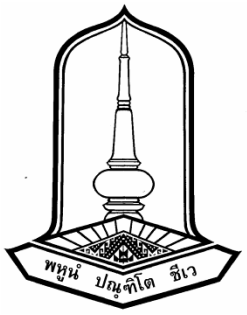

MANAGERIAL ACCOUNTING INNOVATION IMPLEMENTATION AND VALUABLE DECISION-MAKING: AN EMPIRICAL INVESTIGATION OF ELECTRONIC PARTS BUSINESSES IN THAILAND

NUNTHA CHANKAEW

A dissertation submitted in partial fulfillment of the requirements for
the degree of Doctor of Philosophy in Accounting
at Mahasarakham University
October 2012

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This dissertation was funded by Mahasarakham Business School,
Mahasarakham University Scholarship,
Academic Year 2012.

ACKNOWLEDGEMENTS

I wish to express my gratitude to everyone who advised and supported me to complete this dissertation.

First, I would like to thank the Office of the Higher Education Commission, who generously provided me with a scholarship for my study. I would also like to thank the Yala Rajabhat University for giving me the opportunity to study for this doctorate.

Second, I am appreciative to my advisor, Associate Professor Dr.Phapruke Ussahawanitchakit, for his kindness and beneficial guidelines inspiring me to create an idea for the development of my dissertation. This devoted compliment is for his directions and morale encouragement through the entire doctoral program. Moreover,

I would like to express my appreciation to all who provided useful comments and suggestions. Many valuable recommendations from the related experts helped me cope with the academic uncertainty and the successful accomplishment of the doctoral program.

Third, I am deeply grateful to all my friends both within and outside the Faculty of Accountancy and Management, for their cheerfulness during my doctoral life.

Likewise, I wish to thank all respondents of electronic parts businesses in Thailand for their time and valuable information.

Lastly, and most importantly, I am deeply grateful to my parents for their endless support and love. They have always been there for me, no matter what challenges I have faced. Mr. Sawas Chankaew, my dad and Mrs. Kim Chankaew, my mom, gratefully thank you from the bottom of my heart.

And special one, Mr. Korakoth Chabandit who always inspiration with me when I feel weary discouraged.

Nuntha Chankaew

TITLE Managerial Accounting Innovation Implementation and Valuable Decision-Making: An Empirical Investigation of Electronic Parts Businesses in Thailand
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UNIVERSITY Mahasarakham University **DATE** 2012

ABSTRACT

Due to the changes in today's competitive environment, the organization needs to make adjustments or try to find ways to manage more effectively the organization that has the potential to compete and survive sustainably. In particular, the manufacturing industry is facing a more competitive account of innovation management as one of the techniques of management accounting in which, contemporary and useful information for the competitive advantage is the value of a sustainable and vital operation more efficient in the fierce competition. The primary purpose of this research is to examine the effects of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making. The effects of financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making and the effects of managerial accounting innovation implementation's antecedents are examined. This research utilizes two theories, including the resource-advantage theory and the contingency theory. This research specifically selected electronic parts businesses in Thailand as the sample. A questionnaire is used as an instrument for data collection and the accounting manager is a key informant. In addition, ordinary least square regression analysis is operated to test the postulated hypotheses.

The overall results indicate that cost allocation concentration, customer profitability analysis and management control orientation has a significant positive effect on financial information usefulness, cost allocation concentration and customer

profitability analysis has a significant positive effect on managerial practice advantage, cost allocation concentration, customer profitability analysis, and management control orientation has a significant positive effect on business operation quality and customer profitability analysis and management control orientation have a significant positive influence on valuable decision-making. Likewise, managerial practice advantage and business operation quality have a potential positive influence on valuable decision-making while financial information usefulness has no relationship with valuable decision-making. Accounting vision has a significant positive influence on target pricing focus, while accounting knowledge they have significant positive effect on cost allocation concentration, performance evaluation competency, and management control orientation. For accounting learning has a significant positive influence on customer profitability analysis. Accountant modern competency has a significant positive influence on customer profitability analysis and activity-based management capability. For accounting environment have a significant positive effect on activity-based management capability and management control orientation. Specifically, accounting environment has a potential positive influence on management control orientation with accounting system efficiency as the moderators. Meanwhile, activity-based management capability has a significant positive effect on valuable decision-making with information management experience as the moderators. Likewise, financial information usefulness, managerial practice advantage and business operation quality have no influence on valuable decision-making with organizational adaptation capability as the moderators.

In conclusion, the findings of this research have the theoretical contribution that the integrative approach of the resource-advantage theory and the contingency theory can help to explain the causes and results of managerial accounting innovation implementation. Therefore, firms should pay attention to managerial accounting innovation implementation in managerial practices advantage and business operation quality because it can increase valuable decision-making. The advantages of managerial accounting innovation implementation should contain the potential competencies in financial information, managerial practices, and business operations that support valuable decision-making. This research reveals both future research directions and limitations. According to the results of the moderating effect, mostly are not significant.

Further research should re-investigate and also consider studying other potential moderating variables. Moreover, researchers should attempt to analyze by using other different groups of populations and samples and/or the different analysis.

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CHAPTER I

INTRODUCTION

Overview

In today's competitive environment change, every organization needs to make adjustments or try to find ways to manage more effectively so that the organization can remain potential to compete and survive sustainably. In particular, the manufacturing industry is facing an increasingly competitive environment (Danneels, 2002); for instance, the firm has a new variety of products affecting operations of both production and sales with more complexity. Therefore, the manufacturing industry continues to implement several techniques for the sustainable success of the firm (Chenhall and Langfield-Smith, 1998; Roslender and Hart, 2001). Managerial accounting innovation implementation is one of the contemporary management accounting techniques that provides useful information to valuable decision-making, a sustainable competitive advantage, and is crucial to operating more efficiently in a violently competitive environment (Abernethy and Bouwens, 2005).

Managerial accounting is an activity to transform data into information or information that is used to convey meaning or is that management can make use of the information for decision-making (Baines and Langfield-Smith, 2003). The purpose of management accounting is to report results to the management and staff within the organization. This information is useful for planning, controlling and evaluating performance (Dunk, 1989). Moreover, this work has also recently been the need for new management accounting development to become integrated into the existing routines of organizational participants if the change is to operate effectively (Sulaiman and Mitchell, 2005). Accordingly, innovation can be related to new technological changes and products and new administrative techniques and services (Dunk, 1989; Nassar, Al-Khadash, Al-Okdah and Sangster, 2011). Managerial accounting innovation refers to a management accounting model indicating a general pattern of how management accounting systems are designed (Ax and Bjornenak, 2005). There is now a substantial and growing literature which provides evidence that change has become a prominent feature of contemporary

management accounting practices. The flow of technical innovation was apparent and descriptions of their practical implementation was widespread such as activity-based cost, activity-based management , target cost, strategic cost management, balanced scorecards, customer profitability analysis and life cycle costing (Cavalluzzo and Ittner, 2004; Sulaiman and Mitchell, 2005; Abdel-Maksoud, Cerbioni, Ricceri and Velayutham, 2010; Hoque, 2011; Nassar et al., 2011) which has been developed by most of the operational personnel within their organizations (Horngren, Foster and Datar, 1997).

Managerial accounting innovation has developed relatively recently in the general area of accounting and managerial accounting innovation in a literary meaning. However, as the literature is ambiguous about what constitutes managerial accounting innovation implementation (Abernethy and Bouwens, 2005), empirical studies have focused on the diffusion of managerial accounting innovation, or the decisions to use or not to use managerial accounting innovation (Nassar et al., 2011) or managerial accounting innovation implementation as only one dimension was given little attention. Therefore, this research is an attempt to give meaning to the purpose of managerial accounting innovation implementation that affects valuable decision-making. This research focuses on the main objective of managerial accounting innovation in six aspects including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation (Cavalluzzo and Ittner, 2004; Sulaiman and Mitchell, 2005; Abdel-Maksoud, Cerbioni, Ricceri and Velayutham, 2010; Nassar et al., 2011); managerial accounting innovation implementation assumes the influence of subsequent financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making (Gupta and Galloway, 2003).

Currently, the managerial accounting innovation literature still lacks empirical evidence for investigating the relationship between the antecedents and its consequences of managerial accounting innovation implementation (Baines and Langfield-Smith, 2003; Nassar, 2011). Therefore, the relationship between the antecedents and its consequences of managerial accounting innovation implementation is necessary for academic researches to investigate and to verify. From the aforementioned discussion, this is an origin of the motivated reasons for this research.

This research is an investigation to directly link managerial accounting innovation implementation to financial information usefulness, managerial practice advantage, and business operation quality and to examine the effects of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making by using information management experience as a moderator. Additionally, this research scrutinizes the relationships between financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making by using organizational adaptation capability as a moderator. Moreover, this research investigates the effects of the antecedents including accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment on managerial accounting innovation implementation, and to test the effects of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment on managerial accounting innovation implementation by using accounting system efficiency as a moderator.

With an interest to the phenomenon of managerial accounting innovation implementation, this research attempts to expand and contribute the managerial accounting innovation implementation success literature. The research applies two principal theoretical frameworks, including the resource-advantage theory and the contingency theory. The resource-advantage theory (R-A) suggests that any organization that has the advantage of the resources has a competitive advantage as well. The organization's resources are financial, physical, legal, human, organizational, informational and relational. Resource characteristics are heterogeneous and imperfectly mobile. The role of management is to recognize, understand, create, select, implement and modify strategies. Competitive dynamics are in disequilibrium provoking, with innovation endogenous. The goal of the R-A theory is superior financial performance. The contingency theory suggests that there is no one best way or method to form an organization to gain a competitive advantage and an effective strategy. In addition, for some situations it may not be successful in management accounting strategy which is contingent upon the internal and external factors that are likely to result in superior performance (Fiedler, 1964; Wiersema and Bantel, 1993; Humphreys and Hoque, 2007; Augusto and

Coelho, 2009) that also brought the concept of the contingency framework to explain the phenomenon of managerial accounting innovation implementation.

This research generates both theoretical and managerial contributions. In the theoretical contribution, this research provides an important expansion on previous knowledge and relevant literature of managerial accounting innovation implementation. Moreover, this research focuses on the dimensions of managerial accounting innovation implementation that can enhance financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Furthermore, this research focuses on the effects of the antecedents including accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accounting environment on managerial accounting innovation implementation. Finally, the results of this research help confirm the usefulness of the organizational learning theory, and the contingency theory to explain the business phenomena. In terms of managerial contributions, this research can be more effective and efficient managerial accounting innovative implementation. Hence, administrators can use the results for valuable decision-making in the management of the enterprise to achieve sustainability and success in the more competitive environment. Additionally, this research identifies both the antecedents and consequences of managerial accounting innovation implementation which helps obtain valuable decision-making. In addition, the population of this research is the electronic parts businesses in Thailand because Thailand is the leading country of exports for electronic components over the last several decades and has become an increasingly important contributor to the Thai economy in the future (Theingi and Tang, 2006). The accounting manager or the accounting executive of the electronic parts businesses in Thailand are chosen as the key participants because they have an important direct effect on practices and innovation managerial accounting in each firm; moreover, they are well suited to provide the detailed cost system and other organizational information needed for the tests (Cadez and Guilding, 2008). This research differs from other research in that the dimensional aspects of managerial accounting innovation such as cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation, have never been done before.

Purposes of the Research

The main purpose of the research is to examine the relationships between managerial accounting innovation implementation including six dimensions (cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation) on valuable decision-making. Also, the specific research purposes are as follows:

1. To empirically examine the relationships among each dimension of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making,

2. To empirically investigate the relationships among financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making,

3. To investigate the effect of congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment on each dimension of managerial accounting innovation implementation,

4. To test the moderating effects of accounting system efficiency on accounting vision, accounting knowledge, accounting learning, accountant modern competency, accounting environment and managerial accounting innovation implementation relationships,

5. To test the relationships among each dimension of managerial accounting innovation implementation and financial information usefulness , managerial practice advantage , business operation quality, and valuable decision-making by using information management experience as a moderating determination, and

6. To scrutinize the relationships among financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making by using organizational adaptation capability as a moderator.

Research Questions

The key research question of this study is how managerial accounting innovation implementation (cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation) has an impact on valuable decision-making. Also, the specific research questions are as follows:

1. How does each dimension of managerial accounting innovation implementation have an influence on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making?

2. How do financial information usefulness, managerial practice advantage, and business operation quality have an influence on valuable decision-making?

3. How does the congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment have an effect on each dimension of managerial accounting innovation implementation?

4.How does accounting system efficiency moderate the relationships among congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency, accounting environment, and managerial accounting innovation implementation?

5.How does information management experience moderate the relationships among managerial accounting innovation implementation, financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making? and

6. How does organizational adaptation capability moderate the relationships between financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making?

Scope of the Research

This research aims to examine the effects of managerial accounting innovation implementation on valuable decision-making of electronic parts businesses in Thailand. The effect of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, and business operation quality are also investigated. Also, the information management experience is treated as a moderator of the relationship among managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making. Additionally, the effect of financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making is investigated. Also, the organizational adaptation capability is treated as a moderator of the relationship between financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making. Moreover, congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment are assumed to become the antecedents of managerial accounting innovation implementation via the moderating effect of accounting system efficiency.

With respect to the research objectives and research questions, managerial accounting innovation implementation is an independent variable and it is defined as the achievement of the primary objective of managerial accounting innovation including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation (Cavalluzzo and Ittner, 2004; Abernethy and Bouwens; Ax and Bjornenak; Sulaiman and Mitchell, 2005; Sven, 2009; Abdel-Maksoud et al., 2010; Ming-Lang, 2010; Nassar et al., 2011). Managerial accounting innovation implementation is hypothesized to be positively associated with financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Within the relationship, valuable decision-making is a dependent variable of the research, which is defined as choosing the best option in order to solve the problem efficiently to the operate with the consistency of performance and efficiency (Chenhall and Morris, 1995). Information management experience is one of the moderating

relationships among managerial accounting innovation implementation on information benefits, managerial practice advantages, business operation quality, and valuable decision-making in which information management experience refers to the work continued on a regular basis making the expertise to manage the complete information so it can be retrieved in the operation quickly (Rad, Shams and Naderi, 2009). Financial information usefulness refers to the good results of the reports that reflect the financial position and operating results that are accurate and reliable so they can be used for decision-making or analysis for forecasting future performance (Fisher and Kingma, 2001). Managerial practice advantage refers to the method for the comprehensive management of all aspects of the business and the different operations, better or superior, to its competitors (Kapuge and smith, 2007). Business operation quality refers to the procedures and operational processes that are consistent with the stated goals and are very good and efficient (Suraratdecha and Okunade, 2006). Likewise, financial information usefulness and managerial practice advantage are business operation qualities hypothesized to have a positive effect on valuable decision-making. To explicitly expand the greater understanding of the relationship, organization adaptation capability is hypothesized to positively moderate financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making relationships. Organizational adaptation capability refers to the continuous development of management improvement on the environmental changes to increase competitiveness and decision-making as well (Lee, 2001; Hatum, Pettigrew and Michelini, 2010).

The antecedents of managerial accounting innovation implementation include: accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment are hypothesized to become the antecedents of managerial accounting innovation implementation. Accounting vision refers to the guidelines or practices of accounting in accordance with professional accounting knowledge with regard to the accuracy and the effects that may occur (Tuntrabundit and Ussahawanitchakit, 2010). Accounting knowledge refers to the importance of intellect, which is understanding the process and can be found in previous analytical solutions with regard to the accuracy of accounting information (Lin, 2008). Accounting learning refers to the continuous focus on developing skills, knowledge, and understanding of

accounting by providing funding for training to improve the performance of accounting regularly to make the operation viable and timely (Waroonkun and Ussahawanitchakit, 201). Accountant modern competency refers to the enthusiasm of continuous self-development and to learn about the concepts, principles, methods and new accounting innovations that can be applied to new technology in the preparation and presentation of relevant information and expertise (Groenland and Swagerman, 2009). Accounting environment refers to the external factors and affects the performance of the accounts that need to be adjusted, the applications, and improves operational efficiency (Withayapoom and Ussahawanitchakit, 2009). Accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment are hypothesized to positively impact on managerial accounting innovation implementation (Murray and Frazier, 1986).

Furthermore, accounting system efficiency is hypothesized to positively moderate accounting vision-successful cost accounting implementation relationships, accounting knowledge-successful cost accounting implementation relationships, accounting learning-successful cost accounting implementation relationships, accountant modern competency-successful cost accounting implementation relationships, and accounting environment-successful cost accounting implementation relationships. Accounting system efficiency refers to the quality of the methods or tools used to collect the accounting and the application of accounting consistent with the good operational results to support the preparation and presentation of financial reports (Baulianne, 2007).

Organization of the Dissertation

This research is organized in five chapters as follows.

Chapter one provides an overview and motivation of the research, role of managerial accounting innovation, purposes of the research, research questions, scope of the research, and organization of the dissertation,

Chapter two reviews previous studies and relevant literature, explains the theoretical framework to describe the conceptual model, and develops the related hypotheses for testing,

Chapter three discusses the research methods, including the sample selection and data collection procedure, the variable measurements of each construct, the development and verification of the survey instrument by testing reliability and validity, the statistics and equations to test the hypotheses, and the table of the summary of definitions and operational variables of constructs,

Chapter four presents the results of statistical testing, demonstrates the empirical results, and discussion in full detail, and

Finally, Chapter five details the conclusion, the theoretical and managerial contributions, the limitations, and suggestions for future research.

CHAPTER II

LITERATURE REVIEWS AND CONCEPTUAL FRAMEWORK

As described earlier in Chapter 1, the six research objectives and six research questions are converted to 28 testable hypotheses in order to prove the overall relationship constructs. Thus, this chapter mentions about the relationships and hypothesized development among each variable based on the literature reviews and theoretical foundation. Moreover, the core construct of the conceptual model is managerial accounting innovation implementation. This research provides empirical evidence about what factors help determine a company is more valuable. Therefore, this research attempts to integrate theoretical perspectives that support learning within the organization to adapt to innovations in management accounting to the changing competitive environments. This will result in sustainable business performance.
The theories applied in this research include the theory of organizational learning and the contingency theory. An earlier overview of the literature on the antecedents and consequence factors of managerial accounting innovation implementation is drawn. The literature review is intended to provide an understanding of the founding fields on the proposed conceptual framework.

This chapter is organized into three major sections. The first introduces theories that backup the conceptual model in this research. The second provides the literature review of all constructs of the conceptual framework, the definitions and the previous studies on the subject of managerial accounting innovation implementation in the context of the electronic parts businesses in Thailand. The final chapter presents the conceptual model and details the development of hypotheses.

Theoretical Foundations

To clearly understand the relationships between managerial accounting innovation implementation and valuable decision-making and other associations, resource-advantage theory and the contingency theory are implemented to explain the aforementioned relationships.

The resource-advantage theory (R-A Theory)

The resource-advantage theory (R-A Theory) was first proposed by Hunt and Morgan (1995) and has been adopted by many disciplines such as marketing, management, economics, ethics, law, and general business (Hunt and Davis , 2008). This theory describes the advantages of competition, which Hunt and Madhavaram (2006) called a process of the competition. Whether the company will have advantage competition depends on resources or competition-suppliers.

The resources can be defined as tangible and intangible (Hunt and Davis, 2008). The resources are heterogeneous and immobile and focus on resources of comparative advantages. From the definition, the resources are financial (e.g., cash resources) physical (e.g., plant, and equipment) legal (e.g., trademarks, and license), human (e.g., the skills and knowledge or individual employees) organizational (e.g., competences, controls, policies, and culture) information (e.g., knowledge from consumer and competitive intelligence) and relational (e.g., relationships with suppliers and customers) (Hunt and Davis, 2008).

Hunt and Madhavaram (2006) and Hunt and Davis (2008) show the foundation of R-A theory that 1) Demand is heterogeneous across industries, heterogeneous within industries and dynamic, 2) Consumer information is imperfect and costly, 3) Human motivation is constrained to self-interest seeking, 4) the organization's objective is superior financial performance, 5) the organization's information is imperfect and costly, 6) the organization's resources are financial, physical, legal, human, organizational, informational and relational, 7) resource characteristics are heterogeneous and imperfectly mobile, 8) the role of management is to recognize, understand, create, select, implement and modify strategies, and 9) competitive dynamics are disequilibrium provoking, with innovation endogenous. The goal of the R-A theory is superior financial performance. It is the signaling of market position. The superior financial performance is expressed that business success and business sustainability are in both the short and long-term.

In the managerial accounting process, the firm should have an efficient and effective operation plan. The firm plan should be prepared to use existing resources with maximum benefits. The resources that should be prepared include skills, knowledge of individual staff, control, method, scope or competence, knowledge of the

consumer, and knowledge from the past job. The managerial resources make practices effective and reduces risk and efficiency enhancement.

Contingency Theory

The contingency theory is also applied to managerial accounting innovation implementation and its antecedents. Respectively, accounting researchers have interpreted the organizational structure to include management accounting techniques such as planning, control, and performance evaluation which can increase the performance of the company which can enhance firm performance. The contingency theory suggests that the most appropriate organization should be a structured and consistent environment and the reality of the organization to achieve competitive advantage and an effective strategy. In addition, some situations may not be successful, so strategic account management is contingent upon internal and external factors that are likely to result in superior performance. (Fiedler, 1964; Wiersema and Bantel, 1993; Humphreys and Hoque, 2007; Augusto and Coelho, 2009) also brought the concept of contingency framework to explain the phenomenon of managerial accounting innovation implementation.

The central theme of the contingency theory is the process management of strategies, and (Drazin and Van de Van, 1985) the contingency theory suggests that efficiency is a function of alignment, interoperability, cost and environmental performance. The company and the basics of emergency research use traditional detection methods, and organizational factors that affect the context and the success of the system management controller (Chenhall, 2003). However, there were many. The contingency theory is a theoretical basis for explaining how the organization some of the management control system (MCS), the company is likely to occur under certain conditions before is an extensive literature on contingency theory has examined the relationship between organizational needs and to explore the impact on performance (Nicolaou, 2002; Krumwiede et al., 2007).

Consistent with the contingency theory, the implementation of managerial accounting innovation depends on its ability to adapt to changes in the external circumstances and the internal factors (Pavlators and Paggios, 2009). This perspective is consistent with Cadez and Guilding (2008) who found that strategic management accounting usage including costing, planning, controlling, and performance

measurement; strategic decision-making; competitor accounting; and customer accounting have an impact on firm performance that can be explained by the contingency framework (Hoque 2000; Nicolaou 2002; Krumwiede and Suessmair 2005; Pizzini 2006; Krumwiede and others 2007; Al-Omiri and Drury 2007; Pavlatos and Paggios 2009; Ajibolade, Arowomole and Ojikutu, 2010).

In sum, the two theories describe the phenomena in this research, namely resource-advantage theory and contingency theory. Moreover, these theories illustrate the relationships of managerial accounting innovation implementation and its antecedents and consequences which are shown in Figure 1 as follows. The next section elaborates on the literature reviews and hypotheses of managerial accounting innovation implementation as discussed below.

Relevant Literature Review and Research Hypotheses

According to the theoretical foundations, managerial accounting innovation implementation and valuable decision-making are independent and dependent variables of the research, respectively. The effect of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, and business operation quality are the mediating effects of the research. Accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment are also the antecedents of managerial accounting innovation implementation. Lastly, information management experience, organizational adaptation capability and accounting system efficiency are the moderating effects of the research model.

As described earlier, this research purposes that managerial accounting innovation implementation is positively associated with valuable decision-making by using information management experience as a moderator are examined. Moreover, the effect of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, and business operation quality are tested by using information management experience as a moderator. Financial information usefulness, managerial practice advantage, and business operation quality are supposed

to have a positive relationship with valuable decision-making. This research also assumes that organization adaptation capability increases the relationship between financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making. Furthermore, the effects of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accountant environment on managerial accounting innovation implementation by using accounting system efficiency as a moderator are examined. Then, a conceptual model of this research is presented as shown in Figure 1.

Managerial Accounting Innovation Implementation

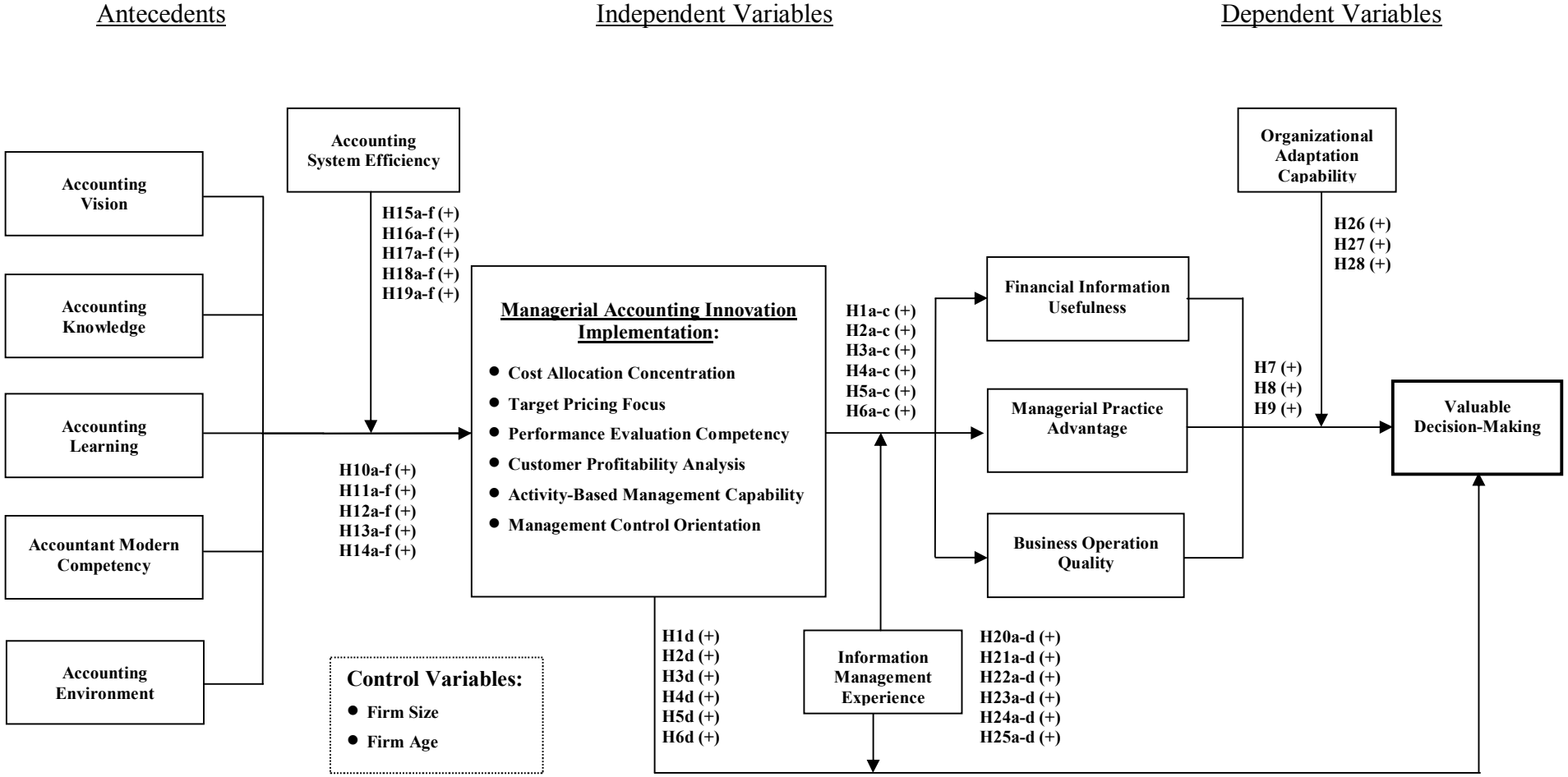
Before investigating the issues of managerial accounting innovation implementation, it is necessary first to explore the idea of managerial accounting and managerial accounting innovation applied in the organization.

Management accounting can be defined as the process of preparation that aims to ensure the accuracy and timeliness of financial information and statistical data necessary for management or related persons. The data are used in the decision-making process so that management accounting may be different for each company depending on the policy and the structure of the company.

Management accounting is to provide executives with information designed to support and enhance decision-making. Production environment change and fierce competition for new management accounting techniques, is necessary for the manager. The main purpose of managerial accounting is an activity to transform data into information or information that is used to convey meaning, or is that management can take it to help in decision-making (Baines and Langfield-Smith, 2003).

Managerial accounting is necessary for both financial and accounting information to be used in conjunction with the techniques needed to drive business success which is a useful tool in advising management on the financial implications of projects and can be used to analyze or explain the financial impact on the joints of business decisions made within the company. Thus, managerial accounting is the tool that used to define a business strategy to increase competitiveness and contribute to the success of the business.

Figure 1: Conceptual Model of Managerial Accounting Innovation Implementation and Valuable Decision-Making: An Empirical Investigation of Electronic Parts Businesses in Thailand



In the last decade, the number of new ideas in the field of management accounting, also known as managerial accounting innovation has been developed and applied in an increases organization that are highly competitive (Khajavi and Nazemi, 2010). Managerial accounting innovation implementation refers to the application type or to apply new modern methods in management accounting to make good decisions by focusing on aggregation, collection, allocation, analysis, evaluation, and control of the operational process (Zawawi and Hoque, 2010) . In this research the majority include cost allocation, target pricing, performance evaluation, customer profitability analysis, activity-based management and management control (Cavalluzzo and Ittner, 2004; Sulaiman and Mitchell, 2005; Abdel-Maksoud, Cerbioni, Ricceri and Velayutham, 2010; Hoque, 2011; Nassar et al., 2011)

This research focuses only on innovation in each dimension, so the spacing of the research lacks evidence in support of the truth about the adoption of innovative management accounting and six dimensional organizations were applied simultaneously to even more valuable decision-making. Accordingly, in this research the dimensions of managerial accounting innovation implementation are created from several prior researches as aforementioned which are divided into six groups, namely cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability and management control orientation, each of which is elaborated below. Then, a summary of the key literature review on managerial accounting innovation implementation is presented in Table 1.

Table 1: Summary of Key Literature Review on Managerial Accounting Innovation Implementation

Authors	Title	Results
Dunk (1989)	Management Accounting Lag	This paper provides a framework to explain that this lag in organizations may be due to the perceived greater complexity and lesser relative advantage, compatibility, trialability and observability of administrative innovations as compared with technical innovations. The empirical research not only supports the existence of an accounting lag, but also suggests that there may be a substantial reward for those organizations that can remedy it.
Lapsley and Wright (2004)	The diffusion of management accounting innovations in the public sector: a research agenda	The results of the survey indicate, inter alia, that adoption of accounting innovations by public sector organizations is largely affected by government influence.
Preda and Watts (2004)	Contemporary accounting innovations in Australia: manufacturing versus service organizations	The results provide some support for the hypothesis that different organizational fields will rely on different elements of adoption for different accounting innovations. However, the second hypothesis, that different drivers provide different motivators for the adoption of accounting innovations, was not supported.

Table 1: Summary of Key Literature Review on Managerial Accounting Innovation Implementation (Continued)

Authors	Title	Results
Ax and Bjornenak (2005)	Bundling and diffusion of management accounting innovations—the case of the balanced scorecard in Sweden	The balanced scorecard allows for different interpretations and uses of the concept that could potentially increase the supply side effect in the diffusion of management accounting innovations process.
Abernethy and Bouwens (2005)	Determinants of accounting innovation Implementation	The research found that the delegation of decision rights can limit the potential for resistance in two ways—(a) by creating the environment which allows managers to ensure that their subunits are able to adapt to the new signals provided by accounting innovations and (b) by enabling subunit managers to become involved in the design of these systems.
Liua and Pan (2007)	The implementation of activity-based costing in China: an innovation action research approach	The results showed that the top management support, which has been identified as an important success factor in activity based costing literature, is evidently the predominant success factor in the organization.

Table 1: Summary of Key Literature Review on Managerial Accounting Innovation Implementation (Continued)

Authors	Title	Results
Chongruksut (2009)	Organizational culture and the use of management accounting innovations in Thailand	The research found that there was no overall statistical difference in organizational culture between firms which make use of and do not make use of innovations.
Naranjo-Gil, Maas, and Hartmenn (2009)	How CFOs determine management accounting innovation: An examination of direct and indirect effects	The research found the chief financial officer's impact on innovation strategy and performance.
Wnuk-Pel (2010)	Diffusion of management accounting innovations in non-manufacturing firms-the case of activity-based costing	The research shows that the degree of adoption of modern costing systems, such as activity-based costing or target costing, is still rather limited in non-manufacturing companies of Poland. In companies using activity-based costing, the most important reasons for implementation were the need for cost reduction and performance improvement, changes in information needs of management, and necessity to improve control.

Table 1: Summary of Key Literature Review on Managerial Accounting Innovation Implementation (Continued)

Authors	Title	Results
Khajavi and Nazemi (2010)	Innovation in management accounting: the needs of world-class firms	The paper shows that the main characteristics of world-class firms and suggest an ideal organizational framework of world class firms. The world-class companies should use the newest and modern techniques in manufacturing.
Zawawi and Hoque (2010)	Research in management accounting innovations	The review finds that research on management accounting innovations (MAI) has intensified during the period 2000-2008, with the main focus on exploring the extent to which a host of organizational and environmental factors influence the implementation and use of MAIs in organizations.
Harder (2011)	Management innovation capabilities: A typology and propositions for management innovation research	This paper presents a typology categorizing management innovation along two dimensions; radicands and complexity. In addition, the paper proposes a model of the foundations of management innovation. Propositions and implications for future research are discussed.

