JMSS Journal of Multidisciplinary in Social Sciences

Journal of Multidisciplinary in Social Sciences
Journal homepage : http://jmss.dusit.ac.th

Dynamic Management Accounting Orientation and Firm Growth: Empirical Evidence from Food Businesses in Thailand

Kwanchanok Hannimitkulchai Kornchai Phornlaphatrachakorn & Karun Pratoom

Mahasarakham Business School, Mahasarakham University, Maha Sarakham 44150, Thailand

Article info

Article history:
Received :
Revised : 31 May 2018
Accepted : 19 June 2018

Keywords:
Dynamic Management Accounting Orientation, Decision-Making Success, Firm Growth

Abstract

This study aims at investigating the relationship between the dynamic management accounting orientation, which comprises five major practices, and firm growth of food businesses in Thailand. The data were gathered from 294 food businesses in Thailand using mail questionnaire survey, while the key informants were accounting manager from each of the firms. The regression analyses suggested that dynamic management accounting orientation's dimensions consisting of strategic positioning analysis, cost management strategy, modern performance measurement, and market information orientation had a positive effect on firm growth. Likewise, the results have shed light on the mediating role of decision-making success and operational goal achievement. This empirical evidence could be used as a guideline for management accounting development to enhance the operational efficiency and growth of an organization in a constantly changing business environment.

Introduction

In the era of globalization, organizations face an increased environmental uncertainty and intense competition due to the changes in advanced technology and constantly changing customer preference (Abushaiba & Zainuddin, 2012). This situation affects corporate management changes and also result in the need for the firm to develop specific forms of management accounting information in order to support management decision making under the environmental uncertainty (Baines & Langfield-Smith, 2003; Waweru, Hoque, & Uliana, 2004). The literature review has identified that developing management accounting practices to fit the constantly changing business environment were essential for organizations to achieve their growth potential (Schiller, 2010; Vaivio, 2008; Williams & Seaman, 2002). Consequently, management accounting practices are needed to be more dynamic and responsive to environmental change.

In this research, the emphasis on developing management accounting practices to enhance management efficiency under a constantly changing business environment is interpreted as dynamic management accounting orientation. It focuses on applying management accounting practices that can capture the activities of the real business environment as well as anticipate future trends in the environment and features of business

* Corresponding Author
e-mail: wkwan411@yahoo.com

firms to be able to provide essential information for decision-making in order to achieve operational goals. Recent literature suggested that an important part of management accounting developments associated with broadening scope of information such as externally focused, non-financial, and future-orientated. These features have an effect on broadening the view about organizational performance and facilitating the company's adaption to environment dynamism (Abdel-Kader & Luther, 2008; Lääts & Haldma, 2012; Naranjo-Gil & Hartmann, 2007). However, these studies did not mention that management accounting practices that can provide a broadened scope of information. Moreover, the research evidence on the management accounting practices that can provide a broader scope of information and affect superior performance in dynamic environments were limited, especially in a developing country.

This research, therefore, intends to offer the research evidence by developing a framework that addresses the relationship between dynamic management accounting orientation and firm growth and then examines it empirically. Dynamic management accounting orientation comprises of five critical practices that facilitate the organization's adaptation to environmental dynamism and foster superior performance derived from reviewing the literature. Hence, the key research question is "How does dynamic management accounting orientation influence firm growth?" with the key objective to investigate the relationship between dynamic management accounting orientation and firm growth. This study provides contributions on both theoretical and managerial levels by providing the key management accounting practices to achieve the organization's competitive advantage and succeed in organization performance, as well as provide the guideline for organizations to design and implement effective management accounting practices in a dynamic environment.

Objectives

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

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

Conceptual Framework

The conceptual framework demonstrates the relations between dynamic management accounting orientation and its consequences as illustrated in Figure 1.

