Extended conceptualization of perceived usefulness: empirical test in the context of information system use continuance. *Behaviour & Information Technology*, 31(5), 525-540.

Yeniyurt, S. (2003).A literature review and integrative performance measurement framework for multinational companies. *Marketing Intelligence &Planning*, 21(3), 134-142.

Yeung, M. C. H., and Ennew, C. T. (2000). From customer satisfaction to profitability. *Journal of Strategic Marketing*, 8(4), 313-326.

Zahra, S and George, G. (2002). Absorptive capacity: A review, reconceptualization and extension. *Academy of Management Review*, 27(2), 185-203.

Zahra, S. A., Sapienza, H. J., and Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, 43(4), 917-955.

Zhang, Y., Zhou, J., and Zhou, N. (2007). Audit committee quality, auditor independence, and internal control weaknesses. *Journal of Accounting and Public Policy*, 26(3), 300-327.

Zikmund, W. G. (2003). *Business Research Methods*. 7th ed. Ohio: Thomson Learning.

Zollo, M., and Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, 13(3), 339-351.

Zoni, L., Dossi, A., and Morelli, M. (2012). Management accounting system (MAS) change: field evidence. *Asia-Pacific Journal of Accounting & Economics*, 19(1), 119-138.

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: insights from a simulation study. *Strategic Management Journal*, 24(2), 97-125.

APPENDICES

APPENDIX A

The Original Items

Table 1A: Original Items in Scales

Construct	Items
Strategic Positioning Analysis (SPA)	
SPA1	Firm believes that good accounting information allows the business to determine the direction and more efficient and effective management practices.
SPA2	Firm pays attention to the use of accounting information in setting strategic, direction and business plan in a systematic and concrete way which will increase competitiveness and sustainability.
SPA3	Firm focuses using accounting information to analyze and synthesize the competitiveness that will help to guide the continuous competitive advantage.
SPA4	Firm commits to use accounting information for setting good practices and to allocate resources efficiently which will help achieve the goals and lead to longer-term profitability.
Cost Management Strategy (CMS)	
CMS1	Firm believes that good cost management will allow the company to achieve its goals of operating under fierce competition.
CMS2	Firm pays attention to the analysis of components of production and operation cost to be accurate which will make the planning of operations more efficient.
CMS3	Firm focuses on the application of appropriate accounting techniques and methods in planning and controlling costs in accordance with the direction of corporate governance that will help management effectively adapt to the situation.
CMS4	Firm encourages to do cost databases and analysis the various types of costs in systematically to guide the management strategies that lead to the goals effectively
Modern Performance Measurement (MPM))	
MPM1	Firm believes that the performance measurement which consistent with the current operational strategy will help achieve the goals more effectively.
MPM2	Firm pays attention to the integration of new techniques and evaluation methods which will stimulate and motivate personnel to achieve their full potential.
MPM3	Firm focuses on the application of monetary and non-monetary measurement in a systematic manner that will make the operation of the organization more effectively.
MPM4	Firm encourages for performance measurement that encompasses quantitative and qualitative measurement that will motivate personnel to accept and enthusiastic work to achieve their goals.
MPM5	Firm prioritizes the application of benchmarking in the operation of the business that increases more capacity and competitiveness.

Table 1A: Original Items in Scales (Continued)

Construct	Items
Market Information Orientation	
MIO1	Firm believes that having accounting information related to good marketing practices will allow the company to effectively manage its business under changing circumstances.
MIO2	Firm pays attention to the analysis of information related to the competitor's potential and competency continuously that will allow for setting more consistent strategies to the situation.
MIO3	Firm commits to analyze the costs and expenses associated with providing customer service that will allow the company to plan and manage its profits more efficiency and effectiveness.
MIO4	Firm focuses on analyzing and customers segmentation from current and future profitability to support marketing operations and management of the organization to meet more customers' need.
Environmental Responsibility Reporting (ERR)	
ERR1	Firm believes that the presentation of information related to environmental responsibility will allow the business to be recognized by the stakeholders and to be more successful in the operation.
ERR2	Firm focuses on the application for systematic and concrete accounting techniques and methods to make more efficiently and effectively environmental report presentation.
ERR3	Firm focuses on providing clear and straightforward information on the costs and benefits of environmental activities which will allow firm to plan and decide on the environmental performance more effectively.
ERR4	Firm encourages to disclosure the information that impact from the environment activities in both monetary and non-monetary for making a good understanding and confident of the people involved.
Managerial Information Usefulness (MIU)	
MIU1	Firm has information that is consistent with the needs and uses of management in every situation.
MIU2	Firm has complete information to support its operations in every scope.
MIU3	Firm has sufficient information to manage its operations under uncertain situations both current and future.
MIU4	Firm can provide information which executives' needs in various situations that quickly and accurately on time.
Decision-Making Success (DMS)	
DMS1	Firm can choose diversified alternatives more effectively.
DMS2	Firm can choose to invest in the important activities or assets appropriately.
DMS3	Firm can choose the most returned or profitable option effectively and in line with the organization's goals.
DMS4	Firm can choose the right choice quickly, under various circumstances effectively.

Table 1A: Original Items in Scales (Continued)

Construct	Items
Operational Goal Achievement (OGA)	
OGA1	Firm can operate in accordance with established guidelines and procedures efficiently and effectively; consistent with the strategic plan and organizational objectives.
OGA2	Firm can improve and develop their operational processes continuously and well respond to various environments.
OGA3	Firm can manage internal resources appropriately, consistent with the current economic situation efficiently and effectively.
OGA4	Firm can systemize the management and operation professionally that is acceptable to customers, social and stakeholders.
Firm Growth (FG)	
FG1	Firm can increase operating income continuously.
FG2	Firm has the higher net profit per asset ratio compared with last year.
FG3	Firm has increased market share and tendency to rise continually.
FG4	Firm can retain old customers and increase new customers compared to past operations.
FG5	Firm believes that it will have capability and efficiency enough to maintain its growth and survival in the current and future economic crisis.
Proactive Top Management Vision (PTM)	
PTM1	The executive convinces that the strategic formulation and policies in the management that focus on future goals will help the administration more successful.
PTM2	The executives emphasizes on developing good management system continuously that will allow firm can operate under various circumstances, in the future, effectively.
PTM3	The executive encourages to apply the modern and fast technology for systematic management that will help to be success in operation and more competitive advantage over competitors.
PTM4	The executive encourages staff to learn and train the techniques and new ways of working that will help to enhance the efficiency and better competitiveness of firm.
Business Intelligence Competency (BIC)	
BIC1	Firm believes that having a wide range of knowledge and capability that are consistent with various situations, will help firm is success for better management.
BIC2	Firm focuses on the application of information technology to the systematic management of information that will allow the company to better forecast its potential and business trends are more in line with the situation.
BIC3	Firm pays attention to the databases preparation that related to business operations from past to future, which will allow operation planning is more efficient.

Table 1A: Original Items in Scales (Continued)

Construct	Items
BIC4	Firm commits to integrate the good work experience of past personnel into the present that will improve to be better efficiency and ability to respond to the various situation.
Best Management Accounting System (BMS)	
BMS1	Firm believes that having the good management accounting system which help firm to collect data and do the accounting reports that better respond to the needs of executives.
BMS2	Firm pays attention to develop management accounting system that is consistent with firm's strategies and management which will help firm to get the right information to make better decision in various situation.
BMS3	Firm supports to improve management accounting system to be more modern that will help firm to get the up to date and consistent information with actual situation is concrete.
BMS4	Firm always recognizes that good management accounting systems will support the operation of the organization more convenient and faster which make successful management effectively.
Market Learning Capability (MLC)	
MLC1	Firm believes that having a good marketing learning, it help to better manage for various situation.
MLC 2	Firm focuses on analyzing market demand continuously that can setting the target and the marketing plan most effectively.
MLC 3	Firm focuses on the study and assessment of the market situation that will help to have more information in determining a better marketing strategy.
MLC 4	Firm encourages its employees to participate in training or exchanges on issues related to the analysis of changing market trends that will increase the ability to respond the needs of the market more effectively.
Competitive Change Pressure (CCP)	
CCP1	The more competition environment make firm to focus on the development of management potential which able to face the various situation.
CCP2	The different customer's need, make firm must focus on study and understanding the customer to better respond what customer's need.
CCP3	The increase of competitors and their potential, firm must focus on present the different product and service to get more acceptance from customers.
CCP4	There are many new products to the market continuously that make firm must focus on research and development of new products successively, to better compete with competitors.

Table 1A: Original Items in Scales (Continued)

Construct	Items
Knowledge Management Intension (KMI)	
KMI1	Firm believes that good knowledge management that will make the operating more efficiently and effectively.
KMI2	Firm focuses on integrating knowledge into systematic and concrete that will help to increase the skills and capacity of the personnel.
KMI3	Firm encourages its personnel to exchange knowledge within and between departments that will helps to make operations under competitive circumstance more effective.
KMI4	Firm emphasizes to transmit the good idea and operation method that will help to achieve the operational goals more quickly and efficiently.
Innovation Culture (IC)	
IC1	Firm believes that having a corporate culture of creativity the good operation, it will help the operation succeed and grow sustainably.
IC2	Firm encourages the development of modern management continually that will help to have effective resource management and good respond to the competitive environment.
IC3	Firm focuses on developing new processes for the production or services continuously which will help to make the difference and competitive advantage.
IC4	Firm commits to seeking new technologies to support the work process continuously, which will increase the operation capacity more efficiently.
IC5	Firm supports the environment and opportunity for the staff to freely present ideas that will help create in finding new ways of operation which more effectiveness and goal achievement.

APPENDIX B

Item Factor Loading and Reliability Analyses in Sample

Table 1B: Item Factor Loadings and Reliability Analyses in Sample[a]

Constructs	Items	Factor Loadings	Reliability (Alpha)
Firm Growth (FG)	FG1	.930	.931
	FG2	.878	
	FG3	.901	
	FG4	.865	
	FG5	.930	
Strategic Positioning Analysis (SPA)	SPA1	.825	.862
	SPA2	.820	
	SPA3	.896	
	SPA4	.830	
Cost Management Strategy (CMS)	CMS1	.701	.844
	CMS 2	.910	
	CMS 3	.897	
	CMS 4	.829	
Modern Performance Measurement (MPM)	MPM1	.727	.837
	MPM2	.814	
	MPM3	.807	
	MPM4	.735	
	MPM5	.814	
Market Information Orientation (MIO)	MIO1	.752	.852
	MIO2	.819	
	MIO3	.858	
	MIO4	.899	
Environmental Responsibility Reporting (ERR)	ERR1	.841	.938
	ERR2	.961	
	ERR3	.943	
	ERR4	.932	

[a]N=294

Table 1B: Item Factor Loadings and Reliability Analyses in Sample[a](Continued)

Constructs	Items	Factor Loadings	Reliability (Alpha)
Managerial Information Usefulness (MIU)	MIU1	.927	.923
	MIU2	.896	
	MIU3	.916	
	MIU4	.867	
Decision-Making Success (DMS)	DMS1	.884	.926
	DMS2	.928	
	DMS3	.905	
	DMS4	.886	
Operational Goal Achievement (OGA)	OGA1	.737	.848
	OGA2	.907	
	OGA3	.804	
	OGA4	.871	
Proactive Top Management Vision (PTM)	PTM1	.874	.931
	PTM2	.937	
	PTM3	.949	
	PTM4	.884	
Business Intelligence Competency (BIC)	BIC1	.793	.875
	BIC2	.841	
	BIC3	.835	
	BIC4	.946	
Best Management Accounting System (BMS)	BMS1	.831	.930
	BMS 2	.928	
	BMS3	.946	
	BMS4	.930	
Market Learning Capability (MLC)	MLC1	.852	.906
	MLC2	.923	
	MLC3	.929	
	MLC4	.858	

[a]N=294

Table 1B: Item Factor Loadings and Reliability Analyses in Sample[a] (Continued)

Constructs	Items	Factor Loadings	Reliability (Alpha)
Competitive Change Pressure (CCP)	CCP1	.748	.844
	CCP2	.914	
	CCP3	.895	
	CCP4	.752	
Knowledge Management Intension (KMI)	KMI1	.887	.905
	KMI2	.893	
	KMI3	.907	
	KMI4	.850	
Innovation Culture (IC)	IC1	.747	.858
	IC2	.845	
	IC3	.861	
	IC4	.796	

[a]N=294

APPENDIX C

Key Participant Characteristics

Table 1C: Key Participant Characteristics

Characteristics		Frequencies	Percentage (%)
1. Gender	Male	45	15.31
	Female	249	84.69
	Total	294	100.00
2. Age	Less than 30 years old	17	5.80
	30 - 40 years old	108	36.70
	41 - 50 years old	117	39.80
	More than 50 years old	52	17.70
	Total	294	100.00
3. Marital status	Single	111	37.76
	Married	162	55.10
	Divorced	21	7.14
	Total	294	100.00
4. Education level	Bachelor's degree or lower	183	62.24
	Higher than Bachelor's degree	111	37.76
	Total	294	100.00
5. Working experience	Less than 5 years	38	12.92
	5-10 years	59	20.07
	10-15 years	63	21.43
	More than 15 years	134	45.58
	Total	294	100.00
6. Average monthly income	Less than 75,000 Baht	132	44.90
	75,000 – 100,000 Baht	76	25.85
	100,001 – 120,000 Baht	39	13.27
	More than 120,000 Baht	47	15.98
	Total	294	100.00
7. Working position	Accounting director	43	14.63
	Accounting manager	169	57.48
	Accountant	64	21.77
	Other	18	6.12
	Total	294	100.00

APPENDIX D

Demographic of Firm Characteristics

Table 1D: Firm Respondent Characteristics

Characteristics		Frequencies	Percentage (%)
1. Business Type	Company limited	207	70.41
	Partnership	87	29.59
	Total	294	100.00
2. Business registered capital (Baht)	Less than 25,000,000	103	35.03
	25,000,000 – 50,000,000	49	16.67
	50,000,001 – 100,000,000	62	21.09
	More than 100,000,000	80	27.21
	Total	294	100.00
3. Total assets of the firm (Baht)	Less than 50,000,000	78	26.53
	50,000,000 - 100,000,000	50	17.01
	100,000,001 - 150,000,000	46	15.65
	More than 150,000,000	120	40.81
	Total	294	100.00
4. Number of employees	Less than 50 persons	85	28.91
	50 – 100 persons	50	17.01
	101 – 150 persons	32	10.88
	More than 150 persons	127	43.20
	Total	294	100.00
5. The period of time in operating business	Less than 5 years	18	6.12
	5 - 10 years	43	14.63
	11 – 15 years	79	26.87
	More than 15 years	154	52.38
	Total	294	100.00
6. Average revenue per year(Baht)	Less than 25,000,000	34	11.56
	25,000,001 – 50,000,000	43	14.63
	50,000,001 – 75,000,000	15	5.10
	More than 75,000,000	202	68.71
	Total	294	100.00

APPENDIX E

Non-Response Bias Tests

Table 1E: Non-Response Bias Tests

Comparison	N	Mean	S.D.	t	p-value
Business registered capital	294				
• Early Group	122	2.46	1.250	.525	.600
• Late Group	172	2.37	1.194		
Total assets of the firm	294				
• Early Group	122	2.74	1.237	.187	.852
• Late Group	172	2.69	1.264		
Number of employees	294				
• Early Group	122	2.71	1.302	.497	.620
• Late Group	172	2.66	1.281		
The period of time in operating Business	294				
• Early Group	122	3.25	.911	-.189	.850
• Late Group	172	3.26	.939		
Average revenue per year	294				
• Early Group	122	3.34	1.077	.584	.560
• Late Group	172	3.29	1.120		