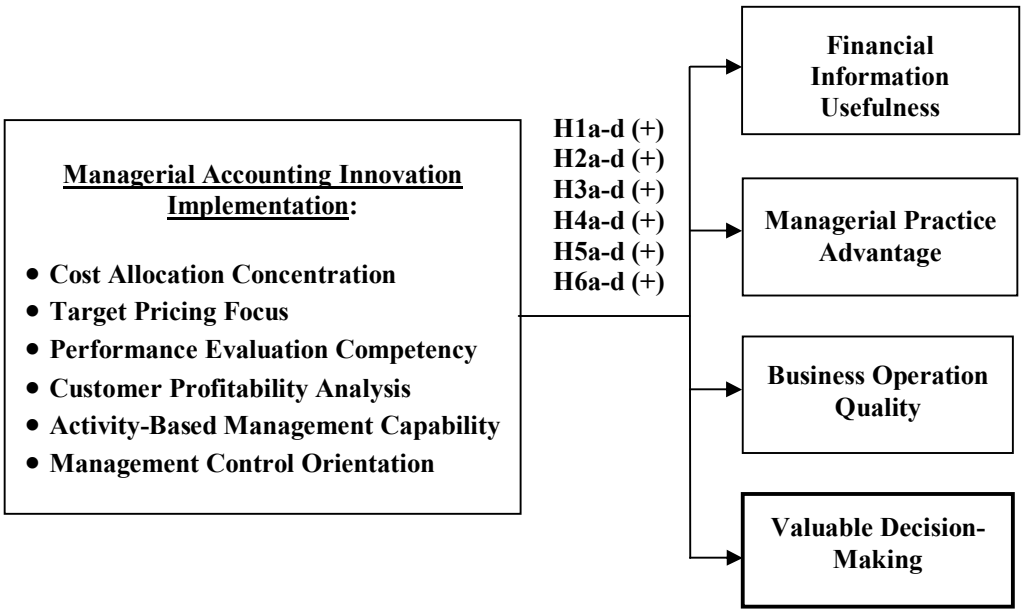
Table 1: Summary of Key Literature Review on Managerial Accounting Innovation Implementation (Continued)

Authors	Title	Results
Nassar, Al-Khadash, Al-Okdah, and Sangster (2011)	The implementation of management accounting innovation within the Jordanian Industrial Sector: The role of supply-side factors	The research found that the degrees of satisfaction regarding the current role of supply-side factors in driving the implementation of MAI shows that most of these factors need improvement. In addition, the most cited reasons for not implementing MAI were lack of Co-operation between universities (academics) and companies (professionals) in Jordan.

Consequences of Managerial Accounting Innovation Implementation (MAII)

This section investigates the effects of six dimensions of MAII consisting of cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation on four consequences including, financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making, as shown in Figure 2.

Figure 2: The Effects of Managerial Accounting Innovation Implementation on Financial Information Usefulness, Managerial Practice Advantage, Business Operation Quality and Valuable Decision-Making



Cost Allocation Concentration

The accurate calculation product costs can be built from accurate records and compilation cost data by appropriate cost accounting methods, allocated factory overhead by accurate and appropriate criteria such as the activity-based cost allocation method, calculation product cost by using real and the complete cost data, and careful process of calculation product cost (Parsons and MacDonal, 1970; Pizzini, 2006).

In addition, Naranjo-Gil, Maas, and Hartmann (2009) refer to Activity-Based Cost (ABC) as a cost allocation technique that responds to the distortion costs inherented in the system cost by-product of the cost of resources. The diversity and complexity of the product is not only in the product ABC, but also in the products, customers, suppliers, distribution channels, brands and market shares of the cost. ABC is claimed to be useful in complex organizations and activities at different levels of consumer spending.

There are three aspects of the allocation of costs. The first is related to the purpose of costing such as products, processes, and tasks. The second is division to the collection and expenditure related to the purposes of costing; for example, the cost of manufacturing expenses, selling and administrative expenses, total expenses, general expenses, service costs and fixed costs. The third is the method of determining the first and the second side. The cost allocations for the allocation of costs of production are usually labor hours or machine hours to produce. In this research, cost allocation concentration refers to the importance of the criteria for the appropriation of costs associated with the products and services that are appropriate and consistent with the situation to get an accurate cost (Lamminmaki and Drury, 2001).

A review of the literature by Lamminmaki and Drury (2001) suggested that a key dimension of successful cost accounting implementation is product costing accuracy that means more accurate product cost is an important issue for accounting practitioners. For example, managers may want to know whether the information provided by their costing systems is accurate so they can estimate the uncertainty of their decisions made on the basis of this information (Chan and Lee, 2003). Accurate product cost is the attributes of cost information for decision-making that cost management system should provide the means to develop reasonably accurate product cost. This requires that the system be designed to use cost driver information to trace costs to the products. The system need not be the most accurate one, but one which matches benefits of additional accuracy with expenses of achieving additional accuracy (Barfield, Raiborn, and Kinney, 1997; McLean, 2006).

Cost allocation methods can increase cost and profit as right, and also allows managers to understand and estimate the resources used in the company's value in delivering results-oriented strategy (Krumwiede, 1998; Anand, 2004; Byrne and Stower, 2008). The purpose of reporting all financial needs of the system of costing is that it

has succeeded in allocating the appropriate costs of the goods or services (Cooper and Kaplan, 1988). The achievement of this objective involves the proper allocation of costs at the time. Parsons and MacDonald (1970) concluded that the cost accounting system must be reliable. Cost allocation is a system that is accurate, reliable and able to meet the need of management decisions.

In this research, firms that have cost allocation concentration tend to increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 1a: The higher the cost allocation concentration is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 1b: The higher the cost allocation concentration is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 1c: The higher the cost allocation concentration is, the more likely that firms will gain greater business operation quality.

Hypothesis 1d: The higher the cost allocation concentration is, the more likely that firms will gain greater valuable decision-making.

Target Pricing Focus

Target pricing is a price management tool for a solution. Target pricing is a strict management technique to help prevent managers from launching low-margin products that do not generate an appropriate return on investment (Omar, 1997). In the past, companies need to design, supply, manufacture, and retail delivery process that allows the company to achieve profitability goals to set the needs of customers and their willingness to pay a specific price in the most common of cost plus pricing. Target costing ensures success with a successful economic rate of return for increased productivity and profit margin for the dealers. However, the price has been considered an indicator of quality, though the cost and quality targets will be considered separately.

The practice of target pricing that has been a key factor in the success of Japanese manufacturers (Li et al., 2011) finds that sharing cost-reduction expenses allows the manufacturer to use the supply-side approach to attain a competitive advantage. Target pricing (target sales price) is the price level of goods / services that are available, or the price of a competitor's proposal as a starting point. However, there are other factors involved when setting the selling price as the value of the product or service for the customer such as the consumer expectations, the concept of products, product life cycle, sales volume expectations and strategies of competitors and the price level of other consumer goods and services in the market (Yazdifar and Askarany, 2012). In this research, target pricing focus refers to emphasizing on pricing consistent with the products and services to push for profits (Omar, 1997). Target pricing also takes into account the responsibilities of a third party. Kee (2010) found that decisions related to production target costing in the economy continue to add value to the company.

In this research, firms that have target pricing focus tend to increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 2a: The higher the target pricing focus is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 2b: The higher the target pricing focus is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 2c: The higher the target pricing focus is, the more likely that firms will gain greater business operation quality.

Hypothesis 2d: The higher the target pricing focus is, the more likely that firms will gain greater valuable decision-making.

Performance Evaluation Competency

Performance evaluation is a systematic review process carried out to achieve organizational goals. To evaluate the performance of management and control, the system enables organizations to manage existing resources more effectively and to measure the effectiveness that has to be related to the goals of the company (Wu and Hung, 2008). The traditional indicators are based on the operational and financial restrictions in the evaluation of overall performance evaluation as traditional financial performance alone cannot measure the performance of covered operations. Joshi (2001) said performance evaluation is to assess the importance of management accounting. This suggests that both financial and nonfinancial measures are used to measure performance and specifically looks at a business from four perspectives: finance, customer, internal process, and learning and growth (Cardinaels and Veen-Dirks, 2010; Wu and Chang, 2012). Naranjo-Gil, Maas, and Hartmann (2009) refer to the Balanced Scorecard (BSC) as a measure of performance that complements financial measures to traditional measures of performance providing insight into more success strategies of the organization. BSCs provide a comprehensive set of indicators of current and future operating results. BSC is a holistic concept evaluation (Cebeci, 2009; Chen, Hsu and Tzeng, 2011) that presents a balanced scorecard approach of how to balance indicators in order to overcome these shortcomings. In this research, performance evaluation competency refers to the focus of the guidelines, approaches and methods of assessment measurement on operational suitability for the work to be successful (Mahama, 2006). In a review of the literature, Mahama (2006) finds that performance measurement systems affect cooperation within the organization and enhances organization performance. Performance evaluations are the key factors to stimulate enthusiasm in the task and cooperation within the organization. In this research, firms that have performance evaluation competency tend to increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 3a: The higher the performance evaluation competency is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 3b: The higher the performance evaluation competency is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 3c: The higher the performance evaluation competency is, the more likely that firms will gain greater business operation quality.

Hypothesis 3d: The higher the performance evaluation competency is, the more likely that firms will gain greater valuable decision-making.

Customer Profitability Analysis

Customer profitability is the net dollars made by the group or individual client of an organization (Jacobs, Johnston and Kotchetova, 2001). Knowledge of customer profitability can improve decision-making for many aspects of marketing including product and services development, pricing, and all forms of communications including marketing, promotion and personal selling (Mulhern, 1999) which accurately reflect revenue and marketing support variations across-customers for marketing decisions. Then, customer profitability reports are expected to have an edge on traditional costing reports, since revenue and marketing support differences across customers are more accurately reflected (Mulhern, 1999). This reflects the pattern of income and a more accurate determination of changes in the marketing decisions related to customers. Reported profits are expected to have an edge on cost report revenue and customer support across different markets which will be more accurate (Mulhern, 1999; Cardinaels, Roodhooft and Warlop, 2004).

The base of each customer will have a difference in customer revenue generated for the company and the costs of the companies that are causing revenues to secure them. While most companies are aware of the revenue of customers, many companies are unaware of all the costs associated with customer relations. In general, the cost of goods is known for each customer. However, sales and marketing and service and support costs are considered the most costly. In this research, customer profitability analysis refers to the refutation focused on the revenue and expenses loss of each customer to be used as the basis for planning and presenting products and services accordingly (Raaij, Vernooij and Triest, 2003). Benefits from the CPA lie in the insights

it gives to the uneven distribution of costs and revenues, rather than the clients. Information about the distribution of costs among customers, and the value of the particular distribution of income is generally known for its understanding of the extent to which the client uses the resources specified in this company which will create new opportunities for the company, including administrative costs, revenue and marketing strategy (Raaij, Vernooij and Triest, 2003). CPA, as a specific application of ABC, reveals the links between activities and resource consumptions, and it therefore, points directly to profit opportunities. CPA provides the basis for decisions on pricing plans, bonuses, and discounts to customers. However, it shows why some orders to fill cost more than others, and allows companies to have their prices reflect those differences. However, a similar vein can help improve decision-making about discounts. In the absence of sophisticated knowledge about the costs of customer-specific discounts, they are often based on sales volume. The analysis of the profitability of the customer may very well be shown, but some of our large customers are in fact not useful. The results may also help reduce the existing structure to maximize long-term profitability (Helgesen, 2007).

Therefore, the implementation for customer analysis profitability provides a direction for a team consisting of at least a marketer and a management accountant (Raaij, Vernooij and Triest, 2003; Lino and Andrea, 2006). The marketing is focuses on long-term relationships and mutual benefits with customers (Lee, Lin and Chen, 2010). Therefore, accounting focuses on the data obtained from the analysis of customer profitability for such information for making decisions. In this research, firms that have customer profitability analysis tend to increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 4a: The higher the customer profitability analysis is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 4b: The higher the customer profitability analysis is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 4c: The higher the customer profitability analysis is, the more likely that firms will gain greater business operation quality.

Hypothesis 4d: The higher the customer profitability analysis is, the more likely that firms will gain greater valuable decision-making.

Activity-Based Management Capability

Activity-based management (ABM) is a technique based on the definition of the activities carried out by a company which is the ultimate cause of the indirect costs focusing on the management of the activities (Lino and Andrea, 2006), leading to a competitive advantage to the feasibility of the target set. ABM is a way for organizations to measure and control the purpose of optimization. This is achieved by the creation and implementation of activities under the framework for performance measurement and resource management, continuous improvement and decision-making (Armstrong, 2002; Gupta and Galloway, 2003). ABM is a much broader concept (Rasmussen, Savory and Williams, 1999). ABM refers to the fundamental management philosophy that focuses on the planning, execution, and measurement of activities as the key to a competitive advantage. In this research, activity-based management capability refers to the emphasis on management by taking into value chain to determine the costs allocation associated with resource use and the beneficial uses of activities that add value to generate the maximum profit (Khataie, Bulgak and Segovia, 2011).

The activity-based management system is designed and applied in the production of goods or services to monitor activity at all stages by engaging in the manufacturing of the product and trying to determine what portions of the resources are being used in each activity of each product type. The data obtained can help determine if the product is profitable. This process seeks to add value to the organization and should be further developed. However, these systems are more commonly used than ever today, in an effort to obtain a more reliable product cost and improve the process of developing a better marketing strategy that leads to improved product design, process or supplier relationships and customer satisfaction. This can serve as useful data to support the implementation of an effective decision-making process based on the updated information (Gupta and Galloway, 2003), and the main objective is the highlight of the

ABM consisting of two issues: (1) to provide detailed information about costs and consumption in the specific process and (2) to provide accurate information for managers to improve decision-making more efficiently (Khataie, Bulgak and Segovia, 2011).

In this research, firms that have activity-based management capability tend to increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 5a: The higher the activity-based management capability is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 5b: The higher the activity-based management capability is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 5c: The higher the activity-based management capability is, the more likely that firms will gain greater business operation quality.

Hypothesis 5d: The higher the activity-based management capability is, the more likely that firms will gain greater valuable decision-making.

Management Control Orientation

The main purpose of the management control system (MSC) is to monitor decisions throughout the organization and to guide employee behavior in desirable ways in order to increase the chances that an organization's objectives, including organizational performance is to be achieved (Langfield-Smith, 1997; Kallunki et al., 2010). MCS is defined as a tool designed to assist the manager's decision-making consisting of both formal and informal forms of controls (Chenhall; Zhao, 2003; Chenhall and Euske, 2007). Henri's (2006) definition includes planning systems, reporting systems, and monitoring procedures that are based on information use. Interestingly, MCS is a broad concept consisting of many elements used for varying purposes. Mahama (2006) and Malmi and Brown (2008) define management controls to

include all those organizational arrangements and actions designed to facilitate the achievement of performance goals with the least unintended consequences. In this research, management control orientation refers to the focus on methods and develops a good tracking performance to make the operation as planned and effective (Mahama, 2006). Firms need to establish control tools to help managers make right decisions. The strong competition due to market globalization and technological change is forcing firms to develop a management control system. The management control system will become a tool to achieve sustained success of firms by helping directors make decisions in daily operations and gives good strategies of the business (Chenhall, 2003). In the context of an acute competitive environment, practices can have very dysfunctional effects on the decision-making processes and evaluations at the various levels of management. Various forms of dysfunctional behaviors have been previously identified and MCS research identified some key terms/concepts such as budgetary slack, managerial short term orientation, and manipulation of performance measures specific to particular control systems or contexts (Chow et al., 1996). However, MCS represents a logo of survival in the organization that is costly and time-consuming to install and operate (Sandino, 2007). Several researchers have focused on the role of MCS design, environment to implement MCS, and so forth, but this paper will focus on MCS. Taken all together, this discussion implies that MCS would foster control systems to exist in all spheres of the operations of the organization that are necessary in the process of management as an extra effort on behalf of their organization, which consequently would lead to higher levels of firm success. In other words, managerial capability would mediate the relationship between MCS and firm success because MCS is one such system in which the top management also ties its hand. Unless the performance is per the objectivity of MCS, no one could be rewarded despite the willingness of the top management. Consequently, everything would be converted at the high level of productivity (Nilniyom, 2009). Therefore, MCS plays an essential role in development (Abernethy et al., 2004) by assisting organizations in observing nation-wide accountabilities (Chenhall, 2003).

Therefore any organization has management control that would benefit the organization in the system. In this research, firms that have management control orientation tend to increase financial information usefulness, managerial practice

advantage, business operation quality, and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 6a: The higher the management control orientation is, the more likely that firms will gain greater financial information usefulness.

Hypothesis 6b: The higher the management control orientation is, the more likely that firms will gain greater managerial practice advantage.

Hypothesis 6c: The higher the management control orientation is, the more likely that firms will gain greater business operation quality.

Hypothesis 6d: The higher the management control orientation is, the more likely that firms will gain greater valuable decision-making.

The Effects of Financial Information Usefulness, Managerial Practice Advantage, and Business Operation Quality on Valuable Decision-Making

This section examines the influence of financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making. It is assumed that there are positive relationships among all of them as depicted in Figure 3.

Valuable Decision-Making

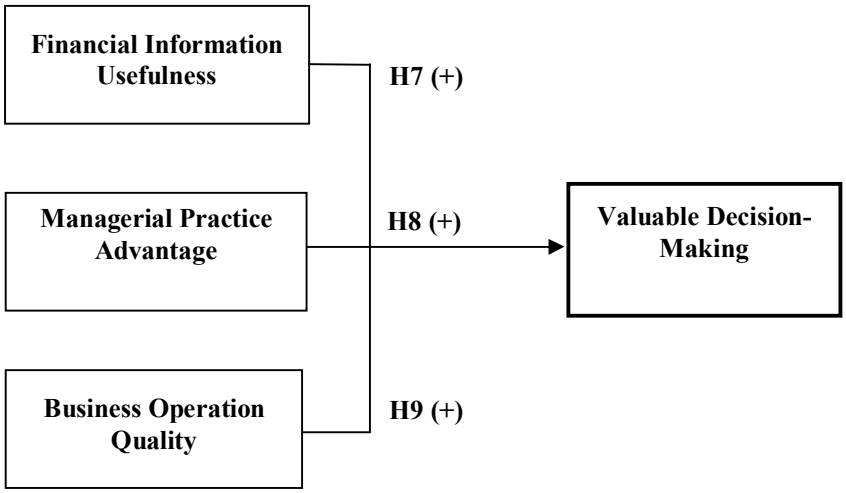
Decision-making is a comprehensive process that includes identifying the problem and decision making criteria, the basis weight is given, move to the development, analysis and choices that can be used to correct the problem, and evaluate the effectiveness of the decision (Yeshmin and Hossan, 2011). Decisions have been assigned to assess the extent to which decision-makers achieve the objectives for the decision. In this research, valuable decision-making can observed from the perception of the decision based on financial performance. The advantages relate to successful management and decision-making for capital intensive projects, the decision to buy or

find the right product mix, selling price and the right decisions, and further removal of the products (Swenson, 1995; Anderson and Lanan, 1999; Lamminmaki and Drury, 2001). The decision-making is the process of choosing the solutions that can be used in a course of action or the problem (Raiborn, Kinney and Prather-Kinsey, 2006).

The ability of managers to manage depends on the choice of the best, the most effective course of action to achieve the target set to get the right choice with the need to manage information related to quality alternative solutions. Therefore, the company has the option to decide with minimal damage (Barfield, Raiborn, and Kinney, 1997). Cerullo (1980) found that user satisfaction may be the most important factor for the organization because it is pushes the changes in the correct pattern and use. The accounting system is considered the major mechanism of the organization as it is vital for management decision-making and effective control of the organization (O' Donnell and David, 2000). Swenson (1995), Nicolaou (2000) and Wouters, Anderson, and Wynstra (2005) pointed out that the concept of the effectiveness of the system according to the satisfaction of the judgment of the perceived quality of the output data provided by the system has been introduced as an important concept of effectiveness.

In this research, valuable decision-making refers to the analysis of the highest return and choosing the best option in order to operate effectively and gain the highest benefits (Chenhall and Morris, 1995). It means to identify potential options and decisions that are based on objectives claimed that the organization has participatory decision-making and flexibility. It will have the opportunity to identify problems and develop ideas to increase throughout the organization. Therefore, managerial accounting innovation is implemented as a result to make the business processes more efficient. It is financial and accounting information, operating management, and business performance. Naveh and Halevy (2000) stated that information quality is central to many organizational processes crucial for effective decision-making. The company has the ability to adapt to the environment.

Figure 3: The Effects of Financial Information Usefulness, Managerial Practice Advantage and Business Operation Quality on Valuable Decision-Making



Financial Information Usefulness

Financial information usefulness refers to good results of the reports that reflect the financial position and operating results that are accurate and reliable and can be used for decision-making or analysis used to forecast future performance (Fisher and Kingma, 2001). The purpose of financial information is to provide users with relevant and timely information for decision-making. Decision-making is concerned with future actions (Bello, 2009) or financial information that is the basis of internal financial information to assist managers to make business decisions such as providing a new products, making or buying a product, product pricing, and new type of product. Managerial accounting innovation literature indicates that managerial accounting innovation implementation has a significant influence on decision-making effectiveness. Krumwiede et al. (2007) and Zager and Zager (2006) indicated that it is useful to have financial information in the context of the decision process. The financial analysis is necessary in order to obtain the actual available data. In this research, firms that have financial information usefulness tend to increase valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 7: The higher the financial information usefulness is, the more likely that the firms will gain greater valuable decision-making.

Managerial Practice Advantage

Managerial practice advantage refers to the methods for comprehensive management of all aspects of the business and the different operations that are better or superior to its competitors (Kapuge and smith, 2007). Managerial practice is associated with the decision of the manager include planning / organizing, problem solving, consulting, and Delegating (Chen and Lee, 2007). Good management practices are associated with the development plan, employee and customer relationships, product quality, and valuable external contacts. Also, it is a support organization for continuous improvement because there are many tools to manage accounts & techniques development (Sharkar, Sobhan and Sultana, 2006). Kapuge and Smith (2007) found a positive correlation between the techniques of management applications in the overall quality of total quality management and quality management practices.

Management accounting literature suggests that changes in technology and the environment can lead to new decisions and control problems. As a corporate body to adjust to these developments, they must ensure that the administrative account system that is designed to meet the design criteria is new or not (Chenhall, 2003). Fullerton and McWatters (2002) reported that in the presence of innovative managerial practices (IMPs), the company requires a bottom-up of the need to report to work regularly. However, any organization with management practices quality will result in added value to the decision even more. In this research, firms that have management practices quality tend to increase valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 8: The higher the managerial practice advantage is, the more likely that the firms will gain greater valuable decision-making.

Business Operation Quality

Business operation refers to the process of the economic entity; the relationship continues to be seen as the combination of strategic management to improve

competitiveness and the amount of resources used in the operation to get the results of success and to provide value to customers (Konthong and Ussahawanitchkit, 2010). These objectives relate to the success of the mission of the business and the effectiveness and efficiency of operations and operational quality standards and procedures to ensure more effective change in the environment (Daft, 2007). Many companies are seeking ways to perform better due to increased competition in the business world. Therefore, the operation of the organization can help companies achieve their business goals and optimize the company (Tseng, 2009; Jirawuttinunt and Ussahawanitchkit, 2011). In this research, business operation quality refers to the procedures and operation processes consistent with the stated goal that are very good and efficient (Suraratdecha and Okunade, 2006). Business operation quality is technique, method, or strategy that is innovative in management's best. In addition, the processes and resources to support the mission of the decision the maximum value procedures for operation of the organization that can add value to the economy. So there is a mutually reinforcing interaction between knowledge, skills and expertise to build up the capacity of resources within the organization that are linked to best practices throughout the company to achieve the business objectives of the organization. Therefore, business operation quality consists of skills, knowledge, and the ability of the staff in best practices to meet corporate goals.

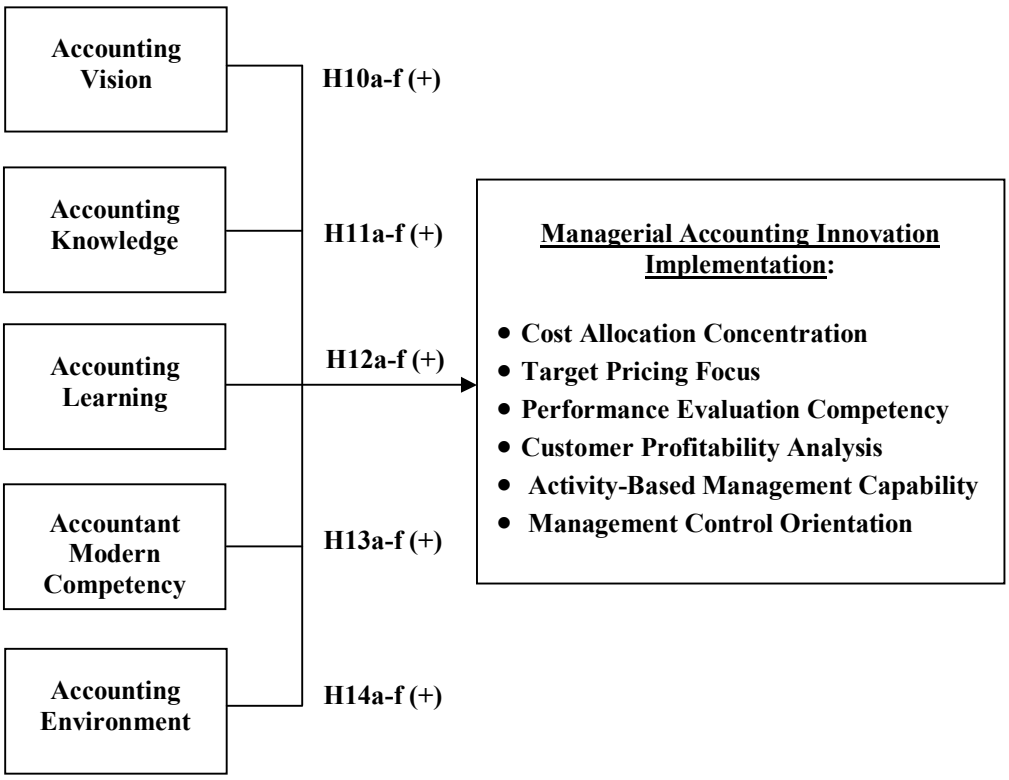
In this research, firms that have business operation quality tend to increase valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 9: The higher the business operation quality is, the more likely that the firms will gain greater valuable decision-making.

Antecedents of Managerial Accounting Innovation Implementation (MAII)

This section explains the influences of the five antecedents (accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment) on six dimensions of MAII which includes related cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation, as presented in Figure 4 below.

Figure 4: The Effects of Antecedents on Managerial Accounting Innovation Implementation



Accounting Vision

Accounting vision refers to the guidelines or practices of accounting in accordance with professional accounting knowledge with regard to the accuracy and the effects that may occur (Tuntrabundit and Ussahawanitchakit, 2010). The definition of

vision generally is an ideal goal to be achieved in the future (Kirkpatrick, Wofford, and Baum, 2002; Elenkov, Judge, and Wright, 2005). In other word, vision is an ideal and unique image of the future that articulates the value (Ruvio, Rosenblatt, and Hertz-Lazarowitz, 2010) in the vision, so the department should be set in line with the vision of the organization.

Vision for inter firm operations is defined as the goals of the organization that are organized and managed as inter firm activities by the plan of the firms following policies, regulations, and principles of firms in the future (Robkob and Ussahawanitchakit, 2009; Tuntrabundit and Ussahawanitchakit, 2010). Vision is described as a goal to organize work activities with partners to achieve a desirable competitive advantage. The frame of mind for future direction is revealed by vision. Vision is enabled through the firm's relationship mindset, and interorganizational operations. Moreover, organizational vision is to develop the occasion for leveraging a competitive advantage (McGivern and Tvori, 1998). Therefore, the goals of the organization with inter firm activities need to be set and shared from the beginning (Mazzawi, 2002). Hence, the implementation of strategic collaborative capability is created also by vision for inter firm operations. Strategic collaborative capability has long been considered vital for individual firm operations to attain desirable firm performance (Tuntrabundit and Ussahawanitchakit, 2010).

In this research, accounting vision is one factor that causes the organization to use managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 10a: The higher the accounting vision is, the more likely that firms will gain greater cost allocation concentration.

Hypothesis 10b: The higher the accounting vision is, the more likely that firms will gain greater target pricing focus.

Hypothesis 10c: The higher the accounting vision is, the more likely that firms will gain greater performance evaluation competency.

Hypothesis 10d: The higher the accounting vision is, the more likely that firms will gain greater customer profitability analysis.

Hypothesis 10e: The higher the accounting vision is, the more likely that firms will gain greater activity-based management capability.

Hypothesis 10f: The higher the accounting vision is, the more likely that firms will gain greater management control orientation.

Accounting Knowledge

Knowledge is defined as meaningful information, which implies that information obtains meaning through experience, interpretation and reflection. Both consultants and academics are producers of knowledge (Helden et al., 2010). Knowledge in accounting is management accounting information to support managers in solving problems. This knowledge includes support for new or modified methods and procedures as well as to understand their use and analysis of their effectiveness. Knowledge is information stored on memory. Because individuals have limited information storage and processing capability, they specialize in particular kinds of knowledge (Stone, Hunton and Wier, 2000). In this research, accounting knowledge refers to the importance of intellect, understanding the process, and can be found in previous analytical solutions with regard to the accuracy of accounting information (Lin, 2008). A review of the literature (Stone, Hunton and Wier, 2000) provides insight into the process of knowledge acquisition and knowledge to match the tasks in account management. Therefore, knowledge is the most important feature of the organization to be successful. Moilanen (2007) found that knowledge of the operation can be transferred. There is a need of prior related knowledge and knowledge development today that will allow them to transfer the tacit information leading to organizational performance. For the rapid advances in technology and globalization, the roles of accountants in the organization need to be adjusted, to develop the necessary knowledge

and skills of accounting professionals to meet the changing demands stemming from the new business environment (Lin, Xiong and Liu, 2005; Lin, 2008).

In this research, accountant knowledge is one factor that causes the organization to use managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 11a: The higher the accounting knowledge is, the more likely that firms will gain greater cost allocation concentration.

Hypothesis 11b: The higher the accounting knowledge is, the more likely that firms will gain greater target pricing focus.

Hypothesis 11c: The higher the accounting knowledge is, the more likely that firms will gain greater performance evaluation competency.

Hypothesis 11d: The higher the accounting knowledge is, the more likely that firms will gain greater customer profitability analysis.

Hypothesis 11e: The higher the accounting knowledge is, the more likely that firms will gain greater activity-based management capability.

Hypothesis 11f: The higher the accounting knowledge is, the more likely that firms will gain greater management control orientation.

Accounting Learning

Accounting learning refers to the focus on developing skills, knowledge and understanding of accounting by providing funding for training to improve the performance of accounting regularly makes the operation viable and timely (Waroonkun and Ussahawanitchakit, 2011). Learning is the committed goal of people to improve or enhance their application to the work they perform. The importance that

is attached to the process of learning new skills is valued by themselves and the success of learning is seen as dependent on the effort to learn the real interest in running one of the challenges. This involves the view of himself as curious and trying to find a person or an organization supplied with various methods to increase learning for employees (Coad, 1996). In addition, individuals within companies are developing new knowledge or insights that have the potential to influence the behavior of the learning activity, which is the ability to recognize, acquire, and apply new knowledge to improve the performance of the individual (Hedberg, Nystrom and Starbuck, 1976).

Accounting learning has developed a deep expertise of new knowledge within the company involving insights with the potential to influence learning behaviors and inhibit their ability to acquire and utilize new knowledge to improve account performance (Waroonkun and Ussahawanitchakit, 2011). Previous research on social learning, planning and monitoring of the policy process, especially for adapting new innovations are applied. Thus, social learning is examined from the perspective of the process of using different contexts in order to enhance the performance of their companies, in which the company would have to improve the transfer of best practices of the business (Holden, 2008). Cho (2005) indicates that organizations have to determine the type of management accounting information that requires advanced technology to achieve better efficiency. In addition, Eddy, Hall and Robinson (2006) suggest that the ability of the employees in the organization is very important in creating the potential for both employees and organizations. The learning is a source of competitive advantage in the organization that should involve the employees by promoting or supporting the learning resources in order to facilitate learning more effectively.

Therefore, prior researches support firms with a higher relationship between accounting learning and managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 12a: The higher the accounting learning is, the more likely that firms will gain greater cost allocation concentration.

Hypothesis 12b: The higher the accounting learning is, the more likely that firms will gain greater target pricing focus.

Hypothesis 12c: The higher the accounting learning is, the more likely that firms will gain greater performance evaluation competency.

Hypothesis 12d: The higher the accounting learning is, the more likely that firms will gain greater customer profitability analysis.

Hypothesis 12e: The higher the accounting learning is, the more likely that firms will gain greater activity-based management capability.

Hypothesis 12f: The higher the accounting learning is, the more likely that firms will gain greater management control orientation.

Accountant Modern Competency

Accounting competency is defined as the capacity of an existing account. The ability exists to work with organizations that are full which covers the knowledge, technical skills, cognitive ability, experience, and personality of the accountants (Stone, Hunton and Wier, 2000; Ley and Albert, 2003; Kennedy and Dresser, 2005; Baird, Harrison, and Reeve, 2007). Kennedy and Dresser (2005) indicate that the performance of employees is essential for organizations to contribute to organizational success. Furthermore, the ability individuals bring to their regular jobs, as well skills or the ability of the company's employees (Blocher, Chen, and Lin, 2001). In this research, accountant modern competency refers to the enthusiasm to continuously self-develop and to learn about the concepts, principles, methods and new accounting innovations to apply to new technology in the preparation and presentation of relevant information and expertise (Groenland and Swagerman, 2009). Furthermore, accountant modern competency affects the application of techniques or innovations more quickly for the optimization of the performance.

Previous research showed that an accountant can be very important. Lamberton, Fedorowicz and Roohani (2005) state that all aspects of the accounting

profession are affected by the widespread use of information technology to point out that the enthusiasm in pursuit of new knowledge has the potential to increase in older workers and thus, increases efficiency to the organization. In this research, accountant modern competency is one factor that causes the organization to use managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 13a: The higher the accountant modern competency is, the more likely that firms will gain greater cost allocation concentration.

Hypothesis 13b: The higher the accountant modern competency is, the more likely that firms will gain greater target pricing focus.

Hypothesis 13c: The higher the accountant modern competency is, the more likely that firms will gain greater performance evaluation competency.

Hypothesis 13d: The higher the accountant modern competency is, the more likely that firms will gain greater customer profitability analysis.

Hypothesis 13e: The higher the accountant modern competency is, the more likely that firms will gain greater activity-based management capability.

Hypothesis 13f: The higher the accountant modern competency is, the more likely that firms will gain greater management control orientation.

Accounting Environment

Accounting environment is defined as the conditions that affect the accounting operation such as accounting standards, regulations and practices, stakeholders, and technology (Withayapoom and Ussahawanitchakit, 2009). The system must be changed

to comply with our partners and the competitive environment. Therefore, the accountants have tried to adjust the presentation of information to be current.