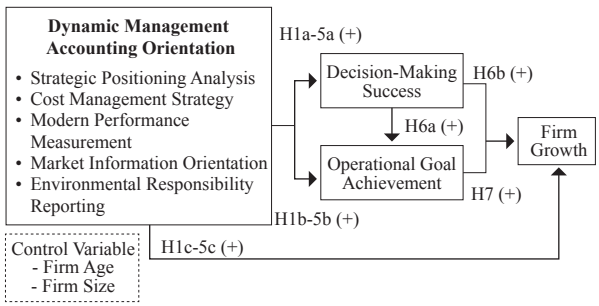

Figure 1 Conceptual Framework

In this research, dynamic capability theory is applied to develop the conceptual framework of the relationship between dynamic management accounting orientation and firm growth. This theory is one of the most influential and cited theories in management to explain how organizations achieve superior performance in rapidly changing business environments (Drnevich & Kriauciunas, 2011; Moustaghfir, 2008; Zollo & Winter, 2002). The theoretical perspective suggested that the competitive advantage of organizations accrued due to their ability to integrate, build and reconfigure their resources or capabilities constantly to address rapidly changing environments (Teece, Pisano & Shuen, 1997). Dynamic management accounting orientation is the capability of firms corresponding to this theory. Because it can provide necessary information in helping managers to make better decisions under constantly changing business environments by integrating external information and management accounting techniques. Thus, based on the theoretical perspectives, dynamic management accounting orientation is a key in driving successful decision-making, operational goal achievement, and firm growth.

1. Dynamic Management Accounting Orientation (DMAO)

Management accounting is an essential part of the management process in identifying, measuring, analyzing, interpreting, and presenting useful information to assist management for decision-making and creating policy as well as day to day operation of an organization to achieve their goals (Horngren et al., 2007). Its role

changes over time, depending on manager's information needs in order to address the economic context (Haldma & Lääts, 2002; Waweru, Hoque, & Uliana, 2004). Thus, in this research, dynamic management accounting orientation refers to the ability of firms to use accounting practices to support and enhance management efficiency under a constantly changing business environment in order to achieve competitive advantage and firm growth. It focuses on applying management accounting practices that are increasing the organizational adaptation abilities and adding value to the organization.

Accounting literature stated that management accounting roles in a dynamic environment tended to focus on adding value to the organization (Hilton, 2005; IFAC, 1998). Also, it attempted to broaden the scope of management accounting information such as externally focused, non-financial, and future-orientated, by integrating management accounting technique and external information associated with market dynamism and competition intensity (Abdel-Kader & Luther, 2008; Lääts & Haldma, 2012). These management accounting roles facilitated the organization's adaptation to environment dynamism and gain superior performance by providing relevant information that explains the economic changes and facilitates creating or enhancing organization value (Lääts & Haldma, 2012; Van der Stede, Chow, & Lin, 2006). From the literature review, there are five critical management accounting practices that are consistent with management accounting roles as mentioned above, which include strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility reporting. Consequently, they are identified as dynamic management accounting orientation's dimensions, examined and hypothesized their relationships to performance outcomes.

1.1 Strategic Positioning Analysis (SPA)

Currently, coping with the intense competition calls for strategic position to determine and maintain a unique position and image in the market and provide extra value to the organization compared to the competitors (Ombasa, 2015). In order to maintain the organizational competitive position and improve future competitiveness, contemporary companies should collect and analyze the information on current and potential competition (Malinic, Jovanovic, & Jankovic, 2012). Thus, strategic positioning analysis in this research refers to the ability of the firm to provide accounting information for assessing the potential of the firm which leads to determining the operational plans and create a defensible position over its competitors (Roslender & Hart, 2003). From the literature, it is suggested the use of accounting information to capture the firm's efficiency in utilizing its resources as well as capture the efficiency strategy construct can help firms decide the best mixture of strategies to defend a firm against the competitive forces in the industry and influence the firm's performance (Baines et al., 2005; Kim, Song, & Koo, 2008). Thus, the hypothesis is proposed as follows:

H1: Strategic positioning analysis has a positive effect on (a) decision-making success, (b) operational goal achievement, and (c) firm growth.

1.2 Cost Management Strategy (CMS)

Cost management strategy is one of the crucial management accounting practices that provides useful cost information to improve strategic decision-making and increase operational efficiency in a violently competitive environment (Sulaiman et al., 2005). In this study, it refers to the ability of the firm to accurately analyze and predict the production and operation costs in business then use this information to plan and control expenses in accordance with the direction of administration (Tontiset & Choojan, 2012). It can enhance accurate cost information which has significant benefits for managers in understanding and evaluating how resources are used across the firm's value-chains in delivering strategic outcomes, as well as making operational improvements, budgeting planning, and performing evaluation (Anand, 2004). Also, it enables a firm to identify and remove the non-value-added activities that give rise to cost in the process and enables them to control factors that give rise to customer value and improve firm performance in the long run (Langfield-Smith, Thorne, & Hilton, 2009). Therefore, the hypothesis is assigned as follows:

H2: Cost management strategy has a positive effect on (a) decision-making success, (b) operational goal achievement, and (c) firm growth.