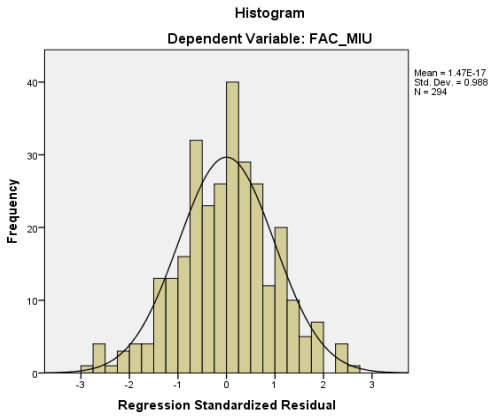
APPENDIX F

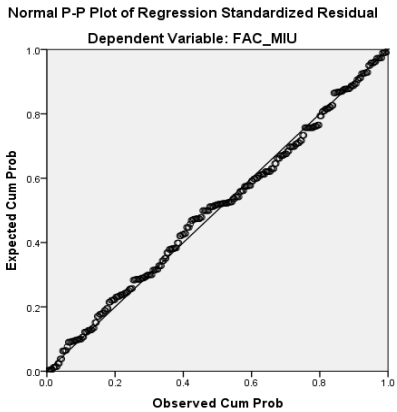
Testing Assumption of Regression Analysis

Appendix F – Results of testing basic assumption of regression analysis

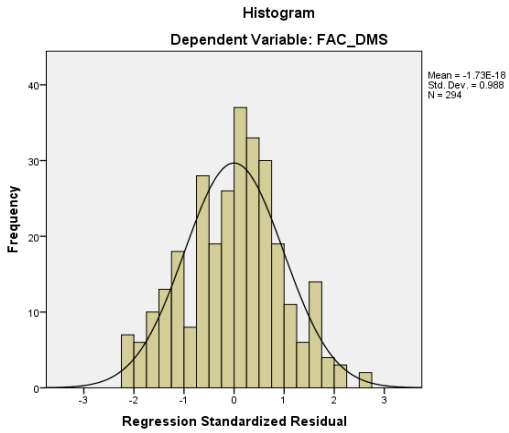
Normality of the error term distribution

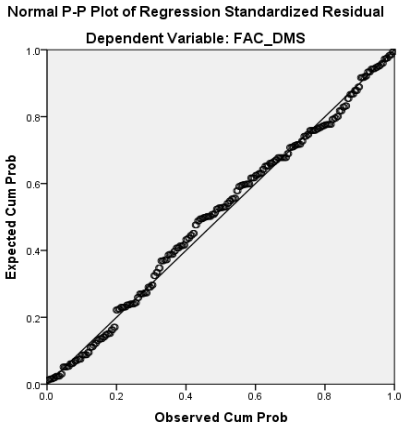
Equation 1: $MIU = \alpha_{01} + \beta_1 SPA + \beta_2 CMS + \beta_3 MPM + \beta_4 MIO + \beta_5 ERR + \beta_6 FA + \beta_7 FS + \varepsilon$



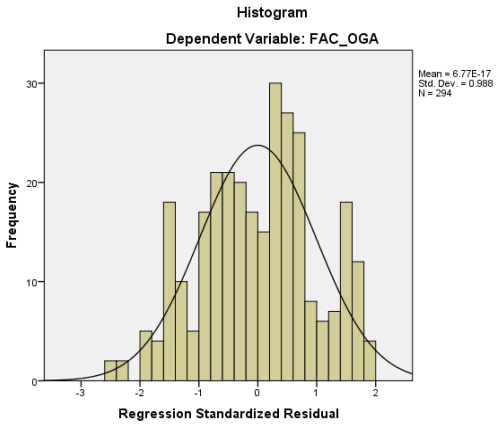


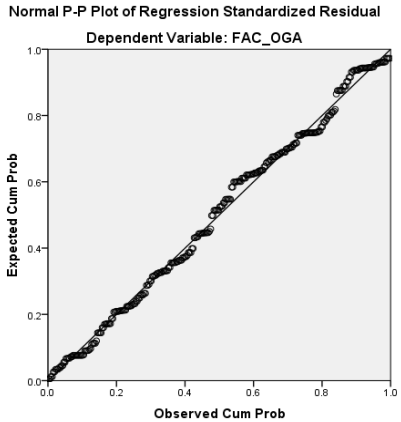
Equation 2: $DMS = \alpha_{02} + \beta_8 SPA + \beta_9 CMS + \beta_{10} MPM + \beta_{11} MIO + \beta_{12} ERR + \beta_{13} FA + \beta_{14} FS + \varepsilon$



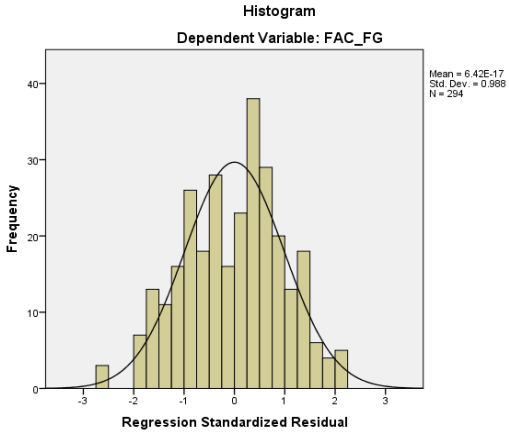


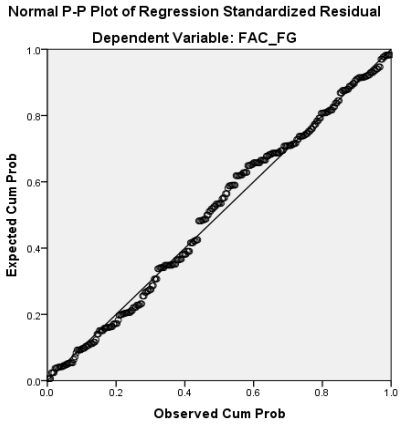
Equation 3: $OGA = \alpha_{03} + \beta_{15} SPA + \beta_{16} CMS + \beta_{17} MPM + \beta_{18} MIO + \beta_{19} ERR + \beta_{20} FA + \beta_{21} FS + \varepsilon$



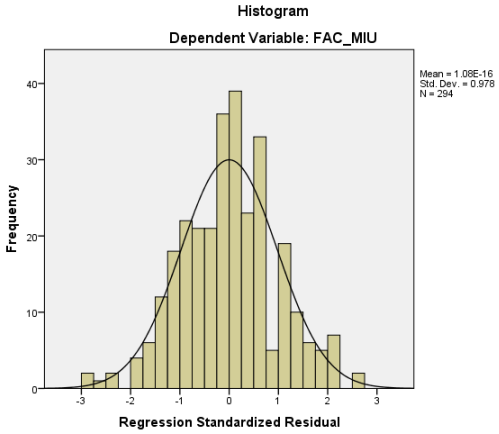


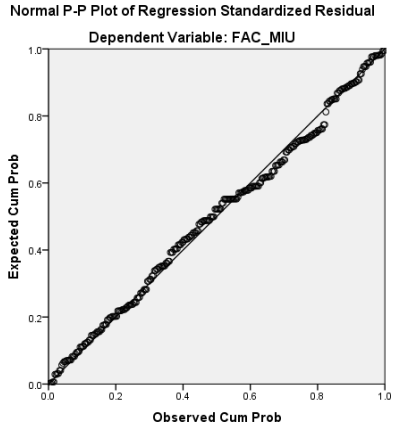
Equation 4: ***FG*** $= \alpha_{04} + \beta_{22}\,SPA + \beta_{23}CMS + \beta_{24}MPM + \beta_{25}MIO + \beta_{26}ERR + \beta_{27}FA + \beta_{28}FS + \varepsilon$



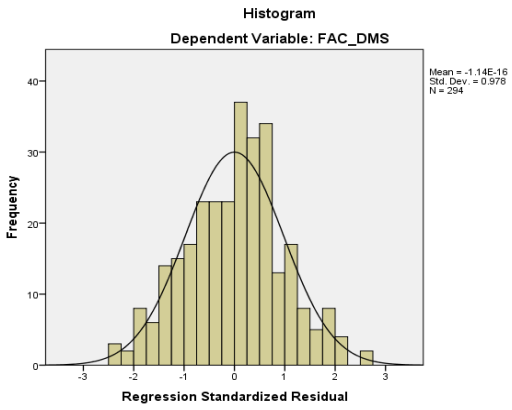


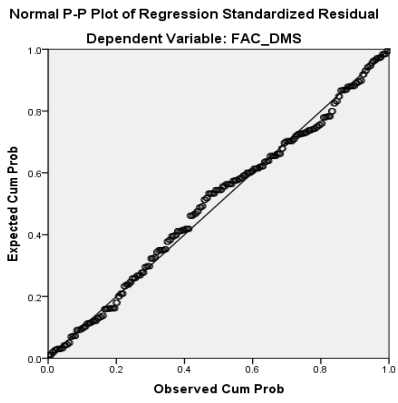
Equation 5: ***MIU*** $= \alpha_{05} + \beta_{29}\,SPA + \beta_{30}CMS + \beta_{31}MPM + \beta_{32}MIO + \beta_{33}ERR + \beta_{34}KMI + \beta_{35}(KMI * SPA) + \beta_{36}(KMI * CMS) + \beta_{37}(KMI * MPM) + \beta_{38}(KMI * MIO) + \beta_{39}(KMI * ERR) + \beta_{40}FA + \beta_{41}FS + \varepsilon$



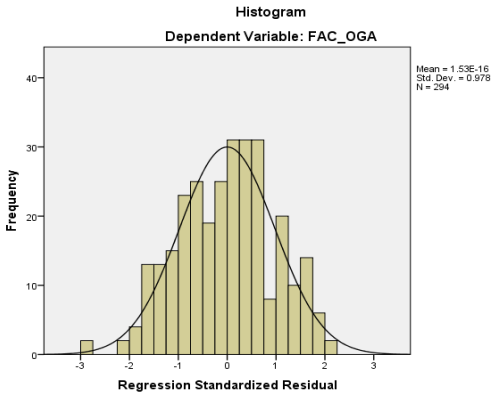


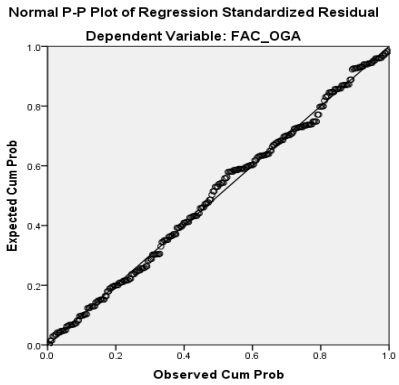
Equation 6: ***DMS***$= \alpha_{06} + \beta_{42}SPA + \beta_{43}CMS + \beta_{44}MPM + \beta_{45}MIO + \beta_{46}ERR + \beta_{47}KMI + \beta_{48}(KMI * SPA) + \beta_{49}(KMI * CMS) + \beta_{50}(KMI * MPM) + \beta_{51}(KMI * MIO) + \beta_{52}(KMI * ERR + \beta_{53}FA + \beta_{54}FS + \varepsilon$



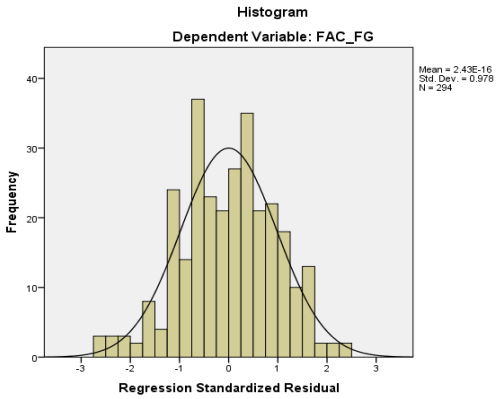


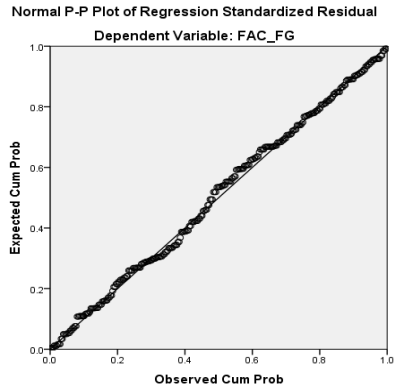
Equation 7: ***OGA*** $= \alpha_{07} + \beta_{55}SPA + \beta_{56}CMS + \beta_{57}MPM + \beta_{58}MIO + \beta_{59}ERR + \beta_{60}KMI + \beta_{61}(KMI * SPA) + \beta_{62}(KMI * CMS) + \beta_{63}(KMI * MPM) + \beta_{64}(KMI * MIO) + \beta_{65}(KMI * ERR + \beta_{66}FA + \beta_{67}FS + \varepsilon$



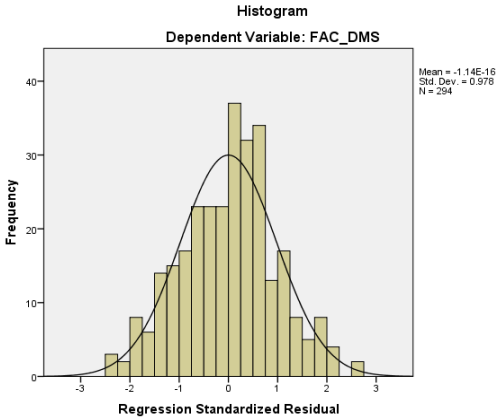


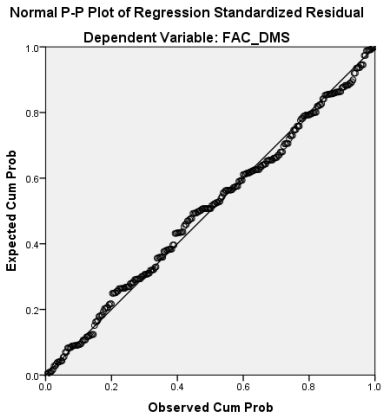
Equation 8: ***FG*** $= \alpha_{08} + \beta_{68}SPA + \beta_{69}CMS + \beta_{70}MPM + \beta_{71}MIO + \beta_{72}ERR + \beta_{73}KMI + \beta_{74}(KMI * SPA) + \beta_{75}(KMI * CMS) + \beta_{76}(KMI * MPM) + \beta_{77}(KMI * MIO) + \beta_{78}(KMI * ERR + \beta_{79}FA + \beta_{80}FS + \varepsilon$