In this research, accounting environment refers to the external factors that affect the performance of the accounts that need to be adjusted, and improves operational efficiency (Withayapoom and Ussahawanitchakit, 2009). The previous literature suggests that changes in environmental factors surrounding an organization can have a significant impact on its accounting and control systems (Baines and Langfield-Smith, 2003); Hoque and James, 2000). Tuanmat (2010) found that changes in the competitive environment and changes in manufacturing technology affect changes in managerial accounting. Chenhall (2003) suggests that the balance of the accounting environment and fitness for a corporate environment is essential to support the manager's new information requirements.

In this research, accounting environment is one factor that causes the organization to use managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 14a: The higher the accounting environment is, the more likely that the firms will gain greater cost allocation concentration.

Hypothesis 14b: The higher the accounting environment is, the more likely that firms will gain greater target pricing focus.

Hypothesis 14c: The higher the accounting environment is, the more likely that firms will gain greater performance evaluation competency.

Hypothesis 14d: The higher the accounting environment is, the more likely that firms will gain greater customer profitability analysis.

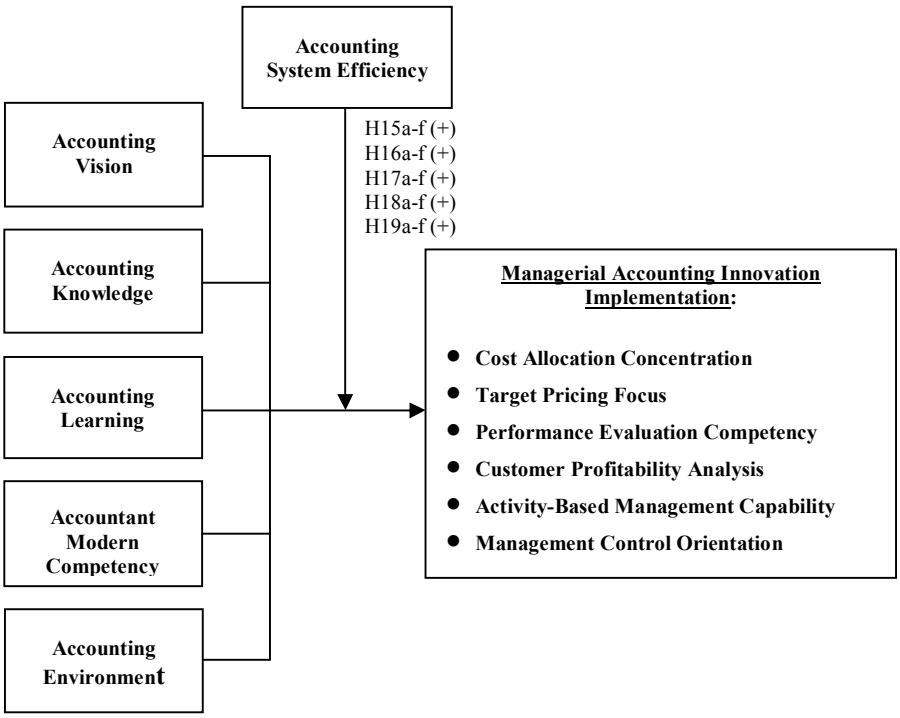
Hypothesis 14e: The higher the accounting environment is, the more likely that firms will gain greater activity-based management capability.

Hypothesis 14f: The higher the accounting environment is, the more likely that firms will gain greater management control orientation.

Moderator of Managerial Accounting Innovation Implementation (MAII)

This section explains the influences of the moderator effect which consists of three moderator variables: accounting system efficiency, information management experience and organizational adaptation capability. Each is enumerated as follows: accounting system efficiency as a moderating effect of five antecedents (accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment) on six dimensions of MAII (cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation) as presented in Figure 5 below.

Figure 5: The Roles of Accounting System Efficiency as a Moderator



Accounting System Efficiency

The accounting system is the system of accounting function which helps control the operation and helps the accounting information to be accurately presented in the financial reports in a timely manner. Chenhall and langfield-Smith, (1998) identified the relationship between accounting and the uncertainty of the environment concept of the contingency theory. Therefore, when the business environment is changing more sophisticated training organizations attempt to provide technology-related changes in the accounting system to help improve the performance (Haldma Laats, 2002; William and Seamen, 2002). Abernethy and Bouwens (2005) stated that the accounting system is used for decision control innovation creating the potential for wealth effects to occur. The accounting system is a major mechanism for management decisions and effective control of the organization (O'Donnell and David, 2000). In the vital system of accounts the role of accounting information in an organization to manage and control the music function to work has emerged. The research pointed out that the concept of the effectiveness of the system by the satisfaction of the quality of the recognition of the export system has been suggested as the concept of effectiveness. (Nicolaou, 2000).

In this research, accounting system efficiency refers to the quality of the methods or tools used to collect the accounting and application of accounting to be consistent with good operational results to support the preparation and presentation of financial reports (Baulianne, 2007). To research the performance of the system in terms of the output of the accounting system to create certain data used by managers for decision-making accounting innovations are used to enhance organizational performance (Abernethy and Bouwens, 2005). Also, indicators prior to the effectiveness of the system is satisfied with the quality of the recognition of the export information system to study the system performance in terms of effective mechanism within the company, the quality of information available to users and meet their information developed (Nicolaou, 2000). In additional, the system performance in terms of effective mechanisms within that the quality of information available to users and meet their data developed. Chenhall (1999) reports on innovations in management accounting systems (MAS) was developed in response for the implementation and results achieved by the innovative system are based on operational efficiency.

In this research, a higher level of accounting system efficiency will positively moderate the relationships among the antecedents (i.e. accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accounting environment) and managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation). Thus, the hypotheses are proposed as follows:

Hypothesis 15: The relationships between accounting vision and (a) cost allocation concentration, (b) target pricing focus, (c) performance evaluation competency, (d) customer profitability analysis, (e) activity-based management capability, and (f) management control orientation will be positively moderated by accounting system efficiency.

Hypothesis 16: The relationships between accounting knowledge and (a) cost allocation concentration, (b) target pricing focus, (c) performance evaluation competency, (d) customer profitability analysis, (e) activity-based management capability, and (f) management control orientation will be positively moderated by accounting system efficiency.

Hypothesis 17: The relationships between accounting learning and (a) cost allocation concentration, (b) target pricing focus, (c) performance evaluation competency, (d) customer profitability analysis, (e) activity-based management capability, and (f) management control orientation will be positively moderated by accounting system efficiency.

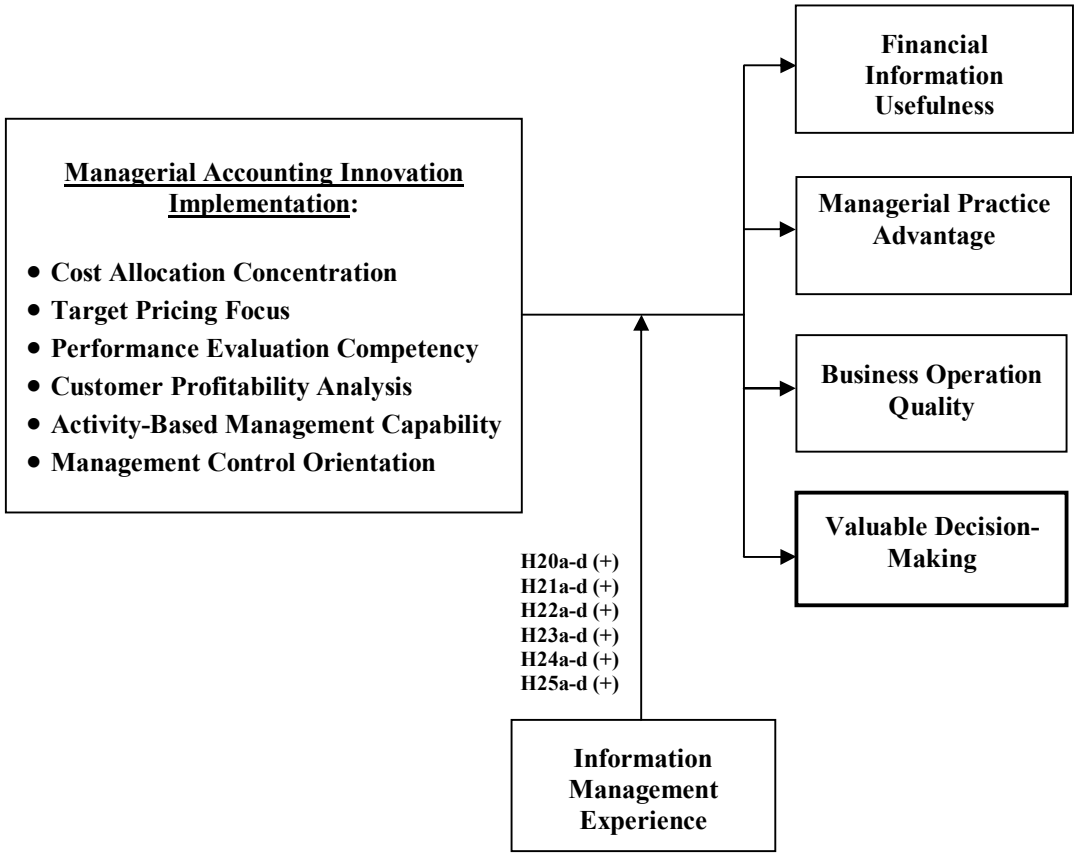
Hypothesis 18: The relationships between accountant modern competency and (a) cost allocation concentration, (b) target pricing focus, (c) performance evaluation competency, (d) customer profitability analysis, (e) activity-based management capability, and (f) management control orientation will be positively moderated by accounting system efficiency.

Hypothesis 19: The relationships between accounting environment and (a) cost allocation concentration, (b) target pricing focus, (c) performance evaluation competency, (d) customer profitability analysis, (e) activity-based management capability, and (f) management control orientation will be positively moderated by accounting system efficiency.

Information Management Experience

The second moderator, information management experience, is a moderator of the relations of the six dimensions of MAII on financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making as presented in Figure 6.

Figure 6: The Roles of Information Management Experience as a Moderator



Information is important for every organization. The best quality information to improve decision-making, increases efficiency and helps the organization have the potential to benefit from the competition (Citroen, 2011). Therefore, many organizations are looking for effective solutions and continue to seek to deal with the existing internal and external environment as more business or industry would need effective information management as well as to assess their strengths and weaknesses. Rad, Shams and Naderi (2009) reported one of the most important elements in the data. Some information is important enough to be important for the organization, so many organizations are trying to find different methods and tools used for data arising from the operation and the days are growing steadily (Rad, Shams and Naderi, 2009).

Information management refers to the planning, organizing, directing and controlling of the information available within the organization and use of technologies and techniques for effective management of information and knowledge resources. Besides, information management includes assets both inside and outside the organization to gain a competitive advantage. Information management is related to the evaluation of information needs within the organization and understanding the needs and requirements an important step in the strategy. This will promote creativity and innovation enterprise-wide (Choo, 1995; Maceviciute and Wilson, 2002; Booth and Philip, 2005).

In addition, experience in data management is also important for the organization, in particular, businesses that have complex or multiple products. Experience has a lot of information the technology system that stores data in a more diverse organization would affect the data managers who lack skills to manage information (Schlogl, 2005). Kebede (2010) claims experience in understanding the management of data and information developed in the relevant departments and information systems. There is also an important factor for the emergence and evolution of knowledge management which is relevant to understanding the formation and the quality of knowledge and understanding the nature of the work or can be referred by a specialist in management information quickly (Lin, 2008). In this research, information management experience refers to work continued on a regular basis making the expertise to manage complete information that can be retrieved in the operation quickly (Rad, Shams and Naderi, 2009). Hence, a higher level of information management

experience will positively moderate the relationships among managerial accounting innovation implementation (i.e. cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation), financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 20: The relationships between cost allocation concentration and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

Hypothesis 21: The relationships between target pricing focus and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

Hypothesis 22: The relationships between performance evaluation competency and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

Hypothesis 23: The relationships between customer profitability analysis and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

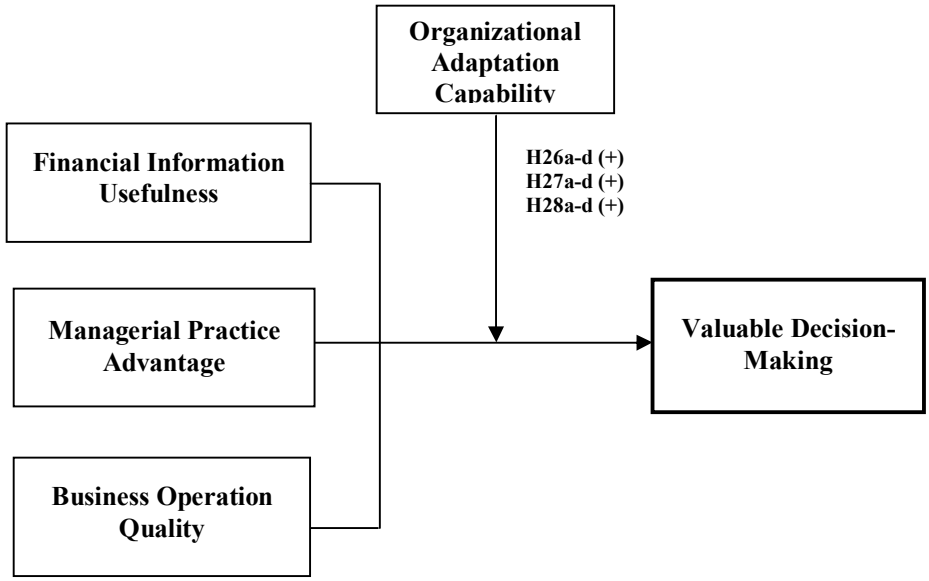
Hypothesis 24: The relationships between activity-based management capability and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

Hypothesis 25: The relationships between management control orientation and (a) financial information usefulness, (b) managerial practice advantage, (c) business operation quality and (d) valuable decision-making will be positively moderated by information management experience.

Organizational Adaptation Capability

Organizational adaptation capability as a moderator of the relations moderates financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making as presented in Figure 7 below:

Figure 7: The Role of Organizational Adaptation Capability as a Moderator



Organizational adaptation capability refers to the specific capability of the firm to adjust and respond successfully to environmental change. Both the environmental condition and firm capabilities shape the firm's response to take a competitive advantage for firm success (Lee, 2001). Organizational adaptation refers to modification of the internal components in order to adapt to changes in the environment (Hatum, Pettigrew and Michelini, 2010). The purpose of the adjustment is to allow the organization to return to normal (Cameron, 1984) from the perspective of strategic

management, (Hitt, Ireland and Hoskison, 2005) for the ability to combine the resources and the ability to name the core competencies. Helfat and Peteraf (2003) stated that organizational adaptation is the ability of organizations to carry out the coordination of the use of corporate resources for the purpose of achieving a specific result. Therefore, the ability of the organization is important to strengthen the competitive advantage of companies that helped create the potential of the strategic environment and to enact it (Limpsurapong and Ussahawanitchakit, 2011). Organizational adaptation is a popular way for organizations to respond to competitive threats and market opportunities, and the business environment affects the management of the organization (Ussahawanitchakit, 2011). Organizational adaptation is a challenge for companies to recognize the changing environment and to successfully meet the needs of the environment.

In this research, organizational adaptation capability refers to management improvement and the continuous development to environmental changes increases competitiveness and decision-making, as well (Lee, 2001; Hatum, Pettigrew and Michelini, 2010). Therefore, the main goal is to make a quick adjustment that can be a key to competitiveness leading to survival (Lee, 2001). Consequently, the ability to adapt the organization to reflect financial information usefulness, managerial practice advantage and business operation quality of the response will be valuable decision-making. Hence, a higher level of organizational adaptation capability will positively moderate the relationships among financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making. Thus, the hypotheses are proposed as follows:

Hypothesis 26: The relationships between financial information usefulness and valuable decision-making will be positively moderated by organizational adaptation capability.

Hypothesis 27: The relationships between managerial practice advantage and valuable decision-making will be positively moderated by organizational adaptation capability.

Hypothesis 28: The relationships between business operation quality and valuable decision-making will be positively moderated by organizational adaptation capability.

Summary

Based on the above literature reviews, this chapter details the conceptual model of managerial accounting innovation implementation and valuable decision-making. This chapter has detailed the literature reviews, theories and conceptual framework constructed, and has proposed a set of 28 testable hypotheses. Managerial accounting innovation implementation is the main concern of this research that focused on the antecedents and its consequences. Also investigated was the impact of financial information usefulness, managerial practice advantage, business operation quality on valuable decision-making through the effects of moderating accounting vision, accounting knowledge, accounting learning, accountant modern competency and accountant environment.

The next chapter describes the research methods including the population selection and data collection procedure, the variable measurements of each construct, the instrumental verification, the statistics and equations to test the hypotheses and summarize the definitions and operational variables of constructs for the research. Table 2 presents a summary of all hypotheses relationships as shown below.

Table 2: Summary of Hypothesized Relationships

Hypotheses	Description of Hypothesized Relationships
H1a	The higher the cost allocation concentration is, the more likely that firms will gain greater financial information usefulness.
H1b	The higher the cost allocation concentration is, the more likely that firms will gain greater managerial practice advantage.
H1c	The higher the cost allocation concentration is, the more likely that firms will gain greater business operation quality.
H1d	The higher the cost allocation concentration is, the more likely that firms will gain greater valuable decision-making.
H2a	The higher the target pricing focus is, the more likely that firms will gain greater Financial information usefulness.
H2b	The higher the target pricing focus is, the more likely that firms will gain greater managerial practice advantage.
H2c	The higher the target pricing focus is, the more likely that firms will gain greater business operation quality.
H2d	The higher the target pricing focus is, the more likely that firms will gain greater valuable decision-making.
H3a	The higher the performance evaluation competency is, the more likely that firms will gain greater financial information usefulness.
H3b	The higher the performance evaluation competency is, the more likely that firms will gain greater managerial practice advantage.
H3c	The higher the performance evaluation competency is, the more likely that firms will gain greater business operation quality.
H3d	The higher the performance evaluation competency is, the more likely that firms will gain greater valuable decision-making.
H4a	The higher the customer profitability analysis is, the more likely that firms will gain greater financial information usefulness.
H4b	The higher the customer profitability analysis is, the more likely that firms will gain greater managerial practice advantage.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H4c	The higher the customer profitability analysis is, the more likely that firms will gain greater business operation quality.
H4d	The higher the customer profitability analysis is, the more likely that firms will gain greater valuable decision-making.
H5a	The higher the activity-based management capability is, the more likely that firms will gain greater financial information usefulness.
H5b	The higher the activity-based management capability is, the more likely that firms will gain greater managerial practice advantage.
H5c	The higher the activity-based management capability is, the more likely that firms will gain greater business operation quality.
H5d	The higher the activity-based management capability is, the more likely that firms will gain greater valuable decision-making.
H6a	The higher the management control orientation is, the more likely that firms will gain greater financial information usefulness.
H6b	The higher the management control orientation is, the more likely that firms will gain greater managerial practice advantage.
H6c	The higher the management control orientation is, the more likely that firms will gain greater business operation quality.
H6d	The higher the management control orientation is, the more likely that firms will gain greater valuable decision-making.
H7	The higher the financial information usefulness is, the more likely that firms will gain greater valuable decision-making.
H8	The higher the managerial practice advantage is, the more likely that firms will gain greater valuable decision-making.
H9	The higher the business operation quality is, the more likely that firms will gain greater valuable decision-making.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H10a	The higher the accounting vision is, the more likely that firms will gain greater cost allocation concentration.
H10b	The higher the accounting vision is, the more likely that firms will gain greater target pricing focus.
H10c	The higher the accounting vision is, the more likely that firms will gain greater performance evaluation competency.
H10d	The higher the accounting vision is, the more likely that firms will gain greater customer profitability analysis.
H10e	The higher the accounting vision is, the more likely that firms will gain greater activity-based management capability.
H10f	The higher the accounting vision is, the more likely that firms will gain greater management control orientation.
H11a	The higher the accounting knowledge is, the more likely that firms will gain greater cost allocation concentration.
H11b	The higher the accounting knowledge is, the more likely that firms will gain greater target pricing focus.
H11c	The higher the accounting knowledge is, the more likely that firms will gain greater performance evaluation competency.
H11d	The higher the accounting knowledge is, the more likely that firms will gain greater customer profitability analysis.
H11e	The higher the accounting knowledge is, the more likely that firms will gain greater activity-based management capability.
H11f	The higher the accounting knowledge is, the more likely that firms will gain greater management control orientation.
H12a	The higher the accounting learning is, the more likely that firms will gain greater cost allocation concentration.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H12b	The higher the accounting learning is, the more likely that firms will gain greater target pricing focus.
H12c	The higher the accounting learning is, the more likely that firms will gain greater performance evaluation competency.
H12d	The higher the accounting learning is, the more likely that firms will gain greater customer profitability analysis.
H12e	The higher the accounting learning is, the more likely that firms will gain greater activity-based management capability.
H12f	The higher the accounting learning is, the more likely that firms will gain greater management control orientation.
H13a	The higher the accountant modern competency is, the more likely that firms will gain greater cost allocation concentration.
H13b	The higher the accountant modern competency is, the more likely that firms will gain greater target pricing focus.
H13c	The higher the accountant modern competency is, the more likely that firms will gain greater performance evaluation competency.
H13d	The higher the accountant modern competency is, the more likely that firms will gain greater customer profitability analysis.
H13e	The higher the accountant modern competency is, the more likely that firms will gain greater activity-based management capability.
H13f	The higher the accountant modern competency is, the more likely that firms will gain greater management control orientation.
H14a	The higher the accounting environment is, the more likely that firms will gain greater cost allocation concentration.
H14b	The higher the accounting environment is, the more likely that firms will gain greater target pricing focus.
H14c	The higher the accounting environment is, the more likely that firms will gain greater performance evaluation competency.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H14d	The higher the accounting environment is, the more likely that firms will gain greater customer profitability analysis.
H14e	The higher the accounting environment is, the more likely that firms will gain greater activity-based management capability.
H14f	The higher the accounting environment is, the more likely that firms will gain greater management control orientation.
H15a	The relationships between accounting vision and cost allocation concentration will be positively moderated by accounting system efficiency.
H15b	The relationships between accounting vision and target pricing focus will be positively moderated by accounting system efficiency.
H15c	The relationships between accounting vision and performance evaluation competency will be positively moderated by accounting system efficiency.
H15d	The relationships between accounting vision and customer profitability analysis will be positively moderated by accounting system efficiency.
H15e	The relationships between accounting vision and activity-based management capability will be positively moderated by accounting system efficiency.
H15f	The relationships between accounting vision and management control orientation will be positively moderated by accounting system efficiency.
H16a	The relationships between accounting knowledge and cost allocation concentration will be positively moderated by accounting system efficiency.
H16b	The relationships between accounting knowledge and target pricing focus will be positively moderated by accounting system efficiency.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H16c	The relationships between accounting knowledge and performance evaluation competency will be positively moderated by accounting system efficiency.
H16d	The relationships between accounting knowledge and customer profitability analysis will be positively moderated by accounting system efficiency.
H16e	The relationships between accounting knowledge and activity-based management capability will be positively moderated by accounting system efficiency.
H16f	The relationships between accounting knowledge and management control orientation will be positively moderated by accounting system efficiency.
H17a	The relationships between accounting learning and cost allocation concentration will be positively moderated by accounting system efficiency.
H17b	The relationships between accounting learning and target pricing focus will be positively moderated by accounting system efficiency.
H17c	The relationships between accounting learning and performance evaluation competency will be positively moderated by accounting system efficiency.
H17d	The relationships between accounting learning and customer profitability analysis will be positively moderated by accounting system efficiency.
H17e	The relationships between accounting learning and activity-based management capability will be positively moderated by accounting system efficiency.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H17f	The relationships between accounting learning and management control orientation will be positively moderated by accounting system efficiency.
H18a	The relationships between accountant modern competency and cost allocation concentration will be positively moderated by accounting system efficiency.
H18b	The relationships between accountant modern competency and target pricing focus will be positively moderated by accounting system efficiency.
H18c	The relationships between accountant modern competency and performance evaluation competency will be positively moderated by accounting system efficiency.
H18d	The relationships between accountant modern competency and customer profitability analysis will be positively moderated by accounting system efficiency.
H18e	The relationships between accountant modern competency and activity-based management capability will be positively moderated by accounting system efficiency.
H18f	The relationships between accountant modern competency and management control orientation will be positively moderated by accounting system efficiency.
H19a	The relationships between accounting environment and cost allocation concentration will be positively moderated by accounting system efficiency.
H19b	The relationships between accounting environment and target pricing focus will be positively moderated by accounting system efficiency.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H19c	The relationships between accounting environment and performance evaluation competency will be positively moderated by accounting system efficiency.
H19d	The relationships between accounting environment and customer profitability analysis will be positively moderated by accounting system efficiency.
H19e	The relationships between accounting environment and activity-based management capability will be positively moderated by accounting system efficiency.
H19f	The relationships between accounting environment and management control orientation will be positively moderated by accounting system efficiency.
H20a	The relationships between cost allocation concentration and financial information usefulness will be positively moderated by information management experience.
H20b	The relationships between cost allocation concentration and managerial practice advantage will be positively moderated by information management experience.
H20c	The relationships between cost allocation concentration and business operation quality will be positively moderated by information management experience.
H20d	The relationships between cost allocation concentration and valuable decision-making will be positively moderated by information management experience.
H21a	The relationships between target pricing focus and financial information usefulness will be positively moderated by information management experience.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H21b	The relationships between target pricing focus and managerial practice advantage will be positively moderated by information management experience.
H21c	The relationships between target pricing focus and business operation quality will be positively moderated by information management experience.
H21d	The relationships between target pricing focus and valuable decision-making will be positively moderated by information management experience.
H22a	The relationships between performance evaluation competency and financial information usefulness will be positively moderated by information management experience.
H22b	The relationships between performance evaluation competency and managerial practice advantage will be positively moderated by information management experience.
H22c	The relationships between performance evaluation competency and business operation quality will be positively moderated by information management experience.
H22d	The relationships between performance evaluation competency and valuable decision-making will be positively moderated by information management experience.
H23a	The relationships between customer profitability analysis and financial information usefulness will be positively moderated by information management experience.
H23b	The relationships between customer profitability analysis and managerial practice advantage will be positively moderated by information management experience.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H23c	The relationships between customer profitability analysis and business operation quality will be positively moderated by information management experience.
H23d	The relationships between customer profitability analysis and valuable decision-making will be positively moderated by information management experience.
H24a	The relationships between activity-based management capability and financial information usefulness will be positively moderated by information management experience.
H24b	The relationships between activity-based management capability and managerial practice advantage will be positively moderated by information management experience.
H24c	The relationships between activity-based management capability and business operation quality will be positively moderated by information management experience.
H24d	The relationships between activity-based management capability and valuable decision-making will be positively moderated by information management experience.
H25a	The relationships between management control orientation and financial information usefulness will be positively moderated by information management experience.
H25b	The relationships between management control orientation and managerial practice advantage will be positively moderated by information management experience.
H25c	The relationships between management control orientation and business operation quality will be positively moderated by information management experience.

Table 2: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H25d	The relationships between management control orientation and valuable decision-making will be positively moderated by information management experience.
H26	The relationships between financial information usefulness and valuable decision-making will be positively moderated by organizational adaptation capability.
H27	The relationships between managerial practice advantage and valuable decision-making will be positively moderated by organizational adaptation capability.
H28	The relationships between business operation quality and valuable decision-making will be positively moderated by organizational adaptation capability.

CHAPTER III

RESEARCH METHODS

The prior chapter described in detail managerial accounting innovation implementation with theoretical foundation, literature review, conceptual framework, and hypotheses development. Consequently, research methods help to clearly answer with the research questions testable hypotheses. Research methods are elaborated on in this chapter with four components: sample selection and data collection procedure, measurements, methods, and statistical analyses. This chapter is organized as follows. Firstly, the sample selection and data collection procedures, including population and sample, data collection, and test of non-response bias are detailed. Secondly, the variable measurements are developed. Thirdly, the instrumental verifications including the test of validity and reliability, and the statistical analyses including the regression equations are presented. Finally, the table of the summary of definitions and the operational variables of constructs are included.

Sample Selection and Data Collection Procedure

Population and Sample

The population of this research is 593 electronic parts businesses in Thailand drawn from the database of the Department of Business Development (www. dbd.go.th/) on February 19, 2012. In addition, Jaiimsin (2006) also concluded that Thailand' electronic parts business attracted a large amount of the country's foreign direct investment (FDI), making it one of the most attractive sectors for foreign investment, because about 80% of the electrical and electronic goods made in Thailand are exported. The electronic parts businesses are the largest industrial export sector in Thailand and have led the country's export growth over the past decades. It is also likely to extend into Thailand's future international trade (Hobday and Rush, 2007). Moreover, Patell (1987); Ian (1991) suggested that electronic parts businesses will concentrate on successful cost accounting implementation. For example, medium-sized electronic manufacturing firms have attempted to deal with product costing requirement

in an environment with high levels of price deflation and frequent design revision (Brewer, Juras and Brownlee II, 2003). Thus, electronic parts businesses in Thailand have been chosen as the population and a sample of this research.

The accounting manager or accounting executive are chosen as the key participants because they have an important direct effect on practices and innovation of managerial accounting in each firm; moreover, they are well suited to provide the detailed cost system and other organizational information needed for the tests (Cadez and Guilding, 2008). Thailand as drawn from the database of the Department of Business Development is used for identifying a number of electronics parts businesses and companies' addresses. For this research, the electronic parts businesses in Thailand consist of several product families: electronic product lines covering computers, accessories and components, printed circuit boards, telephone sets, television receivers, air-conditioners, video and audio accessories and components. All 593 electronic parts businesses were chosen from the list in the database, and they were subsequently selected as the sample size.

With respect to the questionnaire mailing, 593 mailed questionnaires are sent and 48 undelivered mails are returned. Removing the undelivered mails from the original 593 mails, the valid mailing is 545 surveys. After eight weeks, 112 mails are received including 2 incomplete questionnaires. Then, complete and usable questionnaires are 110 surveys. The effective response rate is approximately 20.18%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey if more than 20% as shown in Table A, Appendix A is regarded acceptable.

Data Collection

The questionnaire is an appropriate tool to be used to collect data in this type of cross-sectional study to collect the detailed, non-public data needed to test the model. Questionnaire is a widely-used method for large-scale data collection in behavioral accounting research because a representative sample can be collected from the chosen population in a variety of locations at a low cost (Kwok and Sharp, 1998). Thus, the questionnaire is directly distributed to each accounting executive in Thai electronic parts businesses by mail. Then, the complete questionnaires are directly sent back to the researcher.

For this research, a questionnaire consists of seven parts. Part one asks personal information such as gender, age, marital status, education level, working experience, revenue, and position. Part two is about general information of electronic parts businesses in Thailand such as type of business, authorized capital of the firm, total assets of the firm, number of employees, and age of the firm. Part three is related to evaluating each construct in the conceptual model. In part three, all questions deal with the measurement of managerial accounting innovation implementation including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability and management control orientation. In part four, the consequences of managerial accounting innovation implementation including financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making are questioned. In part five, an antecedent of managerial accounting innovation implementation includes accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accounting environment. In part six, the business environment of the firm including information management experience, organizational adaptation capability, and accounting system efficiency is also asked. Finally, an open-ended question for the accounting manager's suggestions and opinions is included in part seven.

Test of Non-Response Bias

Empirically, this study uses the method to estimate non-response bias which this approach compares early and late respondents groups on the basis of their arrival dates (Armstrong and Overton, 1977). Following this further, this method uses the various firm characteristics consist of firm size, firm age, firm capital, and so on which key informant self-reported all construct. In this research, all 110 received questionnaires are split into two equal groups. The first fifty percent of respondents were defined as early respondents (n=55) and the last fifty percent of respondents (n=55) were referred to as late respondents. To ascertain possible problems with non-response bias, tourism businesses specifies t-tests between early and late respondents' revealed statistically significant differences according to the test for non-response bias and special efforts are made to increase the response rate. Moreover, the analysis uses

t-test comparison of the means of all constructs for the random sample versus all other respondents. Significant differences between late responders and early responders indicate the presence of non-response bias. If there are no significant differences across the two groups, then they are reasonably confident that non-response bias does not pose a major problem. As a result, there are no significant differences the overall variables including operation capital of firm ($t = 0.269$, $p > .05$), number of employee ($t = 0.138$, $p > .05$), and the period of time in proceeding business ($t = -1.743$, $p > .05$) as shown in Table B, Appendix B.

Measurements

The measure development procedures involve the multiple items development for measuring each construct in the conceptual model. All constructs are the abstractions that cannot be directly measured or observed and should be measured by multiple items (Churchill, 1979). These constructs are transformed to the operational variables for true measuring by adapting the relevant literature. To measure each construct in the conceptual model, all variables are gained from the survey and are measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Table 3 provides the definition of each construct, the operational variables, the scale sources, and the sample questions and items. The variable measurements of the dependent variable, the independent variables, the mediating variables, the moderating variables, and the control variables of this research are elaborated as follows.

Dependent Variable

Valuable Decision-Making. Valuable decision-making refers to the analysis of highest return and choosing the best option in order to effectively operate with the highest benefits (Chenhall and Morris, 1995). Valuable decision-making is measured using a five-item scale that is modified from Anderson and Lanan (1999); Lamminmaki and Drury (2001).

Independent Variables

This research consists of three different independent variables. The first variable is the core construct of this research. This variable is measured using six attributes including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation. These attributes reflect the achievement of the primary objective of managerial accounting innovation implementation. The measure of each attribute depends on its definition which is also detailed.

Cost allocation concentration. Cost allocation concentration refers to the importance of the criteria for the appropriation of costs associated with the products and services that are appropriate and consistent with the situation to get an accurate cost (Lamminmaki and Drury, 2001). Cost allocation concentration is measured using a four-item scale in which this construct is developed as a new scale based on its definition.

Target pricing focus. Target pricing focus refers to an emphasis on pricing that is consistent with the products and services to push for profits (Omar, 1997). Target pricing focus is measured using a four-item scale developed as a new scale based on its definition.

Performance evaluation competency. Performance evaluation competency refers to the focus of the guidelines, approaches, and methods of assessment measurement of operational suitability to the motivation for the work to be successful (Mahama, 2006). Performance evaluation competency is measured using a four-item scale developed as a new scale based on its definition.