1.3 Modern Performance Measurement (MPM)

Firms are responding to uncertain environments by increasing their use of comprehensive (diverse, balanced and integrated) performance measurement systems (Schulz, Wu, & Chow, 2010). This system can provide continuous signals as to what is most important in their day-to-day activities and where efforts must be directed to increase operational efficiency (Hoque, Mia, & Alam, 2001). Thus, modern performance measurement in this research is the firm's ability to apply

performance appraisals consistent with its current operating model with the variety of indicators covering all dimensions of performance measurement in both financial and non-financial information, as well as quantitative and qualitative information that leads to increased operational efficiency. Integrated performance measurement systems would further enhance the information for better decision making to identify the strategies offering the highest potential for achieving the firm's objectives (Ittner, Larcker, & Randall, 2003). In addition, diversity of performance measures helps to expand the use of performance-based compensation systems and encourages employees to increase their efforts at work, which in turn enhances organizational performance (Gosselin, 2005; Neely, Gregory, & Platts, 2005). The hypothesis is proposed as follows:

H3: Modern performance measurement has a positive effect on (a) decision-making success, (b) operational goal achievement, and (c) firm growth.

1.4 Market Information Orientation (MIO)

Normally, the development of management accounting in order to address rapidly changing and uncertain business environments is related to external information needs, including competition, customer needs, and market change (Cinquini & Tenucci, 2007). In this study, market information orientation is the firm's ability to provide and analyze accounting information that relates to competitors' potentiality and the profitability of customers for planning and making decision to set competitive strategy in response to the market effectively (Inglis & Clift, 2008). Prior research found that customer profitability, customer's cost, and competitor's potentiality which is derived from market-oriented accounting were useful information for the identification of activities that meet market needs (Helgesen, 2007; Kumar et al., 2011). Also, a superior understanding regarding competitors and markets can help a firm identify and develop capabilities that are necessary to achieve superior competitive advantage and firm performance (Mokhtari et al., 2013). Thus, the hypothesis is proposed as follows:

H4: Market information orientation has a positive effect on (a) decision-making success, (b) operational goal achievement, and (c) firm growth.

1.5 Environmental Responsibility Reporting (ERR)

In this research, environmental responsibility reporting refers to the ability of the firm to provide and present accounting information related to environmental activities by reporting on the costs and benefits of the environmental activities that can be used as managerial information in various fields that affect the environment (Tanc & Gokoglan, 2015). It focuses on providing the correct environmental information for managing environmental costs for increasing organizational profitability and sustainability development (Vasile & Man, 2012). The existing literature suggested that environmental responsibility reporting is critical for management in a highly competitive environment (Holm & Rikhardsson, 2008). It adds value to the organization by providing valuable information for decision-making related to environmental management. It also helps increase operational efficiency to achieve the goal with costing plans and clearly contribute to the competitive advantage of the organization (De Beer & Friend, 2006; Gibson & Martin, 2004). Therefore, the hypothesis is offered as follows:

H5: Environmental responsibility reporting has a positive effect on (a) decision-making success, (b) operational goal achievement, and (c) firm growth.

2. Decision-Making Success (DMS)

Decision-making is a rational process to choose the right alternative for the situation (Harris, 2012). The good and effective decision can provide various approaches, methods, and techniques that contribute to operational improvement and lead to achieve business goals (Kidane, 2012; Thitiyapramote, 2015). Consequently, decision-making success is the effectiveness of the organization in choosing the best alternatives that enables the organization to achieve its objectives and gain its maximized benefits (Talaulicar, Grundei, & Werder, 2005). Previous research stated that information provided by management accounting can ensure firm growth through decision-making efficiency related to business strategy decisions (Heidmann, Schäffer, & Strahringer, 2008; Naranjo-Gil & Hartmann, 2006). Based on the literature, decision-making success is a potential possibility that affects operational goal achievement and firm growth. Therefore, the hypothesis is given as follows:

H6: Decision-making success has a positive effect on (a) operational goal achievement, and (b) firm growth.

3. Operational Goal Achievement (OGA)

Operational goal achievement refers to the firm's ability to execute the ideas that have been planned effectively, consistent with strategy and organizational objectives. (Deepen et al., 2008; Mohamed, 2008). It is

the representation of the final process in an operation which depends on the ability of the firm to create opportunities through business procedures leading to continuously maximizing their profitability, market share, and competitiveness in the long-term (Abd El Aziz & Fady, 2013). Prior research found that operational goals can help an organization to achieve its long-term goals. For example, the sales department might set an operational objective, which targets to raise sales revenue for the next several months (Bianca, 2014). Moreover, achieving business goals reflect the managing resources appropriately and systemizing operations professionally that have an impact on long-term performance (Chaikambang, Ussahawanitchakit, & Boonlua, 2012). Hence, the hypothesis is proposed as follows:

H7: Operational goal achievement has a positive effect on firm growth.