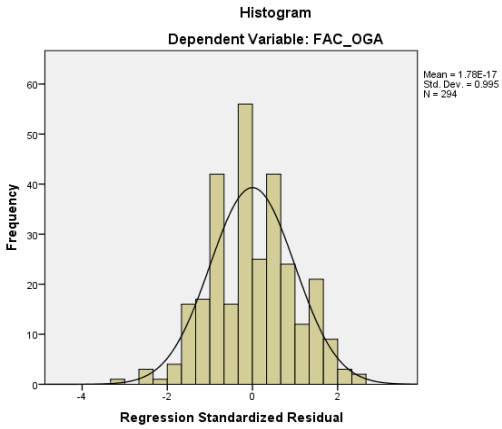


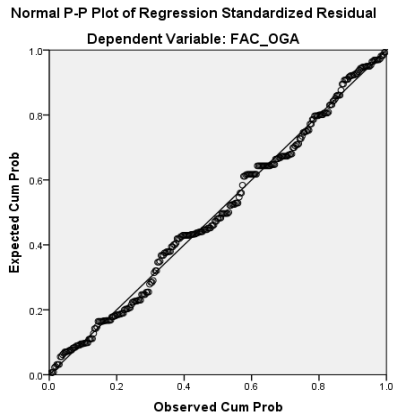
Equation 9: ***DMS*** $= \alpha_{09} + \beta_{81}MIU + \beta_{82}FA + \beta_{83}FS + \varepsilon$



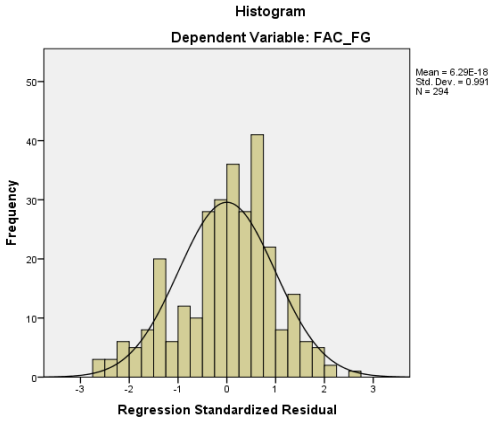


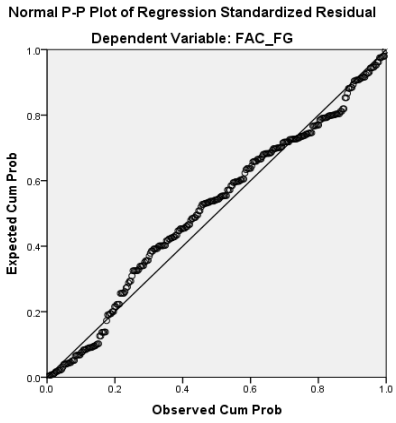
Equation 10: OGA = $\alpha_{10} + \beta_{84}DMS + \beta_{85}FA + \beta_{86}FS + \varepsilon$



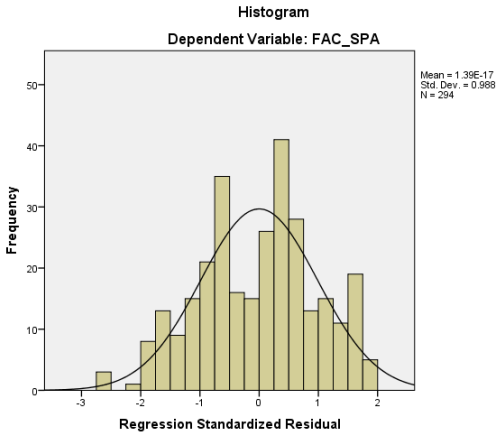


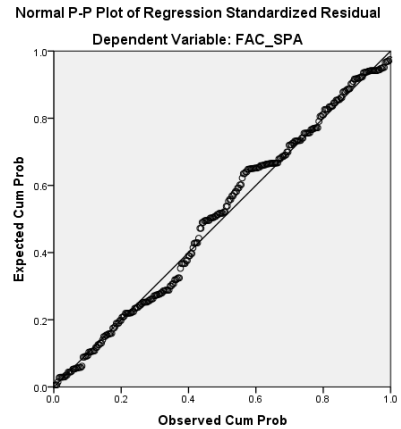
Equation 11: FG = $\alpha_{11} + \beta_{87}MIU + \beta_{88}DMS + \beta_{89}OGA + \beta_{90}FA + \beta_{91}FS + \varepsilon$



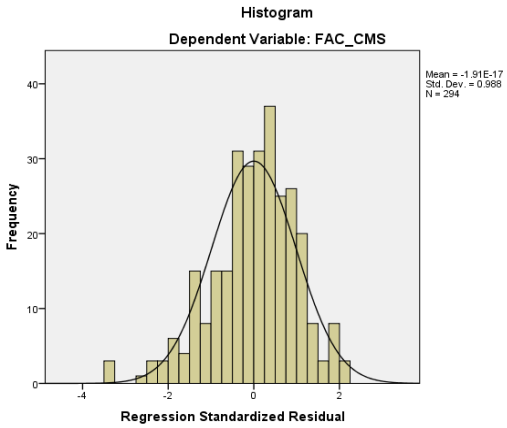


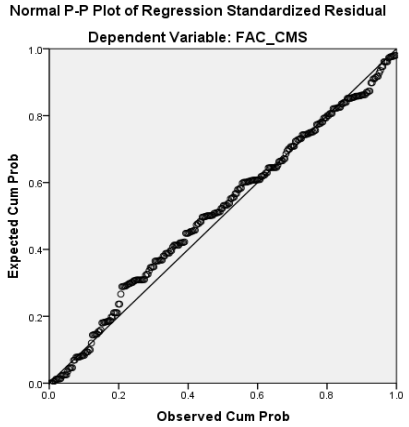
Equation 12: SPA = $\alpha_{12} + \beta_{92}PTV + \beta_{93}BIC + \beta_{94}BMS + \beta_{95}MLC + \beta_{96}CCP + \beta_{97}FA + \beta_{98}FS + \varepsilon$



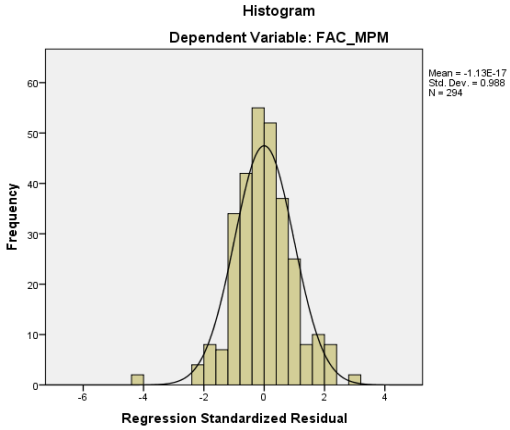


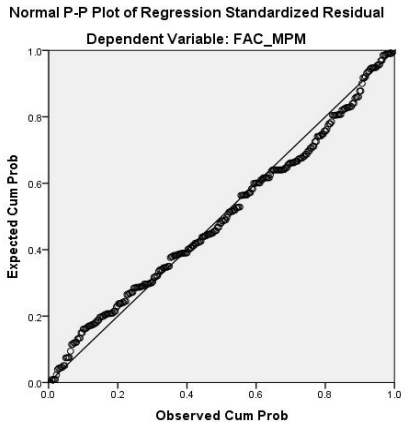
Equation 13: CMS $= \alpha_{13} + \beta_{99}PTV + \beta_{100}BIC + \beta_{101}BMS + \beta_{102}MLC + \beta_{103}CCP + \beta_{104}FA + \beta_{105}FS + \varepsilon$



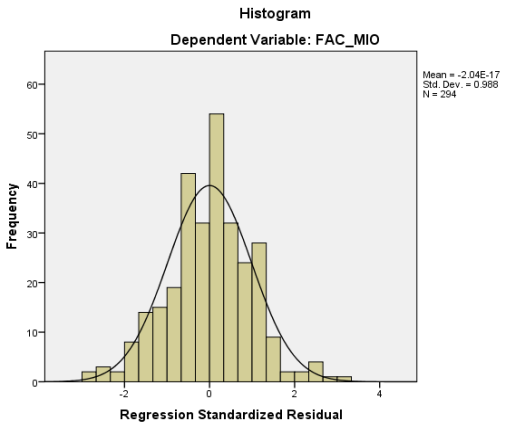


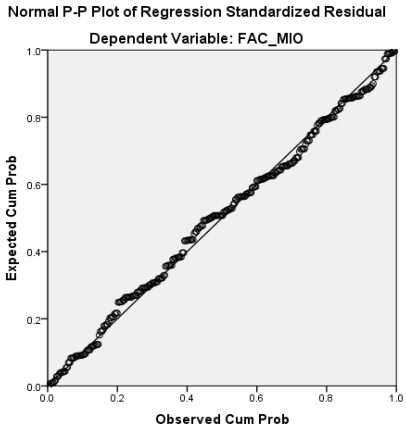
Equation 14: MPM $= \alpha_{14} + \beta_{106}PTV + \beta_{107}BIC + \beta_{108}BMS + \beta_{109}MLC + \beta_{110}CCP + \beta_{111}FA + \beta_{112}FS + \varepsilon$



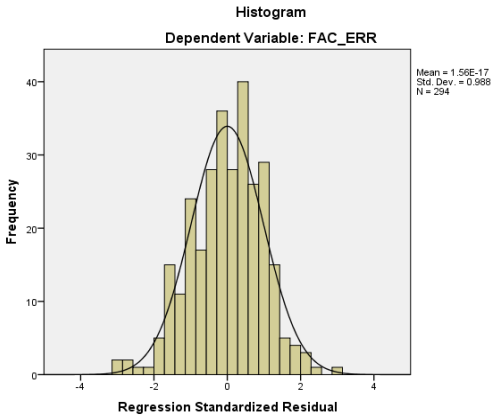


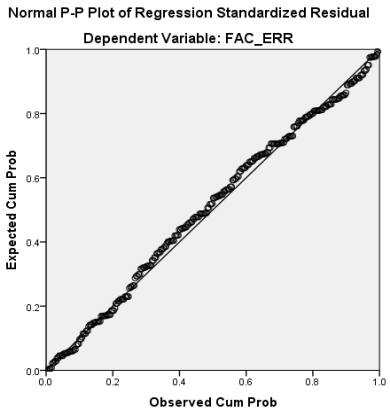
Equation 15: MIO $= \alpha_{15} + \beta_{113}PTV + \beta_{114}BIC + \beta_{115}BMS + \beta_{116}MLC + \beta_{117}CCP + \beta_{118}FA + \beta_{119}FS + \varepsilon$



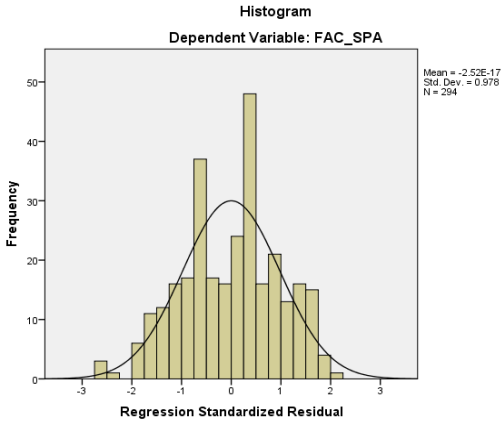


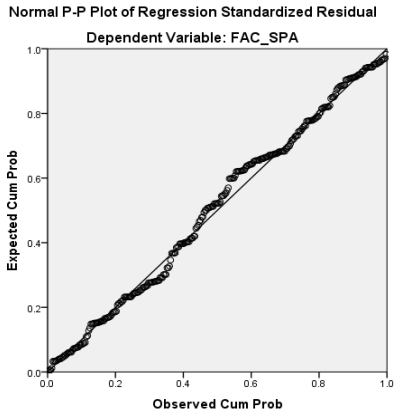
Equation 16: ERR = $\alpha_{16} + \beta_{120} PTV + \beta_{121} BIC + \beta_{122} BMS + \beta_{123} MLC + \beta_{124} CCP + \beta_{125} FA + \beta_{126} FS + \varepsilon$



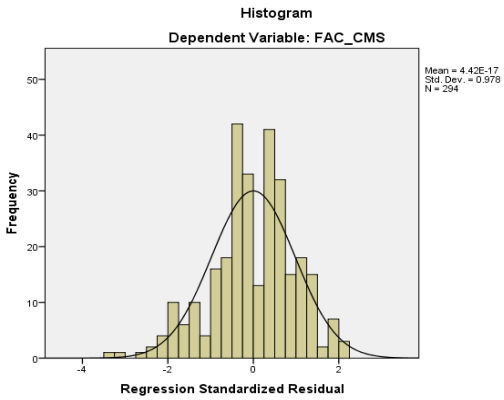


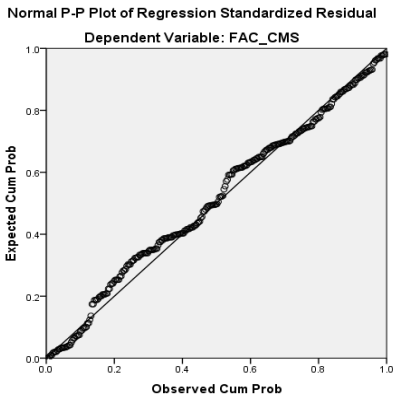
Equation 17: SPA = $\alpha_{17} + \beta_{127} PTV + \beta_{128} BIC + \beta_{129} BMS + \beta_{130} MLC + \beta_{131} CCP + \beta_{132} IC + \beta_{133}(IC * PTV) + \beta_{134}(IC * BIC) + \beta_{135}(IC * BMS) + \beta_{136}(IC * MLC) + \beta_{137}(IC * CCP) + \beta_{138} FA + \beta_{139} FS + \varepsilon$



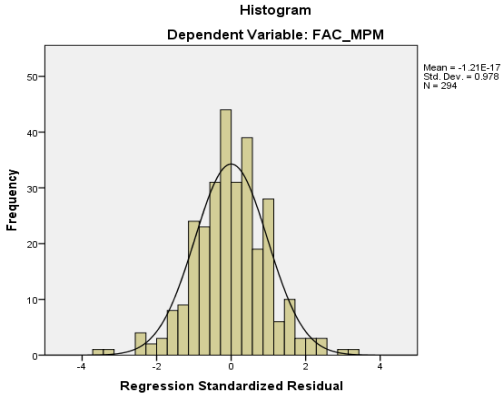


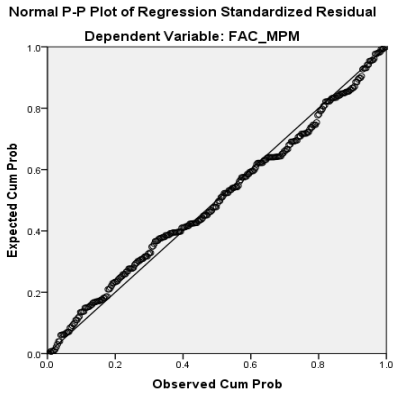
Equation 18: CMS = $\alpha_{18} + \beta_{140} PTV + \beta_{141} BIC + \beta_{1421} BMS + \beta_{143} MLC + \beta_{144} CCP + \beta_{145} IC + \beta_{146}(IC * PTV) + \beta_{147}(IC * BIC) + \beta_{148}(IC * BMS) + \beta_{149}(IC * MLC) + \beta_{150}(IC * CCP) + \beta_{151} FA + \beta_{152} FS + \varepsilon$