Customer profitability analysis. Customer profitability analysis refers to the calculation focused on the revenue and expenses loss of each customer to be used as the basis for planning and presenting products and services accordingly (Raaij, Vernooij and Triest, 2003). Customer profitability analysis is measured using a four-item scale developed as a new scale based on its definition.

Activity-based management capability. Activity-based management capability refers to the emphasis on management by taking into value chain to determine the cost allocation of associated resource use, and the beneficial use of activities that add value to generate the maximum profit (Khataie, Bulgak and Segovia, 2011). Activity-based management capability is measured using a five-item scale developed as a new scale based on its definition.

Management control orientation. Management control orientation refers to the focus on methods and develops a good tracking performance to make the operation as planned and effective (Mahama, 2006). Management control orientation is measured using a four-item scale developed as a new scale based on its definition.

The second independent variable in this research is collaboration outcomes as a consequence of managerial accounting innovation implementation: Financial information usefulness, managerial practice advantage, and business operation quality. The measure of each dimension conforms to its definition to be discussed as follows.

Financial information usefulness. Financial information usefulness refers to the good results of the reports that reflect the financial position and operating results that are accurate and reliable and can be used for decision-making or analysis used to forecast future performance (Fisher and Kingma, 2001). Financial information usefulness is measured using a three-item scale developed as a new scale based on its definition.

Managerial practice advantage. Managerial practice advantage refers to the method for the comprehensive management of all aspects of the business, and the different operations, that are better or superior to its competitors (Kapuge and smith, 2007). Managerial practice advantage is measured using a three-item scale developed as a new scale based on its definition.

Business operation quality. Business operation quality refers to the procedures and operational processes that are consistent with the stated goals that are very good and

efficient (Suraratdecha and Okunade, 2006). Business operation quality is measured using a four-item scale developed as a new scale based on its definition.

The third independent variable is internal and external factors treated as an antecedent of managerial accounting innovation implementation in this research. This variable is measured using five characteristics including accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accountant environment. The measure of each characteristic conforms to its definition to be discussed as follows.

Accounting vision. Accounting vision refers to the guidelines or practices of accounting in accordance with professional accounting knowledge with regard to the accuracy and the effects that may occur (Tuntrabundit and Ussahawanitchakit, 2010). Accounting vision is measured using a four-item scale developed as a new scale based on its definition.

Accounting knowledge. Accounting knowledge refers to the importance of intellect, understanding the process, and can be found in previous analytical solutions with regard to the accuracy of accounting information (Lin, 2008). Accounting knowledge is measured using a three-item scale developed as a new scale based on its definition.

Accounting learning. Accounting learning refers to the focus on developing skills, knowledge and understanding of accounting by providing funding for regular training to improve the performance of accounting to make the operation viable and timely (Waroonkun and Ussahawanitchakit, 2011). Accounting learning is measured using a four-item scale modified from Holden (2008).

Accountant modern competency. Accountant modern competency refers to the enthusiasm of continuous self-development and to learn about the concepts, principles, methods and new accounting innovation to apply to new technology in the preparation and presentation of relevant information and expertise (Groenland and Swagerman,

2009). Accountant modern competency is measured using a four-item scale developed as a new scale based on its definition.

Accounting environment. Accounting environment refers to the external factors that affect the performance of the accounts that need to be adjusted, along with the applications that improve operational efficiency (Withayapoom and Ussahawanitchakit, 2009). Accounting environment is measured using a four-item scale developed as a new scale based on its definition.

Moderating Variables

Information management experience. Information management experience refers to the work continued on a regular basis enabling the expertise to manage the complete information and can be retrieved in the operation quickly (Rad, Shams and Naderi, 2009). Information management experience is measured using a five-item scale developed as a new scale based on its definition.

Organizational adaptation capability. Organizational adaptation capability refers to the continuous management improvement and development to environmental changes that increase competitiveness and decision-making, as well (Lee, 2001; Hatum, Pettigrew and Michelini, 2010). Organizational adaptation capability is measured using a three-item scale developed as a new scale based on its definition.

Accounting system efficiency. Accounting system efficiency refers to the quality of the methods or tools used to collect the accounting and application of accounting consistent with good operational results to support the preparation and presentation of financial reports (Baulianne, 2007). Accounting system efficiency is measured using a four-item scale developed as a new scale based on its definition.

Control Variables

Two control variables are included to account for firm characteristics that may influence the hypothesized relationships which are firm age and size. Firm size is defined as operation capital of the firm. It is a dummy variable which 0 means a firm

has operation capital lower than or equal 40,000,000 Baht and 1 means a firm has operation capital more than 40,000,000 Baht. Firm age refers to the period of time in proceeding business. It is a dummy variable which 0 means firm has the period of time in proceeding business lower than or equal 15 years and 1 means firm has the period of time in proceeding business more than 15 years (Tontiset and Ussahawanitchakit, 2010).

Methods

In this research, all constructs in the conceptual model are developed by adopting the relevant literature. Consequently, a pre-test method is appropriately conducted to assure validity and reliability of the questionnaire. The rationale of the pre-test is to check clearly and accurately the understanding of a questionnaire. In addition, the purpose of conducting the pre-test is to examine the validity and reliability of each measure employed in the questionnaire. For this research, thirty accounting managers or accounting executives are chosen from the first lot of returned questionnaires. Finally, these questionnaires are included in the final data analysis.

Validity and Reliability

Validity. Validity refers to the degree to which instruments measure the constructs they are intended to measure (Hair et al., 2010). Moreover, validity is defined as the accuracy of the measurement that is concerned with whether the researchers are measuring what they want to measure (Kwok and Sharp, 1998). For this research, content and construct validity of the questionnaire are examined.

Content validity. Content validity is rational judgments by academics that are evaluating the adequacy of the measure. Content validity is the extent to which the empirical instrument, the questionnaire, captures precisely the content domain of the theoretical construct (Kwok and Sharp, 1998). Content validity relies on the subjective interpretation of the appropriateness of the items to the construct under study; the former from the point of the researcher gleaning knowledge from the literature, and the latter from professional academics. This research was addressed by requesting two academic experts who have experience in this area to review the instrument in order to

ensure that the questionnaires used appropriate wordings and all constructs are sufficient to cover the contents of the variables. Based on their feedback, some questions were deleted or adjusted accordingly to attain the best measurement.

Construct validity: Construct validity refers to the set of measured items that actually reflect the theoretical latent construct that those items are designed to measure (Hair et al., 2010). The exploratory factor analysis (EFA) is used to test the construct validity in this research. Items are used to measure each construct that was extracted to be only one principle component. In this research, all factor loading are greater than 0.40 cut-offs and statistically significant according to the rule-of-thumb (Nunnally and Bernstein, 1994). Table C shows factor loadings and Cronbach's alpha of all variables from thirty tourism firms in the pre-test. (Table C in the Appendix C present about the detail factor loading and alpha coefficient of all constructs from 110 electronics parts businesses in this research). In addition, factor loadings of all constructs are exhibited in Table C that it presents a value higher than 0.40 which is cut-off score recommended by Nunnally and Bernstein (1994). The factor loading ranging from 0.491 – 0.946 the lowest factor loading is in cost allocation concentration and the highest factor loading is in accounting vision. Thus, construct validity of this research is tapped by items in the measure as theorized.

Reliability. Reliability refers to the degree of consistency between multiple measurements of a variable (Hair et al., 2010). For the reliability perspective, an important advantage of a multi-item measure over a single-item is that reliability tends to increase and measurement error decreases (Churchill, 1979). The most popular measure of internal consistency reliability is Cronbach's alpha, which is derived from the correlation of each item with every other item (Kwok and Sharp, 1998). Cronbach's alpha may be the most widely used measure of internal consistency reliability for two reasons: it is provided by many popular statistical software programs, and it is well understood by most researchers (Kwok and Sharp, 1998). This research uses Cronbach's alpha to measure the internal consistency which should be greater than 0.60 (Hair et al., 2006).

In this research, testing validity and reliability of a questionnaire as qualities of a good instrument were conducted from a pilot test from thirty accounting controllers

tested by factor analysis and Cronbach's Alpha, respectively, to revise the questionnaire to ensure validity and reliability. Table C shows the factor loading of each construct that presents a value higher than 0.40 which is the cut-off score recommended by Nunnally and Berstein (1994). The factor loading ranging from 0.491 - 0.946, the lowest factor loading, is in cost allocation concentration and the highest factor loading is in accounting vision. Thus, construct validity of this research is tapped by items in the measure as theorized.

This research examines the reliability of the measurements. Cronbach's alpha coefficient (Cronbach, 1951) is commonly used as a measure of the internal consistency or reliability of the constructs. Thus, in this research, it is applied to evaluate reliability. Per the suggestion of Nunnally and Berstein (1994), Cronbach's alpha coefficient was recommended that its value should be equal or greater than 0.60 as widely accepted. According to the results from Table C, Cronbach's alpha coefficients range from 0.647 - 0.930. The lowest coefficient is for cost allocation concentration and the highest coefficient is for business operation quality. That is, the internal consistency of the measures used in this research must be considered good for all constructs (See also Appendix C).

Statistics

This research used several statistical techniques including both descriptive and inferential statistic techniques such as mean, standard deviation, correlation analysis, factor analysis, Crobach's alpha, and regression analysis. These are fully discussed below.

Correlation analysis

This research uses correlation analysis to test the correlation among all variables and provide a correlation matrix that shows the intercorrelations among all variables for the initial analysis. As the variables become highly correlated, the multicollinearity problem may occur (Neter, Wasserman and Kutner, 1990). This problem occurs when any single independent variable is highly correlated with a set of other independent variables. As multicollinearity increases, it complicates the

interpretation of the variables because a variable can be explained by the other variables in the analysis. 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. This research employs Pearson correlation to evaluate the relationship of the intercorrelations of each variable.

Regression analysis

Regression analysis is a statistical methodology that utilizes the relation between two or more quantitative variables so that a response or outcome variable can be predicted from the other (Kutner et al., 2005). This methodology is widely used in business, the social and behavioral sciences, the biological sciences, and many other disciplines. The Ordinary Least Squares (OLS) regression analysis is used to test all hypotheses following the conceptual model. Because both dependent and independent variables in this research are categorical and interval data, OLS is an appropriate method for examining the hypothesized relationships to test factors affecting valuable Decision-making of electronic parts businesses in Thai (Aulakh et al., 2000). Before hypotheses testing, all raw data are checked, encoded, and recorded in a data file. Then, the basic assumption of regression analysis is tested. This process involves checking the normality, heteroscedasticity, autocorrelation, multicollinearity, and linearity.

As aforementioned, this research analyzes the data which is calculated in the form of factor scores for all variables by using factor analysis that are prepared to avoid the mullticollinearity problems and prepared for testing all hypotheses. From this conceptual model, the relationship among the antecedents and its consequences of managerial accounting innovation implementation, and its moderator and mediator variables was initially assessed using regression analysis (Frazier, Barron and Tix, 2004). Thus, all hypotheses in this research are transformed to twenty-two equations. Each equation consists of the main variables related to the hypotheses testing as described in the previous chapter. Moreover, two control variables, firm size and firm age are included in all of those 22 equations for hypotheses testing as follows:

$$\textit{Equation 1: FIU} = \beta_{001} + \beta_1 CAC + \beta_2 TPE + \beta_3 PEC + \beta_4 CPA + \beta_5 ABM + \beta_6 MCO + \beta_7 FS + \beta_8 FA + \varepsilon$$

$$\textit{Equation 2: FIU} = \beta_{002} + \beta_9 CAC + \beta_{10} TPE + \beta_{11} PEC + \beta_{12} CPA + \beta_{13} ABM + \beta_{14} MCO + \beta_{15} IME + \beta_{16} (CAC^* IME) + \beta_{17} (TPE^* IME) + \beta_{18} (PEC^* IME) + \beta_{19} (CPA^* IME) + \beta_{20} (ABM^* IME)) + \beta_{21} (MCO^* IME) + \beta_{22} FS + \beta_{23} FA + \varepsilon$$

$$\textit{Equation 3: MPA} = \beta_{003} + \beta_{24} CAC + \beta_{25} TPE + \beta_{26} PEC + \beta_{27} CPA + \beta_{28} ABM + \beta_{29} MCO + \beta_{30} FS + \beta_{31} FA + \varepsilon$$

$$\textit{Equation 4: MPA} = \beta_{004} + \beta_{32} CAC + \beta_{33} TPE + \beta_{34} PEC + \beta_{35} CPA + \beta_{36} ABM + \beta_{37} MCO + \beta_{38} IME + \beta_{39} (CAC^* IME) + \beta_{40} (TPE^* IME) + \beta_{41} (PEC^* IME) + \beta_{42} (CPA^* IME) + \beta_{43} (ABM^* IME)) + \beta_{44} (MCO^* IME) + \beta_{45} FS + \beta_{46} FA + \varepsilon$$

$$\textit{Equation 5: BOQ} = \beta_{005} + \beta_{47} CAC + \beta_{48} TPE + \beta_{49} PEC + \beta_{50} CPA + \beta_{51} ABM + \beta_{52} MCO + \beta_{53} FS + \beta_{54} FA + \varepsilon$$

$$\textit{Equation 6: BOQ} = \beta_{006} + \beta_{55} CAC + \beta_{56} TPE + \beta_{57} PEC + \beta_{58} CPA + \beta_{59} ABM + \beta_{60} MCO + \beta_{61} IME + \beta_{62} (CAC^* IME) + \beta_{63} (TPE^* IME) + \beta_{64} (PEC^* IME) + \beta_{65} (CPA^* IME) + \beta_{66} (ABM^* IME) + \beta_{67} (MCO^* IME) + \beta_{68} FS + \beta_{69} FA + \varepsilon$$

$$\textit{Equation 7: VDM} = \beta_{007} + \beta_{70} CAC + \beta_{71} TPF + \beta_{72} PEC + \beta_{73} CPA + \beta_{74} ABM + \beta_{75} MCO + \beta_{76} FS + \beta_{77} FA + \varepsilon$$

$$\textit{Equation 8: VDM} = \beta_{008} + \beta_{78}CAC + \beta_{79}TPF + \beta_{80}PEC + \beta_{81}CPA + \beta_{82}ABM + \beta_{83}MCO + \beta_{84}IME + \beta_{85}(CAC * IME) + \beta_{86}(TPF * IME) + \beta_{87}(PEC * IME) + \beta_{88}(CPA * IME) + \beta_{89}(ABM * IME) + \beta_{90}(MCO * IME) + \beta_{91}FS + \beta_{92}FA + \varepsilon$$

$$\textit{Equation 9: VDM} = \beta_{009} + \beta_{93}FIU + \beta_{94}MPA + \beta_{95}BOQ + \beta_{96}FS + \beta_{97}FA + \varepsilon$$

$$\textit{Equation10: VDM} = \beta_{010} + \beta_{98}FIU + \beta_{99}MPA + \beta_{100}BOQ + \beta_{101}OAC + \beta_{102}(FIU * OAC) + \beta_{103}(MPA * OAC) + \beta_{104}(BOQ * OAC) + \beta_{105}FS + \beta_{106}FA + \varepsilon$$

$$\textit{Equation 11: CAC} = \beta_{011} + \beta_{107}ACV + \beta_{108}ACK + \beta_{109}ACL + \beta_{110}AMC + \beta_{111}ACE + \beta_{112}FS + \beta_{113}FA + \varepsilon$$

$$\textit{Equation 12: CAC} = \beta_{012} + \beta_{114}ACV + \beta_{115}ACK + \beta_{116}ACL + \beta_{117}AMC + \beta_{118}ACE + \beta_{119}ASE + \beta_{120}(ACV * ASE) + \beta_{121}(ACK * ASE) + \beta_{122}(ACL * ASE) + \beta_{123}(AMC * ASE) + \beta_{124}(ACE * ASE) + \beta_{125}FS + \beta_{126}FA + \varepsilon$$

$$\textit{Equation 13: TPF} = \beta_{013} + \beta_{127}ACV + \beta_{128}ACK + \beta_{129}ACL + \beta_{130}AMC + \beta_{131}ACE + \beta_{132}FS + \beta_{133}FA + \varepsilon$$

$$\textit{Equation 14: TPF} = \beta_{014} + \beta_{134}ACV + \beta_{135}ACK + \beta_{136}ACL + \beta_{137}AMC + \beta_{138}ACE + \beta_{139}ASE + \beta_{140}(ACV * ASE) + \beta_{141}(ACK * ASE) + \beta_{142}(ACL * ASE) + \beta_{143}(AMC * ASE) + \beta_{144}(ACE * ASE) + \beta_{145}FS + \beta_{146}FA + \varepsilon$$

$$\textit{Equation 15: PEC} = \beta_{015} + \beta_{147}ACV + \beta_{148}ACK + \beta_{149}ACL + \beta_{150}AMC + \beta_{151}ACE + \beta_{152}FS + \beta_{153}FA + \varepsilon$$

$$\textit{Equation 16: PEC} = \beta_{016}+\beta_{154}ACV + \beta_{155}ACK +\beta_{156}ACL + \beta_{157}AMC + \beta_{158}ACE + \beta_{159}ASE + \beta_{160}(ACV*ASE) + \beta_{161}(ACK*ASE) + \beta_{162}(ACL*ASE) + \beta_{163}(AMC*ASE) + \beta_{164}(ACE*ASE) +\beta_{165}FS + \beta_{166}FA +\varepsilon$$

$$\textit{Equation 17: CPA} = \beta_{017} + \beta_{167}ACV + \beta_{168}ACK +\beta_{169}ACL + \beta_{170}AMC + \beta_{171}ACE + \beta_{172}FS + \beta_{173}FA +\varepsilon$$

$$\textit{Equation 18: CPA} = \beta_{018}+\beta_{174}ACV + \beta_{175}ACK +\beta_{176}ACL + \beta_{177}AMC + \beta_{178}ACE + \beta_{179}ASE + \beta_{180}(ACV*ASE) + \beta_{181}(ACK*ASE) + \beta_{182}(ACL*ASE) + \beta_{183}(AMC*ASE) + \beta_{184}(ACE*ASE) +\beta_{185}FS + \beta_{186}FA +\varepsilon$$

$$\textit{Equation 19: ABM} = \beta_{019}+ \beta_{187}ACV + \beta_{188}ACK +\beta_{189}ACL + \beta_{190}AMC + \beta_{191}ACE + \beta_{192}FS + \beta_{193}FA +\varepsilon$$

$$\textit{Equation 20: ABM} = \beta_{020} +\beta_{194}ACV + \beta_{195}ACK +\beta_{196}ACL + \beta_{197}AMC + \beta_{198}ACE + \beta_{199}ASE + \beta_{200}(ACV*ASE) + \beta_{201}(ACK*ASE) + \beta_{202}(ACL*ASE) + \beta_{203}(AMC*ASE) + \beta_{204}(ACE*ASE) +\beta_{205}FS + \beta_{206}FA +\varepsilon$$

$$\textit{Equation 21: MCO} = \beta_{021} + \beta_{207}ACV + \beta_{208}ACK +\beta_{209}ACL + \beta_{210}AMC + \beta_{211}ACE + \beta_{212}FS + \beta_{213}FA +\varepsilon$$

$$\textit{Equation 22: MCO} = \beta_{022} +\beta_{214}ACV + \beta_{215}ACK +\beta_{216}ACL + \beta_{217}AMC + \beta_{218}ACE + \beta_{219}ASE + \beta_{220}(ACV*ASE) + \beta_{221}(ACK*ASE) + \beta_{222}(ACL*ASE) + \beta_{223}(AMC*ASE) + \beta_{224}(ACE*ASE) +\beta_{225}FS + \beta_{226}FA +\varepsilon$$

Where;

CAC	=	Cost allocation concentration
TPF	=	Target pricing focus
PEC	=	Performance evaluation competency
CPA	=	Customer profitability analysis
ABM	=	Activity-based management capability
MCO	=	Management control orientation
FIU	=	Financial information usefulness
MPA	=	Managerial practice advantage
BOQ	=	Business operation quality
VDM	=	Valuable decision-making
ACV	=	Accounting vision
ACK	=	Accounting knowledge
ACL	=	Accounting learning
AMC	=	Accountant modern competency
ACE	=	Accounting environment
IME	=	Information management experience
OAC	=	Organizational adaptation capability
ASE	=	Accounting system efficiency
FS	=	Firm size
FA	=	Firm age
β	=	Regression coefficient
ε	=	Error

Summary

This chapter details the research methods in this research for gathering data and examining all constructs in the conceptual model to answer the research objectives and research questions. The contents engage the sample selection and data collection procedure including population and sample, data collection, and the test of non-response bias. In fact, the 593 electronic parts businesses in Thailand are chosen as the sample. The population and sample are chosen from the database of the Department of Business

Development, Ministry of Commerce Thailand drawn on February 19, 2012. The data collection procedure is a questionnaire mail survey of accounting managers or accounting executives of the electronic parts businesses in Thailand, who are proposed to be the key informants. Indeed, the descriptive, correlation, and the multiple regression analysis are processed to prove the 28 hypotheses. Moreover, the variable measurements are followed for each of all variables in the conceptual model. Table C details the variable measurements: the definition of each construct, operational variables, scale sources, and sample questions and items below. In addition, the instrumental verifications including the test of validity and reliability and the statistical analysis are presented. Accordingly, 22 equations are examined by statistical analysis in this chapter. The results of hypotheses testing are presented in the next chapter. In addition, the next chapter describes respondent characteristics and descriptive statistics, as well.

Table 3: Definitions and Operational Variables of Constructs

Construct	Definition	Operational Variables	Scale Source
Independent variables Managerial accounting innovation implementation			
Cost allocation concentration (CAC)	The importance of the criteria for the appropriation of costs associated with the products and services are appropriate and consistent with the situation to get an accurate cost	The rules on cost allocation appropriate and consistent with the situation	New scale
Target pricing focus (TPF)	Emphasis on pricing is consistent with the products and services to push for profits	Pricing must be consistent with the characteristics of the goods and services. The company's goal is to clear and to push the company to profitability	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Performance evaluation competency (PEC)	The focus of the guidelines, approaches and methods of assessment measurement of operational suitability to the motivation for the work to be successful	Capabilities of companies to establish guidelines and procedures for evaluating the performance properly, the staff is motivated to achieve business success	New scale
Customer profitability analysis (CPA)	The refutation is focused on the revenue and expenses loss of each customer to be used as the basis for planning and presenting products and services accordingly	The company's ability to make a profit for each customer, products and services to meet the revenue of each client, income and expenses of each client are a great fit	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Activity-based management capability (ABM)	The emphasis on management by taking into value chain to determine the costs allocation of associated resource use and the beneficial uses of activities that add value to generate the maximum profit	Analysis of value-added activities and activities that do not add value, allocating costs associated with the use of resources, management taking into account the full value, the use of value-added activities	New scale
Management control orientation (MCO)	The focus on methods and developing a good tracking performance to make the operation as planned and effective	The success of management's control, seeking guidance and control system management, the development management control	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Mediating variables			
Financial information usefulness (FIU)	The good results of the reports that reflect the financial position and operating results that are accurate and reliable can be used for decision-making or analysis used to forecast future performance	Financial information that is accurate , reliable, to reflect the financial position and the results of operations of the business, can be used to predict performance	New scale
Managerial practice advantage (MPA)	The method for the comprehensive management of all aspects of the business and the different operations, better or superior to its competitors	The competency of main point business information	New scale
Business operation quality (BOQ)	The procedures and operational processes that are consistent with the stated goal are very good and efficient	The effectiveness of the firm's operation which comes from goal and objective achievement	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Dependent variables			
Valuable decision-making (VDM)	The analysis of highest return and choosing the best option in order to have an effective operation and the highest benefits	Decision-making for project capital intensive, appropriate decision making or buying decisions, appropriate product and sales mix decisions, accurate pricing decisions, and additional or eliminate product analysis	Anderson and Lanan (1999); Lamminmaki and Drury (2001)
Antecedent variables			
Accounting vision (ACV)	The guidelines or practices of accounting in accordance with professional accounting knowledge with regard to the accuracy and the effects that may occur	Guidelines and procedures, the accounting is correct, the accounting system is based on knowledge, taking into account the effects that may occur	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Accounting knowledge (ACK)	The importance of intellect, understanding the process can be found in previous analytical solutions with regard to the accuracy of accounting information	Knowledge and understanding of accounting, process of accounting, accuracy of accounting information	New scale
Accounting learning (ACL)	The focus is on continuously developing skills, knowledge and understanding of accounting by providing funding for training to regularly improve the performance of accounting to make the operation viable and timely	The item questions for the perceptions of ability to receive acquires and utilizes new knowledge to enhance accountant performance	Holden (2008)

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Accountant modern competency (AMC)	The enthusiasm for continuous self-development and to learn about the concepts, principles, methods and new accounting innovation to be able to apply new technology in the preparation and presentation of relevant information and expertise	Elective training, cognitive abilities, technical skills, and knowledge	New scale
Accounting environment (ACE)	The external factors that affect the performance of the accounts that need to be adjusted, applications, and improves operational efficiency	Expectations of stakeholders, that are good information and are effective in accordance with standard accounting practices and regulations, the development of accounting	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Moderating variables Information management experience (IME)	The work is continued on a regular basis making the expertise to manage the complete information and can be retrieved in the operation quickly	Knowledge of the self and the success of the work in the past to the present, work regularly and continuously, data are complete, and is ready for use, the ability to retrieve information	New scale
Organizational adaptation capability (OAC)	The continuous management improvement and development to environmental changes to increase competitiveness and decision-making as well	The ability to adapt the organization's competitive environment, the adaptive management continues, learning techniques or a combination of new technologies into the enterprise	New scale

Table 3: Definitions and Operational Variables of Constructs (Continued)

Construct	Definition	Operational Variables	Scale Source
Accounting system efficiency (ASE)	The quality of the methods or tools used to collect the accounting and application of accounting are consistent with the good operational results to support the preparation and presentation of financial reports	The development of accounting systems, the application of the accounting system. A good accounting system, the operations of the company to achieve its goals	New scale
Control variables Firm size (FS)	Operation capital of the firm	Dummy variable 0 = below and equal 40,000,000 Baht, 1 = higher than 40,000,000 Baht	Tontiset and Ussahawanitchakit (2010)
Firm age (FA)	The period of time in the proceeding business	Dummy variable 0 = below and equal 15 years, 1 = higher than 15 years	Tontiset and Ussahawanitchakit (2010)

CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents the results of statistic testing beginning with the presentation of respondent characteristics and descriptive statistics that increase the understanding of the sample characteristics. Next, the results of correlation analysis and hypotheses testing by using multiple regression analysis are detailed. Finally, the summary of all hypotheses testing is also provided.

Respondent Characteristics and Descriptive Statistics

Participants and Respondent Characteristics

In this research, the participant is the head accounting manager or accounting executive of each electronic parts businesses in Thailand. The details of the key participants are described by gender, age, marital status, education level, work experience, average monthly income at present and working position at present.

The results show that 18.19% of participants are male and 81.81% are female. Most participants are between 30 and 40 years old (37.27%) and most participants are married (49.09%). Approximately, 67.27% of participants obtained a bachelor's degree or lower. The majority of participants have more than 15 years of work experience (41.82%). Furthermore, most participants receive the average monthly income of less than 40,000 Baht (43.64%). Finally, most participants hold an accounting manager position (92.73%) (See also Appendix E).

For the characteristics of electronic parts businesses in Thailand, the descriptive statistics are presented by type of business, the location of the business, operational capital, total assets of the firms, the number of employees, the period in course of business and the main customers group of business. The results indicate that the majority of respondents had registered company limited (93.64%) for their business type. For the business location, the majority of respondents had operations in the central (41.82%). For the operation capital of the firm, the majority of respondents have less than 25,000,000 Baht (47.27%). Moreover, the total assets of the respondents' firms are

less than 50,000,000 Baht and more than 200,000,000 Baht (40.91%). Approximately, 42.73% of firms have more than 150 employees. Most firms have been in business for more than 15 years (40.00%). Also, a large number of the main customer group of the business respondents is foreign customers (60.91%) (See also Appendix F).

Hypothesis Testing and Results

Effects of Managerial Accounting Innovation Implementation on Its Consequences

With respect to the relationship, this research posits managerial accounting innovation implementation as the antecedents of its consequences. For the independent variables, six dimensions of managerial accounting innovation implementation are combined, which are cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation. The dependent variables are financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making. The hypotheses are analyzed from the regression equations 1, 3, 5, and 7 according to Chapter three. Table 4 shows the correlations between the independent variable and the dependent variables. The results of OLS regression analysis of the relationships between managerial accounting innovation implementation on its consequences are provided in Table 5.

In Table 4, the results indicate that cost allocation concentration is significantly and positively correlated to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .522$, $p < .01$; $r = .525$, $p < .01$; $r = .432$, $p < .01$; $r = .447$, $p < .01$, respectively). Target pricing focus has a significant and positive correlation to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .437$, $p < .01$; $r = .413$, $p < .01$; $r = .405$, $p < .01$; $r = .535$, $p < .01$, respectively). Performance evaluation competency has a significant and positive correlation to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .452$, $p < .01$; $r = .440$, $p < .01$; $r = .437$, $p < .01$; $r = .483$, $p < .01$, respectively). Customer profitability analysis has a significant and positive

correlation to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .517$, $p < .01$; $r = .571$, $p < .01$; $r = .505$, $p < .01$; $r = .634$, $p < .01$, respectively). Activity-based management capability has a significant and positive correlation to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .459$, $p < .01$; $r = .528$, $p < .01$; $r = .419$, $p < .01$; $r = .597$, $p < .01$, respectively).Moreover, management control orientation has a significant and positive correlation to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making ($r = .468$, $p < .01$; $r = .448$, $p < .01$; $r = .449$, $p < .01$; $r = .561$, $p < .01$, respectively).

For the correlation among independent variables, the results are presented in Table 4 which also show that the cost allocation concentration is significantly and positively correlated to target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .530$, $p < .01$; $r = .497$, $p < .01$; $r = .422$, $p < .01$, $r = .489$, $p < .01$, $r = .392$, $p < .01$, respectively). Target pricing focus is significantly and positively correlated to performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .423$, $p < .01$; $r = .618$, $p < .01$; $r = .490$, $p < .01$, $r = .401$, $p < .01$, respectively). Performance evaluation competency is significantly and positively correlated to customer profitability analysis, activity-based management capability, and management control orientation ($r = .465$, $p < .01$; $r = .581$, $p < .01$; $r = .535$, $p < .01$, respectively). Customer profitability analysis is significantly and positively correlated to activity-based management capability ($r = .701$, $p < .01$) and management control orientation ($r = .457$, $p < .01$). Also, activity-based management capability has a significant and positive correlation to management control orientation ($r = .602$ $p < .01$). However, these correlation coefficients are less than 0.8 as recommended by Hair et al. (2006). Overall, almost all variables are smaller than 0.8, but there are some variables larger than 0.8. Thus, this research tests variance inflation factors (VIF) which are used to test the correlations among six dimensions of managerial accounting innovation implementation. In this case, the minimum value of VIF is 1.146 and the maximum is 4.497 (See also Appendix G), which is well below the cut-off value of 10 (Neter,

Wasserman, and Kutner, 1985; Hair et al., 2006), meaning each dimension of managerial accounting innovation implementation is not correlated with each other. Consequently, there are no significant multicollinearity problems confronted in this study.

For the correlation among independent variables, the results presented in Table 4 also show that cost allocation concentration is significantly and positively correlated to target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .530$, $p < .01$; $r = .497$, $p < .01$; $r = .422$, $p < .01$, $r = .489$, $p < .01$, $r = .392$, $p < .01$, respectively). Target pricing focus is significantly and positively correlated to performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .423$, $p < .01$; $r = .618$, $p < .01$; $r = .490$, $p < .01$, $r = .401$, $p < .01$, respectively). Performance evaluation competency is significantly and positively correlated to customer profitability analysis, activity-based management capability, and management control orientation ($r = .465$, $p < .01$; $r = .581$, $p < .01$; $r = .535$, $p < .01$, respectively). Customer profitability analysis is significantly and positively correlated to activity-based management capability ($r = .701$, $p < .01$) and management control orientation ($r = .457$, $p < .01$). Also, activity-based management capability has a significant and positive correlation to management control orientation ($r = .602$ $p < .01$). However, these correlation coefficients are less than 0.80 as recommended by Hair et al. (2006). Overall, almost all variables are smaller than 0.8, but there are some variables larger than 0.8. Thus, in this research test, variance inflation factors (VIF) are used to test the correlations among six dimensions of managerial accounting innovation implementation. In this case, the minimum value of VIF is 1.146 and the maximum is 4.497 (See also Appendix G), which is well below the cut-off value of 10 (Neter, Wasserman and Kutner, 1985; Hair et al., 2006), meaning each dimension of managerial accounting innovation implementation is not correlated with each other. Consequently, there are no significant multicollinearity problems confronted in this study.