Research Methodology

1. Population and Samples

Food businesses in Thailand are selected as the population of this study because they are constantly experiencing changes in the business environment from several competitors, as well as marketing conditions that change both consumer behaviors and substitute items in the available markets (Food intelligence center of Thailand, 2016). Thus, they are likely to require more relevant accounting information to support the flexibility of management under such environments. A list of 1,485 food businesses in Thailand was provided by the Department of Business Development, the Ministry of Commerce, Thailand (www.dbd.go.th, accessed April 1, 2017). According to Krejcie & Morgan (1970), the required sample size is 369 firms under the 95% confidentiality rule. However, response rate for a mail survey is approximately 20% (Aaker, Kumar, & Day, 2001). To get adequate sample size to meet the reliable research results, this research finally uses all 1,485 firms as a sample for a distributed mail survey.

2. Research Instrument

A Questionnaire was used as the research instrument for this research. For the instrument testing, Cronbach's alpha and factor analysis were conducted to evaluate validity and reliability of the questionnaire. The results showed that Cronbach's alpha coefficient had a value between 0.769-0.931, which was greater than the acceptable cut-off score (<0.7) (Hair et al., 2010), meaning that all measures have good internal consistency. All factor loadings were between 0.614–0.937 (< 0.40) which was statistically significant (Nunnally & Bernstein, 1994). Thus, all measures are deemed appropriate for further analysis as they express an accepted validity and reliability in this study.

2.1 Variable Measurements

All of the constructs in the conceptual framework were measured using a five-point Likert scale. Dynamic management accounting orientation is the main variable in this study which was classified into five dimensions, all dimensions were measured based on its definition and previous literature reviews. Firstly, strategic positioning analysis was measured using a four-item scale by assessing how firms use accounting information in evaluating their potential and competitiveness, as well as determining the competitive position in the industry to achieve its goals and lead to long-term profitability. Secondly, cost management strategy was measured using a four-item scale by assessing the ability of the firm to effectively collect, analyze, and present production and operation costs which are used to plan and improve operational performance aligning with the organization's goals and to help organizations quickly respond to changing circumstances. Thirdly, modern performance measurement was measured using a five-item scale by assessing the use of performance indicators across multiple dimensions aligned with current operations that include both monetary and non-monetary indicators which are quantitative and qualitative indicators to maximize performance and achieve goals. Fourthly, market information orientation was measured using a four-item scale by assessing the firm's ability to use accounting information to assess competitors' competencies, as well as to analyze customer costs and profits which are for planning and deciding to operate in accordance with the present and future market situations effectively. Finally, environmental responsibility reporting was measured using a four-item scale by assessing how firms provide information regarding their environmental activities which are both financial and non-financial by reporting on the costs and benefits of improving and maintaining the environment for planning and deciding on the environment issue effectively. Decision-making success and operational goal achievement are the mediating variables of the study. Decision-making success was measured via how firms choose the best alternatives quickly from various alternatives by using relevant and useful information in a crisis situation. This variable was

measured using a four-item scale based on its definition. Operational goal achievement was assessed by the operations that succeeded in attaining the firm's strategy and objectives. This variable was measured using a four-item scale revised from Chaikambang et al. (2012). Finally, firm growth, which is a dependent variable, was assessed by the perception of high return on investment, increasing incomes, increasing market share, customer satisfaction, and operating in a more uncertain environment. This variable was measured using five-item scales revised from Hongsombud et al. (2012).

3. Collection of Data

Data were collected from 1,485 food businesses in Thailand via questionnaire mail survey. The key informant was accounting manager of each food business, as they have the best knowledge and understanding of the nature and format of accounting information and firm performance. With regards to a mail survey, questionnaires were sent directly to accounting managers and the follow-up calls were made two weeks after mailing. As a result, 297 surveys were returned with 294 valid surveys, yielding a response rate of 20.15%. This research also verified non-response bias by comparing the data received from early and late responses (Armstrong & Overton, 1977). The result shows no significant differences between the two groups, which implies that non-response bias may not be a problem.