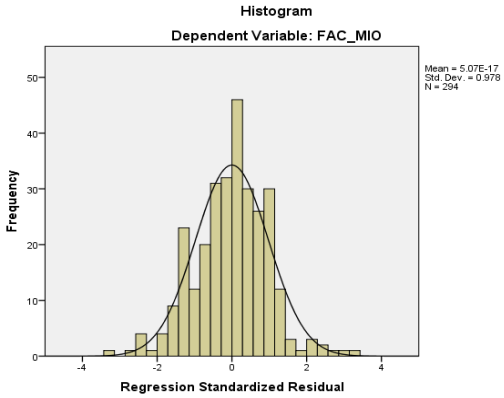


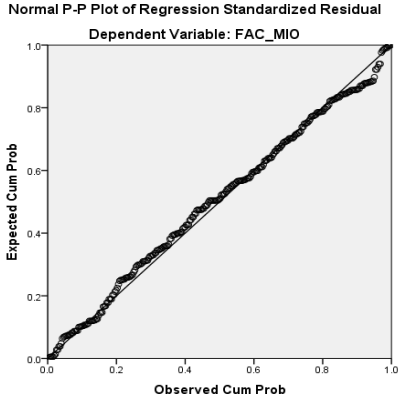
Equation 19: MPM = $\alpha_{19} + \beta_{153} PTV + \beta_{154} BIC + \beta_{1551} BMS + \beta_{156} MLC + \beta_{157} CCP + \beta_{158} IC + \beta_{159}(IC * PTV) + \beta_{160}(IC * BIC) + \beta_{161}(IC * BMS) + \beta_{162}(IC * MLC) + \beta_{163}(IC * CCP) + \beta_{164} FA + \beta_{165} FS + \varepsilon$



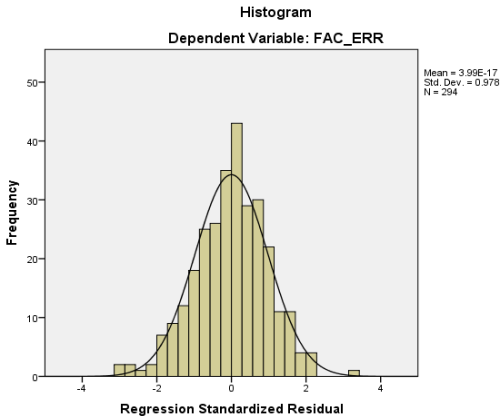


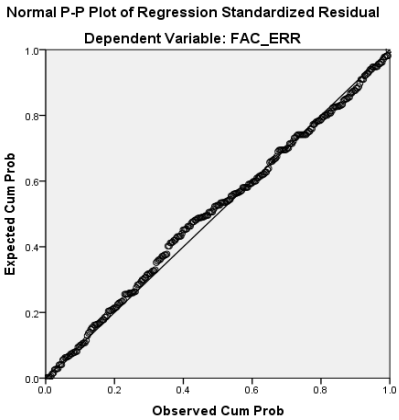
Equation 20: MIO = $\alpha_{20} + \beta_{166} PTV + \beta_{167} BIC + \beta_{1681} BMS + \beta_{169} MLC + \beta_{170} CCP + \beta_{171} IC + \beta_{172}(IC * PTV) + \beta_{173}(IC * BIC) + \beta_{174}(IC * BMS) + \beta_{175}(IC * MLC) + \beta_{176}(IC * CCP) + \beta_{177} FA + \beta_{178} FS + \varepsilon$





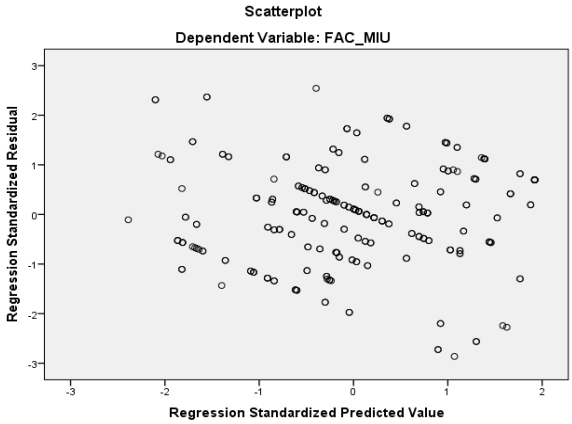
Equation 21: ERR = $\alpha_{21} + \beta_{179} PTV + \beta_{180} BIC + \beta_{1811} BMS + \beta_{182} MLC + \beta_{183} CCP + \beta_{184} IC + \beta_{185}(IC * PTV) + \beta_{186}(IC * BIC) + \beta_{187}(IC * BMS) + \beta_{188}(IC * MLC) + \beta_{189}(IC * CCP) + \beta_{190} FA + \beta_{191} FS + \varepsilon$



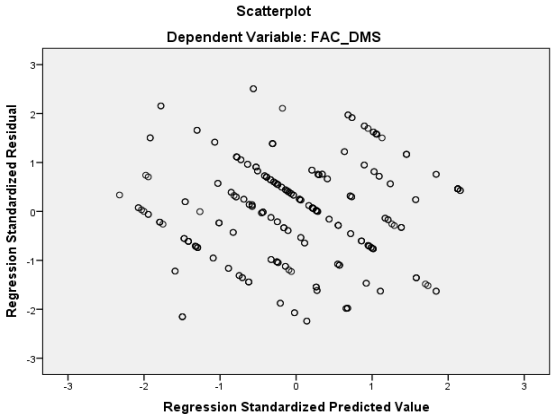


Test of constant variance of the error terms (Homoscedasticity)

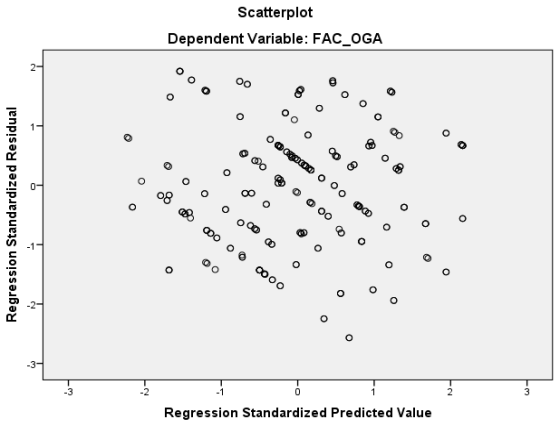
Equation 1: MIU $= \alpha_{01} + \beta_1 SPA + \beta_2 CMS + \beta_3 MPM + \beta_4 MIO + \beta_5 ERR + \beta_6 FA + \beta_7 FS + \varepsilon$



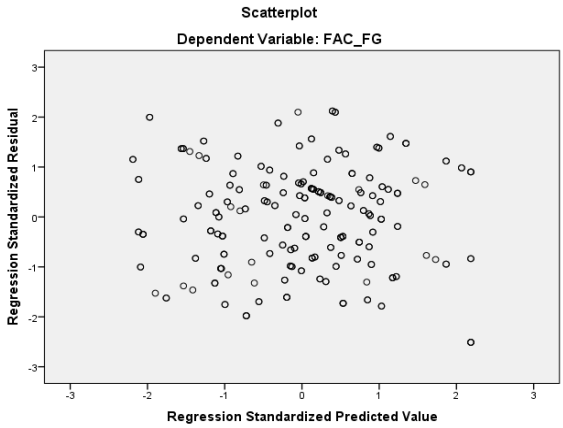
Equation 2: ***DMS***$= \alpha_{02} + \beta_8 SPA + \beta_9 CMS + \beta_{10} MPM + \beta_{11} MIO + \beta_{12} ERR + \beta_{13} FA + \beta_{14} FS + \varepsilon$



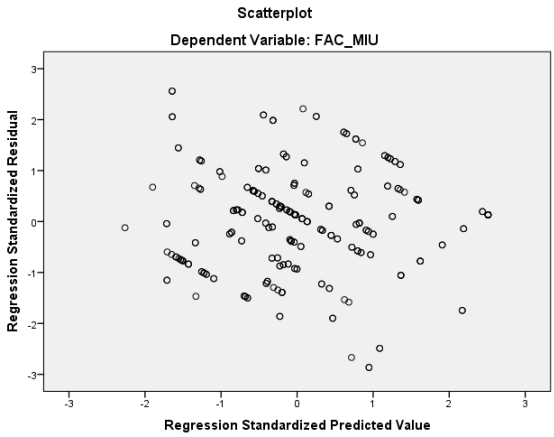
Equation 3: ***OGA***$= \alpha_{03} + \beta_{15} SPA + \beta_{16} CMS + \beta_{17} MPM + \beta_{18} MIO + \beta_{19} ERR + \beta_{20} FA + \beta_{21} FS + \varepsilon$



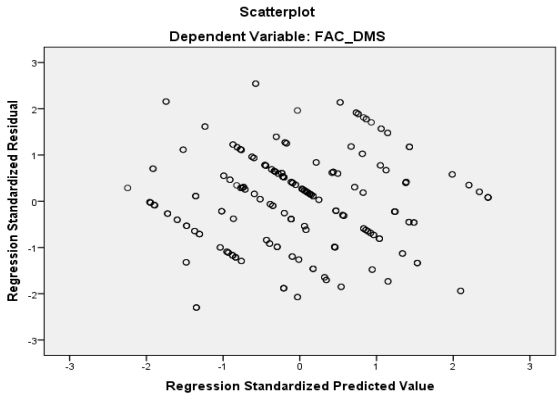
Equation 4: $FG = \alpha_{04} + \beta_{22} SPA + \beta_{23}CMS + \beta_{24}MPM + \beta_{25}MIO + \beta_{26}ERR + \beta_{27}FA + \beta_{28}FS + \varepsilon$



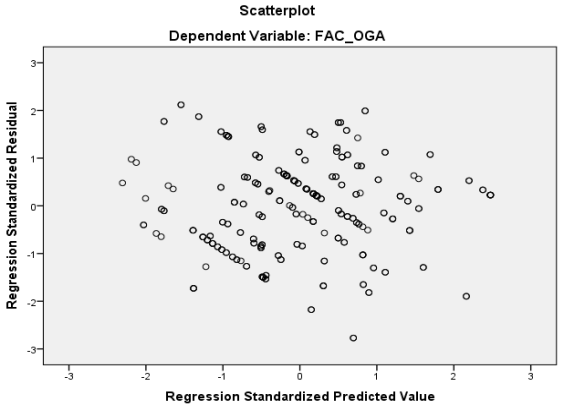
Equation 5: $MIU = \alpha_{05} + \beta_{29} SPA + \beta_{30}CMS + \beta_{31}MPM + \beta_{32}MIO + \beta_{33}ERR + \beta_{34}KMI + \beta_{35}(KMI * SPA) + \beta_{36}(KMI * CMS) + \beta_{37}(KMI * MPM) + \beta_{38}(KMI * MIO) + \beta_{39}(KMI * ERR) + \beta_{40}FA + \beta_{41}FS + \varepsilon$



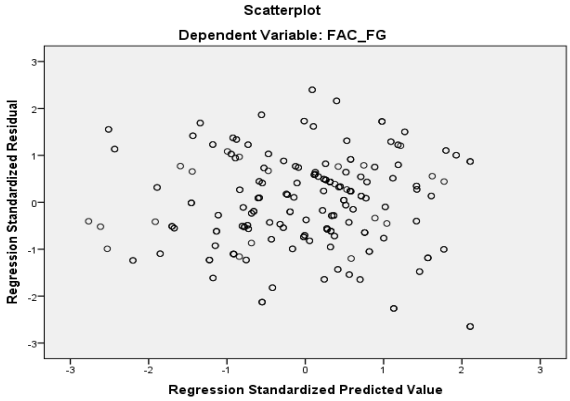
Equation 6: $DMS = \alpha_{06} + \beta_{42}SPA + \beta_{43}CMS + \beta_{44}MPM + \beta_{45}MIO + \beta_{46}ERR + \beta_{47}KMI + \beta_{48}(KMI * SPA) + \beta_{49}(KMI * CMS) + \beta_{50}(KMI * MPM) + \beta_{51}(KMI * MIO) + \beta_{52}(KMI * ERR + \beta_{53}FA + \beta_{54}FS + \varepsilon$



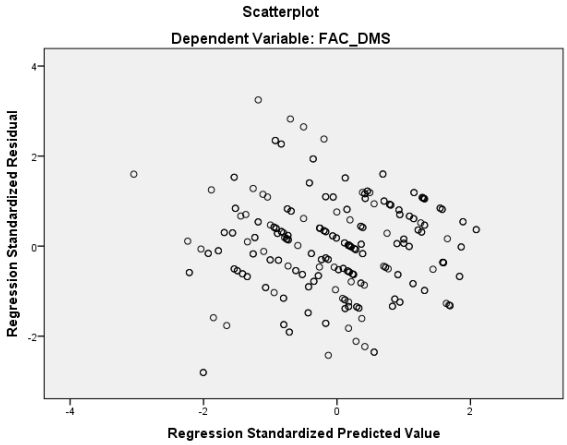
Equation 7: ***OGA*** $= \alpha_{07} + \beta_{55}SPA + \beta_{56}CMS + \beta_{57}MPM + \beta_{58}MIO + \beta_{59}ERR + \beta_{60}KMI + \beta_{61}(KMI * SPA) + \beta_{62}(KMI * CMS) + \beta_{63}(KMI * MPM) + \beta_{64}(KMI * MIO) + \beta_{65}(KMI * ERR + \beta_{66}FA + \beta_{67}FS + \varepsilon$



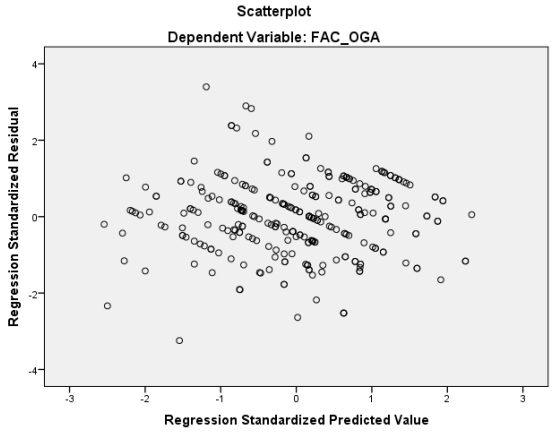
Equation 8: FG $= \alpha_{08} + \beta_{68}SPA + \beta_{69}CMS + \beta_{70}MPM + \beta_{71}MIO + \beta_{72}ERR + \beta_{73}KMI + \beta_{74}(KMI * SPA) + \beta_{75}(KMI * CMS) + \beta_{76}(KMI * MPM) + \beta_{77}(KMI * MIO) + \beta_{78}(KMI * ERR + \beta_{79}FA + \beta_{80}FS + \varepsilon$



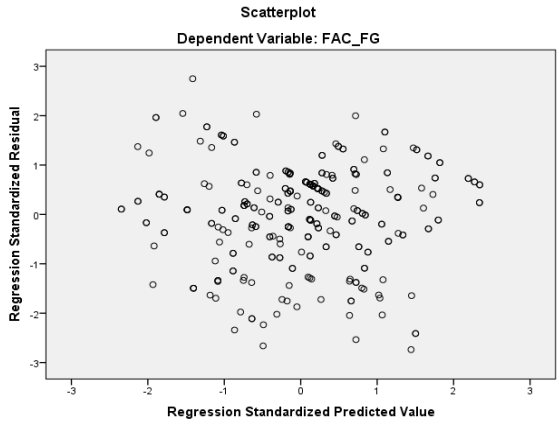
Equation 9: ***DMS*** $= \alpha_{09} + \beta_{81}MIU + \beta_{82}FA + \beta_{83}FS + \varepsilon$