Table 4: Descriptive Statistics and Correlation Matrix

Variables	CAC	TPF	PEC	CPA	ABM	MCO	IME	FIU	MPA	BOQ	VDM	FS	FA
Mean	3.991	4.057	4.125	3.816	3.787	4.143	3.976	4.049	3.688	3.830	3.691	N/A	N/A
S.D.	0.526	0.543	0.524	0.587	0.551	0.482	0.502	0.583	0.605	0.623	0.628	N/A	N/A
CAC													
TPF	.530***												
PEC	.497***	.423***											
CPA	.422***	.618***	.465***										
ABM	.489***	.490***	.581***	.701***									
MCO	.392***	.401***	.535***	.457***	.602***								
IME	.573***	.507***	.626***	.531***	.667***	.666***							
FIU	.522***	.437***	.452***	.517***	.459***	.468***	.518**						
MPA	.525***	.413***	.440***	.571***	.528***	.448***	.614**	.722***					
BOQ	.432***	.405***	.437***	.505***	.419***	.449***	.585**	.729***	.809***				
VDM	.447***	.535***	.483***	.634***	.597***	.561***	.607**	.609***	.686***	.716***			
FS	-.175	-.102	.035	-.023	-.019	.042	.106	-.015	-.013	.024	-.078		
FA	.011	-.112	-.015	-.134	-.087	-.101	-.161	-.122	-.085	-.166	-.083	.320***	

** $p < 0.05$, *** $p < 0.01$

Table 5: Results of Effects of Managerial Accounting Innovation Implementation on Its Consequences and the Moderating Role of Constructs

Independent Variables	Dependent Variables							
	FIU	**FIU**	**MPA**	**MPA**	**BOQ**	**BOQ**	**VDM**	**VDM**
	Equation 1 $\beta_{1\text{-}8}$	**Equation 2** $\beta_{9\text{-}23}$	**Equation 3** $\beta_{24\text{-}31}$	**Equation 4** $\beta_{32\text{-}46}$	**Equation 5** $\beta_{47\text{-}54}$	**Equation 6** $\beta_{55\text{-}69}$	**Equation 7** $\beta_{70\text{-}77}$	**Equation 8** $\beta_{78\text{-}92}$
CAC	**.331***** (.100)	**.308***** (.106)	**.338***** (.098)	**.254**** (.098)	**.199*** (.104)	.109 (.104)	.102 (.090)	.055 (.091)
TPF	-.018 (.106)	-.050 (.111)	-.101 (.104)	-.167 (.103)	.002 (.111)	-.060 (.109)	.106 (.096)	.074 (.096)
PEC	.099 (.101)	.089 (.107)	.047 (.098)	-.043 (.100)	.146 (.105)	.062 (.106)	.055 (.091)	.011 (.092)
CPA	**.308**** (.118)	**.296**** (.122)	**.379***** (.116)	**.365***** (.114)	**.335***** (.124)	**.321***** (.121)	**.330***** (.107)	**.326***** (.105)
ABM	.100 (.124)	-.117 (.131)	.031 (.122)	-.039 (.122)	-.134 (.130)	-.205 (.130)	.076 (.112)	.034 (.113)
MCO	**.209**** (.099)	.174 (.111)	.142 (.097)	.000 (.103)	**.207**** (.104)	.077 (.110)	**.260***** (.090)	**.193**** (.096)
IME		.148 (.136)		**.410***** (.127)		**.410***** (.134)		**.267**** (.117)
CAC x IME		.001 (.126)		.014 (.117)		-.023 (.125)		-.097 (.109)
TPF x IME		-.043 (.138)		.084 (.129)		.173 (.137)		-.045 (.119)
PEC x IME		.135 (.126)		.041 (.117)		.083 (.124)		.031 (.108)
CPA x IME		-.022 (.132)		-.017 (.123)		-.107 (.130)		.022 (.114)
ABM x IME		.128 (.130)		.045 (.121)		.132 (.129)		**.274**** (.113)
MCO x IME		-.157 (.118)		-.006 (.109)		-.104 (.116)		-.136 (.101)
FS	-.130 (.166)	-.161 (.179)	-.157 (.162)	**-.298*** (.166)	.037 (.173)	-.079 (.176)	-.202 (.150)	**-.265*** (.176)
FA	.107 (.164)	-.047 (.172)	-.013 (.161)	.118 (.160)	-.240 (.172)	-.109 (.169)	.078 (.148)	.185 (.148)
Adjusted R^2	.429	.455	.455	.454	.377	.470	.534	.595
Maximum VIF	2.737	4.497	2.737	4.497	2.737	4.497	2.737	4.497

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$ Beta coefficients with standard errors in parenthesis

For the hypothesis testing, Table 5 shows the results of OLS regression analysis indicating that cost allocation concentration significantly and positively affects financial information usefulness (β_1 = .331, p < .10), managerial practice advantage (β_{24} = .338, p < .01) and business operation quality (β_{47}= .199, p < .10). The results of this research are in accordance with the recommendations of previous research which has been described as the quality of the correct cost allocations resulting in positive financial information usefulness, managerial practice advantage, and business operation quality due to the uncertain business situations. Cost allocation is right and proper in that the products and services that are important to management decisions enhance the strategic costing to compete more effectively and efficiently (i.e., Krumwiede, 1998; Lamminmaki and Drury, 2001; Chan and Lee, 203; Anand, 2004). Therefore, it is possible that the cost allocation concentration seems to be a result of financial information usefulness, managerial practice advantage, and business operation quality and was significant. ***Therefore, Hypotheses 1a-c are supported.***

However, cost allocation concentration also has no significant effects on valuable decision-making (β_{70} = .102, p > .10). The results of this research show no direct correlation between cost allocation concentration and valuable decision-making, contrary to the recommendations of the previous research suggesting the asset allocation for accuracy and reliability, as it can enhance the efficiency and effectiveness of the decision (i.e., Barfield, Raiborn and Kinney, 1997; McLean, 2006). However, in the results of this study, it was found that cost allocation concentration can add valuable decision-making having a significant effect on managerial practice advantage and business operation quality. Therefore, the results of this study can conclude that effective cost allocation enhances strategic decisions on strategic information creating managerial practice advantage and improving business operation quality, only because managerial practice advantage will provide valuable information in the creation of a competitive strategy and performance (Krumwiede, 1998; Anand, 2004; Byrne and Stower, 2008), and business operation quality will influence business decisions. It will help competitiveness and the amount of resources used in the operation to get successful results and to provide value to the customers (Konthong and Ussahawanitchkit, 2010), so it is possible that cost allocation concentration and valuable decision-making significantly influences over managerial practice advantage and business operation

quality. ***Thus, Hypothesis 1d is not supported.***

In Table 5, the results also indicate that target pricing focus does not significantly affect financial information usefulness (β_2 = -.018, p > .10), managerial practice advantage (β_{25} = -.101, p > .10), business operation quality (β_{48}= .002, p > .10), and valuable decision-making (β_{71}= .106, p > .10). The study of this research shows no correlation between target pricing focus, financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. This is in contrast to the recommendations of the previous research suggesting that target pricing focus will increase financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making (Li et al., 2011; Yazdifar and Askarany, 2012); however, the practice of target pricing that has been a key factor in the success of Japanese manufacturers (Li et al., 2011) finds that sharing cost-reduction expenses allows the manufacturer using the supply-side approach to attain a competitive advantage. Target pricing is the price level of goods / services that are available, or the price of a competitor's proposal as a starting point. However, there are other factors to consider when setting the selling price as the value of the product or service for the customer which are consumer expectations, the concept of the products, product life cycles, sales volume expectations, strategies of the competitors, and the price level of other consumer goods and services in the market (Yazdifar and Askarany, 2012). In addition, Kee (2010) found that decisions related to production target costing in the economy continue to add value to the company. ***Thus, Hypotheses 2a-d are not supported.***

Furthermore, the results also indicate that performance evaluation competency does not significantly affect financial information usefulness (β_3 = .099, p > .10), managerial practice advantage (β_{26} = .047, p > .10), business operation quality (β_{49} = .146, p > .10), and valuable decision-making (β_{72} = .055, p > .10). The study of this research shows no correlation between performance evaluation competency and financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. This is in contrast to the recommendations of the research previously suggested which showed that performance evaluation competency can effectively and efficiently add financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making (Joshi, 2001; Wu

and. Hung, 2008). However, performance evaluation is a systematic review process carried out to achieve organizational goals to evaluate the performance of the management and control system which enables organizations to manage existing resources more effectively and to measure the effectiveness that has to be related to the goals of the company (Wu and Hung, 2008). The traditional indicators are based on the operational and financial restrictions in the evaluation of the overall performance evaluation traditional financial performance alone cannot measure the performance of covered operations. Joshi (2001) finds that performance evaluation is to assess the importance of management accounting. This suggests that both financial and nonfinancial measures are used to measure performance and specifically looks at a business from four perspectives: finance, customer, internal process, and learning and growth (Cardinaels and Veen-Dirks, 2010; Wu and Chang, 2012). ***Thus, Hypotheses 3a-d are not supported.***

Table 5 also indicates that customer profitability analysis has positive influences on financial information usefulness ($\beta_4 = .308$, $p < .05$), managerial practice advantage ($\beta_{27} = .379$ $p < .01$), business operation quality ($\beta_{50} = .335$ $p < .01$), and valuable decision-making ($\beta_{73} = .330$ $p < .01$). The results of this study are based on the recommendations of previous research which has been described as customer profitability analysis that will result in positive financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. These benefited from customer profitability analysis shown by the insights it gives to the uneven distribution of costs and revenues, rather than the clients' information about the distribution of costs among customers. As well, the value of the particular distribution of income is generally known for its understanding of the extent to which the client uses the resources specified as this company will create new opportunities for the company, including administrative costs, revenue, and marketing strategy (Raaij, Vernooij and Triest, 2003; Lino and Andrea, 2006; Lee, Lin and Chen, 2010). Customer profitability analysis provides the basis for decisions on pricing plans, bonuses, and discounts to customers. However, a similar vein can help improve decision-making about discounts and also help reduce the existing structure to maximize long-term profitability (Helgesen, 2007). It is possible that the customer profitability analysis seems to be a significant result of financial information usefulness,

managerial practice advantage, business operation quality, and valuable decision-making. ***Hence, Hypotheses 4a-d are supported.***

Nevertheless, the results also indicate that activity-based management capability does not significantly affect financial information usefulness (β_5 = .100, p > .10), managerial practice advantage (β_{28} = .031, p > .10), business operation quality (β_{51} = -.134, p > .10), and valuable decision-making (β_{74} = .076, p > .10). The study of this research shows no correlation between activity-based management capability and financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. This is in contrast to the recommendations of the previous research suggesting that activity-based management capability can effectively and efficiently add financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making by Gupta and Galloway, 2003. However, activity-based management system is designed and applied in the production of goods or services to monitor activity at all stages by engaging in the manufacture of the product and trying to determine what portions of the resources are being used in each activity of each product type. The data obtained can help determine if the product is profitable. This process seeks to add value to the organization and should be further developed . However, these systems are more commonly used than ever today, in an effort to obtain a more reliable product cost and improve the process of developing a better marketing strategy that leads to improved product design, process or supplier relationships and customer satisfaction that can serve as useful data to support the implementation of an effective decision-making process based on the updated information (Gupta and Galloway, 2003; Khataie, Bulgak and Segovia, 2011). ***Thus, Hypotheses 5a-d are not supported.***

Finally, the results in Table 5 indicate that management control orientation significantly and positively relates to financial information usefulness (β_6= .209, p < .05), business operation quality (β_{52}= .207, p < .05) and valuable decision-making (β_{75} = .260, p < .01). The results of this study are based on the recommendations of previous research which has been described as the best and appropriate management control orientation that will result in positive financial information usefulness, business operation quality and valuable decision-making. This is because firms need to establish control tools to help managers make right decisions in the strong competition due to

market globalization and technological change which is forcing firms to develop a management control system. A management control system will become a tool to achieve sustained success of the firms by helping directors make decisions in daily operations and gives good strategies of the business (Chenhall, 2003; Sandino, 2007). It is possible that management control orientation seems to significantly increase output for financial information usefulness and business operation quality. ***Hence, Hypotheses 6a 6c and 6d are supported.***

However, the results also indicate that management control orientation does not significantly affect managerial practice advantage (β_{29} = .142, p > .10). The results of this research shows no significant relationship between management control orientation and managerial practice advantage contrary to the suggestions of previous research suggesting that good and appropriate management control orientation can increase managerial practice advantage effectively and efficiently (Chow et al., 1996; Chenhall, 2003; Sandino, 2007). However, the results of this research found that management control orientation is a valuable decision-making both directly and indirectly though business operation quality was significant (see dotted the H9); therefore, the results of this study concluded that effective management control orientation to enhance strategic decisions on how to better manage and control business operation quality can also influence business decisions that will help directors make decisions in daily operations and give good strategies of the business. ***Thus, Hypothesis 6b is not supported.***

For the control variables, the results indicate that firm size does not influence on financial information usefulness (β_7= -.130, p > .10), managerial practice advantage (β_{30}= -.157, p > .10), business operation quality (β_{53} = .037, p > .10), and valuable decision-making (β_{76} = -.202, p > .10). Moreover, firm age does not affect financial information usefulness (β_8= .107, p > .10), managerial practice advantage (β_{31}= -.013, p > .10), business operation quality (β_{54}= .240, p > .10), and valuable decision-making (β_{77} = .078, p > .10).

Moderating Effects of Information Management Experience

With respect to the relationship, this research posits information management experience as a moderators that moderate the relationship among six dimensions of managerial accounting innovation implementation on financial information usefulness,

managerial practice advantage, business operation quality, and valuable decision-making as previously illustrated in Figure 6. The hypotheses are analyzed from the regression equations 2, 4, 6, and 8 according to Chapter three. The results of OLS regression analysis of information management experience as the moderator that moderates the relationship between managerial accounting innovation implementation on its consequences are provided in Table 5.

For the moderating effects of information management experience, the results in Table 5 also indicate that information management experience does not moderate the relationships between cost allocation concentration and financial information usefulness (β_{16} = .001, p > .10), the relationships between cost allocation concentration and managerial practice advantage (β_{39} = .014, p > .10), the relationships between cost allocation concentration and business operation quality (β_{62} = -.023, p > .10), and the relationships between cost allocation concentration and valuable decision-making (β_{85} = .202, p > .10).

The results also present that information management experience does not moderate the relationships between target pricing focus and financial information usefulness (β_{17} = -.043, p > .10), the relationships between target pricing focus and managerial practice advantage (β_{40} = .084, p > .10), the relationships between target pricing focus and business operation quality (β_{63} = .173, p > .10), and the relationships between target pricing focus and valuable decision-making (β_{86} = -.045, p > .10).

Furthermore, the results in Table 5 also indicate that information management experience does not moderate the relationships between performance evaluation competency and financial information usefulness (β_{18}= .135, p > .10), the relationships between performance evaluation competency and managerial practice advantage (β_{41} = .041, p > .10), the relationships between performance evaluation competency and business operation quality (β_{64} = .083, p > .10), and the relationships between performance evaluation competency and valuable decision-making (β_{87} = .031, p > .10).

The results also present that information management experience does not moderate the relationships between customer profitability analysis and financial information usefulness (β_{19}= -.022, p > .10), the relationships between customer profitability analysis and managerial practice advantage (β_{42} = -.017, p > .10), the relationships between customer profitability analysis and business operation quality

(β_{65} = -.107, p > .10), and the relationships between customer profitability analysis and valuable decision-making (β_{88} = .022, p > .10).

Furthermore, the results in Table 5 indicate that information management experience does not moderate the relationships between activity-based management capability and financial information usefulness (β_{20} = .128, p > .10), the relationships between activity-based management capability and managerial practice advantage (β_{43} = .045, p > .10), and the relationships between activity-based management capability and business operation quality (β_{66} = .132, p > .10) also indicate that information management experience significantly moderates the relationships between activity-based management capability and valuable decision-making (β_{89} = .274 p < .05)

The results in Table 5 show that there are no significant moderating effects of information management experience on the relationships between management control orientation and financial information usefulness (β_{21} = -.157, p > .10), the relationships between management control orientation and managerial practice advantage (β_{44} = -.006, p > .10), the relationships between management control orientation and business operation quality (β_{67} = -.104, p > .10), and the relationships between management control orientation and valuable decision-making (β_{90} = -.136, p > .10).

Finally, for the control variables, the results indicate that firm size influences managerial practice advantage (β_{45} = -.298, p < .10), and valuable decision-making (β_{91} = -.265, p < .10) also indicates that firm size does not influence financial information usefulness (β_{22}= -.161, p > .10) and business operation quality (β_{68} = -.079, p > .10). Moreover, firm age does not affect financial information usefulness (β_{23}= -.047, p > .10), managerial practice advantage (β_{46}= .118 p > .10), business operation quality (β_{69}= -.109, p > .10), and valuable decision-making (β_{92} = .185, p > .10).

Therefore, the study of this research discovers that the relationship between activity-based management capability and valuable decision-making will be positively moderated by information management experience to the company. In addition, effective activity-based management capability can add valuable decision-making even if the company's information management experience is better. However, information is important for every organization with the best quality information improving decision-making, increasing efficiency and helping the organization have potential benefits from the competition (Citroen, 2011). Therefore, many organizations are looking for effective

solutions and continue to deal with the existing internal and external environment to be more business or industry that would need effective information management as well as to assess their strengths and weaknesses. Rad, Shams and Naderi (2009) reported one of the most important elements in the data some information is important enough for the organization, so many organizations are trying to find different methods and tools used for data arising from the operation and the days are growing steadily (Rad, Shams and Naderi, 2009). ***Hence, Hypotheses 24d is supported.***

For the results of this research, there is no correlation between cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis and management control orientation on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making; the relationship between activity-based management capability on financial information usefulness, managerial practice advantage and business operation quality will be moderated by information management experience. However, experience has a lot of information on the technology system that stores data in a more diverse organization and would affect the data managers who lack skills to manage information (Schlogl, 2005). Kebede (2010) claims experience in understanding and management of data and information are developed in the relevant departments and information systems. There is also an important factor for the emergence and evolution of knowledge management relevant to understanding the formation and the quality of knowledge and understanding the nature of the work or being quickly referred by a specialist in management information (Lin, 2008). In addition, information management is related to the evaluation of information needs within the organization and understanding the needs and requirements is an important step in the strategy. This will promote creativity and innovation enterprise-wide (Choo, 1995; Maceviciute and Wilson, 2002; Booth and Philip, 2005). ***Hence, Hypotheses 20a-d, 21a-d, 22a-d, 23a-d, 24a-c, and 25a-d are not supported.***

For the control variables, the results indicate that firm size has influence on managerial practice advantage (β_{45}= -.298, $p < .10$) and valuable decision-making (β_{91} = -.265, $p < .10$). Moreover, firm size does not influence on financial information usefulness (β_{22}= -.161, $p > .10$) and business operation quality (β_{68} = -.079, $p > .10$). Thus, the findings indicated that firms with the higher operation capital have greater

managerial practice advantage and valuable decision-making. Moreover, firm age does not affect financial information usefulness (β_{23}= -.047, p > .10), managerial practice advantage (β_{46}= .118, p > .10), business operation quality (β_{69}= -.109, p > .10), and valuable decision-making (β_{92} = .185, p > .10).

The Relationships among Its Consequences of Managerial Accounting Innovation Implementation on Valuable Decision-making

As described in Chapter two, the relationships among the consequences of managerial accounting innovation implementation are combined with financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making. The first focuses on financial information usefulness that affects to valuable decision-making. Another one is financial information usefulness that affects valuable decision-making as previously illustrated in Figures 3 and 4. The hypotheses are analyzed from regression equation 9 according to Chapter three. Table 6 shows the correlations between the independent variable and the dependent variables. The results of OLS regression analysis on the relationships among financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making are provided in Table 7.

Table 6: Descriptive Statistics and Correlation Matrix

Variables	**FIU**	**MPA**	**BOQ**	**OAC**	**VDM**	**FS**	**FA**
Mean	4.049	3.688	3.830	3.918	3.691	N/A	N/A
S.D.	0.583	0.605	0.623	0.609	0.628	N/A	N/A
FIU							
MPA	.722***						
BOQ	.729***	.809***					
OAC	.453***	.553***	.532***				
VDM	.609***	.686***	.716***	.675***			
FS	-.015	-.013	.024	-.039	-.078		
FA	-.122	-.085	-.166	-.059	-.083	.320***	

*** p < 0.01

The results indicate that financial information usefulness is significantly and positively correlated to valuable decision-making ($r = .609$, $p < .01$). Managerial practice advantage is a significant and positive correlation to valuable decision-making ($r = .686$, $p < .01$). Business operation quality is a significant and positive correlation to valuable decision-making ($r = .716$, $p < .01$). For the correlation among independent variables, the results presented in Table 6 also show that financial information usefulness is significantly and positively correlated to managerial practice advantage and business operation quality ($r = .722$, $p < .01$; $r = .729$, $p < .01$ respectively). Managerial practice advantage is significantly and positively correlated to business operation quality ($r = .809$, $p < .01$). However, variance inflation factors (VIF) are used to test the correlations among its consequences. In this case, the minimum value of VIF is 1.131 and the maximum value of VIF is 4.734 (See also Appendix G), which is well below the cut-off value of 10 (Neter, Wasserman and Kutner, 1985; Hair et al., 2006), meaning each dimension of accounting outcome has no significant multicollinearity problems confronted in this study.

For the hypotheses testing, Table 7 shows the results of OLS regression analysis indicating that financial information usefulness does not significantly affect valuable decision-making ($\beta_{93} = .107$, $p > .10$). The study of this research shows no significant relationship between financial information usefulness and valuable decision-making, which are contrary to the suggestions of previous research suggesting that financial information usefulness is believed to add value to the decision. Effectively and productively (Zager and Zager, 2006; Krumwiede et al., 2007), however, financial information provides users with relevant and timely information for decision-making while decision-making is concerned with future actions and are the basis of internal financial information to assist managers to make business decisions such as providing a new product, making or buying a product, product pricing, and a new type of product (Fisher and Kingma, 2001; Bello, 2009). ***Thus, Hypothesis 7 is not supported.***

The evidence also reveals that managerial practice advantage significantly and the positively influences valuable decision-making ($\beta_{94} = .252$, $p < .05$). The study of this research is based on the recommendations of previous research which has been described as managerial practice advantage resulting in positive valuable decision-making as good management practices are associated with the development plan,

employee and customer relationships, product quality, and external contacts with the value. It is an support organization of continuous improvement because there are many tools to manage accounts and techniques development practiced (Sharkar, Sobhan and Sultana, 2006). For managerial practice advantage it is possible to add valuable decision-making significantly. ***Hence, Hypothesis 8 is supported.***

Table 7: Results of Effects of Relationship among Its consequences on Valuable Decision-Making

Independent Variables	**Dependent Variables**	
	VDM	**VDM**
	Equation 9 $\beta_{93\text{-}97}$	**Equation 10** $\beta_{98\text{-}106}$
FIU	.107 (.101)	.110 (.095)
MPA	**.252**** (.118)	.163 (.111)
BOQ	**.447***** (.120)	**.297**** (.122)
OAC		**.393***** (.074)
FIU x OAC		.024 (.082)
MPA x OAC		.086 (.106)
BOQ x OAC		-.139 (.107)
FS	-.206 (.138)	-.183 (.125)
FA	.120 (.143)	.093 (.131)
Adjusted R^2	.561	.660
Maximum VIF	3.432	4.734

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

Furthermore, business operation quality is positively and significantly related to valuable decision-making (β_{95} = .447, p < .01). The study of this research is based on the recommendations of previous research which has been described as business operation quality resulting in positive valuable decision-making as many companies are seeking ways to better performance due to increased competition in the business world. Therefore, the operation of the organization will help companies achieve their business goals and optimize the company (Tseng, 2009; Jirawuttinunt and Ussahawanitchkit, 2011). However, business operation quality may be a technique, method, or strategy that is innovative in integrating elements of management's organizational activities, processes, and resources to support the mission and maximum procedures value for operating organization and increasing economic value (Daft, 2007), business operation quality that it is possible to add a valuable decision-making is significantly. ***Therefore, Hypothesis 9 is supported.***

For the control variables, the results indicate that firm size does not influence valuable decision-making (β_{96} = -.206, p > .10), Moreover, firm age does not affect valuable decision-making (β_{97} = .120, p > .10.

Moderating Effects of Organizational Adaptation Capability

With respect to the relationship, this research posits organizational adaptation capability as a moderator that moderates the relationship among financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making as previously illustrated in Figure 7. The hypotheses are analyzed from regression equation 10 according to Chapter three. The results of OLS regression analysis of organizational adaptation capability as the moderator that moderates the relationship among financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making are provided in Table 7.

For the moderating effects of organizational adaptation capability, the results indicate that organizational adaptation capability does not moderate the relationships between financial information usefulness and valuable decision-making (β_{102}= .024, p > .10). Also, the results indicate that organizational adaptation capability does not moderate the relationships between managerial practice advantage and valuable decision-making (β_{103} = .086, p > .10). Moreover, the results indicate that organizational

adaptation capability does not moderate the relationships between business operation quality and valuable decision-making (β_{104} = -.139, p > .10). The results of this study show no correlation between financial information usefulness, managerial practice advantage and business operation quality that is moderated by organizational adaptation capability. Therefore, the ability of the organization is important to strengthen the competitive advantage of companies that helped create the potential of the strategic environment and to enact it (Limpsurapong and Ussahawanitchakit, 2011). ***Hence, Hypotheses 26, 27 and 28 are not supported.***

Effects of the Antecedents on Managerial Accounting Innovation Implementation

As shown in Figure 4, this research designates accounting vision, accounting knowledge, accounting learning, accounting modern competency, and accounting environment as the antecedents of managerial accounting innovation implementation. Simply put accounting vision, accounting knowledge, accounting learning, accounting modern competency, and accounting environment are addressed as independent variables, while managerial accounting innovation implementation contain six dimensions: cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation are posited as the dependent variables of the relationship. The hypotheses are analyzed from the regression equations 11, 13, 15, 17, 19 and 21 according to Chapter three. Table 8 shows the correlations between the independent and dependent variables. The results of OLS regression analysis on the relationships between the antecedents and managerial accounting innovation implementation are provided in Table 9.

Table 8 shows the correlation between the independent variables and the dependent variable. It also presents the correlation among the independent variables. The results explain that accounting vision has significant and positive correlations to cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation (r = .569, p < .01; r = .496, p < .01; r = .585, p < .01; r = .488, p < .01; r = .536, p < .01; r = .514, p < .01, respectively). Accounting knowledge

significantly and positively correlates to cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .575$, $p < .01$; $r = .459$, $p < .01$; $r = .617$, $p < .01$; $r = .470$, $p < .01$; $r = .557$, $p < .01$; $r = .590$, $p < .01$, respectively). Accounting learning significantly and positively correlates to cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .489$, $p < .01$; $r = .372$, $p < .01$; $r = .535$, $p < .01$; $r = .538$, $p < .01$; $r = .606$, $p < .01$; $r = .530$, $p < .01$, respectively). Accounting modern competency significantly and positively correlates to cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .507$, $p < .01$; $r = .388$, $p < .01$; $r = .483$, $p < .01$; $r = .557$, $p < .01$; $r = .619$, $p < .01$; $r = .431$, $p < .01$, respectively). Besides, accounting environment significantly and positively correlates with cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation ($r = .487$, $p < .01$; $r = .327$, $p < .01$; $r = .495$, $p < .01$; $r = .415$, $p < .01$; $r = .553$, $p < .01$; $r = .546$, $p < .01$, respectively).

For the correlations among independent variables, the results present that accounting vision has a significant and positive correlation with accounting knowledge ($r = .809$, $p < .01$), accounting learning ($r = .678$, $p < .05$), accounting modern competency ($r = .680$, $p < .01$), and accounting environment ($r = .602$, $p < .01$). For accounting knowledge , it has a significant and positive correlation with accounting learning ($r = .747$, $p < .01$), accounting modern competency ($r = .666$, $p < .01$), and accounting environment ($r = .596$, $p < .01$). Accounting learning has a significant and positive correlation with accounting modern competency ($r = .730$, $p < .01$) and accounting environment ($r = .613$, $p < .01$). In addition, accounting modern competency has a significant and positive correlation with accounting environment ($r = .602$, $p < .01$).

Table 8: Descriptive Statistics and Correlation Matrix

Variables	ACV	ACK	ACL	AMC	ACE	ASE	CAC	TPF	PEC	CPA	ABM	MCO	FS	FA
Mean	3.996	4.106	3.959	3.805	4.011	4.048	3.991	4.057	4.125	3.816	3.787	4.143	N/A	N/A
S.D.	0.552	0.528	0.578	0.627	0.615	0.568	0.526	0.543	0.524	0.587	0.551	0.482	N/A	N/A
ACV														
ACK	.809***													
ACL	.678**	.747***												
AMC	.680***	.666***	.730***											
ACE	.602***	.596***	.613***	.602***										
ASE	.640***	.640***	.686***	.606***	.661***									
CAC	.569***	.575***	.489***	.507***	.487***	.488***								
TPF	.496***	.459***	.372***	.388***	.327***	.406***	.530***							
PEC	.585***	.617***	.535***	.483***	.495***	.575***	.497***	.423***						
CPA	.488***	.470***	.538***	.557***	.415***	.453***	.422***	.618***	.465***					
ABM	.536***	.557***	.606***	.619***	.553***	.611***	.489***	.490***	.581***	.701***				
MCO	.514***	.590***	.530***	.431***	.546***	.577***	.392***	.401***	.535***	.457***	.602***			
FS	.052	.050	.036	.013	.125	.053	.175	-.102	.035	-.023	-.019	.042		
FA	-.040	-.065	-.095	-.139	-.160	.026	.011	-.112	-.015	-.134	-.087	-.101	.320***	

** $p < 0.05$, *** $p < 0.01$

Table 9: Results of Effects of the Antecedents on Managerial Accounting Innovation Implementation

Independent Variables	Dependent Variables											
	CAC	CAC	TPF	TPF	PEC	PEC	CPA	CPA	ABM	ABM	MCO	MCO
	Equation11 $\beta_{107\text{-}113}$	Equation 12 $\beta_{114\text{-}126}$	Equation 13 $\beta_{127\text{-}133}$	Equation 14 $\beta_{134\text{-}146}$	Equation 15 $\beta_{147\text{-}153}$	Equation 16 $\beta_{154\text{-}166}$	Equation 17 $\beta_{167\text{-}173}$	Equation 18 $\beta_{174\text{-}186}$	Equation 19 $\beta_{187\text{-}193}$	Equation 20 $\beta_{194\text{-}206}$	Equation 21 $\beta_{207\text{-}213}$	Equation 22 $\beta_{214\text{-}226}$
ACV	.192 (.139)	.165 (.146)	**.343**** (.154)	**.263*** (.156)	.175 (.137)	.142 (.142)	.139 (.145)	.085 (.150)	.015 (.132)	-.025 (.133)	.021 (.138)	-.033 (.139)
ACK	**.256*** (.147)	.239 (.154)	.160 (.162)	.199 (.164)	**.322**** (.145)	**.309**** (.149)	-.026 (.152)	.010 (.158)	.086 (.139)	.131 (.141)	**.363**** (.146)	**.396***** (.146)
ACL	-.021 (.132)	-.041 (.142)	-.032 (.146)	-.067 (.152)	.085 (.130)	.015 (.138)	**.235*** (.137)	.215 (.146)	.200 (.125)	.102 (.130)	.145 (.131)	.033 (.135)
AMC	.141 (.123)	.139 (.128)	.056 (.136)	.037 (.137)	.001 (.121)	-.035 (.124)	**.284**** (.128)	**.277**** (.132)	**.281**** (.116)	.276** (.117)	-.111 (.122)	-.129 (.122)
ACE	.137 (.107)	.108 (.123)	.019 (.118)	-.099 (.131)	.157 (.105)	.087 (.119)	.026 (.111)	-.003 (.127)	**.215**** (.101)	.163 (.112)	**.292***** (.106)	**.225*** (.117)
ASE		.096 (.136)		.192 (.144)		**.252*** (.131)		.068 (.139)		.167 (.124)		.212 (.129)
ACV x ASE		-.071 (.165)		.092 (.176)		-.032 (.160)		-.100 (.169)		-.031 (.150)		.025 (.157)
ACK x ASE		-.052 (.159)		-.049 (.169)		.132 (.153)		.054 (.163)		.135 (.144)		.051 (.150)
ACL x ASE		.015 (.143)		.248 (.152)		-.112 (.138)		.065 (.146)		-.030 (.130)		-.041 (.135)
AMC x ASE		.099 (.160)		-.122 (.170)		.061 (.155)		-.011 (.164)		-.183 (.146)		-.092 (.152)
ACE x ASE		.032 (.119)		.028 (.127)		-.052 (.115)		.119 (.122)		.178 (.108)		**.198*** (.113)
FS	.246 (.164)	.250 (.173)	-.233 (.182)	-.163 (.184)	-.062 (.162)	-.059 (.167)	-.054 (.171)	-.053 (.177)	-.146 (.155)	-.137 (.158)	-.017 (.163)	-.002 (.164)
FA	.072 (.169)	.053 (.180)	-.087 (.187)	-.194 (.191)	.115 (.167)	.059 (.174)	-.113 (.176)	-.154 (.184)	.071 (.160)	-.024 (.164)	-.063 (.168)	-.175 (.170)
Adjusted R^2	.407	.415	.276	.337	.423	.453	.360	.386	.469	.515	.416	.475
Maximum VIF	3.698	5.998	3.698	5.998	3.698	5.998	3.698	5.998	3.698	5.998	3.698	5.998

*** p < 0.01, ** p < 0.05, * p < 0.10 Beta coefficients with standard errors in parenthesis

With respect to possible problems relating to multicollinearity, all the correlation coefficients of independent variables are smaller than 0.8, and all the VIF values are smaller than 10 (Hair et al., 2006). Overall, almost all variables are smaller than 0.8, but there are some variables greater than 0.8. Thus, this research used VIF to test the correlations among accounting vision, accounting knowledge, accounting learning, accounting modern competency, and accounting environment. In this analysis, the minimum value of VIF is 1.161 and the maximum is 5.998 (See also Appendix G), which is less than 10 indicating that there are no significant multicollinearity problems confronted (Neter, Wasserman and Kutner, 1985; Hair et al., 2006), meaning each dimension of the antecedent of managerial accounting innovation implementation is not correlated with each other. Consequently, there are no significant multicollinearity problems confronted.