4. Data Analysis

Ordinary least squared (OLS) regression analysis was conducted to examine the relationships between dynamic management accounting orientation and its consequences because all variables in this study were neither nominal data nor categorical data. The statistical equations are shown below:

Equation 1: $DMS = \alpha_1 + \beta_1 SPA + \beta_2 CMS + \beta_3 MPM + \beta_4 MIO + \beta_5 ERR + \beta_6 FAG + \beta_7 FSZ + \varepsilon_1$

Equation 2: $OGA = \alpha_2 + \beta_8 SPA + \beta_9 CMS + \beta_{10} MPM + \beta_{11} MIO + \beta_{12} ERR + \beta_{13} FAG + \beta_{14} FSZ + \varepsilon_2$

Equation 3: $FGR = \alpha_3 + \beta_{15} SPA + \beta_{16} CMS + \beta_{17} MPM + \beta_{18} MIO + \beta_{19} ERR + \beta_{20} FAG + \beta_{21} FSZ + \varepsilon_3$

Equation 4: $OGA = \alpha_4 + \beta_{22} DMS + 2\beta_{23} FAG + \beta_{24} FSZ + \varepsilon_4$

Equation 5: $FGR = \alpha_5 + \beta_{25} DMS + 2\beta_{26} OGA + \beta_{27} FAG + \beta_{28} FSZ + \varepsilon_5$

Results

Table 1 shows the descriptive statistic and correlation matrix of all variables. Pearson correlation coefficients ranged from 0. 307 to 0.684 at the $p < 0.05$ level. It means that the variables have positively correlated. Moreover, inter-correlation in each predict variable is below 0.8. Similarly, variance inflation factors (VIFs) ranging from 1.303 to 2.125, were below the cutoff value of 10, meaning that they are not correlated among the independent variables (Hair et al., 2010). Thus, there are no substantial multicollinearity problems found in this research.

The results of the OLS regression analysis of the effects of each dimension of dynamic management

Table 1 Descriptive Statistics and Correlation Matrix

Variables	SPA	CMS	MPM	MIO	ERR	DMS	OGA	FGH
Mean	**4.283**	**4.187**	**3.837**	**3.898**	**3.604**	**3.876**	**3.818**	**3.615**
S.D.	**0.558**	**0.590**	**0.622**	**0.650**	**0.797**	**0.602**	**0.595**	**0.696**
CMS	.584***							
MPM	.450***	.570***						
MIO	.370***	.489***	.570***					
ERR	.392***	.405***	.603***	.661***				
DMS	.482***	.453***	.551***	.487***	.429***			
OGA	.483***	.484***	.552***	.612***	.536***	.684***		
FGH	.341***	.307***	.501***	.468***	.387***	.615***	.565***	
FAG	.047	-.045	.020	.056	.109	.021	.003	-.027
FSZ	.038	-.037	.034	.043	.096	-.007	.012	-.001

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

Table 2 Results of Multiple Regression Analysis

Independent Variables	Dependent Variables				
	DMS	OGA	FGR	OGA	FGR
	(H1a-5a)	(H1b-5b)	(H1c-5c)	(H6a)	(H6b,7)
	Equation1	Equation2	Equation3	Equation4	Equation5
Strategic Positioning Analysis (PTM)	0.219*** (0.051)	0.211*** (0.053)	0.160** (0.062)		
Cost Management Strategy (BIC)	0.176** (0.057)	0.104* (0.061)	0.125* (0.068)		
Modern Performance Measurement (BMS)	0.168** (0.058)	0.166** (0.060)	0.346*** (0.069)		
Market Information Orientation (MLC)	0.357*** (0.059)	0.361*** (0.061)	0.298*** (0.071)		
Environmental Responsibility Reporting (CCP)	-0.002 (0.059)	0.045 (0.059)	-0.022 (0.071)		
Decision-Making Success (DMS)				0.696*** (0.043)	0.501*** (0.067)
Operational Goal Achievement (OGA)					0.327*** (0.066)
Firm Age (FMA)	-0.027 (0.106)	-0.013 (0.097)	-0.068 (0.112)	-0.051 (0.098)	-0.098 (0.102)
Firm Size (FMZ)	-0.070 (0.108)	-0.139 (0.099)	-0.114 (0.114)	0.059 (0.098)	0.044 (0.102)
Adjusted R^2	0.517	0.479	0.306	0.464	0.420

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

accounting on its consequences are shown in Table 2. Firstly, the results indicate that strategic positioning analysis positively influences all outcomes: decision-making success (β_1 = 0.219, p < .01), operational goal achievement (β_8 = 0.211, p < .01), and firm growth (β_{15} = 0.160, p < .05). Therefore, it can be concluded that strategic positioning analysis is one of the important management accounting practices to enhance the operational efficiency and growth of an organization in a constantly changing business environment. Thus, Hypotheses 1a, 1b, and 1c are supported.