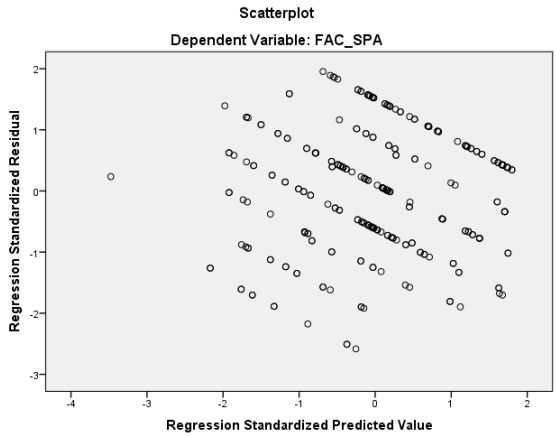
Equation 10: OGA = $\alpha_{10} + \beta_{84}DMS + \beta_{85}FA + \beta_{86}FS + \varepsilon$



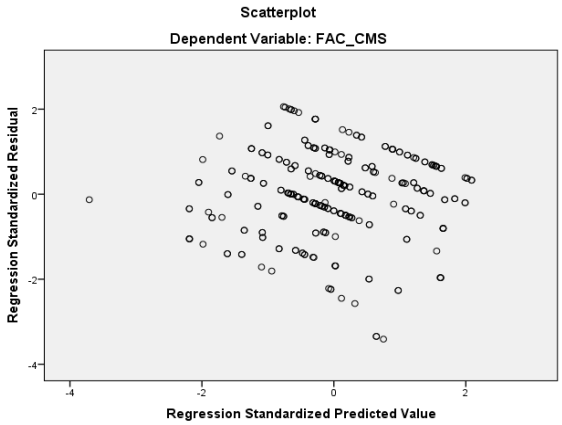
Equation 11: FG = $\alpha_{11} + \beta_{87}MIU + \beta_{88}DMS + \beta_{89}OGA + \beta_{90}FA + \beta_{91}FS + \varepsilon$



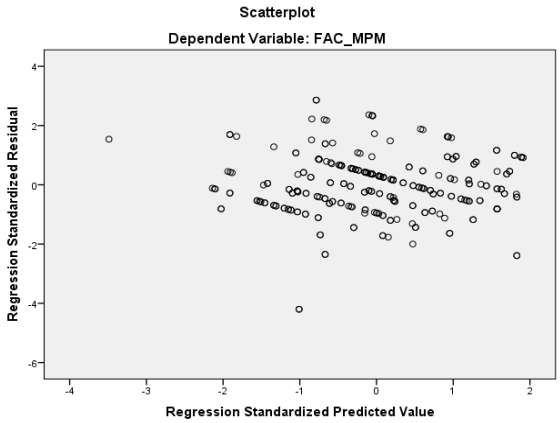
Equation 12: SPA $= \alpha_{12} + \beta_{92}PTV + \beta_{93}BIC + \beta_{94}BMS + \beta_{95}MLC + \beta_{96}CCP + \beta_{97}FA + \beta_{98}FS + \varepsilon$



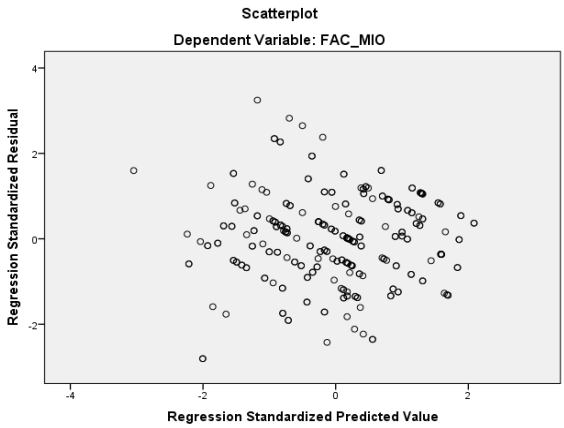
Equation 13: CMS $=\alpha_{13}+\beta_{99}PTV+\beta_{100}BIC+\beta_{101}BMS+\beta_{102}MLC+\beta_{103}CCP+\beta_{104}FA+\beta_{105}FS+\varepsilon$



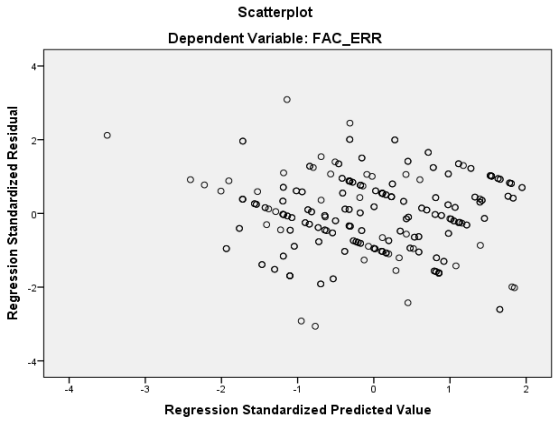
Equation 14: MPM $=\alpha_{14}+\beta_{106}PTV+\beta_{107}BIC+\beta_{108}BMS+\beta_{109}MLC+\beta_{110}CCP+\beta_{111}FA+\beta_{112}FS+\varepsilon$



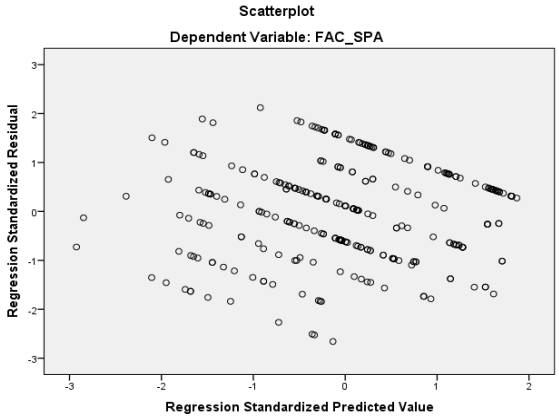
Equation 15: MIO $=\alpha_{15}+\beta_{113}PTV+\beta_{114}BIC+\beta_{115}BMS+\beta_{116}MLC+\beta_{117}CCP+\beta_{118}FA+\beta_{119}FS+\varepsilon$



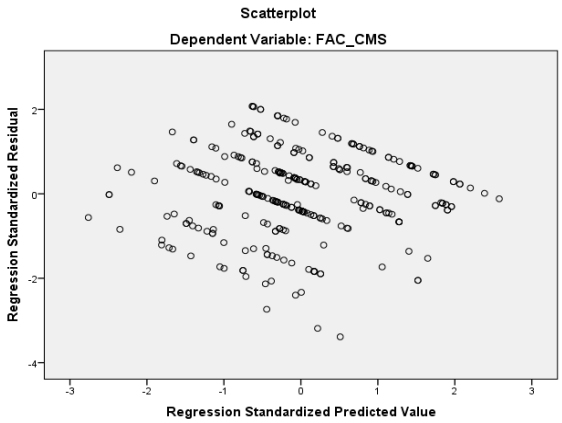
Equation 16: ERR = $\alpha_{16} + \beta_{120}\,PTV + \beta_{121}BIC + \beta_{122}BMS + \beta_{123}MLC + \beta_{124}CCP + \beta_{125}FA + \beta_{126}FS + \varepsilon$



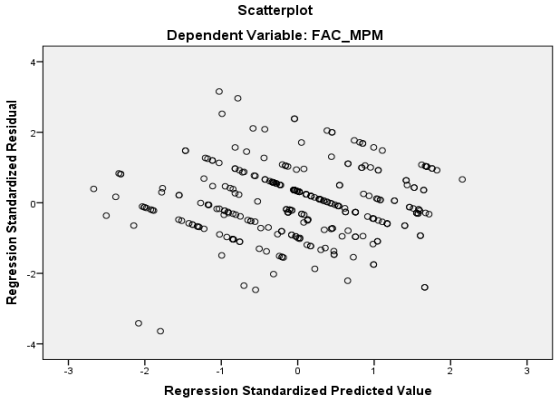
Equation 17: SPA $= \alpha_{17} + \beta_{127}\,PTV + \beta_{128}BIC + \beta_{129}BMS + \beta_{130}MLC + \beta_{131}CCP + \beta_{132}IC + \beta_{133}(IC * PTV) + \beta_{134}(IC * BIC) + \beta_{135}(IC * BMS) + \beta_{136}(IC * MLC) + \beta_{137}(IC * CCP) + \beta_{138}FA + \beta_{139}FS + \varepsilon$



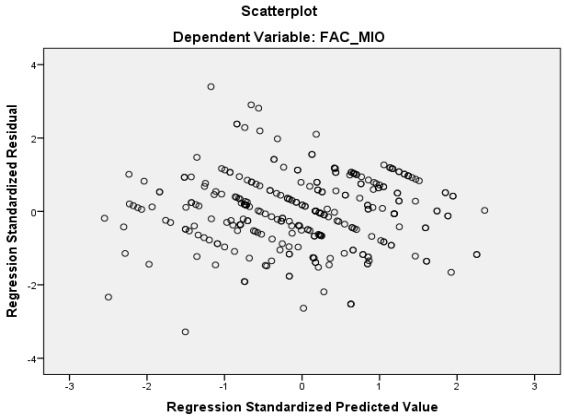
Equation 18: CMS $= \alpha_{18} + \beta_{140}\,PTV + \beta_{141}BIC + \beta_{1421}BMS + \beta_{143}MLC + \beta_{144}CCP + \beta_{145}IC + \beta_{146}(IC * PTV) + \beta_{147}(IC * BIC) + \beta_{148}(IC * BMS) + \beta_{149}(IC * MLC) + \beta_{150}(IC * CCP) + \beta_{151}FA + \beta_{152}FS + \varepsilon$



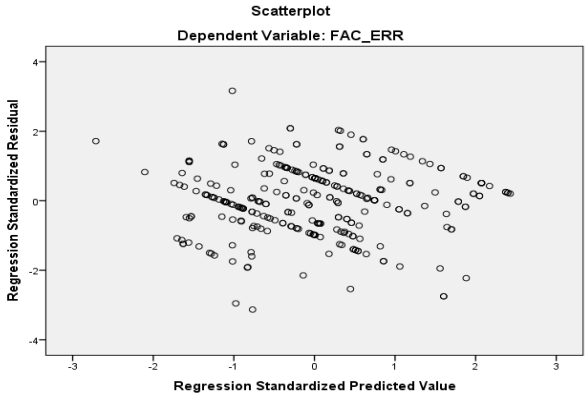
Equation 19: MPM $= \alpha_{19} + \beta_{153}\,PTV + \beta_{154}BIC + \beta_{155}1BMS + \beta_{156}MLC + \beta_{157}CCP + \beta_{158}IC + \beta_{159}(IC * PTV) + \beta_{160}(IC * BIC) + \beta_{161}(IC * BMS) + \beta_{162}(IC * MLC) + \beta_{163}(IC * CCP) + \beta_{164}FA + \beta_{165}FS + \varepsilon$



Equation 20: MIO $= \alpha_{20} + \beta_{166}\,PTV + \beta_{167}BIC + \beta_{168}1BMS + \beta_{169}MLC + \beta_{170}CCP + \beta_{171}IC + \beta_{172}(IC * PTV) + \beta_{173}(IC * BIC) + \beta_{174}(IC * BMS) + \beta_{175}(IC * MLC) + \beta_{176}(IC * CCP) + \beta_{177}FA + \beta_{178}FS + \varepsilon$



Equation 21: ERR $= \alpha_{21} + \beta_{179}\,PTV + \beta_{180}BIC + \beta_{181}1BMS + \beta_{182}MLC + \beta_{183}CCP + \beta_{184}IC + \beta_{185}(IC * PTV) + \beta_{186}(IC * BIC) + \beta_{187}(IC * BMS) + \beta_{188}(IC * MLC) + \beta_{189}(IC * CCP) + \beta_{190}FA + \beta_{191}FS + \varepsilon$



Test independence of the error terms (Test of Autocorrelation)

Table F1: The results of independence of error terms assumption testing

Equations	R	R Square	Adjusted R Square	Durbin-Watson (d Statistic)
1	.628	.394	.379	1.922
2	.727	.529	.517	1.993
3	.701	.491	.479	1.922
4	.568	.322	.306	1.841
5	.667	.445	.419	1.942
6	.738	.545	.524	1.943
7	.749	.561	.540	1.874
8	.612	.375	.345	1.944
9	.664	.441	.436	1.964
10	.685	.469	.464	1.902
11	.656	.430	.420	1.646
12	.548	.300	.283	1.742
13	.523	.274	.256	1.943
14	.590	.348	.332	1.875
15	.666	.444	.430	1.951
16	.616	.380	.365	1.968
17	.561	.314	.282	1.742
18	.573	.328	.297	1.870
19	.625	.391	.363	1.891
20	.699	.488	.465	2.021
21	.660	.435	.409	1.956

Test of Multicollinearity

Table F1: The results of multicollinearity testing (DMAO and its consequences)

Independent Variables	Dependent Variables							
	MIU		DMS		OGA		FG	
	Equation 1		Equation 2		Equation 3		Equation 4	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
SPA	.622	1.607	.622	1.607	.622	1.607	.622	1.607
CMS	.506	1.976	.506	1.976	.506	1.976	.506	1.976
MPM	.491	2.037	.491	2.037	.491	2.037	.491	2.037
MIO	.470	2.125	.470	2.125	.470	2.125	.470	2.125
ERR	.472	2.119	.472	2.119	.472	2.119	.472	2.119
Firm Age	.753	1.327	.753	1.327	.753	1.327	.753	1.327
Firm Size	.733	1.364	.733	1.364	.733	1.364	.733	1.364

Table F2: The results of multicollinearity testing (DMAO, its consequences and moderator)

Independent Variables	Dependent Variables							
	MIU		DMS		OGA		FG	
	Equation 5		Equation 6		Equation 7		Equation 8	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
SPA	.509	1.963	.509	1.963	.509	1.963	.509	1.963
CMS	.448	2.232	.448	2.232	.448	2.232	.448	2.232
MPM	.453	2.208	.453	2.208	.453	2.208	.453	2.208
MIO	.419	2.385	.419	2.385	.419	2.385	.419	2.385
ERR	.360	2.779	.360	2.779	.360	2.779	.360	2.779
KMI	.455	2.197	.455	2.197	.455	2.197	.455	2.197
SPA*KMI	.485	2.063	.485	2.063	.485	2.063	.485	2.063
CMS*KMI	.427	2.344	.427	2.344	.427	2.344	.427	2.344
MPM*KMI	.371	2.699	.371	2.699	.371	2.699	.371	2.699
MIO*KMI	.268	3.735	.268	3.735	.268	3.735	.268	3.735
ERR*KMI	.301	3.319	.301	3.319	.301	3.319	.301	3.319
Firm Age	.741	1.350	.741	1.350	.741	1.350	.741	1.350
Firm Size	.699	1.430	.699	1.430	.699	1.430	.699	1.430

Table F3: The results of multicollinearity testing (DMAO consequences and firm growth)

Independent Variables	Dependent Variables					
	MIU		DMS		OGA	
	Equation 9		Equation 10		Equation 11	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
MIU	1.000	1.000			.481	2.078
DMS			.999	1.001	.450	2.220
OGA					.457	2.188
FG					.767	1.304
Firm Age	.768	1.302	.768	1.303	.767	1.304
Firm Size	.768	1.302	.768	1.302	.481	2.078

Table F4: The results of multicollinearity testing (DMAO and its antecedences)