For hypotheses testing, the results of OLS regression analysis are illustrated in Table 9. Also for, the relationships between accounting vision and six dimensions of managerial accounting innovation implementation , the results in Table 9 indicate that accounting vision significantly and positively affects target pricing focus (β_{127} = .343, p < .05). The result of this research in accordance with the recommendations of previous research explains that the company's accounting vision will result in positive target pricing focus. The vision for inter firm operations is the goal of the organization, which organized and managed inter firm activities by following policies, regulations, and principles of firms in the future. (Robkob and Ussahawanitchakit, 2009; Tuntrabundit and Ussahawanitchakit, 2010). Moreover, for organizational vision to develop the occasion for leveraging a competitive advantage (McGivern and Tvori, 1998), the company's accounting vision will possibly be able to target pricing focus significantly. ***Thus, Hypotheses 10b is supported.***

On the other hand, the results indicate that accounting vision does not significantly affect cost allocation concentration (β_{107}= .192, p > .10), performance evaluation competency (β_{147} = .175, p > .10), customer profitability analysis (β_{167}= .139, p > .10), activity-based management capability (β_{187} = .015, p > .10), and management control orientation (β_{207} = .021, p > .10). The results of this research show no correlation between accounting vision and cost allocation concentration, performance evaluation competency, customer profitability analysis, activity-based management capability and

management control orientation, which vision enabled through the firm's relationship mindset and interorganizational operations. Moreover, organizational vision develops the occasion for leveraging a competitive advantage (McGivern and Tvori, 1998). Therefore, the goals of the organization with inter firm activities need to be set and shared from the beginning (Mazzawi, 2002). ***Thus, Hypothesis 10a and 10c-f is not supported.***

The results also indicate that accounting knowledge significantly and positively affects cost allocation concentration (β_{108}= .256, p < .10), performance evaluation competency (β_{148} = .322, p < .05), and management control orientation (β_{208} = .363, p < .05). The results of this research in accordance with the recommendations of previous research explains the company's accounting knowledge will contribute positively to cost allocation concentration, performance evaluation competency and management control orientation. Knowledge in accounting is management accounting information to support managers in solving problems. This knowledge includes support for new or modified methods and procedures, as well as to understand their use and analysis of their effectiveness. However, knowledge is information stored in memory, because individuals have limited information storage and processing capability. They specialize in particular kinds of knowledge (Stone, Hunton and Wier, 2000). If the business is accounting knowledge that can add cost allocation concentration, performance evaluation competency and management control orientation are significant. ***Thus, Hypotheses 11a, 11c, and 11f are supported.***

However, the results indicate that accounting knowledge does not directly influence on target pricing focus (β_{128} = .160, p > .10), customer profitability analysis (β_{168}= -.026, p > .10), and activity-based management capability (β_{188} = .086, p > .10). The results of this research show no correlation between accounting knowledge and target pricing focus, customer profitability analysis and activity-based management capability, in which a review of the literature (Stone, Hunton and Wier, 2000) provides insight into the process of knowledge acquisition and knowledge to match the tasks in account management. Moilanen (2007) found that knowledge of the operation can be transferred to the need of prior related knowledge and knowledge development today that will allow them to transfer the tacit information leading to organizational performance. For the rapid advances in technology and globalization, the roles of

accountants in the organization need to be adjusted, to develop the necessary knowledge and skills of accounting professionals to meet the changing demands stemming from the new business environment (Lin, Xiong and Liu, 2005; Lin, 2008). ***Hence, Hypotheses 11b, 11d and 11e are not supported.***

The results also indicate that accounting learning significantly and positively affects customer profitability analysis (β_{169}= .235, p < .10). The result of this research in accordance with the recommendations of previous research explains that the company's accounting learning will contribute positively to customer profitability analysis. Learning is a source of competitive advantage in the organization that should involve the employees by promoting or supporting the learning resources in order to facilitate learning more effectively (Coad, 1996; Eddy, Hall and Robinson, 2006). It is possible that if business is accounting knowledge, it can add customer profitability analysis significantly. ***Thus, Hypothesis 12d is supported.***

However, the results indicate that accounting learning does not directly influence cost allocation concentration (β_{109}= -.021, p > .10), target pricing focus (β_{129} = -.032, p > .10), performance evaluation competency (β_{149} = .085, p > .10), activity-based management capability (β_{189} = .200, p > .10), and management control orientation (β_{209} = .145, p > .10). The results of this research show no correlation between accounting learning and cost allocation concentration, target pricing focus, performance evaluation competency, activity-based management capability, and management control orientation. Which social learning, planning and monitoring of the policy process, especially for adapting to new innovations applied. Thus, social learning to examined from the perspective of the process of using different contexts in order to enhance the performance of their companies, which the company would have to improve the transfer of best practices of business (Holden, 2008). Cho (2005) indicates that organizations have to determine the type of management accounting information requires advanced technology to achieve better efficiency. In addition, Eddy, Hall and Robinson (2006) suggest that the ability of the employees of the organization is very important in creating the potential for both employees and organizations. ***Hence, Hypotheses 12a-c, 12e and 12f are not supported.***

The results also indicate that accountant modern competency significantly and positively affects customer profitability analysis (β_{170} = .284, p < .05) and activity-based management capability (β_{190} = .281, p < .05). The results of this research accordance with the recommendations of previous research explains that the company's accountant modern competency will contribute positively to customer profitability analysis and activity-based management capability as well as to the ability individuals bring to their regular jobs. Skills or the abilities of the company's employees, especially those who are called the core concept of the core competence is important in order to adopt a group battle between our two companies to gain a competitive advantage (Blocher, Chen and Lin, 2001). It is possible that if the business is accountant modern competency, it can significantly add customer profitability analysis and activity-based management capability. ***Thus, Hypotheses 13d and 13e are supported.***

The results indicate that accountant modern competency does not directly influence cost allocation concentration (β_{110}= .141, p > .10), target pricing focus (β_{130} = .056, p > .10), performance evaluation competency (β_{150} = .001, p > .10), and management control orientation (β_{210}= -.111, p > .10). The results of this research show no correlation between accountant modern competency and cost allocation concentration, target pricing focus, performance evaluation competency, and management control orientation, which exists to work with organizations that are full and which covers the knowledge, technical skills, cognitive ability, experience, and personality of accountants (Stone, Hunton and Wier, 2000; Ley and Albert, 2003; Kennedy and Dresser, 2005; Baird, Harrison and Reeve, 2007). Kennedy and Dresser (2005) indicate that the performance of employees is essential for the organizations to contribute to organizational success. Furthermore, the ability of individuals brings their regular jobs as well as skills or the ability of the company's employees, especially those who are called the core concept of core competence, as they are important in order to adopt a group battle between our two companies to gain a competitive advantage (Blocher, Chen and Lin, 2001). ***Hence, Hypotheses 13a-c and 13f are not supported.***

The results also indicate that the accounting environment significantly and positively affects activity-based management capability (β_{191} = .215, p < .05) and management control orientation (β_{211} = .292, p < .01). The results of this research are in accordance with the recommendations of previous research that explains the company's

accounting environment will contribute positively to the activity-based management capability and management control orientation. Also, the changes in a competitive environment and changes in manufacturing technology affect the changes in managerial accounting change (Tuanmat, 2010) . Chenhall (2003) suggests that the balance of the accounting environment and fitness for a corporate environment is essential to support the manager's new information requirements. It is possible that if the business is an accounting environment, it can significantly add activity-based management capability and management control orientation. ***Thus, Hypotheses 14e and 14f are supported.***

However, the results indicate that accounting environment does not directly influence cost allocation concentration (β_{111}= .137, p > .10), target pricing focus (β_{131} = .019, p > .10), performance evaluation competency (β_{151} = .157, p > .10), and customer profitability analysis (β_{171} = .026, p > .10). The results of this research show no correlation between accounting environment and cost allocation concentration, target pricing focus, performance evaluation competency, and customer profitability analysis, which previous literature suggests that changes in environmental factors surrounding an organization can have a significant impact on its accounting and control systems (Baines and Langfield-Smith, 2003); Hoque and James, 2000). Tuanmat (2010) found that changes in the competitive environment and changes in manufacturing technology affect the changes in managerial accounting change. Chenhall (2003) suggests that the balance of the accounting environment and fitness for a corporate environment is essential to support the manager's new information requirements. ***Hence, Hypotheses 14a-d are not supported.***

For the control variables, the results indicate that firm size does not influence cost allocation concentration (β_{112} = .246, p > .10), target pricing focus (β_{132} = -.233, p > .10), performance evaluation competency (β_{152} = -.062, p > .10), customer profitability analysis (β_{172} = -.054, p > .10), activity-based management capability (β_{192} = -.146, p > .10), and management control orientation (β_{212} = -.017, p > .10), meaning that there is no difference in the operational capacity of the firm to provide managerial accounting innovation implementation. Moreover, firm age does not influence cost allocation concentration (β_{113} = .072, p > .10), target pricing focus (β_{133}= .087, p > .10), performance evaluation competency (β_{153} = .115, p > .10), customer profitability analysis (β_{173} = -.113, p > .10), activity-based management capability (β_{193} = .071, p >

.10), and management control orientation (β_{213} = -.063, p > .10) meaning that there is no difference in the period of time in the proceeding business to provide managerial accounting innovation implementation.

Moderating Effects of Accounting System Efficiency

With respect to the relationship, this research posits accounting system efficiency as a moderator that moderates the relationship among the antecedents and managerial accounting innovation implementation as illustrated in Figure 5 previously. The hypotheses are analyzed from the regression equations 12, 14, 16, 18, 20, and 22 according to Chapter three. The results of OLS regression analysis of accounting system efficiency that moderates the relationships between the antecedents and managerial accounting innovation implementation are provided in Table 9.

This research posits that accounting system efficiency positively moderates the relationships between the antecedents and managerial accounting innovation implementation. The results depicted in Table 9 indicate that accounting system efficiency has significantly moderate the relationships between accounting environment and management control orientation (β_{224} = .198, p < .10). The accounting system is a major mechanism for management decisions and effective control of the organization (0'Donnell and David, 2000). In the vital system of accounts that have emerged about the role of accounting information in an organization to manage and control the music function to work. The research pointed out that the concept of the effectiveness of the system by the satisfaction of the quality of the recognition of the export system has been suggested that the concept of effectiveness. (Nicolaou, 2000). ***Hence, Hypotheses 19f is supported.***

The results depicted in Table 9 indicate that accounting system efficiency does not significantly moderate the relationship between accounting vision and cost allocation concentration (β_{120} = -.071, p > .10), the relationships between accounting vision and target pricing focus (β_{140} = .092, p > .10), the relationships between accounting vision and performance evaluation competency (β_{160} = -.032, p > .10), the relationships between accounting vision and customer profitability analysis (β_{180} = -.100, p > .10), the relationships between accounting vision and activity-based management capability (β_{200} = -.031, p > .10), and the relationships between accounting

vision and management control orientation (β_{220} = .025, p > .10).

The results also indicate that accounting system efficiency does not significantly moderate the relationships between accounting knowledge and cost allocation concentration (β_{121} = -.052, p > .10), the relationships between accounting knowledge and target pricing focus (β_{141} = -.049, p > .10), the relationships between accounting knowledge and performance evaluation competency (β_{161} = .132, p > .10), the relationships between accounting knowledge and customer profitability analysis (β_{181} = .054, p > .10), the relationships between accounting knowledge and activity-based management capability (β_{201} = .135, p > .10), and the relationships between accounting knowledge and management control orientation (β_{221} = .051, p > .10).

The evidence also indicates that accounting system efficiency does not significantly moderate the relationship between accounting learning and cost allocation concentration (β_{122} = .015, p > .10), the relationships between accounting learning and target pricing focus (β_{142} = .248, p > .10), the relationships between accounting learning and performance evaluation competency (β_{162} = -.112, p > .10), the relationships between accounting learning and customer profitability analysis (β_{182} = .065, p > .10), the relationships between accounting learning and activity-based management capability (β_{202} = -.030, p > .10), and the relationships between accounting learning and management control orientation (β_{222} = -.041, p > .10).

The results also indicate that accounting system efficiency does not significantly moderate the relationships between accountant modern competency and cost allocation concentration (β_{123} = .099, p > .10), the relationships between accountant modern competency and target pricing focus (β_{143} = -.122, p > .10), the relationships between accountant modern competency and performance evaluation competency (β_{163} = .061, p > .10), the relationships between accountant modern competency and customer profitability analysis (β_{183} = -.011, p > .10), the relationships between accountant modern competency and activity-based management capability (β_{203} = -.183, p > .10), and the relationships between accountant modern competency and management control orientation (β_{223} = -.092, p > .10).

Furthermore, the results also indicate that accounting system efficiency does not significantly moderate the relationships between accounting environment and cost allocation concentration (β_{124} = .032, p > .10), the relationships between accounting

environment and target pricing focus (β_{144} = .028, p > .10), the relationships between accounting environment and performance evaluation competency (β_{164} = -.052, p > .10), the relationships between accounting environment and customer profitability analysis (β_{184} = .119, p > .10), and the relationships between accounting environment and activity-based management capability (β_{204} = .178, p > .10).

The results of this research show no correlation between its antecedents on dimensions of managerial accounting innovation implementation that will be moderated by accounting system efficiency. However, the performance of the system in terms of the output of the accounting system to create certain data used by managers for decision-making to management accounting innovations are used to enhance organizational performance. The effectiveness of the system that means the company has an effective tools and quality of information available to users and meets their information quickly. (Nicolaou, 2000; Abernethy and Bouwens, 2005). Chenhall (1999) reports on innovations in management accounting systems (MAS) that were developed in response to the implementation and results achieved by the innovative system based on operational efficiency. ***Thus, Hypotheses 15a-f, 16a-f, 17a-f, 18a-f, and 19a-e are not supported.***

Table 10: Summary of the Results of Hypothesis Testing

Hypotheses	Description of Hypothesized Relationships	Results
H1a	The higher the cost allocation concentration is, the more likely that firms will gain greater financial information usefulness.	Supported
H1b	The higher the cost allocation concentration is, the more likely that firms will gain greater managerial practice advantage.	Supported
H1c	The higher the cost allocation concentration is, the more likely that firms will gain greater business operation quality.	Supported
H1d	The higher the cost allocation concentration is, the more likely that firms will gain greater valuable decision-making.	Not Supported
H2a	The higher the target pricing focus is, the more likely that firms will gain greater Financial information usefulness.	Not Supported
H2b	The higher the target pricing focus is, the more likely that firms will gain greater managerial practice advantage.	Not Supported
H2c	The higher the target pricing focus is, the more likely that firms will gain greater business operation quality.	Not Supported
H2d	The higher the target pricing focus is, the more likely that firms will gain greater valuable decision-making.	Not Supported
H3a	The higher the performance evaluation competency is, the more likely that firms will gain greater financial information usefulness.	Not Supported
H3b	The higher the performance evaluation competency is, the more likely that firms will gain greater managerial practice advantage.	Not Supported
H3c	The higher the performance evaluation competency is, the more likely that firms will gain greater business operation quality.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H3d	The higher the performance evaluation competency is, the more likely that firms will gain greater valuable decision-making.	Not Supported
H4a	The higher the customer profitability analysis is, the more likely that firms will gain greater financial information usefulness.	Supported
H4b	The higher the customer profitability analysis is, the more likely that firms will gain greater managerial practice advantage.	Supported
H4c	The higher the customer profitability analysis is, the more likely that firms will gain greater business operation quality.	Supported
H4d	The higher the customer profitability analysis is, the more likely that firms will gain greater valuable decision-making.	Supported
H5a	The higher the activity-based management capability is, the more likely that firms will gain greater financial information usefulness.	Not Supported
H5b	The higher the activity-based management capability is, the more likely that firms will gain greater managerial practice advantage.	Not Supported
H5c	The higher the activity-based management capability is, the more likely that firms will gain greater business operation quality.	Not Supported
H5d	The higher the activity-based management capability is, the more likely that firms will gain greater valuable decision-making.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H6a	The higher the management control orientation is, the more likely that firms will gain greater financial information usefulness.	Supported
H6b	The higher the management control orientation is, the more likely that firms will gain greater managerial practice advantage.	Not Supported
H6c	The higher the management control orientation is, the more likely that firms will gain greater business operation quality.	Supported
H6d	The higher the management control orientation is, the more likely that firms will gain greater valuable decision-making.	Supported
H7	The higher the financial information usefulness is, the more likely that firms will gain greater valuable decision-making.	Not Supported
H8	The higher the managerial practice advantage is, the more likely that firms will gain greater valuable decision-making.	Supported
H9	The higher the business operation quality is, the more likely that firms will gain greater valuable decision-making.	Supported
H10a	The higher the accounting vision is, the more likely that firms will gain greater cost allocation concentration.	Not Supported
H10b	The higher the accounting vision is, the more likely that firms will gain greater target pricing focus.	Supported
H10c	The higher the accounting vision is, the more likely that firms will gain greater performance evaluation competency.	Not Supported
H10d	The higher the accounting vision is, the more likely that firms will gain greater customer profitability analysis.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H10e	The higher the accounting vision is, the more likely that firms will gain greater activity-based management capability.	Not Supported
H10f	The higher the accounting vision is, the more likely that firms will gain greater management control orientation.	Not Supported
H11a	The higher the accounting knowledge is, the more likely that firms will gain greater cost allocation concentration.	Supported
H11b	The higher the accounting knowledge is, the more likely that firms will gain greater target pricing focus.	Not Supported
H11c	The higher the accounting knowledge is, the more likely that firms will gain greater performance evaluation competency.	Supported
H11d	The higher the accounting knowledge is, the more likely that firms will gain greater customer profitability analysis.	Not Supported
H11e	The higher the accounting knowledge is, the more likely that firms will gain greater activity-based management capability.	Not Supported
H11f	The higher the accounting knowledge is, the more likely that firms will gain greater management control orientation.	Supported
H12a	The higher the accounting learning is, the more likely that firms will gain greater cost allocation concentration.	Not Supported
H12b	The higher the accounting learning is, the more likely that firms will gain greater target pricing focus.	Not Supported
H12c	The higher the accounting learning is, the more likely that firms will gain greater performance evaluation competency.	Not Supported
H12d	The higher the accounting learning is, the more likely that firms will gain greater customer profitability analysis.	Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H12e	The higher the accounting learning is, the more likely that firms will gain greater activity-based management capability.	Not Supported
H12f	The higher the accounting learning is, the more likely that firms will gain greater management control orientation.	Not Supported
H13a	The higher the accountant modern competency is, the more likely that firms will gain greater cost allocation concentration.	Not Supported
H13b	The higher the accountant modern competency is, the more likely that firms will gain greater target pricing focus.	Not Supported
H13c	The higher the accountant modern competency is, the more likely that firms will gain greater performance evaluation competency.	Not Supported
H13d	The higher the accountant modern competency is, the more likely that firms will gain greater customer profitability analysis.	Supported
H13e	The higher the accountant modern competency is, the more likely that firms will gain greater activity-based management capability.	Supported
H13f	The higher the accountant modern competency is, the more likely that firms will gain greater management control orientation.	Not Supported
H14a	The higher the accounting environment is, the more likely that firms will gain greater cost allocation concentration.	Not Supported
H14b	The higher the accounting environment is, the more likely that firms will gain greater target pricing focus.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H14c	The higher the accounting environment is, the more likely that firms will gain greater performance evaluation competency.	Not Supported
H14d	The higher the accounting environment is, the more likely that firms will gain greater customer profitability analysis.	Not Supported
H14e	The higher the accounting environment is, the more likely that firms will gain greater activity-based management capability.	Supported
H14f	The higher the accounting environment is, the more likely that firms will gain greater management control orientation.	Supported
H15a	The relationships between accounting vision and cost allocation concentration will be positively moderated by accounting system efficiency.	Not Supported
H15b	The relationships between accounting vision and target pricing focus will be positively moderated by accounting system efficiency.	Not Supported
H15c	The relationships between accounting vision and performance evaluation competency will be positively moderated by accounting system efficiency.	Not Supported
H15d	The relationships between accounting vision and customer profitability analysis will be positively moderated by accounting system efficiency.	Not Supported
H15e	The relationships between accounting vision and activity-based management capability will be positively moderated by accounting system efficiency.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H15f	The relationships between accounting vision and management control orientation will be positively moderated by accounting system efficiency.	Not Supported
H16a	The relationships between accounting knowledge and cost allocation concentration will be positively moderated by accounting system efficiency.	Not Supported
H16b	The relationships between accounting knowledge and target pricing focus will be positively moderated by accounting system efficiency.	Not Supported
H16c	The relationships between accounting knowledge and performance evaluation competency will be positively moderated by accounting system efficiency.	Not Supported
H16d	The relationships between accounting knowledge and customer profitability analysis will be positively moderated by accounting system efficiency.	Not Supported
H16e	The relationships between accounting knowledge and activity-based management capability will be positively moderated by accounting system efficiency.	Not Supported
H16f	The relationships between accounting knowledge and management control orientation will be positively moderated by accounting system efficiency.	Not Supported
H17a	The relationships between accounting learning and cost allocation concentration will be positively moderated by accounting system efficiency.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H17b	The relationships between accounting learning and target pricing focus will be positively moderated by accounting system efficiency.	Not Supported
H17c	The relationships between accounting learning and performance evaluation competency will be positively moderated by accounting system efficiency.	Not Supported
H17d	The relationships between accounting learning and customer profitability analysis will be positively moderated by accounting system efficiency.	Not Supported
H17e	The relationships between accounting learning and activity-based management capability will be positively moderated by accounting system efficiency.	Not Supported
H17f	The relationships between accounting learning and management control orientation will be positively moderated by accounting system efficiency.	Not Supported
H18a	The relationships between accountant modern competency and cost allocation concentration will be positively moderated by accounting system efficiency.	Not Supported
H18b	The relationships between accountant modern competency and target pricing focus will be positively moderated by accounting system efficiency.	Not Supported
H18c	The relationships between accountant modern competency and performance evaluation competency will be positively moderated by accounting system efficiency.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H18d	The relationships between accountant modern competency and customer profitability analysis will be positively moderated by accounting system efficiency.	Not Supported
H18e	The relationships between accountant modern competency and activity-based management capability will be positively moderated by accounting system efficiency.	Not Supported
H18f	The relationships between accountant modern competency and management control orientation will be positively moderated by accounting system efficiency.	Not Supported
H19a	The relationships between accounting environment and cost allocation concentration will be positively moderated by accounting system efficiency.	Not Supported
H19b	The relationships between accounting environment and target pricing focus will be positively moderated by accounting system efficiency.	Not Supported
H19c	The relationships between accounting environment and performance evaluation competency will be positively moderated by accounting system efficiency.	Not Supported
H19d	The relationships between accounting environment and customer profitability analysis will be positively moderated by accounting system efficiency.	Not Supported
H19e	The relationships between accounting environment and activity-based management capability will be positively moderated by accounting system efficiency.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H19f	The relationships between accounting environment and management control orientation will be positively moderated by accounting system efficiency.	Supported
H20a	The relationships between cost allocation concentration and financial information usefulness will be positively moderated by information management experience.	Not Supported
H20b	The relationships between cost allocation concentration and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H20c	The relationships between cost allocation concentration and business operation quality will be positively moderated by information management experience.	Not Supported
H20d	The relationships between cost allocation concentration and valuable decision-making will be positively moderated by information management experience.	Not Supported
H21a	The relationships between target pricing focus and financial information usefulness will be positively moderated by information management experience.	Not Supported
H21b	The relationships between target pricing focus and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H21c	The relationships between target pricing focus and business operation quality will be positively moderated by information management experience.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H21d	The relationships between target pricing focus and valuable decision-making will be positively moderated by information management experience.	Not Supported
H22a	The relationships between performance evaluation competency and financial information usefulness will be positively moderated by information management experience.	Not Supported
H22b	The relationships between performance evaluation competency and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H22c	The relationships between performance evaluation competency and business operation quality will be positively moderated by information management experience.	Not Supported
H22d	The relationships between performance evaluation competency and valuable decision-making will be positively moderated by information management experience.	Not Supported
H23a	The relationships between customer profitability analysis and financial information usefulness will be positively moderated by information management experience.	Not Supported
H23b	The relationships between customer profitability analysis and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H23c	The relationships between customer profitability analysis and business operation quality will be positively moderated by information management experience.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H23d	The relationships between customer profitability analysis and valuable decision-making will be positively moderated by information management experience.	Not Supported
H24a	The relationships between activity-based management capability and financial information usefulness will be positively moderated by information management experience.	Not Supported
H24b	The relationships between activity-based management capability and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H24c	The relationships between activity-based management capability and business operation quality will be positively moderated by information management experience.	Not Supported
H24d	The relationships between activity-based management capability and valuable decision-making will be positively moderated by information management experience.	Supported
H25a	The relationships between management control orientation and financial information usefulness will be positively moderated by information management experience.	Not Supported
H25b	The relationships between management control orientation and managerial practice advantage will be positively moderated by information management experience.	Not Supported
H25c	The relationships between management control orientation and business operation quality will be positively moderated by information management experience.	Not Supported

Table 10: Summary of the Results of Hypothesis Testing (Continued)

Hypotheses	Description of Hypothesized Relationships	Results
H25d	The relationships between management control orientation and valuable decision-making will be positively moderated by information management experience.	Not Supported
H26	The relationships between financial information usefulness and valuable decision-making will be positively moderated by organizational adaptation capability.	Not Supported
H27	The relationships between managerial practice advantage and valuable decision-making will be positively moderated by organizational adaptation capability.	Not Supported
H28	The relationships between business operation quality and valuable decision-making will be positively moderated by organizational adaptation capability.	Not Supported

Additional Test of Effects of Managerial Accounting Innovation Implementation on Its Consequences

With respect to the relationship, this research posits managerial accounting innovation implementation (MAII) as the antecedents of consequences. For the independent variables is managerial accounting innovation implementation. The dependent variables are financial information usefulness, managerial practice advantage, business operation quality and valuable decision making. Table 11 shows the results of OLS regression analysis of the relationships between managerial accounting innovation implementation on its consequences are provided in Table 11.

Table 11: Additional Test of Effects of Managerial Accounting Innovation Implementation on Its Consequences and the Moderating Role of Constructs

Independent Variables	**Dependent Variables**							
	FIU	**FIU**	**MPA**	**MPA**	**BOQ**	**BOQ**	**VDM**	**VDM**
	Model	**Model**	**Model**	**Model**	**Model**	**Model**	**Model**	**Model**
MAII	**.534***** (.082)	**.328***** (.106)	**.589***** (.079)	**.279***** (.097)	**.481***** (.084)	**.**163 (.102)	**.657***** (.073)	**.407***** (.090)
IME		**.284***** (.108)		**.413***** (.099)		**.441***** (.104)		**.338***** (.092)
MAII x IME		**.121*** (.068)		**.129**** (.062)		**.173***** (.066)		**.168***** (.058)
FS	.035 (.172)	-.110 (.172)	.011 (.165)	-.180 (.157)	.155 (.176)	-.064 (.165)	-.139 (.154)	**-.323**** (.146)
FA	-.132 (.177)	-.030 (.173)	-.035 (.170)	.106 (.159)	-.273 (.181)	-.117 (.167)	.035 (.158)	.162 (.147)
Adjusted R^2	.297	.360	.349	.463	.262	.407	.436	.536
Maximum VIF	1.129	1.881	1.129	1.881	1.129	1.881	1.129	1.881

*** p < 0.01, ** p < 0.05, * p < 0.10 [a] Beta coefficients with standard errors in parenthesis

For additional testing, Table 11 shows that managerial accounting innovation implementation has significantly and positively affect financial information usefulness (β = .534, p < .01), managerial practice advantage (β = .589, p < .01), business operation quality (β = .481, p < . 01) and valuable decision making (β = .657, p < . 01). As a whole, Managerial accounting innovation implementation has a potential influence on

its four consequences which consist of financial information usefulness, managerial practice advantage, business operation quality, and valuable decision making.

Moderating Effects of Information Management Experience

With respect to the relationship, this research posits information management experience as moderator that moderate the relationship between managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision making. The results of OLS regression analysis of information management experience as the moderator that moderates the relationship between managerial accounting innovation implementation on its consequences are provided in Table 11.

The results also present that the moderating effects of information management experience, the results in Table 11 show that significant moderating effects of information management experience on the relationships between managerial accounting innovation implementation and financial information usefulness (β = .121, p < .10), managerial practice advantage (β = .129, p < .05), business operation quality (β = .173, p < .01) and valuable decision making (β = .168, p < . 01) which consist of financial information usefulness, managerial practice advantage, business operation quality, and valuable decision making. Thus, the result imply that managerial accounting innovation implementation have a direct potential influence on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision making.

Additional Test of Effects of the Antecedents on Managerial Accounting Innovation Implementation

For additional testing, the results of OLS regression analysis are illustrated in Table 12. also the relationships between antecedents of managerial accounting innovation implementation, the results in Table 12 also indicate that managerial accounting innovation implementation are significant and positively affect accounting vision (β = .076, p > .10), accounting knowledge (β = .071, p > .10), accounting learning (β = .183, p > .10), accountant modern competency (β = .321, p < .01), and accounting environment (β = .152, p > .10). Surprisingly, in part of antecedents of MAII, the result

shows that accountant modern competency have only a potential effect on MAII.

Table 12: Additional Test of Effects of the Antecedents on Managerial Accounting Innovation Implementation and the Moderating Role of Constructs

Independent Variables	Dependent Variables	
	MAII	**MAII**
	Model	**Model**
ACV	.076 (.130)	.024 (.132)
ACK	.071 (.136)	.113 (.139)
ACL	.183 (.123)	.108 (.128)
AMC	**.321***** (.114)	**.313***** (.116)
ACE	.152 (.099)	.099 (.111)
ASE		.144 (.122)
ACV x ASE		-.028 (.149)
ACK x ASE		.065 (.143)
ACL x ASE		.027 (.128)
AMC x ASE		-.116 (.144)
ACE x ASE		.175 (.107)
FS	-.114 (.153)	-.100 (.156)
FA	-.013 (.157)	-.102 (.162)
Adjusted R^2	.487	.526
Maximum VIF	3.698	5.998

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$ [a] Beta coefficients with standard errors in parenthesis

However, the results of each dimension of managerial accounting innovation implementation (See in Table 9) show that all antecedents which consist of accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accounting environment have direct potential effects on each dimension of managerial accounting innovation implementation. Therefore, the results imply that all antecedents of managerial accounting innovation implementation have significant influences on some dimension of managerial accounting innovation implementation but not all dimensions of managerial accounting innovation implementation.

Moderating Effects of Accounting System Efficiency

With respect to the relationship, this research posits accounting system efficiency as moderator of the relationships among antecedents and managerial accounting innovation implementation. The results of OLS regression analysis of accounting system efficiency that moderates the relationships between the antecedents and managerial accounting innovation implementation are provided in Table 12.

This research posits that accounting system efficiency positively moderates the relationships between the antecedents and managerial accounting innovation implementation. The results depicted in Table 12 indicate that accounting system efficiency does not significantly moderate the relationship between managerial accounting innovation implementation on accounting vision (β = -.028, p > .10), accounting knowledge (β = .065, p > .10), accounting learning (β = .027, p > .10), accountant modern competency (β = -.116, p > .10), and accounting environment (β = .175, p > .10). Inversely, it has a significant direct effect on managerial accounting innovation implementation.

CHAPTER V

CONCLUSION

This research investigates the effects of managerial accounting innovation implementation which includes cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. This research also investigates the relationships among financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making. Moreover, the relationships between the antecedents which include; accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment on managerial accounting innovation implementation. The moderating effects of accounting system efficiency moderate the relationship between the antecedents and managerial accounting innovation implementation. Moreover, the information management experience is also examined as the moderators of the relationships between managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Besides, the organizational adaptation capability is also examined as the moderators of the relationships between financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making.

The key research question of this research is how each dimension of managerial accounting innovation implementation has an impact on valuable decision-making. Furthermore, the specific questions are as follows: (1) How does each dimension of managerial accounting innovation implementation have an influence on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making?, (2) How do financial information usefulness, managerial practice advantage, and business operation quality have an influence on valuable decision-making?, (3) How does the congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency and

accounting environment have an effect on each dimension of managerial accounting innovation implementation?, (4) How does accounting system efficiency moderate the relationships among congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency, accounting environment, and managerial accounting innovation implementation?, (5) How does information management experience moderate the relationships among managerial accounting innovation implementation, financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making? And (6) How does organizational adaptation capability moderate the relationships between financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making?.

The relationships among the constructs in the conceptual framework are potentially derived based on two theories, including the resource-advantage theory and the contingency theory. Firstly, the resource-advantage theory is applied to explain the relationships among managerial accounting innovation implementation and its consequences. Under this theory, managerial accounting innovation implementation is a valuable intangible resource that helps maximize financial performance through the creation of managerial decision quality. As a result, electronic firms have accounting information advantage for making managerial decisions effectively and efficiently. Consequently, these firms can meet business success and business sustainability. Finally, the contingency theory is also applied to explain the relationships among managerial accounting innovation implementation and its antecedents. This theory explains that under uncertain environments, the electronic firms have to adapt themselves to be a business survivor. Therefore, these firms develop their internal systems and humans such as accounting vision, accounting knowledge, accounting learning, accountant modern competency, and accounting environment for supporting the managerial accounting innovation implementation to maximize business competency.

This research selects electronic parts businesses in Thailand drawn from the database of the Department of Business Development as the population, because Thailand' electronic parts businesses attracted a large amount of the country's foreign direct investment (FDI), making it one of the most attractive sectors for foreign

investment. This is because about 80% of the electrical and electronic goods made in Thailand are exported. The electronic parts businesses are the largest industrial export sector in Thailand and have led the country' export growth over the past decades. It is also likely to continue to Thailand's future international trade (Hobday and Rush, 2007). The questionnaire is used as the data collection instrument; therefore, 593 questionnaires are directly mailed to the head accounting manager or accounting executive of each firm. The key participants of this research are the heads of accounting managers or accounting executives of the electronic parts businesses in Thailand. They are chosen as the key participants because they have an important direct effect on practices and innovation managerial accounting in each firm; moreover, they are well suited to provide the detailed cost system and other information of the organization.

The evidence reveals that managerial accounting innovation implementation positively impacts to financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. Managerial practice advantage and business operation quality has the positive relationship to valuable decision-making. For the moderating effects, the results indicate that information management experience has a positive effect on the relationships between managerial accounting innovation implementation and valuable decision-making. However, the results also show that organizational adaptation capability does not have the moderating effects on the relationships among financial information usefulness, managerial practice advantage and business operation quality on valuable decision-making. For the influences of the antecedents, the findings reveal that accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment positively affect managerial accounting innovation implementation. However, the results also show that organizational adaptation capability does not have the moderating effects on the relationships among the antecedents on managerial accounting innovation implementation. In sum, the key research questions are supported by the empirical evidences. In addition, the specific research questions are also partially supported.

Contributions

Theoretical Contribution

The objective of this paper is to gain a vivid understanding of the relationship between managerial accounting innovation implementation and valuable decision-making. This research provides an important expansion on previous knowledge and relevant literature of managerial accounting innovation implementation. The research applies two principal theoretical frameworks, including the resource-advantage theory of the firm and the contingency theory which are both used to explain the antecedents and consequences of managerial accounting innovation implementation. Moreover, this research focuses on the dimensions of managerial accounting innovation implementation including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation of financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making. In addition, this research integrates the antecedents of managerial accounting innovation implementation including accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment which affect on managerial accounting innovation implementation in the same model. Additionally, the moderating effect of accounting system efficiency affects the relationships between accounting vision, accounting knowledge, accounting learning, accountant modern competency, accounting environment and managerial accounting innovation implementation. Moreover, the moderating effects of information management experience affects the relationships between the dimensions of managerial accounting innovation implementation and financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making in the same model. Furthermore, the moderating effects of organizational adaptation capability affects the relationships between financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making in the same model.