Secondly, it is found that the cost management strategy also shows significant positive effects on all outcomes: decision-making success (β_2 = 0.176, p < .05), operational goal achievement (β_9 = 0.104, p < .10), and firm growth (β_{16} = 0.125, p < .10). It is noted that the cost management strategy is one of the essential management accounting practices, which has the potential to gain greater decision-making success, operational goal achievement, and firm growth. Thus, Hypotheses 2a, 2b, and 2c are supported.

Thirdly, the results indicate that modern performance measurement shows significant positive effects on all of its outcomes: decision-making success (β_3 = 0.168, p < .05), operational goal achievement (β_{10} = 0.166, p < .05), and firm growth (β_{17} = 0.346, p < .01). The results of this analysis show that modern performance measurement is an important management accounting practice to enhance operational efficiency and achieve superior performance. Therefore, Hypotheses 3a, 3b, and 3c. are supported.

Fourthly, the findings also indicate that market information orientation shows significant positive effects on all of its outcomes: decision-making success (β_4 = 0.357, p < .01), operational goal achievement (β_{11} = 0.361, p < .01), and firm growth (β_{18} = 0.298, p < .01). These results explained market information orientation as the key management accounting practice to enhance organizational performance in the sample companies. Thus, Hypotheses 4a, 4b, and 4c are supported.

Fifth, the research reveals there are no relationships between environmental responsibility reporting and all outcomes: decision-making success (β_5 = -0.002, p > .10), operational goal achievement (β_{12} = 0.045, > .10), and firm growth (β_{19} = -0.022, p > .10). Surprisingly, the results imply that environmental responsibility reporting appears to not be a primary tool used to enhance information about the management decision-making that is relevant to the goals and growth of the organization. Thus, hypotheses 5a, 5b, and 5c are not supported.

Sixth, the findings also show that decision-making success has a significant positive effect on operational goal achievement (β_{22} = 0.696, p < .01), and firm growth (β_{25} = 0.501, p < .01). The findings indicate that the effective decision contributes to achieving the objective and goal of the business by providing suitable approaches, methods, or techniques to the operational improvement. Therefore, hypotheses 6a and 6b are supported.

Finally, the finding indicates that the relationship between operational goal achievement and firm growth shows a significant positive relationship (β_{26} = 0.327, p < .01). This result implies that the firm's ability to operate successfully in line with the targets that have been planned to achieve their objectives can help firms to increase their performance and value. Thus, Hypothesis H7 is supported.

Discussion

This research provides empirical evidence about the influence of dynamic management accounting orientation on firm growth of food businesses in Thailand. The results found that four dimensions of dynamic management accounting orientation, namely, market information orientation, strategic positioning analysis, modern performance measurement, and cost management strategy, respectively, are the key competencies to provide information that explains economic change, efficient use of resources, and contributes to enhancing firm value, which in turn has a positive effect on decision-making success, operational goal achievement, and firm growth. But, the last dimension, namely, environmental responsibility reporting did not affect performance outcomes. Moreover, decision-making success and operational goal achievement shows significant results related to firm growth.

The findings revealed positive significant relationships between strategic positioning analysis, decision-making success, operational goal achievement, and firm growth. Consistent with prior research, strategic positioning analysis, which is supported by relevant management accounting, can provide necessary information for the formulation, implementation, and realization of strategies for achieving competitive advantage (Roslender & Hart, 2003). It provides useful information for decision-making and planning to assist managers with continuous improvement value added to achieving its objectives, and ensuring long-term success

(Carmen and Corina, 2009).

Furthermore, the results show significant positive effects of cost management strategy on decision-making success, operational goal achievement, and firm growth. Consistent with the findings of Tontiset & Choojan (2012), cost management strategy enables a firm to accurately analyze and predict the production and operation costs in business. The results also suggest that cost management strategy provides useful information in decision-making to identify and remove non-value-added activities that give rise to costs in the process and improve operational effectiveness to increase customer value and improve firm performance (Anand, 2004; Langfield-Smith, Thorne, & Hilton, 2009).

The same results appeared for modern performance measurement. The results show that modern performance measurement has a significant positive influence on all outcomes. Consistent with the findings of Tuomela (2005), contemporary or integrated performance measurement systems help managers make better decisions and learn how to best improve their performance when appropriate feedback mechanisms are in place. Modern performance measurement provides information that allows the firm to identify the strategies offering the highest potential for achieving the firm's objectives (Ittner, Larcker, & Randall, 2003). Furthermore, a firm with more modern and comprehensive performance measurement systems, especially including objective and subjective non-financial measures and links to a firm's strategy, have higher performance (Schulz, Wu, & Chow, 2010).