Independent Variables	Dependent Variables									
	SPA		CMS		MPM		MIO		ERR	
	Equation 12		Equation 13		Equation 14		Equation 18		Equation 16	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
PTM	.418	2.394	.418	2.394	.418	2.394	.418	2.394	.418	2.394
BIC	.408	2.449	.408	2.449	.408	2.449	.408	2.449	.408	2.449
BMS	.468	2.137	.468	2.137	.468	2.137	.468	2.137	.468	2.137
MLC	.426	2.345	.426	2.345	.426	2.345	.426	2.345	.426	2.345
CCP	.485	2.064	.485	2.064	.485	2.064	.485	2.064	.485	2.064
Firm Age	.764	1.310	.764	1.310	.764	1.310	.764	1.310	.764	1.310
Firm Size	.749	1.334	.749	1.334	.749	1.334	.749	1.334	.749	1.334

Table F5: The results of multicollinearity testing (DMAO, its antecedences and moderator)

Independent Variables	Dependent Variables									
	SPA		CMS		MPM		MIO		ERR	
	Equation 17		Equation 18		Equation 19		Equation 20		Equation 21	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
PTM	.360	2.778	.360	2.778	.360	2.778	.360	2.778	.360	2.778
BIC	.378	2.646	.378	2.646	.378	2.646	.378	2.646	.378	2.646
BMS	.421	2.374	.421	2.374	.421	2.374	.421	2.374	.421	2.374
MLC	.369	2.712	.369	2.712	.369	2.712	.369	2.712	.369	2.712
CCP	.444	2.251	.444	2.251	.444	2.251	.444	2.251	.444	2.251
IC	.759	1.317	.759	1.317	.759	1.317	.759	1.317	.759	1.317
PTM*IC	.365	2.741	.365	2.741	.365	2.741	.365	2.741	.365	2.741
BIC*IC	.358	2.792	.358	2.792	.358	2.792	.358	2.792	.358	2.792
BMS*IC	.337	2.970	.337	2.970	.337	2.970	.337	2.970	.337	2.970
MLC*IC	.322	3.101	.322	3.101	.322	3.101	.322	3.101	.322	3.101
CCP*IC	.398	2.515	.398	2.515	.398	2.515	.398	2.515	.398	2.515
Firm Age	.726	1.377	.726	1.377	.726	1.377	.726	1.377	.726	1.377
Firm Size	.740	1.352	.740	1.352	.740	1.352	.740	1.352	.740	1.352

APPENDIX G

Cover Letter and Questionnaire: Thai Version

แบบสอบถามเพื่อการวิจัย
เรื่อง การมุ่งเน้นการบัญชีบริหารเชิงพลวัตและการเจริญเติบโตของกิจการ:
หลักฐานเชิงประจักษ์จากธุรกิจอาหารในประเทศไทย

<u>คำชี้แจง :</u>

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาวิจัยเรื่อง “การมุ่งเน้นการบัญชีบริหารเชิงพลวัตและการเจริญเติบโตของกิจการ: หลักฐานเชิงประจักษ์จากธุรกิจอาหารในประเทศไทย”เพื่อใช้เป็นข้อมูลในการจัดทำวิทยานิพนธ์ในระดับปริญญาเอกของผู้วิจัย ในหลักสูตรปรัชญาดุษฎีบัณฑิต คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333

ข้าพเจ้าใคร่ขอความอนุเคราะห์จากท่านผู้ตอบแบบสอบถาม ได้โปรดตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนคำถาม 7 ตอน ดังนี้

ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารฝ่ายบัญชีธุรกิจอาหารในประเทศไทย
ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจอาหารในประเทศไทย
ตอนที่ 3 ความคิดเห็นเกี่ยวกับการมุ่งเน้นการบัญชีบริหารเชิงพลวัตของธุรกิจอาหารในประเทศไทย
ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของของธุรกิจอาหารในประเทศไทย
ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการดำเนินงานของของธุรกิจอาหารในประเทศไทย
ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่มีผลต่อการดำเนินงานของธุรกิจอาหารในประเทศไทย
ตอนที่ 7 ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการบริหารจัดการของธุรกิจอาหารในประเทศไทย

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใด ๆ ที่เปิดเผยเกี่ยวกับตัวท่านในการรายงานข้อมูล รวมทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าวกับบุคคลภายนอกอื่นใดโดยไม่ได้รับอนุญาตจากท่าน

ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

❑ ต้องการ E - mail _____ ❑ ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่าน หรือแนบนามบัตรของท่านมากับแบบสอบถามชุดนี้

ผู้วิจัยขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้อย่างถูกต้องครบถ้วน และหวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อ นางขวัญชนก ห่านนิมิตกุลชัย ซึ่งเป็นผู้วิจัยในครั้งนี้ โทรศัพท์เคลื่อนที่ 081-617-7462หรือ E–mail : wkwan411@yahoo.com

(นางขวัญชนก ห่านนิมิตกุลชัย)
นิสิตระดับปริญญาเอก สาขาวิชาการบัญชี
คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

ตอนที่ 1ข้อมูลทั่วไปเกี่ยวกับผู้บริหารฝ่ายบัญชีธุรกิจอาหารในประเทศไทย

1. เพศ

❑ชาย ❑ หญิง

2. อายุ

❑ น้อยกว่า 30 ปี ❑ 30– 40 ปี

❑41-50 ปี ❑ มากกว่า 50 ปี

3. สถานภาพสมรส

❑ โสด ❑สมรส

❑ หม้าย/หย่าร้าง

4. ระดับการศึกษา

❑ปริญญาตรีหรือต่ำกว่า ❑ สูงกว่าปริญญาตรี

5. ประสบการณ์การทำงานในกิจการ

❑ น้อยกว่า 5 ปี ❑ 5 - 10 ปี

❑ 10 – 15 ปี ❑มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือน

❑ต่ำกว่า 75,000 บาท ❑ 75,000 – 100,000 บาท

❑ 100,001 – 120,000 บาท ❑ มากกว่า 120,000 บาท

7. ตำแหน่งงานในปัจจุบัน

❑ ผู้อำนวยการฝ่ายบัญชี ❑ ผู้จัดการฝ่ายบัญชี

❑สมุห์บัญชี ❑อื่นๆ (โปรดระบุ).....

8. ท่านมีส่วนร่วมในกระบวนการตัดสินใจหรือกระบวนการวางแผนกลยุทธ์ของกิจการหรือไม่

❑ มี ❑ ไม่มี

ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจอาหารในประเทศไทย

1. รูปแบบธุรกิจ

❑บริษัทจำกัด ❑ ห้างหุ้นส่วน

2. จำนวนทุนในการดำเนินงาน

❑ต่ำกว่า 25,000,000 บาท ❑ 25,000,000 – 50,000,000 บาท

❑ 50,000,001 – 100,000,000 บาท ❑มากกว่า 100,000,000 บาท

3. มูลค่าสินทรัพย์รวมของกิจการในปัจจุบัน

❑ ต่ำกว่า 50,000,000 บาท ❑ 50,000,000 - 100,000,000 บาท

❑ 100,000,001 - 150,000,000 บาท ❑ มากกว่า 150,000,000 บาท

4. จำนวนพนักงาน

❑ น้อยว่า 50 คน ❑ 50 -100 คน

❑ 101-150 คน ❑ มากกว่า 150 คน

5. ระยะเวลาในการดำเนินธุรกิจ

❑น้อยกว่า 5 ปี ❑ 5 - 10 ปี

❑ 11 - 15 ปี ❑มากกว่า 15 ปี

6. รายได้ของกิจการต่อปี

❑ต่ำกว่า 25,000,000 บาท ❑ 25,000,000 – 50,000,000 บาท

❑50,000,001 – 75,000,000 บาท ❑มากกว่า 75,000,000 บาท

ตอนที่ 3 ความคิดเห็นเกี่ยวกับการมุ่งเน้นการบัญชีบริหารเชิงพลวัตของธุรกิจอาหารในประเทศไทย

การมุ่งเน้นการบัญชีบริหารเชิงพลวัต	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การวิเคราะห์ตำแหน่งเชิงกลยุทธ์ (Strategic Positioning Analysis) 1. กิจการเชื่อมั่นว่าการมีข้อมูลทางบัญชีที่ดี จะช่วยให้กิจการสามารถกำหนดทิศทาง และแนวทางการบริหารงานได้อย่างมีประสิทธิภาพและมีประสิทธิผลมากยิ่งขึ้น					
2. กิจการให้ความสำคัญกับการนำข้อมูลบัญชีมาใช้ในการกำหนด กลยุทธ์ ทิศทางและแผนงานการดำเนินธุรกิจอย่างเป็นระบบและรูปธรรม ซึ่งจะช่วยเพิ่มศักยภาพการแข่งขันและการดำรงอยู่อย่างยั่งยืน					
3. กิจการมุ่งเน้นให้มีการนำข้อมูลทางการบัญชีมาวิเคราะห์ สังเคราะห์ศักยภาพการแข่งขันขององค์กร ซึ่งจะช่วยเป็นแนวทางในการสร้างความได้เปรียบทางการแข่งขันอย่างต่อเนื่อง					
4. กิจการมุ่งมั่นในการนำข้อมูลทางการบัญชีมากำหนดแนวทางการปฏิบัติงานที่ดีและการจัดสรรทรัพยากรที่มีประสิทธิภาพ ซึ่งจะช่วยให้การดำเนินงานบรรลุเป้าหมายและนำไปสู่การทำกำไรในระยะยาวได้ดียิ่งขึ้น					
กลยุทธ์การจัดการต้นทุน (Cost Management Strategy) 5. กิจการเชื่อมั่นว่าการจัดการต้นทุนที่ดี จะช่วยให้กิจการสามารถบรรลุเป้าหมายในการดำเนินงานภายใต้การแข่งขันที่รุนแรงได้ดียิ่งขึ้น					
6. กิจการให้ความสำคัญกับการวิเคราะห์องค์ประกอบของต้นทุนในการผลิตสินค้าและการดำเนินงานให้มีความถูกต้องชัดเจน ซึ่งจะช่วยให้การวางแผนการดำเนินงานของกิจการมีประสิทธิภาพมากยิ่งขึ้น					
7. กิจการมุ่งเน้นให้มีการประยุกต์ใช้เทคนิคและวิธีการทางการบัญชี ที่เหมาะสมในการวางแผนและควบคุมต้นทุนให้สอดคล้องกับทิศทางการบริหารงานขององค์กรซึ่งจะช่วยให้การบริหารงานมีประสิทธิภาพสามารถปรับตัวต่อสถานการณ์ต่างๆ ได้อย่างรวดเร็ว					
8. กิจการส่งเสริมให้มีการจัดทำฐานข้อมูลต้นทุนและการวิเคราะห์ต้นทุนประเภทต่างๆ อย่างเป็นระบบ ซึ่งจะช่วยเป็นแนวทางในการกำหนดกลยุทธ์การบริหารงานที่นำไปสู่การบรรลุเป้าหมายได้อย่างมีประสิทธิภาพ					

ตอนที่ 3 (ต่อ)

การมุ่งเน้นการบัญชีบริหารเชิงพลวัต	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การวัดผลการปฏิบัติงานสมัยใหม่ (Modern Performance Measurement) 9. กิจการเชื่อมั่นว่าการวัดผลการปฏิบัติงานที่สอดคล้องกับกลยุทธ์การปฏิบัติงานในปัจจุบัน จะช่วยให้การดำเนินงานบรรลุเป้าหมายได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
10. กิจการให้ความสำคัญกับการบูรณาการเทคนิคและวิธีการประเมินผลการปฏิบัติงานรูปแบบใหม่ๆ ซึ่งจะช่วยเป็นแรงกระตุ้นและจูงใจให้บุคลากรปฏิบัติงานให้บรรลุผลสำเร็จอย่างเต็มความสามารถ					
11. กิจการมุ่งเน้นให้มีการประยุกต์ใช้การวัดผลการปฏิบัติงานที่เป็นตัวเงินและไม่เป็นตัวเงินอย่างเป็นระบบ ซึ่งจะช่วยให้การปฏิบัติงานขององค์กรมีประสิทธิภาพมากยิ่งขึ้น					
12. กิจการสนับสนุนให้มีการวัดผลการปฏิบัติงานที่ครอบคลุม ทั้งการวัดผลเชิงปริมาณและเชิงคุณภาพ ซึ่งจะช่วยสร้างแรงจูงใจ ให้บุคลากรเกิดการยอมรับและกระตือรือร้นที่จะทำงานให้บรรลุเป้าหมายมากยิ่งขึ้น					
13. กิจการให้ความสำคัญกับการประยุกต์ใช้การเทียบเคียงแนวทางการปฏิบัติงานที่ดีจากภายนอก (Benchmarking) มาใช้ในการปฏิบัติงานของกิจการ ซึ่งจะช่วยทำให้กิจการเพิ่มศักยภาพและความสามารถในการแข่งขันมากยิ่งขึ้น					
การมุ่งเน้นข้อมูลด้านการตลาด (Market Information Orientation) 14. กิจการเชื่อมั่นว่าการมีข้อมูลทางการบัญชีที่เกี่ยวข้องกับ การดำเนินการทางการตลาดที่ดี จะช่วยให้กิจการสามารถบริหารงานภายใต้สถานการณ์ที่เปลี่ยนแปลงไปได้อย่างมีประสิทธิภาพ					
15. กิจการให้ความสำคัญกับการวิเคราะห์ข้อมูลที่เกี่ยวข้องกับศักยภาพและความสามารถของคู่แข่งขันอย่างต่อเนื่อง ซึ่งจะช่วยให้สามารถกำหนดกลยุทธ์ในการดำเนินงานได้สอดคล้องกับสถานการณ์มากยิ่งขึ้น					
16.กิจการมุ่งมั่นในการวิเคราะห์ต้นทุนและค่าใช้จ่ายที่เกี่ยวข้องกับการให้บริการลูกค้าซึ่งจะช่วยให้กิจการสามารถวางแผนและบริหารกำไรได้อย่างมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					

ตอนที่ 3 (ต่อ)

การมุ่งเน้นการบัญชีบริหารเชิงพลวัต	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
17. กิจการมุ่งเน้นให้มีการวิเคราะห์ แยกแยะ และจำแนกกลุ่มลูกค้าจากการทำกำไรทั้งในปัจจุบันและอนาคต เพื่อใช้เป็นข้อมูลในการสนับสนุนการดำเนินงานทางการตลาดและการบริหารงานขององค์กรให้สอดคล้องกับความต้องการของลูกค้ามากยิ่งขึ้น					
การรายงานความรับผิดชอบด้านสิ่งแวดล้อม (Environmental Responsibility Reporting) 18. กิจการเชื่อมั่นว่าการนำเสนอข้อมูลที่เกี่ยวข้องกับความรับผิดชอบด้านสิ่งแวดล้อม จะช่วยให้กิจการได้รับการยอมรับจากผู้มีส่วนเกี่ยวข้องและประสบความสำเร็จในการดำเนินงานมากยิ่งขึ้น					
19. กิจการให้ความสำคัญกับการประยุกต์ใช้เทคนิค แนวทางและวิธีการทางบัญชีที่เกี่ยวข้องกับด้านสิ่งแวดล้อมอย่างเป็นระบบและรูปธรรม ซึ่งจะทำให้การนำเสนอรายงานทางด้านสิ่งแวดล้อมมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					
20. กิจการมุ่งเน้นให้มีการนำเสนอข้อมูลที่เกี่ยวข้องกับต้นทุนและผลประโยชน์อันเกิดจากกิจกรรมด้านสิ่งแวดล้อมอย่างชัดเจนตรงไปตรงมาซึ่งจะช่วยให้กิจการสามารถวางแผนและตัดสินใจดำเนินงานด้านสิ่งแวดล้อมได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
21. กิจการส่งเสริมให้มีการเปิดเผยข้อมูลที่เกี่ยวข้องกับผลกระทบ ที่เกิดขึ้นจากกิจกรรมด้านสิ่งแวดล้อมต่อผู้มีส่วนเกี่ยวข้อง ทั้งที่เป็น ตัวเงินและไม่เป็นตัวเงิน ซึ่งจะช่วยให้กิจการสร้างความเข้าใจอันดีและความเชื่อมั่นจากผู้มีส่วนเกี่ยวข้องเพิ่มมากขึ้น					