For the validity and reliability of the developed questionnaire, this research tests the validity by using confirmatory factor analysis and the reliability is tested by using Cronbach's alpha coefficient. The results of testing indicate that this data

collection instrument is acceptable. The results also indicate that the resource-advantage theory can be used to maximize financial performance through the creation of managerial decision quality. Moreover, the contingency theory can help explain that under uncertain environments the firm has to adapt themselves to be a business survivor. However, some results of statistical analyses show no support of some postulated hypotheses. Therefore, some constructs in the conceptual framework are modified for further research.

Managerial Implication

Another implication now exists for firm owners, executives, and managers in manufacturing firms. This research helps managers identify and justify key components of managerial accounting innovation implementation that may help manufacturing firms be successful in the long term. Managers should effectively manage and utilize the components of managerial accounting innovation implementation including cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation to sustain and succeed in both the competitive advantage and valuable decision-making. These managers may put more emphasis on managerial accounting innovation implementation rather than external factors, because it is organizational structure followed by the concept of the contingency theory which can be easily managed. In the challenge of managerial accounting innovation implementation, managers should implement advance cost accounting technique and computer-based system that provide the important cost information for decision-making such as sourcing, product pricing and mix, process improvement, producing design and increase or decrease the product. Managers should also plan to expand their managerial accounting innovation implementation to continuously maintain and increase the levels of business excellence, competitive advantage, and firm success.

Moreover, the results of the antecedents of managerial accounting innovation implementation indicate that managerial accounting innovation implementation can be created from accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment. Especially, the manufacturing firm should concentrate on developing accountant competency for instance; the firm should

actively support on training and seminars in advance cost accounting techniques in order to improve skills, abilities, and experience of the accountant. Additionally, top management should concentrate on managerial accounting innovation implementation within the manufacturing firm by showing strong active support. As a result, the firm has higher successful managerial accounting innovation implementation and valuable decision-making.

Limitations and Future Research Directions

Limitations

This research has some limitations that should be mentioned. Firstly, electronic parts businesses in Thailand are designated as the population and sample of analysis. However, the usable sample size of this research has only 110 which are considered small though but theoretically accepted. Hence, this limitation may affect the power of testing in that the results of the hypothesized may have been impacted. Then, researchers should be concerned with interpreting the analyzed results.

Next, the measurements of all constructs in this research are newly developed with some modifications, based on literature reviews and related theories. Also, the research variables were measured by subjective (perceptual) measures. Thus, it is likely that there exist some perceptual differences among the respondents. It seems a little difficult to keep the consistency of responses gathered on the Likert scales across organizations. Though the measurements are developed using the content validated by experts, it may be doubtful without an in-depth interview from the firm's practitioners. Consequently, the results may be impacted by using these scales. Hence, the interpretations of the results should be carefully made and implemented.

Finally, the results of this research are derived from the data solely collected from the electronic parts businesses in Thailand. Thus, the findings of this research may be narrow they lack a general concept like other sectors such as automotive parts businesses, the business of product consumer manufacturing, and other manufacturing industries or other countries.

Future Research Directions

According to the limitations and confirming the results of this research, the need for future research is apparent. Firstly, there are some constructs such as the moderating effects that are mostly insignificant. As a result, future research needs to re-investigate the research hypotheses that are not statistically significant, and should consider seeking to study other potential moderating variables.

Secondly, this research used questionnaires to collect the data. Consequently, self administration may lead to a bias and the halo effect. Future researchers should apply other methods such as in-depth interviews, experiments, and case studies to collect the data. Furthermore, future research may be tested and analyzed with other methods such as structural equation modeling. If the whole model could be analyzed simultaneously, the cause and effect relationships among research variables could be proposed.

Finally, the limitation of this research is a usable sample which is only 110 of the electronic parts businesses in Thailand. Future research should try other populations or samples either in Thailand or other countries for comparative study to broaden the perspective.

Summary

This chapter has detailed the conclusion of results of the effects of managerial accounting innovation implementation on financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making supported by the theoretical frameworks including the resource-advantage theory and the contingency theory. The contents involve contributions including theoretical contributions, and managerial contributions. The theoretical contributions indicate that the resource-advantage theory can be used to explain the relationships among managerial accounting innovation implementation and its consequences. Under this theory, managerial accounting innovation implementation is a valuable intangible resource that helps maximize financial performance through the creation of managerial decision quality. Moreover, the contingency theory can help explain the relationships among managerial accounting innovation implementation and its antecedents. This

theory explains that under uncertain environments it affects electronic firms as they have to adapt themselves to be a business survivor. In addition, limitations and future research directions are presented. Finally, Figure 8 and Table 13 conclude the final conceptual model of this research and a summary of the results of the research.

Figure 8: Summary of the Supported Hypotheses

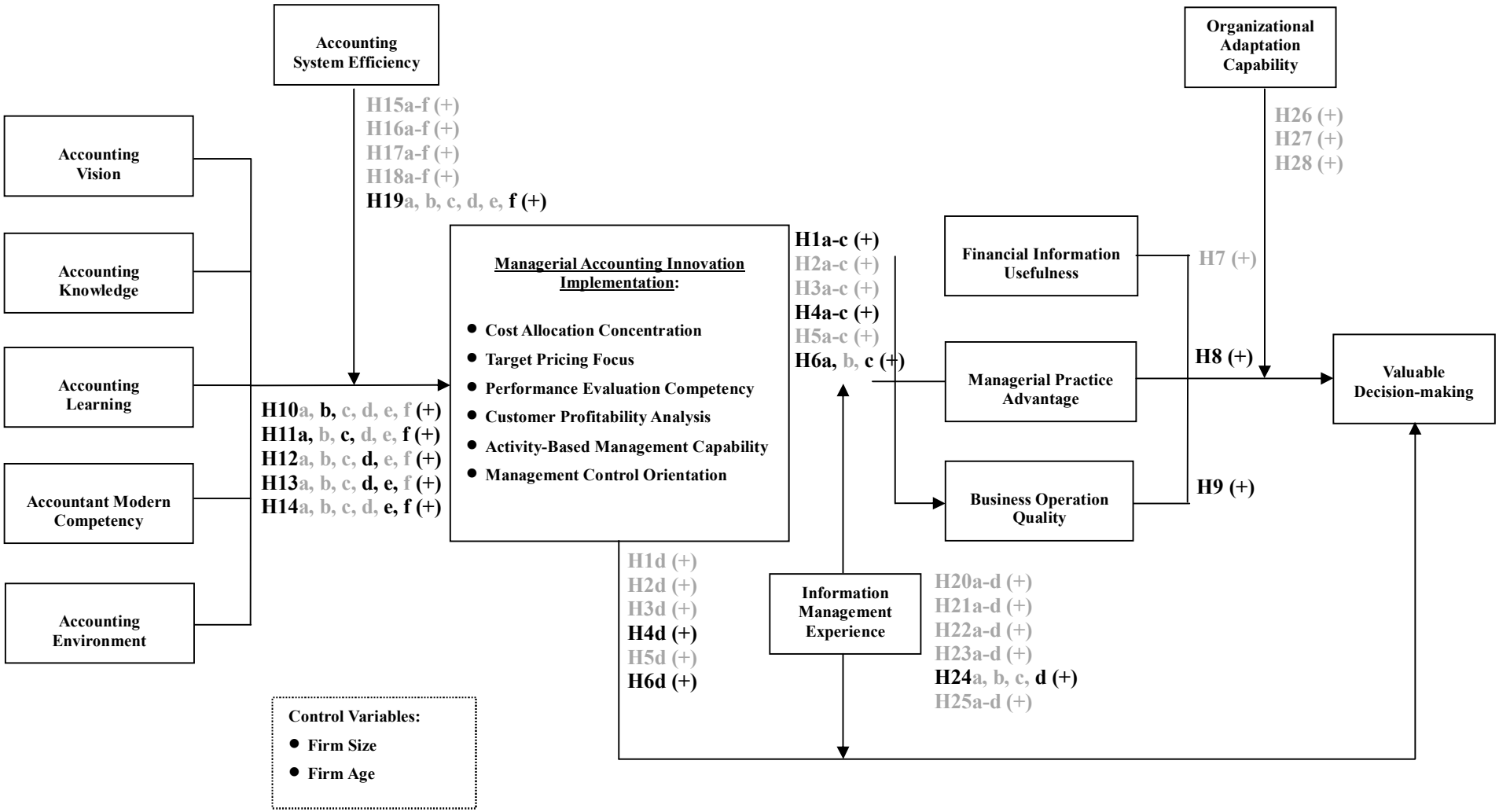


Table 13: Summary of Results in All Hypotheses Testing

Research Questions	Hypotheses	Results	Conclusion
(1) How does each dimension of managerial accounting innovation implementation have an influence on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making?	Hypotheses 1a-d	Cost allocation concentration has a positive influence only on financial information usefulness, managerial practice advantage, and business operation quality.	Partially Supported
	Hypotheses 2a-d	Target pricing focus does not positively influence only on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making.	Not Supported
	Hypotheses 3a-d	Performance evaluation competency does not positively influence only on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making.	Not Supported
	Hypotheses 4a-d	Customer profitability analysis has a positive influence only on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making.	Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypotheses 5a-d	Activity-based management capability does not positively influence only on financial information usefulness, managerial practice advantage, business operation quality, and valuable decision-making.	Not Supported
	Hypotheses 6a-d	Management control orientation has a positive influence only on financial information usefulness, business operation quality, and valuable decision-making.	Partially Supported
(2) How do financial information usefulness, managerial practice advantage, and business operation quality have an influence on valuable decision-making?	Hypotheses 7	Financial information usefulness do not positively effect on valuables decision-making.	Not Supported
	Hypotheses 8	Managerial practice advantage has a positive effect on valuables decision-making.	Supported
	Hypotheses 9	Business operation quality has a positive effect on valuables decision-making.	Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
(3) How does the congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency and accounting environment have an effect on each dimension of managerial accounting innovation implementation?	Hypotheses 10a-f	Accounting vision has positive effects only on target pricing focus.	Partially Supported
	Hypotheses 11a-f	Accounting knowledge has positive effects only on cost allocation concentration, performance evaluation competency, and management control orientation.	Partially Supported
	Hypotheses 12a-f	Accounting learning has positive effects only on customer profitability analysis.	Not Supported
	Hypotheses 13a-f	Accountant modern competency has positive effects only on customer profitability analysis and activity-based management capability.	Not Supported
	Hypotheses 14a-f	Accounting environment has positive effects only on activity-based management capability and management control orientation.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
(4) How does accounting system efficiency moderate the relationships among congruence of accounting vision, accounting knowledge, accounting learning, accountant modern competency, accounting environment, and managerial accounting innovation implementation?	Hypotheses15a-f	Accounting system efficiency does not positively moderate the relationships between accounting vision and cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation.	Not Supported
	Hypotheses16a-f	Accounting system efficiency does not positively moderate the relationships between accounting knowledge and cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypotheses17a-f	Accounting system efficiency does not positively moderate the relationships between accounting learning and cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation.	Not Supported
	Hypotheses18a-f	Accounting system efficiency does not positively moderate the relationships between accountant modern competency and cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypotheses19a-f	Accounting system efficiency does not positively moderate the relationships between accounting environment and cost allocation concentration, target pricing focus, performance evaluation competency, customer profitability analysis, activity-based management capability, and management control orientation.	Not Supported
(5) How does information management experience moderate the relationships among managerial accounting innovation implementation, financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making?	Hypotheses 20a-d	Information management experience does not positively moderates only the relationships between cost allocation concentration and financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypotheses 21a-d	Information management experience does not positively moderates only the relationships between target pricing focus and financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making.	Not Supported
	Hypotheses 22a-d	Information management experience does not positively moderates only the relationships between performance evaluation competency and financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making.	Not Supported
	Hypotheses 23a-d	Information management experience does not positively moderates only the relationships between customer profitability analysis and financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypotheses 24a-d	Information management experience positively moderates only the relationships between activity-based management capability and valuable decision-making.	Partially Supported
	Hypotheses 25a-d	Information management experience does not positively moderates only the relationships between management control orientation and financial information usefulness, managerial practice advantage, business operation quality and valuable decision-making.	Not Supported
(6) How does organizational adaptation capability moderate the relationships between financial information usefulness, managerial practice advantage, and business operation quality on valuable decision-making?	Hypothesis 26	Organizational adaptation capability does not positively moderate the relationship between financial information usefulness and valuable decision-making.	Not Supported

Table 13: Summary of Results in All Hypotheses Testing (Continued)

Research Questions	Hypotheses	Results	Conclusion
	Hypothesis 27	Organizational adaptation capability does not positively moderate the relationship between managerial practice advantage and valuable decision-making.	Not Supported
	Hypothesis 28	Organizational adaptation capability does not positively moderate the relationship between business operation quality and valuable decision-making.	Not Supported

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APPENDICES

APPENDIX A

Detail of Mail Survey Questionnaires

Appendix A - Detail of Mail Survey Questionnaires

Table A: Detail of Mail Survey Questionnaires

Detail of Mail Survey Questionnaires	Number
Questionnaires Mailing	593
Returned Questionnaires	48
Successful Questionnaires Mailing	545
Received Questionnaires	112
Incomplete Questionnaires	2
Complete and Usable Questionnaires	110
Response Rate (110*100/545)	20.18%

APPENDIX B

Tests of Non-Response Biases

Appendix B - Test of Non-response Bias

Table B: Test of Non-response Bias

Comparison	N	Mean	S.D.	t	Sig.*
Operation Capital:					
• First Group	55	2.400	1.435	.269	.444
• Second Group	55	2.327	1.402	.269	
Number of employees:					
• First Group	55	2.564	1.398	.138	.597
• Second Group	55	2.527	1.372	.138	
Firm age:					
• First Group	55	2.782	.994	-1.743	.901
• Second Group	55	3.109	.975	-1.743	

*$p < 0.05$

APPENDIX C

Results of Validity and Reliability Testing

Appendix C - Results of Validity and Reliability Testing

Table C: Results of Validity and Reliability Testing

Constructs	Factor Loadings	Alpha Coefficient
Valuable Decision-Making (VDM)	0.784- 0.863	0.868
Cost Allocation Concentration (CAC)	0.491- 0.777	0.647
Target Pricing Focus (TPF)	0.624- 0.902	0.791
Performance Evaluation Competency (PEC)	0.642- 0.874	0.784
Customer Profitability Analysis (CPA)	0.795- 0.884	0.869
Activity-Based Management Capability (ABM)	0.728 0.852	0.842
Management Control Orientation (MCO)	0.789- 0.916	0.870
Financial Information Usefulness (FIU)	0.809- 0.871	0.783
Managerial Practice Advantage (MPA)	0.857- 0.883	0.845
Business Operation Quality (BOQ)	0.882- 0.935	0.930
Accounting Vision (ACV)	0.749- 0.946	0.906
Accounting Knowledge (ACK)	0.850- 0.915	0.866
Accounting Learning (ACL)	0.762- 0.866	0.825
Accountant Modern Competency (AMC)	0.897- 0.920	0.922
Accounting Environment (ACE)	0.812- 0.910	0.889
Accounting System Efficiency (ASE)	0.796- 0.923	0.902
Information management Experience (IME)	0.777- 0.878	0.904
Organizational Adaptation Capability (OAC)	0.867- 0.886	0.847

N = 30

APPENDIX D

Factor Loadings and Alpha Coefficients of Constructs

Appendix D - Factor Loadings and Alpha Coefficients of Constructs

Table D: Factor Loadings and Alpha Coefficients of Constructs

Constructs	N	Number of Items	Factor Loadings	Alpha Coefficient
Cost Allocation Concentration (CAC)	30	4		.647
CAC1			.491	
CAC 2			.774	
CAC 3			.743	
CAC 4			.777	
Target Pricing Focus (TPF)	30	4		.791
TPF 1			.852	
TPF 2			.624	
TPF 3			.814	
TPF 4			.902	
Performance Evaluation Competency (PEC)	30	4		.784
PEC 1			.768	
PEC 2			.642	
PEC 3			.874	
PEC 4			.823	
Customer Profitability Analysis (CPA)	30	4		.869
CPA 1			.795	
CPA 2			.848	
CPA 3			.871	
CPA 4			.884	

Table D: Factor Loadings and Alpha Coefficients of Constructs (Continued)

Constructs	N	Number of Items	Factor Loadings	Alpha Coefficient
Activity-Based Management Capability (ABM)	30	5		.842
ABM1			.800	
ABM 2			.731	
ABM 3			.829	
ABM 4			.852	
ABM5			.728	
Management Control Orientation (MCO)	30	4		.870
MCO 1			.816	
MCO 2			.916	
MCO 3			.789	
MCO 4			.873	
Financial Information Usefulness (FIU)	30	3		.783
FIU 1			.871	
FIU 2			.851	
FIU 3			.809	
Managerial Practice Advantage (MPA)	30	3		.845
MPA 1			.883	
MPA 2			.883	
MPA 3			.857	
Business Operation Quality (BOQ)	30	4		.930
BOQ 1			.904	
BOQ 2			.882	
BOQ 3			.935	
BOQ 4			.916	

Table D: Factor Loadings and Alpha Coefficients of Constructs (Continued)

Constructs	N	Number of Items	Factor Loadings	Alpha Coefficient
Valuable Decision-Making (VDM)	30	5		.868
VDM 1			.784	
VDM 2			.833	
VDM 3			.863	
VDM 4			.818	
VDM 5			.790	
Accounting Vision (ACV)	30	4		.906
ACV 1			.749	
ACV 2			.900	
ACV 3			.935	
ACV 4			.946	
Accounting Knowledge (ACK)	30	3		.866
ACK 1			.908	
ACK 2			.915	
ACK 3			.850	
Accounting Learning (ACL)	30	4		.825
ACL 1			.794	
ACL 2			.866	
ACL 3			.853	
ACL 4			.762	
Accountant Modern Competency (AMC)	30	4		.922
AMC 1			.897	
AMC 2			.920	
AMC 3			.901	
AMC 4			.895	

Table D: Factor Loadings and Alpha Coefficients of Constructs (Continued)

Constructs	N	Number of Items	Factor Loadings	Alpha Coefficient
Accounting Environment (ACE)	30	4		.889
ACE 1			.845	
ACE 2			.910	
ACE 3			.908	
ACE 4			.812	
Accounting System Efficiency (ASE)	30	4		.902
ASE 1			.922	
ASE 2			.923	
ASE 3			.874	
ASE 4			.796	
Information management Experience (IME)	30	3		.904
IME 1			.777	
IME 2			.792	
IME 3			.878	
Organizational Adaptation Capability (OAC)	30	3		.847
OAC1			.877	
OAC2			.867	
OAC3			.886	

APPENDIX E

Key Participant Characteristics

Appendix E - Key Participant Characteristics

Table E: Key Participant Characteristics

Characteristics	Frequencies	Percentage (%)
1. Gender		
Male	20	18.19
Female	90	81.81
Total	**110**	**100**
2. Age		
Less than 30 years old	16	14.55
30 - 40 years old	41	37.27
41 - 50 years old	36	32.73
More than 50 years old	17	15.45
Total	**110**	**100**
3. Marital status		
Single	52	47.27
Married	54	49.09
Divorced	4	3.64
Total	**110**	**100**
4. Education level		
Lower than bachelor's degree or equivalent	74	67.27
Higher than bachelor's degree	36	32.73
Total	**110**	**100**
5. Working experience		
Less than 5 years	12	10.91
5-10 years	38	34.54
11-15 years	14	12.73
More than 15 years	46	41.82
Total	**110**	**100**

Table E: Key Participant Characteristics (Continued)

Characteristics	Frequencies	Percentage (%)
6. Average monthly income		
Less than 40,000 Baht	48	43.64
40,000 – 50,000 Baht	19	17.27
50,001 – 60,000 Baht	10	9.09
More than 60,000 Baht	33	30
Total	**110**	**100**
7. Working position		
Accounting executive	8	7.27
Accounting manager	102	92.73
Total	**110**	**100**

APPENDIX F

Firm Respondent Characteristics

APPENDIX F – Firm Respondent Characteristics

Table F – Firm Respondent Characteristics

Characteristics	Frequencies	Percentage (%)
1. Type of business		
Company	103	93.64
Partnership	7	6.36
Total	**110**	**100**
2. The location of the business		
North	13	11.82
Central	46	41.82
East	18	16.36
South	0	0.00
Northeast	6	5.45
Bangkok	27	24.55
Total	**110**	**100**
3. Operation capital of the firm		
Less than 25,000,000 Baht	52	47.27
25,000,000 – 40,000,000 Baht	10	9.09
40,000,001 – 55,000,000 Baht	4	3.64
More than 55,000,000 Baht	44	40.00
Total	**110**	**100**
4. Total assets of the firm		
Less than 50,000,000 Baht	45	40.91
50,000,000 – 100,000,000 Baht	15	13.64
100,000,001 – 200,000,000 Baht	5	4.54
More than 200,000,000 Baht	45	40.91
Total	**110**	**100**

Table F: Firm Respondent Characteristics (Continued)

Characteristics	Frequencies	Percentage (%)
5. Number of employees		
Less than 50 employees	43	39.09
50 – 100 employees	11	10.00
101 – 150 employees	9	8.18
More than 150 employees	47	42.73
Total	**110**	**100**
6. The period of time in proceeding business		
Less 5 years	7	6.36
5 – 10 years	36	32.73
11 – 15 years	23	20.91
More than 15 years	44	40.00
Total	**110**	**100**
7. Main customers group of the business		
Thai customers	43	39.09
Foreign customers	67	60.91
Total	**110**	**100**

APPENDIX G

Variance Inflation Factor and Tolerance of each Equation Model

Appendix G - Variance Inflation Factor and Toleranceof each Equation Model

The ideal situation for research would have a number of independent variables highly correlated with the dependent variable, but with little correlation among themselves. If the independent variables have highly correlated with themselves, it impacts to result of regression analysis. Consequently, the result of regression analysis is not believable. In order to test multicollinearity, this research uses Variance Inflation Factor (VIF). Nunnally, (1978) explain if VIF value greater than 10, it has multicollinearity. The VIF of each equation model is less than 10 implying that there is no multicollinearity.

Table G: Variance Inflation Factor and Tolerance of each Equation Model

Independent Variables	Dependent Variables															
	Equation 1: FIU		Equation 2: FIU		Equation 3: MPA		Equation 4: MPA		Equation 5: BOQ		Equation 6: BOQ		Equation 7: VDM		Equation 8: VDM	
	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs
CAC	.565	1.770	.517	1.935	.565	1.770	.517	1.935	.565	1.770	.517	1.935	.565	1.770	.517	1.935
TPF	.500	2.001	.472	2.118	.500	2.001	.472	2.118	.500	2.001	.472	2.118	.500	2.001	.472	2.118
PEC	.558	1.791	.504	1.983	.558	1.791	.504	1.983	.558	1.791	.504	1.983	.558	1.791	.504	1.983
CPA	.403	2.479	.387	2.581	.403	2.479	.387	2.581	.403	2.479	.387	2.581	.403	2.479	.387	2.581
ABM	.365	2.737	.335	2.981	.365	2.737	.335	2.981	.365	2.737	.335	2.981	.365	2.737	.335	2.981
MCO	.572	1.750	.468	2.139	.572	1.750	.468	2.139	.572	1.750	.468	2.139	.572	1.750	.468	2.139
IME			.312	3.204			.312	3.204			.312	3.204			.312	3.204
CAC x IME			.284	3.523			.284	3.523			.284	3.523			.284	3.523
TPF x IME			.281	3.554			.281	3.554			.281	3.554			.281	3.554
PEC x IME			.323	3.095			.323	3.095			.323	3.095			.323	3.095
CPA x IME			.306	3.271			.306	3.271			.306	3.271			.306	3.271
ABM x IME			.222	4.497			.222	4.497			.222	4.497			.222	4.497
MCO x IME			.351	2.847			.351	2.847			.351	2.847			.351	2.847
FS	.821	1.219	.723	1.383	.821	1.219	.723	1.383	.821	1.219	.723	1.383	.821	1.219	.723	1.383
FA	.872	1.146	.819	1.222	.872	1.146	.819	1.222	.872	1.146	.819	1.222	.872	1.146	.819	1.222

Table G: Variance Inflation Factor and Tolerance of each Equation Model (Continued)

Independent Variables	Dependent Variables			
	Equation 1: VDM		Equation 1: VDM	
	TOL	VIFs	TOL	VIFs
FIU	.417	2.397	.374	2.672
MPA	.304	3.287	.275	3.642
BOQ	.291	3.432	.228	4.376
OAC			.625	1.599
FIU x OAC			.366	2.733
MPA x OAC			.229	4.362
BOQ x OAC			.211	4.734
FS	.884	1.131	.869	1.151
FA	.857	1.167	.825	1.212

Table G: Variance Inflation Factor and Tolerance of each Equation Model (Continued)

Independent Variables	Dependent Variables																							
	Equation 11: CAC		Equation 12: CAC		Equation 13: TPF		Equation 14: TPF		Equation 15: PEC		Equation 16: PEC		Equation 17: CPA		Equation 18: CPA		Equation 19: ABM		Equation 20: ABM		Equation 21: MCO		Equation 22: MCO	
	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs	TOL	VIFs
ACV	.299	3.342	.284	3.517	.299	3.342	.284	3.517	.299	3.342	.284	3.517	.299	3.342	.284	3.517	.299	3.342	.284	3.517	.299	3.342	.284	3.517
ACK	.270	3.698	.255	3.914	.270	3.698	.255	3.914	.270	3.698	.255	3.914	.270	3.698	.255	3.914	.270	3.698	.255	3.914	.270	3.698	.255	3.914
ACL	.333	2.999	.300	3.329	.333	2.999	.300	3.329	.333	2.999	.300	3.329	.333	2.999	.300	3.329	.333	2.999	.300	3.329	.333	2.999	.300	3.329
AMC	.384	2.603	.370	2.706	.384	2.603	.370	2.706	.384	2.603	.370	2.706	.384	2.603	.370	2.706	.384	2.603	.370	2.706	.384	2.603	.370	2.706
ACE	.509	1.963	.400	2.500	.509	1.963	.400	2.500	.509	1.963	.400	2.500	.509	1.963	.400	2.500	.509	1.963	.400	2.500	.509	1.963	.400	2.500
ASE			.331	3.023			.331	3.023			.331	3.023			.331	3.023			.331	3.023			.331	3.023
ACV x ASE			.181	5.523			.181	5.523			.181	5.523			.181	5.523			.181	5.523			.181	5.523
ACK x ASE			.173	5.787			.173	5.787			.173	5.787			.173	5.787			.173	5.787			.173	5.787
ACL x ASE			.216	4.628			.216	4.628			.216	4.628			.216	4.628			.216	4.628			.216	4.628
AMC x ASE			.167	5.998			.167	5.998			.167	5.998			.167	5.998			.167	5.998			.167	5.998
ACE x ASE			.350	2.857			.350	2.857			.350	2.857			.350	2.857			.350	2.857			.350	2.857
FS	.861	1.161	.813	1.231	.861	1.161	.813	1.231	.861	1.161	.813	1.231	.861	1.161	.813	1.231	.861	1.161	.813	1.231	.861	1.161	.813	1.231
FA	.845	1.184	.785	1.274	.845	1.184	.785	1.274	.845	1.184	.785	1.274	.845	1.184	.785	1.274	.845	1.184	.785	1.274	.845	1.184	.785	1.274

APPENDIX H

Questionnaire in English version

Questionnaire to the Ph.D. Dissertation Research entitled
"Managerial Accounting Innovation Implementation and Valuable Decision-Making: An Empirical Investigation of Electronic Parts Businesses in Thailand"

Dear Sir,

This research is a part of doctoral dissertation of Miss. Nuntha Chankaew at Mahasarakham business school, Mahasarakham University, Thailand. The objective of this research is to investigate the relationships between managerial accounting innovation implementation and valuable decision-making of electronic parts businesses in Thailand.

The questionnaire is divided into 8 parts:

Part 1 Demographic data of head of accounting department of electronic parts businesses in Thailand
Part 2 General data of electronic parts businesses in Thailand
Part 3 Opinions on managerial accounting innovation implementation of electronic parts businesses in Thailand
Part 4 Opinions on managerial accounting innovation implementation outcomes of electronic parts businesses in Thailand
Part 5 Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand
Part 6 Opinions on the external factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand
Part 7 Recommendations and suggestions for managerial accounting innovation implementation of electronic parts businesses in Thailand

Your answer will be kept as confidentiality and your information will not be shared with any outside 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 to answer all questions completely. I very much hope that your answer will provide the valuable information for academic advancement. If you have any question with respect to this research, please feel free to contact me directly.

Sincerely yours,

(Nuntha Chankaew)
Ph. D. Student
Faculty of accountancy and Management
Mahasarakham University, Thailand

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Fax No: 043-754422
Cell phone: 081-6982584
E-mail: TATA123-2517@hotmail.com

Questionnaire to the Ph.D. Dissertation Research entitled
"Managerial Accounting Innovation Implementation and Valuable Decision-Making: An Empirical Investigation of Electronic Parts Businesses in Thailand"

Part 1: Demographic data of head of accounting department of Thai listed firm

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. Education level

☐ Lower than bachelor's degree or equal

☐ Higher than bachelor's degree

5. Working experience

☐ Less than 5 years ☐ 5 - 10 years

☐ 11 - 15 years ☐ More than 15 years

6. Average monthly income at present

☐ Less than 40,000 Baht ☐ 40,000-50,000 Baht

☐ 50,001-60,000 Baht ☐ More than 60,000 Baht

7. Working position at present

☐ Accounting executive ☐ Accounting manager

Part 2: General data of electronic parts businesses Thailand

1. Type of business

☐ Company ☐ Partnership

2. The location of the business

☐ North ☐ Central

☐ East ☐ South

☐ Northeast ☐ Bangkok

3. Operation capital of the firm

☐ Less than 25,000,000 Baht

☐ 25,000,000 - 40,000,000 Baht

☐ 40,000,001 – 55,000,000 Baht

☐ More than 55,000,000 Baht

4. Total assets of the firm

☐ Less than 50,000,000 Baht

☐ 50,000,000 - 100,000,000 Baht

☐ 100,000,001 – 200,000,000 Baht

☐ More than 200,000,000 Baht

5. Number of employees

☐ Less than 50 employees ☐ 50-100 employees

☐ 101-150 employees ☐ More than 150 employees

6. The period of time in proceeding business

☐ Less than 5 years ☐ 5-10 years

☐ 11-15 years ☐ More than 15 years

7. The main customers group of the business

☐ Thai customers ☐ Foreign customers

Part 3: Opinions on managerial accounting innovation implementation of electronic parts businesses in Thailand

Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
Cost Allocation Concentration					
1. Company believes that the criteria for allocating the cost of regulation. The correct and appropriate to can help companies achieve better.	5	4	3	2	1
2. Company focuses on the research on the cost allocation rules to serve as guidelines for the correct accounting practice and the most appropriate.	5	4	3	2	1
3. Company focuses on cost allocation to reflect the use of resources and costs involved to data used to calculate the cost of operations to be more effective.	5	4	3	2	1
4. Company recognizes that the cost allocation be consistent with the situation and to encourage businesses to work better.	5	4	3	2	1
Target Pricing Focus					
5. Company believes that the pricing of goods and services by the target to help company has goal into work clear and to the point.	5	4	3	2	1
6. Company focuses on exploring the price level of goods and services in the market to use the information in the set and pricing of goods and services for the operation of the business to be appropriate and more accurate.	5	4	3	2	1

Part 3: Opinions on managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
7. Company is fully aware that the quality of products pricing and services the appropriate must comply with products attribute and services and effectiveness of use of such products and services.	5	4	3	2	1
8. Company is committed to the pricing of goods and services to can push for the company to profitability efficiency and effectiveness in operations present and in the future.	5	4	3	2	1
Performance Evaluation Competency 9. Company believes that a good performance evaluation will help encourage staff to work more efficiently.	5	4	3	2	1
10. Company to focus on a guidelines set and performance evaluation procedures In order to motivate employees to work to achieve success.	5	4	3	2	1
11. Company is focused on acquiring the correct rules and procedures for evaluating performance to support and encourage staff are eager to fully functional.	5	4	3	2	1
12. Company realizes that the performance evaluation accurate and appropriate can to motivation for businesses and employees fully functional and present success and in the future.	5	4	3	2	1
Customer Profitability Analysis 13. Company believes that the analyze profitability ability for each customer to help businesses manage more efficiently.	5	4	3	2	1

Part 3: Opinions on managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
14. Company focus on education and research about costs and expenses incurred for each customer to be used as the basic information for service presentation and reasonable pricing set to the customers.	5	4	3	2	1
15. Company focused on presentation providing goods and services in line with the revenue of each client which can help to business understand and profit report of each customer very well.	5	4	3	2	1
16. Company fully aware that the revenue has occurred with a lost cost of each customer is appropriate to provide the company can plan of and forecast the profitability better.	5	4	3	2	1
Activity-Based Management capability					
17. Company believes that activity-based management allows operations efficiency and effectiveness.	5	4	3	2	1
18. Company focus on the analysis of the activities that add value and increase the value of the business this allows for a value-added activity and eliminate activities that do not add value.	5	4	3	2	1
19. Company focused on the use of value-added benefits to the organization this allows the company's ability to profit even more.	5	4	3	2	1
20. Company focus on the allocation of costs associated with resource use and cost reasons, or drives the performance goals and achieve better.	5	4	3	2	1

Part 3: Opinions on managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
21. Company focus on the administration taking into account the full value, which associated with value-added activities as a result, the performance is on target and achieves the objectives set out very well.	5	4	3	2	1
Management Control Orientation					
22. Company believes that good management control can help to ensure the operation is planned and efficiently.	5	4	3	2	1
23. Company focus on ways to control and manage black makes the work more effectively and efficiently.	5	4	3	2	1
24. Company focused on the development of administrative systems, reflecting the creation of revenue and control costs incurred in a systematic and concrete.	5	4	3	2	1
25. Company recognizes that the management control system and incentives to help drive the business to work more effectively and efficiently.	5	4	3	2	1

Part 4: Opinions on managerial accounting innovation implementation outcomes of electronic parts businesses in Thailand

Outcome From Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
Financial Information Usefulness					
1. Company has financial information that reflect the financial position and results of operations of the business correctly.	5	4	3	2	1