The analyses revealed a significant positive influence of market information orientation on decision-making success, operational goal achievement, and firm growth. The findings reveal that market-oriented accounting that has been directed to forecasting and analyzing economic profit of customers (customer revenues, customer costs, and customer satisfaction) and the potential of competitors and markets (competitor cost assessment, competitor performance appraisal such as profit or sale) can provide useful information for decision-making and achieve better performance. Consistent with Mokhtari et al. (2013) and Kumar et al. (2011) who found that a superior understanding of customers and competitors based on market-orientation accounting enables a firm to identify and develop capabilities that are necessary for long-term performance.

However, the results show that environmental responsibility reporting had no significant influence on decision-making success, operational goal achievement, and firm growth. The possible reason could be that most of the companies in Thailand lack knowledge about environmental management accounting practices for environmental cost identification (Setthasakko, 2010). Firms might not be disclosing actual environmental costs and this information tends to be hidden in manufacturing overhead costs, as well as lack of physical information about the uses of materials and energy consumptions (Tsui, 2014). It is, therefore, possible that environmental responsibility reporting does not affect decision-making success, operational goal achievement, and firm growth in this research.

In addition, the findings show significant positive influence of decision-making success on operational goal achievement and firm growth. The findings indicate that making good decisions will propel the organization to success more quickly by finding an easier way to reach its set goals and objectives (Talaulicar, Grundei, & Werder, 2005). It also provides suitable approaches, methods, or techniques toward operational improvement (Kidane, 2012; Thitiyapramote, 2015). Thus, decision-making success is a potential possibility that affects operational goal achievement and growth of firms. Moreover, the analysis supported a positive significant relationship between operational goal achievement and firm growth. Consistent with prior studies, operational goals are the short-term tactics that can help an organization to achieve its long-term strategy (Abd El Aziz & Fady, 2013; Bianca, 2014).

Overall, these results suggest that companies operating in dynamic economic contexts are more in need of dynamic management accounting orientation which consists of management accounting practices, namely, market information orientation, strategic positioning analysis, modern performance measurement, and cost management strategy. The increasing attention on dynamic management accounting orientation will provide value-based performance information for managerial decision-making, which then facilitates the achievement of operating objectives and firm growth.

Suggestion

The research outcomes make incremental contributions to the existing management accounting literature and provide managerial implications, along with the limitations of the study and directions for future research as follows:

Theoretical Contributions

The finding makes several contributions to theory. First, it provides more understanding of management accounting roles in dynamic environments by identifying the crucial practices in the different dimensions that effect both operational efficiency and firm growth. Second, the result extends previous findings by conducting studies in developing countries, especially Thailand, to verify and confirm some previous findings related to management accounting practices in dynamic environments such as strategic positioning analysis, cost management strategy, modern performance measurement, market information orientation, and environmental responsibility. Third, the study extends theoretical perspectives by providing empirical evidence to confirm the ability of dynamic capability theory to explain firm growth through the lens of dynamic management accounting orientation. The results indicate that management accounting practices can explain economic change, facilitate using resources efficiently and creating or enhancing organizational value as an important dimension of dynamic management accounting orientation in order to help the organization achieve firm growth, which is consistent with dynamic capability theory.

Academic Contributions

The academic contribution of this research is in offering the association of two research perspectives on management accounting practices in a dynamic environment. The findings found that developing management accounting practice from the perspective of using the broad scope of information (Abdel-Kader and Luther, 2008; Lääts and Haldma, 2012) along with the perspective of using the sophisticated technique for creating organization value (Hilton, 2005; IFAC, 1998) lead to enhance management competency and superior performance in dynamic environment. In this case, the five specific management accounting practices will be more important in dynamic market where the organization faces highly competitive, and constantly changing customer preference.

Managerial Contributions

The finding provides practical information for developing management accounting practices that contribute to the growth of firms in dynamic environments. The results suggest that development of dynamic management accounting orientations with the ability to analyze strategic positioning, cost management strategy, modern performance measurement, and market information orientation can provide useful information to the organizational operation and would have a positive impact on their growth. Thus, firstly, the firms should emphasize using accounting information to analyze and synthesize the competitiveness of the organization in setting strategic, directional and business plans in a systematic way. Secondly, they should support the development of a database and analysis of various types of costs systematically to guide effective management strategies. Thirdly, they should pay attention to the accounting information related to the marketing operation such as the analysis of information related to the competitor's potential and competency continuously. Fourthly, they should apply new performance appraisals consistent with its current operating model with the variety of indicators, covering all dimensions of performance measurement in both monetary and non-monetary measurements which are quantitative and qualitative information to stimulate and attract personnel for acceptance and increase competitiveness.