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของของธุรกิจอาหารในประเทศไทย

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การใช้ประโยชน์จากข้อมูลทางการบริหาร (Managerial Information Usefulness) 1. กิจการมีข้อมูลที่สอดคล้องกับความต้องการและการใช้ประโยชน์ ของผู้บริหารในทุกสถานการณ์					
2. กิจการมีข้อมูลที่สมบูรณ์ครบถ้วนในการสนับสนุนการดำเนินงานของกิจการในทุกๆ ด้านเป็นอย่างดี					
3. กิจการมีข้อมูลที่เพียงพอต่อการบริหารงานภายใต้สถานการณ์ที่มีความไม่แน่นอนทั้งในปัจจุบันและอนาคต					
4. กิจการมีข้อมูลที่ทันต่อความต้องการเรียกใช้งานของผู้บริหารในสถานการณ์ต่างๆ ได้อย่างรวดเร็วและถูกต้องทันตามเวลา					
ความสำเร็จในการตัดสินใจ (Decision-Making Success) 5. กิจการสามารถเลือกทางเลือกที่มีความหลากหลายได้อย่างมีประสิทธิภาพมากขึ้น					
6. กิจการสามารถเลือกลงทุนในกิจกรรมหรือทรัพย์สินต่างๆ ที่มีความสำคัญได้อย่างเหมาะสม					
7. กิจการสามารถเลือกทางเลือกที่ให้ผลตอบแทนหรือผลประโยชน์สูงสุดได้อย่างมีประสิทธิภาพสอดคล้องกับเป้าหมายขององค์กร					
8. กิจการสามารถเลือกทางเลือกได้อย่างถูกต้องและรวดเร็วภายใต้สถานการณ์ต่างๆ ได้เป็นอย่างดี					
ความสำเร็จในการดำเนินงานตามเป้าหมาย (Operational Goal Achievement) 9. กิจการสามารถปฏิบัติงานตามแนวทางและวิธีการที่กำหนดไว้ได้อย่างมีประสิทธิภาพและประสิทธิผล สอดคล้องกับแผนกลยุทธ์ และวัตถุประสงค์ขององค์กร					
10.กิจการสามารถปรับปรุงและพัฒนากระบวนการดำเนินงานอย่างต่อเนื่อง และสามารถตอบสนองสภาพแวดล้อมได้เป็นอย่างดี					
11. กิจการสามารถจัดการทรัพยากรภายในองค์กรได้อย่างเหมาะสมสอดคล้องกับสถานการณ์ทางเศรษฐกิจในปัจจุบันได้อย่างมีประสิทธิภาพและประสิทธิผลตามเป้าหมาย					

ตอนที่ 4 (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
12. กิจการสามารถจัดระบบการบริหารงานและการดำเนินงานได้อย่างมืออาชีพ และเป็นที่ยอมรับของลูกค้า สังคมและผู้มีส่วนเกี่ยวข้อง					
การเติบโตขององค์กร (Firm Growth) 13.กิจการมีรายได้จากการดำเนินงานเพิ่มสูงขึ้นอย่างต่อเนื่อง					
14.กิจการมีอัตรากำไรสุทธิต่อสินทรัพย์เพิ่มสูงขึ้นเมื่อเทียบกับปีที่ผ่านมา					
15. กิจการมีส่วนแบ่งทางการตลาดเพิ่มขึ้นและมีแนวโน้มที่จะเพิ่มสูงขึ้นอย่างต่อเนื่อง					
16. กิจการสามารถรักษาลูกค้าเก่าไว้ได้พร้อมทั้งมีลูกค้าใหม่เพิ่มขึ้นเมื่อเทียบกับการดำเนินงานในอดีต					
17. กิจการมั่นใจว่ากิจการมีความสามารถและศักยภาพเพียงพอที่จะรักษาระดับการเติบโตและอยู่รอดในธุรกิจในสภาวะวิกฤติทางเศรษฐกิจในปัจจุบันและอนาคต					

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการดำเนินงานของธุรกิจอาหารในประเทศไทย

ปัจจัยภายในที่มีผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
วิสัยทัศน์ของผู้บริหารระดับสูงเชิงรุก (Proactive Top Management Vision) 1. ผู้บริหารเชื่อมั่นว่าการกำหนดกลยุทธ์และนโยบายในการบริหารงานที่มุ่งเน้นเป้าหมายในอนาคต จะช่วยให้การบริหารงานประสบความสำเร็จมากยิ่งขึ้น					
2.ผู้บริหารให้ความสำคัญกับการพัฒนาระบบการบริหารจัดการที่ดีอย่างต่อเนื่องซึ่งจะช่วยให้กิจการสามารถดำเนินงานภายใต้สถานการณ์ต่างๆ ในอนาคตได้อย่างมีประสิทธิภาพ					
3. ผู้บริหารส่งเสริมให้มีการประยุกต์ใช้เทคโนโลยีที่ทันสมัยและรวดเร็วในการบริหารงานอย่างเป็นระบบ ซึ่งจะช่วยให้การดำเนินงานประสบความสำเร็จ และได้เปรียบเหนือคู่แข่งขันอย่างต่อเนื่อง					
4. ผู้บริหารสนับสนุนให้บุคลากรมีการเรียนรู้และฝึกอบรมเทคนิคและวิธีการดำเนินงานใหม่ๆ อยู่เสมอ ซึ่งจะช่วยให้เพิ่มประสิทธิภาพความสามารถ และศักยภาพทางการแข่งขันได้ดียิ่งขึ้น					
ความสามารถที่ชาญฉลาดทางธุรกิจ (Business Intelligence Competency) 5. กิจการเชื่อมั่นว่าการมีความรู้ความสามารถที่หลากหลายสอดคล้องกับสถานการณ์ต่างๆ จะช่วยให้กิจการประสบความสำเร็จในการบริหารงานได้ดียิ่งขึ้น					
6. กิจการมุ่งเน้นให้มีการประยุกต์ใช้เทคโนโลยีสารสนเทศในการจัดการข้อมูลอย่างเป็นระบบ ซึ่งจะช่วยให้กิจการสามารถพยากรณ์ศักยภาพ และแนวโน้มของธุรกิจได้สอดคล้องกับสถานการณ์ได้ดียิ่งขึ้น					
7. กิจการให้ความสำคัญกับการจัดทำฐานข้อมูลที่เกี่ยวข้องกับการดำเนินธุรกิจตั้งแต่อดีตจนถึงอนาคต ซึ่งจะช่วยให้การวางแผนการดำเนินงานให้มีประสิทธิภาพมากยิ่งขึ้น					
8. กิจการมุ่งมั่นในการบูรณาการประสบการณ์ทำงานที่ดีของบุคลากรในอดีตมาใช้ในปัจจุบัน ซึ่งจะช่วยให้เกิดการพัฒนาประสิทธิภาพและความสามารถในการตอบสนองต่อสถานการณ์ได้ดียิ่งขึ้น					

ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่มีผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ระบบบัญชีบริหารที่ดี (Best Management Accounting System) 9. กิจการเชื่อมั่นว่าการมีระบบบัญชีบริหารที่ดี จะช่วยให้การเก็บรวบรวมข้อมูลและนำเสนอรายงานทางการบัญชีสามารถตอบสนองต่อความต้องการของผู้บริหารได้ดียิ่งขึ้น					
10. กิจการให้ความสำคัญกับการพัฒนาระบบบัญชีบริหารให้มีความสอดคล้องกับกลยุทธ์และแนวทางการบริหารงานขององค์กรอยู่เสมอ ซึ่งจะช่วยให้ได้รับข้อมูลที่ตรงกับความต้องการและตัดสินใจในสถานการณ์ต่างๆ ได้อย่างถูกต้องเหมาะสมมากยิ่งขึ้น					
11. กิจการสนับสนุนให้มีการปรับปรุงระบบบัญชีบริหารให้ทันสมัยยิ่งขึ้น ซึ่งจะช่วยให้ได้ข้อมูลที่เป็นปัจจุบันและสอดคล้องกับสภาพ ความเป็นจริงได้อย่างเป็นรูปธรรม					
12. กิจการตระหนักเสมอว่าระบบบัญชีบริหารที่ดีจะช่วยสนับสนุนการดำเนินงานขององค์กรให้สะดวกและรวดเร็วยิ่งขึ้น ทำให้การบริหารงานประสบความสำเร็จได้อย่างมีประสิทธิภาพ					
ความสามารถในการเรียนรู้ตลาด (Market Learning Capability) 13. กิจการเชื่อมั่นว่าการมีการเรียนรู้ทางการตลาดที่ดีจะช่วยให้สามารถบริหารงานได้สอดคล้องกับสถานการณ์ได้ดียิ่งขึ้น					
14. กิจการให้ความสำคัญกับการวิเคราะห์ถึงความต้องการของตลาดอย่างต่อเนื่อง ซึ่งจะช่วยให้สามารถกำหนดเป้าหมาย และแผนการดำเนินงานทางการตลาดได้อย่างมีประสิทธิภาพสูงสุด					
15. กิจการมุ่งเน้นให้มีการศึกษาและประเมินสถานการณ์ทางการตลาดอย่างเป็นรูปธรรม ซึ่งจะช่วยให้มีข้อมูลในการกำหนดกลยุทธ์การตลาดได้ดียิ่งขึ้น					
16. กิจการส่งเสริมให้บุคลากรเข้าร่วมฝึกอบรมหรือแลกเปลี่ยนเรียนรู้ในประเด็นเกี่ยวกับการวิเคราะห์แนวโน้มการเปลี่ยนแปลงทางการตลาดอย่างสม่ำเสมอ ซึ่งจะช่วยเพิ่มความสามารถในการตอบสนองความต้องการของตลาดได้มีประสิทธิภาพมากยิ่งขึ้น					

ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่มีผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การมุ่งเน้นการจัดการความรู้ (Knowledge Management Intension) 17. กิจการเชื่อมั่นว่าการบริหารจัดการความรู้ที่ดีจะช่วยให้การดำเนินงานมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					
18. กิจการมุ่งเน้นให้มีการบูรณาการความรู้ต่างๆ เข้าด้วยกันอย่างเป็นระบบและรูปธรรม ซึ่งจะช่วยส่งเสริมให้บุคลากรมีทักษะและศักยภาพในการดำเนินงานเพิ่มสูงขึ้น					
19. กิจการส่งเสริมให้บุคลากรมีการแลกเปลี่ยนความรู้ระหว่างกันทั้งภายในและระหว่างแผนก ซึ่งจะช่วยให้ทำให้การดำเนินงานภายใต้สถานการณ์ทางการแข่งขันมีประสิทธิภาพมากยิ่งขึ้น					
20. กิจการให้ความสำคัญกับการถ่ายทอดแนวคิดและวิธีการดำเนินงานที่ดีอย่างเป็นระบบ ซึ่งจะช่วยให้สามารถบรรลุเป้าหมายการดำเนินงานได้อย่างรวดเร็วและมีประสิทธิภาพมากยิ่งขึ้น					
วัฒนธรรมนวัตกรรม(Innovation Culture) 21. กิจการเชื่อมั่นว่าการมีวัฒนธรรมองค์กรในการสร้างสรรค์การดำเนินงานที่ดี จะช่วยทำให้การดำเนินงานประสบความสำเร็จและเติบโตได้อย่างยั่งยืน					
22. กิจการส่งเสริมให้มีการพัฒนารูปแบบการบริหารจัดการที่ทันสมัยอยู่เสมอ ซึ่งจะช่วยให้การจัดการทรัพยากรมีประสิทธิภาพและสามารถตอบสนองต่อสภาพแวดล้อมทางการแข่งขันได้เป็นอย่างดี					
23. กิจการมุ่งเน้นให้มีการคิดค้นกระบวนการใหม่ๆ ทั้งการผลิตสินค้าและบริการอย่างต่อเนื่อง ซึ่งจะช่วยให้เกิดการสร้างความแตกต่างและความได้เปรียบเหนือคู่แข่งขันได้มากยิ่งขึ้น					
24. กิจการมุ่งมั่นให้มีการแสวงหาเทคโนโลยีใหม่ๆ มาใช้สนับสนุนกระบวนการทำงานอยู่เสมอ ซึ่งจะช่วยเพิ่มขีดความสามารถในการดำเนินงานให้มีประสิทธิภาพมากยิ่งขึ้น					
25. กิจการสนับสนุนให้มีการสร้างบรรยากาศและเปิดโอกาสให้บุคลากรสามารถนำเสนอแนวความคิดได้อย่างอิสระ ซึ่งจะช่วยให้ เกิดความคิดสร้างสรรค์ในการหาแนวทางการปฏิบัติงานใหม่ๆ ที่มีประสิทธิภาพและบรรลุเป้าหมายได้ดียิ่งขึ้น					

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่มีผลต่อการดำเนินงานของธุรกิจอาหารในประเทศไทย

ปัจจัยภายนอกที่มีผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
แรงกดดันที่เกิดขึ้นจากการเปลี่ยนแปลงทางการแข่งขัน (Competitive Change Pressure) 1. ในปัจจุบันสภาพแวดล้อมการแข่งขันมีความรุนแรงมากขึ้น ทำให้กิจการต่างๆ ต้องมุ่งเน้นในการพัฒนาศักยภาพการบริหารงาน เพื่อให้สามารถต่อสู้กับสถานการณ์ต่างๆ ได้เป็นอย่างดี					
2. ลูกค้าในปัจจุบันมีความต้องการที่หลากหลายมากขึ้น ทำให้กิจการต่างๆ ต้องมุ่งเน้นในการศึกษาและทำความเข้าใจ เพื่อให้สามารถตอบสนองต่อความต้องการของลูกค้าได้ดีมากขึ้น					
3. คู่แข่งขันมีจำนวนมากขึ้นและศักยภาพในการแข่งขันเพิ่มสูงขึ้น ทำให้กิจการต่างๆ ต้องมุ่งมั่นในการนำเสนอสินค้าและบริการ ที่มีความแตกต่าง เพื่อให้ได้รับการยอมรับจากลูกค้ามากยิ่งขึ้น					
4. ในปัจจุบันมีสินค้าใหม่ๆ ออกสู่ตลาดอย่างต่อเนื่อง ทำให้กิจการต่างๆ ต้องให้ความสำคัญกับการวิจัยและพัฒนาผลิตภัณฑ์ใหม่อยู่เสมอ เพื่อให้สามารถต่อสู้กับคู่แข่งขันได้ดียิ่งขึ้น					

ตอนที่ 7 ข้อเสนอแนะและข้อคิดเห็นเกี่ยวกับการบริหารงานของธุรกิจอาหารในประเทศไทย

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(ขอขอบพระคุณที่ได้สละเวลาตอบแบบสอบถาม)

APPENDIX H
Cover Letter and Questionnaire: English Version

Questionnaire for the Ph. D. Dissertation Research entitled
"Dynamic Management Accounting Orientation and Firm Growth
: An Empirical Assessment of Food Businesses in Thailand"

Dear Sir,

This research is a part of a doctoral dissertation of Mrs. Kwanchanok Hannimitkulchai at the Mahasarakham Business School, Mahasarakham University, Thailand. The objective of this research is to examine the operation of food businesses in Thailand. The questionnaire is divided into 7 parts

Part 1: Personal information about accounting director or accounting manager or accountant of food businesses in Thailand,
Part 2: General information about food businesses in Thailand,
Part3: Opinion in dynamic management accounting orientation of food businesses in Thailand,
Part 4: Opinions on the performance of the food business in Thailand,
Part 5: Opinions on internal factors affecting the operation of food businesses in Thailand,
Part 6: Opinions on external factors affecting the operation of food businesses in Thailand, and
Part 7: Suggestions and Comments in the management of the food businesses in Thailand.