Part 4: Opinions on managerial accounting innovation implementation outcomes of electronic parts businesses in Thailand (Continued)

Outcome From Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
2. Company has financial information is correct and reliability, which can be used for analysis and decision making more effectively.	5	4	3	2	1
3. Company has financial information that can be used to predict the future accurately.	5	4	3	2	1
Managerial Practice Advantage 4. Company has operations cover the features and types of businesses in all areas.	5	4	3	2	1
5. Company has operations are different from competitors in the past, present and future events can be assessed accurately.	5	4	3	2	1
6. Company has approach to the management practices that can be applied to the broad issues at all.	5	4	3	2	1
Business Operation Quality 7. Company has procedures and processes to meet goals mission and vision of the business.	5	4	3	2	1
8. Company to operate as planned as well effective.	5	4	3	2	1
9. Company has operations as a whole is considered satisfactory better than others in the same industry consistent with the goals of the organization.	5	4	3	2	1
10. Company has financial information is correct and reliability, which can be used for analysis and decision making more effectively.	5	4	3	2	1

Part 4: Opinions on managerial accounting innovation implementation outcomes of electronic parts businesses in Thailand (Continued)

Outcome From Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
Valuable Decision Making					
11. Company has invested in projects that yield the highest efficiency continuously.	5	4	3	2	1
12. Company has analyzed the benefits from its own production or purchased from third parties as appropriate there are a lot of resources and activities.	5	4	3	2	1
13. Company can decide on the mix of ingredients in the manufacture and sale of the company as well as the results of operations better.	5	4	3	2	1
14. Company can determine the selling price of the product correctly and appropriate to the current economic environment.	5	4	3	2	1
15. Company can activity analysis with adding the appropriate line until the business is managed effectively.	5	4	3	2	1

Part 5: Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand

Internal Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
Accounting Vision					
1. Company believes that the performance of the accounts that focus on accuracy can be a driving force for business success in the short and long term.	5	4	3	2	1

Part 5: Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Internal Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
2. Company focus on the approach and practice of accounting in order to ensure that the business can operate smoothly and efficiently.	5	4	3	2	1
3. Company focus on accounting work to based on knowledge of the accounting profession operations as appropriate.	5	4	3	2	1
4. Company promote of accounting work taking into account the effect may be caused to the economy, society and nation.	5	4	3	2	1
Accounting Knowledge 5. Company believes that knowledge understanding of accounting the company has been operating at full potential.	5	4	3	2	1
6. Company recognizes the work of accountants can help control business operations more efficiently.	5	4	3	2	1
7. Company focus on the accuracy of accounting information by recognizing the ability to think critically in the previous issue as well.	5	4	3	2	1
Accounting Learning 8. Company believes that learning and understanding of accounting continues the company has been operating at full potential.	5	4	3	2	1
9. Company promote a better understanding of various accounting changes the accounting system allows for up to date on events.	5	4	3	2	1

Part 5: Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Internal Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
10. Company encourages development work with the budget for development and training and training on a regular basis. The company is run efficiently.	5	4	3	2	1
11. Company focus on innovation and new business accounts to meet the changing needs more quickly.	5	4	3	2	1
Accountant Modern Competency 12. Bookkeeper of the company's commitment to continuous self-development the conference, attended seminars and training on the principles, methods and new ideas the account continued.	5	4	3	2	1
13. Bookkeeper of the company's knowledge about innovation the new account as well.	5	4	3	2	1
14. Bookkeeper of the company's implications of new information technology in the preparation and presentation of relevant information and expertise.	5	4	3	2	1
15. Bookkeeper of the company's skills and experience in preparing the accounts in a long time.	5	4	3	2	1
Information Management Experience 16. Company believes that the experience in data management the company has operations in all aspects as well and effective.	5	4	3	2	1
17. Company encourage your staff to know their abilities and achievements of the past used as a guide to the present.	5	4	3	2	1

Part 5: Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Internal Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
18. Company realizes of the constant and continuous the staff is expert in the real.	5	4	3	2	1
19. Business focus on the information complete and ready for use in operational efficiency.	5	4	3	2	1
20. Company focus on develop a system that can retrieve information on the operations and decisions more effective.	5	4	3	2	1
Accounting System Efficiency 21. Company believes that a good accounting system can help to achieve better performance.	5	4	3	2	1
22. Company focused on developing systems that are more effective this can help to achieve the very high quality.	5	4	3	2	1
23. Company focuses on the application of the accounting system accordance with the operation of the organization as a result the target is planned.	5	4	3	2	1
24. Company realize that a good accounting system need to promote and encourage the parties to prepare and present financial reports as well and achieve more meet the requirements and standards the related regulations.	5	4	3	2	1
Organizational Adaptation Capability 25. Company believes that the rapid adjustment of the environment is highly competitive and uncertain the company can make better decisions and operate more efficiently.	5	4	3	2	1

Part 5: Opinions on the internal factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

Internal Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
26. Company encourages changing the way the administration continues to keep pace with the changing environment the business can operate effectively.	5	4	3	2	1
27. Company encouraged to learn a technique or a combination of new technologies into the enterprise the company can increase its competitiveness and to judge the product as well.	5	4	3	2	1

Part 6: Opinions on the external factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand

External Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	Agree 4	Not Sure 3	Disagree 2	Strongly Disagree 1
Accounting Environment 1. The stakeholders are expected to work in the accounting business the parties are directed to perform in accordance with standard accounting practices and procedures involved.	5	4	3	2	1
2. Decisions and operations are currently relies on good information and effective the activities were focused on the development of the accounting system more efficient.	5	4	3	2	1
3. In a related technology, accounting and more the activities were focused on the application of such technology to be prepared and have more.	5	4	3	2	1

Part 6: Opinions on the external factors that affect managerial accounting innovation implementation of electronic parts businesses in Thailand (Continued)

External Factor Affect of Managerial Accounting Innovation Implementation	Opinions levels				
	Strongly Agree 5	**Agree 4**	**Not Sure 3**	**Disagree 2**	**Strongly Disagree 1**
4. Companies were committed to the practice of accounting and financial reporting focusing on interests and needs of our stakeholders.	5	4	3	2	1

Part 7: Recommendations and suggestions for managerial accounting innovation implementation of electronic parts businesses in Thailand

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Thank you

APPENDIX I

Questionnaire in Thai version

<u>แบบสอบถามเพื่อการวิจัย</u>

เรื่อง: การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารและการตัดสินใจอย่างมีคุณค่า: การตรวจสอบเชิงประจักษ์ของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

<u>คำชี้แจง</u>

โครงการวิจัยนี้เป็นส่วนหนึ่งของการจัดทำวิทยานิพนธ์ในระดับปริญญาเอก โดยมีวัตถุประสงค์เพื่อศึกษาการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารและการตัดสินใจอย่างมีคุณค่า: การตรวจสอบเชิงประจักษ์ของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

ข้าพเจ้าขอขอบพระคุณที่ท่านได้สละเวลาตอบคำถามทุกข้ออย่างถูกต้องครบถ้วน หากท่านมีความประสงค์จะขอรับรายงานสรุปเกี่ยวกับโครงการวิจัยนี้ โปรดแจ้งความประสงค์ตามที่ระบุไว้ข้างล่างเพื่อจะได้จัดส่งข้อมูลดังกล่าวให้แก่ท่าน และหากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถามเพื่อการวิจัยชุดนี้ โปรดติดต่อข้าพเจ้า นางสาวนันทา จันทร์แก้ว นิสิตปริญญาเอก สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จังหวัดมหาสารคาม 44000 หมายเลขโทรศัพท์ 043-754333 ต่อ 6000 หรือ http://www.acc.msu.ac.th

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใด ๆ ที่เปิดเผยเกี่ยวกับธุรกิจของท่านในการรายงานข้อมูล อีกทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าว กับบุคคลภายนอกโดยไม่ได้รับอนุญาตจากท่าน

ผลจากการศึกษาจะถูกนำมาจัดทำเป็นรายงานสรุป ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

☐ต้องการ E-mail..... ☐ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่านส่วนท้ายของความต้องการ

ขอขอบพระคุณที่ให้ข้อมูลไว้ ณ โอกาสนี้

(นางสาวนันทา จันทร์แก้ว)
นิสิตปริญญาเอก สาขาการบัญชี
คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

ติดต่อโดยตรง:
โทรศัพท์มือถือ: 081-6982584
อีเมล์: TATA123-2517@hotmail.com

<u>ตอนที่ 1</u> ข้อมูลทั่วไปของผู้บริหารฝ่ายบัญชีของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

1. เพศ

☐ ชาย ☐ หญิง

2. อายุ

☐ น้อยกว่า 30 ปี ☐ 30 - 40 ปี

☐ 41 - 50 ปี ☐ มากกว่า 50 ปี

3. สถานภาพ

☐ โสด ☐ สมรส

☐ หม้าย/หย่าร้าง

4. ระดับการศึกษา

☐ ปริญญาตรีหรือต่ำกว่า ☐ สูงกว่าปริญญาตรี

5. ประสบการณ์ทำงานในบริษัท

☐ น้อยกว่า 5 ปี ☐ 5 – 10 ปี

☐ 11 – 15 ปี ☐ มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือน

☐ ต่ำกว่า 40,000 บาท ☐ 40,000 – 50,000 บาท

☐ 50,001 – 60,000 บาท ☐ มากกว่า 60,000 บาท

7. ตำแหน่งงานในปัจจุบัน

☐ ผู้อำนวยการฝ่ายบัญชี ☐ ผู้จัดการฝ่ายบัญชี

<u>ตอนที่ 2</u> ข้อมูลทั่วไปของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

1. รูปแบบธุรกิจ

☐ บริษัทจำกัด ☐ ห้างหุ้นส่วน

2. ที่ตั้งของธุรกิจ

☐ ภาคเหนือ ☐ ภาคกลาง

☐ ภาคตะวันออก ☐ ภาคใต้

☐ ภาคตะวันออกเฉียงเหนือ ☐ กรุงเทพมหานคร

3. ทุนในการดำเนินงาน

☐ ต่ำกว่า 25,000,000 บาท ☐ 25,000,000 – 40,000,000 บาท

☐ 40,000,001 - 55,000,000 บาท ☐ มากกว่า 55,000,000 บาท

4. มูลค่าสินทรัพย์รวมในปัจจุบัน

☐ ต่ำกว่า 50,000,000 บาท ☐ 50,000,000 - 100,000,000 บาท

☐ 100,000,001 - 200,000,000 บาท ☐ มากกว่า 200,000,000 บาท

5. จำนวนพนักงานทั้งหมดในปัจจุบัน

☐ น้อยกว่า 50 คน ☐ 50 – 100 คน

☐ 101 – 150 คน ☐ มากกว่า 150 คน

6. ระยะเวลาในการดำเนินธุรกิจ

☐ น้อยกว่า 5 ปี ☐ 5 - 10 ปี

☐ 11 - 15 ปี ☐ มากกว่า 15 ปี

7. กลุ่มลูกค้าหลักของธุรกิจ

☐ ลูกค้าชาวไทย ☐ ลูกค้าชาวต่างชาติ

<u>ตอนที่ 3</u> ความคิดเห็นเกี่ยวกับการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การมุ่งเน้นการปันส่วนต้นทุน (Cost Allocation Concentration) 1. กิจการเชื่อมั่นว่าการมีเกณฑ์ในการปันส่วนค่าใช้จ่ายด้วยหลักเกณฑ์ที่ถูกต้องและเหมาะสม สามารถช่วยให้กิจการประสบความสำเร็จได้ดียิ่งขึ้น					
2. กิจการให้ความสำคัญกับการศึกษาวิจัยเกี่ยวกับการกำหนดหลักเกณฑ์ปันส่วนต้นทุน เพื่อใช้เป็นแนวทางในการปฏิบัติทางการบัญชีได้ถูกต้องและเหมาะสมมากยิ่งขึ้น					
3. กิจการมุ่งเน้นให้มีการปันส่วนต้นทุน ที่สะท้อนให้เห็นถึงการใช้ทรัพยากรและค่าใช้จ่ายที่เกี่ยวข้อง เพื่อนำมาใช้เป็นข้อมูลในการคำนวณต้นทุนในการดำเนินงานให้มีประสิทธิภาพมากยิ่งขึ้น					
4. กิจการตระหนักเสมอว่าการปันส่วนต้นทุนที่ดี ต้องสอดคล้องกับสถานการณ์ที่เกิดขึ้นและสามารถผลักดันให้กิจการสามารถทำงานได้ดียิ่งขึ้น					
การมุ่งเน้นการตั้งราคาตามเป้าหมาย (Target Pricing Focus) 5. กิจการเชื่อมั่นว่าการกำหนดราคาสินค้าและบริการตามเป้าหมายช่วยให้กิจการมีเป้าหมายในการทำงานที่ชัดเจนและตรงประเด็น					
6. กิจการให้ความสำคัญกับการสำรวจระดับราคาสินค้าและบริการในตลาด เพื่อนำมาใช้เป็นข้อมูลในการกำหนดและตั้งราคาสินค้าและบริการในการดำเนินงานของกิจการให้มีความเหมาะสมและถูกต้องมากยิ่งขึ้น					
7. กิจการตระหนักเสมอว่าคุณภาพการตั้งราคาสินค้าและบริการที่เหมาะสม ต้องสอดคล้องกับคุณลักษณะของสินค้าและบริการ และประสิทธิภาพ ประสิทธิผลการใช้งานสินค้าและบริการดังกล่าว					
8. กิจการมุ่งมั่นให้มีการตั้งราคาสินค้าและบริการ ซึ่งสามารถผลักดันให้กิจการเกิดกำไร มีประสิทธิภาพและประสิทธิผลในการดำเนินงานทั้งในปัจจุบันและอนาคต					

<u>ตอนที่ 3</u> ความคิดเห็นเกี่ยวกับการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ความสามารถในการประเมินผลการปฏิบัติงาน (Performance Evaluation Competency) 9. กิจการเชื่อมั่นว่าการประเมินผลการปฏิบัติงานที่ดี ต้องช่วยส่งเสริมให้บุคลากรมีการปฏิบัติงานที่มีประสิทธิภาพมากยิ่งขึ้น					
10. กิจการให้ความสำคัญกับการกำหนดแนวทางและวิธีการในการประเมินผลการปฏิบัติงาน เพื่อให้บุคลากรเกิดแรงจูงใจในทำงานให้บรรลุผลสำเร็จขององค์กร					
11. กิจการมุ่งเน้นให้มีการแสวงหาหลักเกณฑ์และวิธีการที่ถูกต้องในการประเมินผลการปฏิบัติงาน เพื่อสนับสนุนและส่งเสริมให้บุคลากรมีความกระตือรือร้นในการปฏิบัติงานอย่างเต็มที่					
12. กิจการตระหนักเสมอว่าการประเมินผลการปฏิบัติงานที่ถูกต้องและเหมาะสม สามารถจูงใจให้กิจการและพนักงานทำงานอย่างเต็มที่และประสบผลสำเร็จทั้งในปัจจุบันและอนาคต					
การวิเคราะห์ความสามารถการทำกำไรจากลูกค้า (Customer Profitability Analysis) 13. กิจการเชื่อมั่นว่าการวิเคราะห์ความสามารถการทำกำไรสำหรับลูกค้าแต่ละราย ช่วยให้กิจการบริหารงานได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
14. กิจการให้ความสำคัญกับการศึกษาและวิจัยถึงต้นทุน และค่าใช้จ่ายที่เกิดขึ้นกับลูกค้าแต่ละราย เพื่อนำมาใช้เป็นข้อมูลพื้นฐานในการนำเสนอบริการและตั้งราคาที่เหมาะสมกับลูกค้าดังกล่าว					
15. กิจการมุ่งเน้นให้มีการนำเสนอสินค้าและบริการให้สอดคล้องกับรายได้ที่เกิดขึ้นของลูกค้าแต่ละราย ซึ่งสามารถช่วยให้กิจการเข้าใจและจัดทำรายงานกำไรของ ลูกค้าแต่ละรายได้เป็นอย่างดี					
16. กิจการตระหนักเสมอว่ารายได้ที่เกิดขึ้นกับค่าใช้จ่ายที่เสียไปจากลูกค้าแต่ละรายต้องมีความเหมาะสมกัน ทำให้กิจการสามารถวางแผนและคาดการณ์ความสามารถในการทำกำไรได้ดียิ่งขึ้น					

<u>ตอนที่ 3</u> ความคิดเห็นเกี่ยวกับการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ศักยภาพในการจัดการฐานกิจกรรม (Activity-Based Management Capability) 17. กิจการเชื่อมั่นว่าการจัดการฐานกิจกรรม ช่วยให้การดำเนินงานมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					
18. กิจการให้ความสำคัญกับการวิเคราะห์ถึงกิจกรรมที่เพิ่มมูลค่าและไม่เพิ่มมูลค่าของกิจการ ซึ่งช่วยให้สามารถคงไว้สำหรับกิจกรรมที่เพิ่มมูลค่าและกำจัดกิจกรรมที่ไม่เพิ่มมูลค่า					
19. กิจการมุ่งเน้นให้มีการใช้ประโยชน์จากกิจกรรมที่เพิ่มมูลค่าให้เกิดประโยชน์สูงสุดแก่องค์กร ซึ่งช่วยให้กิจการมีความสามารถในการทำกำไรได้มากยิ่งขึ้น					
20. กิจการมุ่งเน้นให้มีการกำหนดการปันส่วนต้นทุนที่สอดคล้องกับการใช้ทรัพยากรและสาเหตุหรือตัวผลักดันต้นทุน ทำให้การดำเนินงานบรรลุเป้าหมายและประสบผลสำเร็จได้ดียิ่งขึ้น					
21. กิจการมุ่งมั่นให้มีการบริหารงาน โดยคำนึงถึงวงจรมูลค่า โดยมีการเชื่อมโยงกิจกรรมที่เพิ่มมูลค่าเข้าด้วยกัน ซึ่งส่งผลให้การดำเนินงานเป็นไปตามเป้าหมายและประสบผลสำเร็จตามวัตถุประสงค์ที่วางไว้ได้เป็นอย่างดี					
การมุ่งเน้นการควบคุมการบริหาร (Management Control Orientation) 22. กิจการเชื่อมั่นว่าการควบคุมการบริหารที่ดี สามารถช่วยให้การดำเนินงานเป็นไปตามแผนงานที่วางไว้ได้อย่างมีประสิทธิภาพ					
23. กิจการให้ความสำคัญกับการแสวงหาแนวทางและระบบในการควบคุมการบริหาร ทำให้การดำนินงานเกิดประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					
24. กิจการมุ่งเน้นให้มีการพัฒนาระบบควบคุมการบริหาร ที่สะท้อนให้เห็นถึงการสร้างสรรรายได้และการควบคุมค่าใช้จ่ายที่เกิดขึ้นอย่างเป็นระบบและรูปธรรม					

<u>ตอนที่ 3</u> ความคิดเห็นเกี่ยวกับการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
25. กิจการตระหนักเสมอว่าระบบการควบคุมการบริหารที่ดี ต้องช่วยผลักดันและจูงใจให้กิจการปฏิบัติงานอย่างมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					

<u>ตอนที่ 4</u> ความคิดเห็นเกี่ยวกับผลลัพท์ที่ได้รับจากการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

ผลลัพท์ที่ได้รับจากการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ประโยชน์ของข้อมูลทางการเงิน (Financial Information Usefulness) 1. กิจการมีข้อมูลทางการเงินที่สะท้อนถึงฐานะทางการเงินและผลการดำเนินงานที่แท้จริงของกิจการได้อย่างถูกต้อง					
2. กิจการมีข้อมูลทางการเงินที่ถูกต้อง มีความน่าเชื่อถือได้ ซึ่งสามารถนำไปใช้วิเคราะห์และการตัดสินใจลงทุนได้อย่างมีประสิทธิภาพ					
3. กิจการมีข้อมูลทางการเงินที่สามารถนำไปใช้ในการพยากรณ์ผลการดำเนินงานในอนาคตได้อย่างถูกต้องแม่นยำ					
ข้อได้เปรียบของการปฏิบัติงานบริหารจัดการ (Managerial Practice Advantage) 4. กิจการมีการดำเนินงานที่ครอบคลุมคุณลักษณะและประเภทของกิจการในทุก ๆ ด้าน					
5. กิจการมีการดำเนินงานที่แตกต่างจากคู่แข่งขัน สามารถประเมินเหตุการณ์ในอดีต ปัจจุบัน และอนาคตได้อย่างถูกต้อง					
6. กิจการมีวิธีการในการปฏิบัติงานบริหารจัดการที่สามารถนำไปปรับประยุกต์ใช้ได้อย่างครอบคลุมและตรงประเด็นต่าง ๆที่เกี่ยวข้องทั้งหมด					

<u>ตอนที่ 4</u> ความคิดเห็นเกี่ยวกับผลลัพท์ที่ได้รับจากการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

ผลลัพท์ที่ได้รับจากการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
คุณภาพของการดำเนินธุรกิจ (Business Operation Quality) 7. กิจการมีวิธีการและกระบวนการทำงานที่เป็นไปตามจุดมุ่งหมาย พันธกิจ และวิสัยทัศน์ของกิจการ					
8. กิจการสามารถดำเนินงานเป็นไปตามเป้าหมายได้เป็นอย่างดีและมีประสิทธิภาพ					
9. กิจการมีการดำเนินงานในภาพรวมอยู่ในเกณฑ์ที่ดี เหนือกว่ากว่าธุรกิจอื่นในอุตสาหกรรมเดียวกัน สอดคล้องกับเป้าหมายที่ได้กำหนดไว้ขององค์กร					
10. กิจการมีการดำเนินงานที่ดีขึ้นอย่างต่อเนื่องเป็นไปตามเป้าหมายที่วางไว้					
การตัดสินใจอย่างมีคุณค่า (Valuable Decision Making) 11. กิจการมีการเลือกลงทุนในโครงการที่ได้รับผลตอบแทนสูงสุดได้อย่างมีประสิทธิภาพอย่างต่อเนื่อง					
12. กิจการมีการวิเคราะห์เกี่ยวกับผลประโยชน์ที่ได้จากการผลิตเองหรือซื้อจากบุคคลภายนอกได้อย่างเหมาะสม จนทำให้กิจการประหยัดทรัพยากรเป็นอย่างมาก					
13. กิจการสามารถตัดสินใจเลือกเกี่ยวกับส่วนผสมในการผลิตและส่วนผสมในการขายได้อย่างเหมาะสมจนทำให้กิจการมีผลการดำเนินงานที่ดีขึ้น					
14. กิจการสามารถพิจารณากำหนดราคาขายสินค้าได้อย่างถูกต้อง และเหมาะสมกับสภาพแวดล้อมทางเศรษฐกิจในปัจจุบัน					
15. กิจการมีการวิเคราะห์เกี่ยวกับการเพิ่มลดสายผลิตภัณฑ์ได้อย่างเหมาะสม จนทำให้กิจการสามารถบริหารงานได้อย่างมีประสิทธิผล					

<u>ตอนที่ 5</u> ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

ปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
วิสัยทัศน์ด้านบัญชี (Accounting Vision)					
1. กิจการเชื่อมั่นว่าการปฏิบัติงานทางด้านบัญชีที่มุ่งเน้นความถูกต้องสามารถเป็นแรงผลักดันให้กิจการสามารถประสบความสำเร็จในระยะสั้นและระยะยาว					
2. กิจการให้ความสำคัญกับการกำหนดแนวทางและวิธีปฏิบัติงานทางด้านการบัญชี เพื่อให้สามารถมั่นใจได้ว่ากิจการสามารถดำเนินงานได้อย่างราบรื่นและมีประสิทธิภาพ					
3. กิจการมุ่งมั่นให้การปฏิบัติงานทางบัญชีเป็นไปตามความรู้ความสามารถในวิชาชีพบัญชี ทำให้การปฏิบัติงานเป็นไปอย่างเหมาะสม					
4. กิจการส่งเสริมในการปฏิบัติงานทางบัญชีโดยคำนึงถึงผลกระทบที่อาจจะเกิดขึ้นต่อเศรษฐกิจ สังคม และประเทศชาติ					
ความรู้ด้านบัญชี (Accounting Knowledge)					
5. กิจการเชื่อมั่นว่าความรู้ ความเข้าใจทางการบัญชี ทำให้กิจการมีการปฏิบัติงานได้อย่างมีศักยภาพ					
6. กิจการตระหนักถึงกระบวนการทำงานของนักบัญชี สามารถช่วยให้กิจการควบคุมการดำเนินงานได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
7. กิจการให้ความสำคัญกับความถูกต้องของข้อมูลทางการบัญชี โดยตระหนักถึงความสามารถในการคิดวิเคราะห์ แก้ไขปัญหางานในหน้าที่ได้เป็นอย่างดี					
การเรียนรู้ด้านบัญชี (Accounting Learning)					
8. กิจการเชื่อมั่นว่าการศึกษา เรียนรู้ และทำความเข้าใจทางการบัญชีอย่างต่อเนื่อง ทำให้กิจการมีการปฏิบัติงานได้อย่างมีศักยภาพ					
9. กิจการส่งเสริมให้มีความเข้าใจถึงการเปลี่ยนแปลงทางการบัญชีต่าง ๆ ที่เกิดขึ้น ช่วยให้การปฏิบัติงานทางการบัญชีมีความทันสมัยต่อเหตุการณ์					
10. กิจการสนับสนุนให้มีการพัฒนาคุณภาพการทำงานโดยมีงบประมาณในการอบรมพัฒนาคุณภาพ และมีการจัดอบรมอย่างสม่ำเสมอ ทำให้กิจกามีการทำงานอย่างมีประสิทธิภาพ					

<u>ตอนที่ 5</u> ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
11. กิจการให้ความสำคัญกับนวัตกรรมการบัญชีใหม่ ๆ ทำให้กิจการสามารถตอบสนองการปฏิบัติงานที่เปลี่ยนแปลงอยู่เสมอได้อย่างรวดเร็วขึ้น					
ความสามารถสมัยใหม่ของนักบัญชี (Accountant Modern Competency) 12. พนักงานบัญชีของกิจการมีความกระตือรือร้นในการพัฒนาตนเองอย่างต่อเนื่อง โดยได้เข้าร่วมสัมมนาประชุมทางวิชาการและฝึกอบรมเกี่ยวกับหลักการ วิธีการ รวมถึงแนวคิดใหม่ๆ ของการบัญชีอย่างต่อเนื่อง					
13. พนักงานบัญชีของกิจการมีความรู้ความเข้าใจเกี่ยวกับนวัตกรรมการบัญชีใหม่ ๆ ได้เป็นอย่างดี					
14. พนักงานบัญชีของกิจการสามารถประยุกต์ใช้เทคโนโลยีสารสนเทศใหม่ ๆ ในการจัดทำและนำเสนอข้อมูลที่เกี่ยวข้องได้อย่างเชี่ยวชาญ					
15. พนักงานบัญชีของกิจการมีทักษะ ความชำนาญ และประสบการณ์ในการจัดทำบัญชีในระยะเวลาที่ยาวนาน					
ประสบการณ์ในการจัดการข้อมูล (Information Management Experience) 16. กิจการเชื่อมั่นว่าประสบการณ์ในการจัดการข้อมูล ช่วยให้กิจการมีการปฏิบัติงานในทุกด้านได้เป็นอย่างดี และมีประสิทธิภาพ					
17. กิจการส่งเสริมให้บุคลากรนำความรู้ ความสามารถ และความสำเร็จของการทำงานในอดีต มาใช้เป็นแนวทางในการปฏิบัติงานในปัจจุบัน					
18. กิจการตระหนักถึงการปฏิบัติงานอย่างสม่ำเสมอและต่อเนื่อง ทำให้บุคลากรเกิดความเชี่ยวชาญในการปฏิบัติงานอย่างแท้จริง					
19. กิจการให้ความสำคัญกับการมีข้อมูลที่ครบถ้วนสมบูรณ์และพร้อมสำหรับใช้ในการดำเนินงานได้อย่างมีประสิทธิภาพ					
20. กิจการมุ่งเน้นให้มีการพัฒนาระบบที่สามารถเรียกดูข้อมูลในการดำเนินงานและประกอบการตัดสินใจให้มีประสิทธิภาพมากยิ่งขึ้น					

<u>ตอนที่ 5</u> ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ประสิทธิภาพของระบบบัญชี (Accounting System Efficiency) 21. กิจการเชื่อมั่นว่าการมีระบบบัญชีที่ดี สามารถช่วยให้การดำเนินงานบรรลุเป้าหมายได้ดียิ่งขึ้น					
22. กิจการให้ความสำคัญกับการพัฒนาระบบบัญชีให้มีประสิทธิภาพมากยิ่งขึ้น ซึ่งสามารถช่วยให้การดำเนินงานบรรลุผลสำเร็จได้อย่างมีคุณภาพ					
23. กิจการมุ่งเน้นให้มีการประยุกต์ใช้ระบบบัญชี ให้สอดคล้องกับการดำเนินงานขององค์กร ซึ่งส่งผลให้การดำเนินงานเป็นไปตามเป้าหมายที่วางแผนไว้					
24. กิจการตระหนักเสมอว่าระบบบัญชีที่ดี ต้องสามารถส่งเสริมและสนับสนุนให้กิจการมีการจัดทำและนำเสนอรายงานทางการเงินได้อย่างอย่างดี และประสบความสำเร็จมากยิ่งขึ้น สอดคล้องความต้องการและมาตรฐาน ระเบียบข้อปฏิบัติต่าง ๆ ที่เกี่ยวข้อง					
ความสามารถในการปรับตัวขององค์กร (Organizational Adaptation Capability) 25. กิจการเชื่อมั่นว่าการปรับตัวอย่างรวดเร็วขององค์กรภายใต้สภาพแวดล้อมที่มีการแข่งขันสูงและมีความไม่แน่นอน ทำให้กิจการสามารถตัดสินใจได้ดีขึ้นและดำเนินธุรกิจได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
26. กิจการสนับสนุนให้มีการปรับเปลี่ยนวิธีการบริหารงานอย่างต่อเนื่องเพื่อให้ทันต่อสภาพแวดล้อมที่เปลี่ยนแปลง ทำให้กิจการสามารถดำเนินธุรกิจได้อย่างมีประสิทธิภาพ					
27. กิจการสนับสนุนให้มีการเรียนรู้การผสมผสานการใช้เทคนิคหรือเทคโนโลยีใหม่ ๆ เข้ามาใช้ในองค์กร ทำให้กิจการสามารถเพิ่มศักยภาพในการแข่งขันและในการตัดสินสินได้เป็นอย่างดี					

<u>ตอนที่ 6</u> ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย

ปัจจัยภายนอกที่ส่งผลต่อการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหาร	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
สภาพแวดล้อมทางการบัญชี (Accounting Environment) 1. ในปัจจุบันผู้มีส่วนได้เสียคาดหวังในการปฏิบัติงานทางการบัญชีของกิจการ ทำให้กิจการต่าง ๆ มุ่งเน้นให้มีการปฏิบัติงานเป็นไปตามมาตรฐานการบัญชีและระเบียบข้อปฏิบัติที่เกี่ยวข้อง					
2. การตัดสินใจและการดำเนินงานต่าง ๆ ในปัจจุบัน ต้องอาศัยข้อมูลที่ดีและมีประสิทธิภาพ ทำให้กิจการต่าง ๆ มุ่งเน้นในการพัฒนาระบบการปฏิบัติงานทางการบัญชีให้มีประสิทธิภาพมากยิ่งขึ้น					
3. ในปัจจุบันเทคโนโลยีที่เกี่ยวข้องทางการบัญชีมีการพัฒนามากยิ่งขึ้น ทำให้กิจการต่าง ๆ มุ่งเน้นในการประยุกต์ใช้เทคโนโลยีดังกล่าวเพื่อให้การจัดทำบัญชีมีคุณภาพมากยิ่งขึ้น					
4. กิจการต่าง ๆ มุ่งมั่นในการปฏิบัติทางการบัญชีและจัดทำรายงานทางการเงิน โดยมุ่งเน้นประโยชน์และความต้องการของผู้มีส่วนได้เสียสูงสุด					

ตอนที่ 7: ความคิดเห็นและข้อเสนอแนะของท่านเกี่ยวกับความสัมพันธ์ระหว่างการประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารและการตัดสินใจอย่างมีคุณค่า

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ขอขอบพระคุณท่านที่ได้สละเวลาตอบแบบสอบถามทุกข้อ ได้โปรดพับแบบสอบถามใส่ซองที่แนบมาพร้อมกันนี้ส่งคืนตามที่อยู่ที่ระบุไว้ และหากท่านต้องการรายงานสรุปเกี่ยวกับโครงการวิจัยนี้โปรดแนบนามบัตรหรืออีเมล์ของท่านมาพร้อมกับแบบสอบถามนี้ ข้าพเจ้ายินดีที่จะจัดส่งรายงานผลสรุปให้แก่ท่านภายหลังการเสร็จสิ้นการวิเคราะห์ข้อมูลในครั้งนี้

“ขอขอบคุณที่ให้ความร่วมมือ”

APPENDIX J

Letters to the Experts

บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/ **วันที่** 7 เมษายน 2555

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.เกสินี หมื่นไธสง

ด้วย นางสาวนันทา จันทร์แก้ว นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารและการตัดสินใจอย่างมีคุณค่า : การตรวจสอบเชิงประจักษ์ของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.ปพฤกษ์ อุตสาหะวาณิชกิจ)
คณบดีคณะการบัญชีและการจัดการ

บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/ **วันที่** 7 เมษายน 2555

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.พรลภัส สุวรรณรัตน์

ด้วย นางสาวนันทา จันทร์แก้ว นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการบัญชี คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การประยุกต์ใช้นวัตกรรมทางการบัญชีบริหารและการตัดสินใจอย่างมีคุณค่า : การตรวจสอบเชิงประจักษ์ของธุรกิจชิ้นส่วนอิเล็กทรอนิกส์ในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.ปพฤกษ์ อุตสาหะวาณิชกิจ)
คณบดีคณะการบัญชีและการจัดการ

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EDUCATION BACKGROUND

1997	Bachelor of Accounting, Dhurakijpundit University, Bangkok, Thailand.
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RESEARCH

2011	Chankaew N. and Ussahawanitchakit P., 2011, “Management Control System and Firm Success: An Empirical Investigation of Electronic Parts Businesses in Thailand”, Journal of Academy of Business and Economics.
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