Limitation and Directions for Future Research

To provide the useful contribution from this research to the management accounting literature, it is important to acknowledge some limitations. The data was collected by mailed surveys which affects the generalization of this study because of the perception of the respondents and a potential for self-selection bias. Furthermore, this selected method does not capture a comprehensive and deep understanding of the subject phenomena. Therefore, it would be useful to apply other approaches such as qualitative case study or in-depth interview which may shed further light on this issue. Also, it should be conducted in another industry or beyond in dynamic economies to expand the knowledge of management accounting practices in a dynamic economic context. Moreover, future research should be studied by applying other statistics in examining the research relationships, such as structural equation models to extend and complement this study.

References

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

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

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

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

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

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

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

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

Bianca, A. (2014). *The Importance of objectives in organizations.* Retrieved June 26, 2016, from https://yourbusiness.azcentral.com/importance-objectives-organizations-2613.html.

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

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

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

De Beer, P., & Friend, F. (2006). Environmental accounting: A management tool for enhancing corporate environmental and economic performance. *Ecological Economics, 58*(3), 548-560.

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

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

Food intelligence center of Thailand. (2016). *Thai food industry overview.* Retrieve March 7, 2017, from http://food.fda.moph.go.th/lgtfdapv/data/Strategy.pdf.

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

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

Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis: A global perspective.* 7th ed. New Jersey: Person Prentice Hall.

Harris, R. (2012). *Introduction to decision making.* Retrieve June 6, 2017, from http://www.virtualsalt.com/crebook5.htm.

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

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

Hilton, R.W. (2005). *Managerial accounting: Creating value in a dynamic business environment.* 6th ed. Boston: Mc Graw Hill.

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

Hongsombud, A., Ussahawanitchakit, P. & Muenthaisong, K. (2012). Accounting quality control and firm growth: An empirical investigation of corporate governance awarded firms in Thailand. *Journal of Academy of Business and Economics, 12*(5), 97-126.

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

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

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

International Federation of Accountants (IFAC). (1998, March). *International management accounting practice statement: Management accounting concepts*. New York: Financial and Management Accounting Committee, New York, pp. 82-100.

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

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

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

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

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

Langfield-Smith, K., Thorne, H., and Hilton, R. (2009). *Management accounting: Information for creating and managing value.* 5thed. Australia: McGraw-Hill North Ryde.

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

Mohamed, B. (2008). Corporate sustainability/CSR communication and value creation: A marketing approach. *The International Journal of Accounting, 14*(52), 145-160.

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

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

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

Naranjo-Gil, D., & Hartmann, F. (2007). Management accounting systems, top management team heterogeneity and strategic change. *Accounting, Organizations and Society, 32*(7-8), 735-756.

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

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

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

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

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

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

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

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

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

Tanc, A., & Gokoglan, K. (2015). The impact of environmental accounting on strategic management accounting: A research on manufacturing companies. *International Journal of Economics and Financial Issues, 5*(2), 566-573.

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

Thitiyapramote, N. (2015). Managerial accounting practice capability and decision making success: A conceptual model. *Proceedings of 19th ISERD International Conference* (pp. 9-13), Kyoto, Japan.

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

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

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

Vaivio, J. (2008). Qualitative management accounting research: Rationale, pitfalls and potential. *Qualitative Research in Accounting & Management, 5*(1), 64–86.

Van der Stede, W. A., Chow, C. W. & Lin, T. W. (2006). Strategy, choice of Performance measures and performance. *Behavioural Research in Accounting, 18,* 185-205.

Vasile, E., & Man, M. (2012). Current dimension of environmental management accounting. *Procedia-Social and Behavioral Sciences, 62,* 566-570.

Waweru, N. M., Hoque, Z., & Uliana, E. (2004). Management accounting change in South Africa: Case studies from retail companies. *Accounting, Auditing and Accountability Journal, 17*(5), 675-704.

Williams, J. J., & Seaman, A. E. (2002). Management accounting systems change and departmental performance: The influence of managerial information and task uncertainty. *Management Accounting Research, 13*(4), 419-445.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science, 13*(3), 339-351.