Your answer will be kept as confidentiality and your information will not be shared with any outsider party without your permission.

If you want a summary of this research, please indicate your E-mail address or attach your business card with this questionnaire. The summary will be mailed to you as soon as the analysis is completed.

Thank you for your time answering all the questions. I have no doubt that your answer will provide valuable information for academic advancement. If you have any questions with respect to this research, please contact me directly.

Sincerely yours,

(Mrs. Kwanchanok Hannimitkulchai)
Ph. D. Student
Mahasarakham Business School
Mahasarakham University, Thailand

Contact Info:
Mobile phone: 081 - 617 - 7462
E-mail: wkwan411@yahoo.com

Part 1 Personal information about accounting manager/director of food business in Thailand

1. Gender

❑ Male ❑Female

2. Age

❑Less than 30 years old ❑ 30– 40 years old
❑41-50 years old ❑ More than 50 years old

3. Marital status

❑Single ❑ Married ❑ Divorced

4. Educational level

❑ Undergraduate or lower degree
❑Higher than undergraduate

5. Working experience

❑ Less than 5 years ❑ 5 - 10 years
❑ 10 - 15 years ❑More than15 years

6. Average monthly income at present

❑ Less than 75,000 Baht ❑ 75,000 – 100,000 Baht
❑ 100,001 – 120,000 Baht ❑ More than120,000 Baht

7. Working position

❑ Accounting director ❑ Accounting manager
❑Chief Accountant
❑ Other (Please Specify)……..…

Part 2 General information of food businesses in Thailand

1. Business type

❑Company limited ❑Partnership

2. Business registered capital

❑ Less than25,000,000 Baht ❑ 25,000,000 – 50,000,000 Baht
❑ 50,000,001 – 100,000,000 Baht ❑ More than100,000,000 Baht

3. Total assets of Firm at present

❑ Less than50,000,000 Baht ❑ 50,000,000 - 100,000,000 Baht
❑ 100,000,001 - 150,000,000 Baht ❑More than150,000,000 Baht

4. Number of employees

❑ Less than50 persons ❑ 50 – 100 persons
❑101 – 150 persons ❑ More than150 persons

5. The period of time operating in an operating business

❑ Less than 5 years ❑ 5 - 10 years
❑ 11 – 15 years ❑ More than15 years

6. Average sales revenue per year

❑ Less than 25,000,000 Baht ❑ 25,000,001 – 50,000,000 Baht
❑ 50,000,001 – 75,000,000 Baht ❑ More than75,000,000 Baht

Part 3 Opinion in dynamic management accounting orientation of food businesses in Thailand

Dynamic Management Accounting Orientation	Opinion Levels				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	5	**4**	**3**	**2**	**1**
Strategic Positioning Analysis					
1. Firm believes that good accounting information allows the business to determine the direction and more efficient and effective management practices.	5	4	3	2	1
2. Firm pays attention to the use of accounting information in setting strategic, direction and business plan in a systematic and concrete way which will increase competitiveness and sustainability.	5	4	3	2	1
3. Firm focuses using accounting information to analyze and synthesize the competitiveness that will help to guide the continuous competitive advantage.	5	4	3	2	1
4. Firm commits to use accounting information for setting good practices and to allocate resources efficiently which will help achieve the goals and lead to longer-term profitability.	5	4	3	2	1
Cost Management Strategy					
5. Firm believes that good cost management will allow the company to achieve its goals of operating under fierce competition.	5	4	3	2	1
6. Firm pays attention to the analysis of components of production and operation cost to be accurate which will make the planning of operations more efficient.	5	4	3	2	1

Part 3 (Continued)

Dynamic Management Accounting Orientation	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
7. Firm focuses on the application of appropriate accounting techniques and methods in planning and controlling costs in accordance with the direction of corporate governance that will help management effectively adapt to the situation.	5	4	3	2	1
8. Firm encourages to do cost databases and analysis the various types of costs in systematically to guide the management strategies that lead to the goals effectively.	5	4	3	2	1
Modern Performance Measurement 9. Firm believes that the performance measurement which consistent with the current operational strategy will help achieve the goals more effectively.					
10. Firm pays attention to the integration of new techniques and evaluation methods which will stimulate and motivate personnel to achieve their full potential.					
11. Firm focuses on the application of monetary and non-monetary measurement in a systematic manner that will make the operation of the organization more effectively.					
12. Firm encourages for performance measurement that encompasses quantitative and qualitative measurement that will motivate personnel to accept and enthusiastic work to achieve their goals.					
13. Firm prioritizes the application of benchmarking in the operation of the business that increases more capacity and competitiveness.					

Part 3 (Continued)

Dynamic Management Accounting Orientation	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Market Information Orientation					
14. Firm believes that having accounting information related to good marketing practices will allow the company to effectively manage its business under changing circumstances.	5	4	3	2	1
15. Firm pays attention to the analysis of information related to the competitor's potential and competency continuously that will allow for setting more consistent strategies to the situation.	5	4	3	2	1
16. Firm commits to analyze the costs and expenses associated with providing customer service that will allow the company to plan and manage its profits more efficiency and effectiveness.	5	4	3	2	1
17. Firm focuses on analyzing and customers segmentation from current and future profitability to support marketing operations and management of the organization to meet more customers' need.	5	4	3	2	1
Environmental Responsibility Reporting					
18. Firm believes that the presentation of information related to environmental responsibility will allow the business to be recognized by the stakeholders and to be more successful in the operation.	5	4	3	2	1
19. Firm focuses on the application for systematic and concrete accounting techniques and methods to make more efficiently and effectively environmental report presentation.	5	4	3	2	1

Part 3 (Continued)

Dynamic Management Accounting Orientation	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
20. Firm focuses on providing clear and straightforward information on the costs and benefits of environmental activities which will allow firm to plan and decide on the environmental performance more effectively.	5	4	3	2	1
21. Firm encourages to disclosure the information that impact from the environment activities in both monetary and non-monetary for making a good understanding and confident of the people involved.	5	4	3	2	1

Part 4 Opinions on the performance of the food business in Thailand.

Business Performance	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Managerial Information Usefulness 1.Firm has information that is consistent with the needs and uses of management in every situation.	5	4	3	2	1
2. Firm has complete information to support its operations in every scope.	5	4	3	2	1
3. Firm has sufficient information to manage its operations under uncertain situations both current and future.	5	4	3	2	1
4. Firm can provide information which executives' needs in various situations that quickly and accurately on time.	5	4	3	2	1

Part 4 (Continued)

Business Performance	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Decision-Making Success 5. Firm can choose diversified alternatives more effectively.	5	4	3	2	1
6. Firm can choose to invest in the important activities or assets appropriately.	5	4	3	2	1
7.Firm can choose the most returned or profitable option effectively and in line with the organization's goals.	5	4	3	2	1
8. Firm can choose the right choice quickly, under various circumstances effectively.	5	4	3	2	1
Operational Goal Achievement 9. Firm can operate in accordance with established guidelines and procedures efficiently and effectively; consistent with the strategic plan and organizational objectives.	5	4	3	2	1
10. Firm can improve and develop their operational processes continuously and well respond to various environments.	5	4	3	2	1
11. Firm can manage internal resources appropriately, consistent with the current economic situation efficiently and effectively.	5	4	3	2	1
12. Firm can systemize the management and operation professionally that is acceptable to customers, social and stakeholders.	5	4	3	2	1
Firm Growth 13. Firm can increase operating income continuously.	5	4	3	2	1
14. Firm has the higher net profit per asset ratio compared with last year	5	4	3	2	1

Part 4 (Continued)

Business Performance	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
15. Firm has increased market share and tendency to rise continually.	5	4	3	2	1
16. Firm can retain old customers and increase new customers compared to past operations.	5	4	3	2	1
17. Firm believes that it will have capability and efficiency enough to maintain its growth and survival in the current and future economic crisis.	5	4	3	2	1

Part 5 Opinions on internal factors affecting the operation of food business in Thailand.

Internal Factors	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Proactive Top Management Vision 1. The executive convinces that the strategic formulation and policies in the management that focus on future goals will help the administration more successful.	5	4	3	2	1
2. The executive emphasizes on developing good management system continuously that will allow firm can operate under various circumstances, in the future, effectively.	5	4	3	2	1
3. The executive encourages to apply the modern and fast technology for systematic management that will help to be success in operation and more competitive advantage over competitors.	5	4	3	2	1

Part 5 (Continued)

Internal Factors	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
4. The executive encourages staff to learn and train the techniques and new ways of working that will help to enhance the efficiency and better competitiveness of firm.	5	4	3	2	1
Business Intelligence Competency 5. Firm believes that having a wide range of knowledge and capability that are consistent with various situations, will help firm is success for better management.	5	4	3	2	1
6. Firm focuses on the application of information technology to the systematic management of information that will allow the company to better forecast its potential and business trends are more in line with the situation.	5	4	3	2	1
7. Firm pays attention to the databases preparation that related to business operations from past to future, which will allow operation planning is more efficient.	5	4	3	2	1
8. Firm commits to integrate the good work experience of past personnel into the present that will improve to be better efficiency and ability to respond to the various situation.	5	4	3	2	1
Best Management Accounting System 9.Firm believes that having the good management accounting system which help firm to collect data and do the accounting reports that better respond to the needs of executives.	5	4	3	2	1

Part 5 (Continued)

Internal Factors	Opinion Levels				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	5	4	3	2	1
10. Firm pays attention to develop management accounting system that is consistent with firm's strategies and management which will help firm to get the right information to make better decision in various situation.	5	4	3	2	1
11. Firm supports to improve management accounting system to be more modern that will help firm to get the up to date and consistent information with actual situation is concrete.	5	4	3	2	1
12. Firm always recognizes that good management accounting systems will support the operation of the organization more convenient and faster which make successful management effectively.	5	4	3	2	1
Market Learning Capability 13. Firm believes that having a good marketing learning, it help to better manage for various situation.	5	4	3	2	1
14. Firm focuses on analyzing market demand continuously that can setting the target and the marketing plan most effectively.	5	4	3	2	1
15. Firm focuses on the study and assessment of the market situation that will help to have more information in determining a better marketing strategy.	5	4	3	2	1
16. Firm encourages its employees to participate in training or exchanges on issues related to the analysis of changing market trends that will increase the ability to respond the needs of the market more effectively.	5	4	3	2	1

Part 5 (Continued)

Internal Factors	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Knowledge Management Intension 17. Firm believes that good knowledge management that will make the operating more efficiently and effectively.	5	4	3	2	1
18. Firm focuses on integrating knowledge into systematic and concrete that will help to increase the skills and capacity of the personnel.	5	4	3	2	1
19. Firm encourages its personnel to exchange knowledge within and between departments that will helps to make operations under competitive circumstance more effective.	5	4	3	2	1
20. Firm emphasizes to transmit the good idea and operation method that will help to achieve the operational goals more quickly and efficiently.	5	4	3	2	1
Innovation Culture 21. Firm believes that having a corporate culture of creativity the good operation, it will help the operation succeed and grow sustainably.	5	4	3	2	1
22. Firm encourages the development of modern management continually that will help to have effective resource management and good respond to the competitive environment.	5	4	3	2	1
23. Firm focuses on developing new processes for the production or services continuously which will help to make the difference and competitive advantage.	5	4	3	2	1

Part 5 (Continued)

Internal Factors	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
24. Firm commits to seeking new technologies to support the work process continuously, which will increase the operation capacity more efficiently.	5	4	3	2	1
25. Firm supports the environment and opportunity for the staff to freely present ideas that will help create in finding new ways of operation which more effectiveness and goal achievement.	5	4	3	2	1

Part 6 Opinions on external factors affecting the operation of food business in Thailand.

External Factors	Opinion Levels				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Competitive Change Pressure 1. The more competition environment make firm to focus on the development of management potential which able to face the various situation.	5	4	3	2	1
2. The different customer's need, make firm must focus on study and understanding the customer to better respond what customer's need.	5	4	3	2	1
3. The increase of competitors and their potential, firm must focus on present the different product and service to get more acceptance from customers.	5	4	3	2	1
4. There are many new products to the market continuously that make firm must focus on research and development of new products successively, to better compete with competitors.	5	4	3	2	1

Part 7 Suggestions and Comments in the management of the food business in Thailand.

Thank you for your time and attention to this matter

APPENDIX I
Letters to the Experts

บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/ **วันที่** 1 มิถุนายน 2560

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน ผู้ช่วยศาสตราจารย์ ดร.เกสินี หมื่นไธสง

ด้วย นางขวัญชนก ห่านนิมิตกุลชัย นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การมุ่งเน้นการบัญชีบริหารเชิงพลวัตและการเจริญเติบโตของกิจการ: หลักฐานเชิงประจักษ์จากธุรกิจอาหารในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์ท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.สุวรรณ หวังเจริญเดช)
รองคณบดีฝ่ายกิจการนิสิต รักษาการแทน
คณบดีคณะการบัญชีและการจัดการ

บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/ **วันที่** 1 มิถุนายน 2560

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน ผู้ช่วยศาสตราจารย์ ดร.ศรัญญา รักสงฆ์

ด้วย นางขวัญชนก ห่านนิมิตกุลชัย นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การมุ่งเน้นการบัญชีบริหารเชิงพลวัตและการเจริญเติบโตของกิจการ: หลักฐานเชิงประจักษ์จากธุรกิจอาหารในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์ท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.สุวรรณ หวังเจริญเดช)
รองคณบดีฝ่ายกิจการนิสิต รักษาการแทน
คณบดีคณะการบัญชีและการจัดการ

VITA

VITA

NAME	Mrs. Kwanchanok Hannimitkulchai
DATE OF BIRTH	June 25, 1980
PLACE OF BIRTH	Sakon Nakhon, Thailand
ADDRESS	531 Pracha-Uthit Road, Tatcherngchum Sub-District, Muang District, Sakon Nakhon Province, 47000, Thailand.

EDUCATIONAL

2001	Bachelor of Accounting Kasetsart University Bangkok, Thailand.
2003	Master of Business Administration (Financial Accounting) Kasetsart University Bangkok, Thailand.
2018	Doctor of Philosophy (Accounting) Mahasarakham University Mahasarakham, Thailand.

RESEARCH

Hannimitkulchai, K. and Ussahawanitchakit, P. (2016). Continuous audit development and audit survival: Evidence from tax auditors in Thailand. *The Business and Management Review*, 7(5), 487-498.