Diversification of Management Accounting Practices in the Thai Listed Companies¹

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บทคัดย่อ

หลายปีที่ผ่านมากิจการได้ประสบกับการ เปลี่ยนแปลงหลายด้านในการให้การตอบสนองความ ต้องการของผู้บริหาร การบัญชีบริหารก็เช่นเดียวกัน พยายามที่จะพัฒนาให้ควบคู่กับความต้องการของ ผู้บริหารที่เปลี่ยนแปลงไป คณะผู้วิจัยต้องการทราบ แนวทางปฏิบัติการบัญชีบริหารในปัจจุบันว่ามีการ เปลี่ยนแปลงไปอย่างไร การศึกษาครั้งนี้ใช้กลุ่มตัวอย่าง ของบริษัทจดทะเบียนในประเทศไทยจำนวน 420 แห่ง โดยส่งแบบสอบถามไปยังผู้บริหารเกี่ยวกับการบัญชี และใช้การวิเคราะห์ทางสถิติเชิงพรรณาและอุปมา

ถึงแม้ว่าอัตราการตอบกลับจะต่ำ การศึกษาครั้งนี้ ชี้ให้เห็นข้อมูลที่น่าสนใจสรุปได้ว่าการบัญชีบริหารยัง มีลักษณะที่คล้ายคลึงกับอดีต กล่าวคือ การบัญชีบริหาร ยังคงเป็นแบบดังเดิม (Traditional Managerial Accounting) กิจการส่วนใหญ่นิยมใช้ต้นทุนรวม (Full Costing) ในการคิดต้นทุนสินค้า ในขณะเดียวกันวิธี ต้นทุนผันแปร (Variable Costing) ไม่เป็นที่นิยม เท่าใดนัก อย่างไรก็ตามถึงแม้ว่ายังคงใช้ระบบบัญชี แบบดั้งเดิม กิจการหลายแห่งพยายามที่จะประยุกต์

แนวคิดการบัญชีบริหารในหลายรูปแบบ กิจการต่าง อุตสาหกรรมอาจเลือกวิธีการบัญชีบริหารที่แตกต่างกันได้ ทั้งนี้ขึ้นอยู่กับนโยบายของฝ่ายบริหาร ระบบสารสนเทศ และความร่วมมือของพนักงาน ผลการศึกษาครั้งนี้ยังชี้ ให้เห็นอีกว่าการพัฒนาการบัญชีบริหารยังต้องใช้เวลาอีก ระยะหนึ่งในการสนับสนุนการบริหารงานแบบเพิ่มคุณค่า ของกิจการ



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Abstract

In recent years, firms have been experiencing significant changes to support management needs. Certainly, managerial accounting should be developed parallel to those needs. The authors have long observed the management accounting practices in Thailand. Therefore, this purpose of this study is to provide information related to management practices. The similar studies were carried out in Thailand, however, this study attempted to focus on the diversification of management accounting practices in the Thai listed companies. A questionnaire survey type of data collection was adopted to investigate managerial accounting practices. Subjects included the 420 Thai listed companies asking accounting manager about the levels of the current practices. Both descriptive and inferential statistics were employed to analyze the data.

Even if the respondent rate was quite low, the study pointed out interesting information. The outcomes of the current survey are similar to those of in previous research. The study showed that management practices are still in the traditional managerial accounting. Full costing is still popular, while variable costing seems not to be extended used. However, even if the respondents are still using traditional accounting systems, some of the companies are attempting to apply management accounting

concepts into practices at various formats. In addition, the analysis shows that different industries are less likely to adopt the same managerial accounting practices. The successfulness of implementing managerial accounting practices depends on management policy, IT supporting and employee cooperation. The results of this study demonstrate that it is a long way to develop management accounting techniques as a manage-ment accounting which focuses on value based management.

Key words: Managerial accounting, cost accounting, Thai listed companies

Introduction

In recent years, many firms have been experiencing significant change in their organization structures, competitive environments and information technologies. Advanced in information technology have driven innovation and change in the processing, measurement, analysis, and communication of information within and between organization, which facilitated by the enterprise resource planning systems (ERP) the internet and the e-commerce. Such changes imply a need for management accounting to change.

Management accounting has evolved to accommodate changes in business environment. This study focuses on the management accounting practices in Thai listed companies. The purpose of this research is to explore the stage of management

accounting practices. This study will contribute the benefits to the management accounting professional and accounting education. In addition, this result may provide suggestion for in depth research. It is expected that this findings will bridge the gab between academics and practitioners and provide guidelines and other information to the Thai standard setters in improving the management accounting tools and techniques which are suitable for the Thai management accountants.

Development of Management Accounting Practices

According to the Financial and Management Committee of the International Federation of Accountants Committee (FMAC - IFAC) statement of Management Concept in 1989, management accounting is defined as

"The process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information (both financial and operating) used by management to plan, evaluate, and control within an organization and to assure use of accountability for its resources."

During the 1980s Kaplan and Johnson published the "Relevance Lost", notified strong criticism at the management accounting practices during those days. Kaplan and Johnson claimed that all the management accounting practices used

today had been developed by 1925. They are inadequate for today's environment. Due to technological changes, global and domestic competition, and expanding information processing capabilities, management accounting reports are not providing useful and timely information for the business managers.

Besides Kaplan and Johnson, there were many academic and well-known gurus published suggestions on the changing nature of management accounting practices. Some were developed and published modern cost and management accounting practices (Howell, Brown, Soucy & Seed 1987, Bromwich & Bhimani 1989; Young & Selto 1991). These techniques are activity-based costing and management, life cycle costing and target costing, strategic cost management and etc.

In order to understand the stage of management accounting practices in Thailand or any countries, it is necessary to study the development of management accounting practices in the past. There are two perspectives in considering management accounting practices: American and Japanese

Evolution of Management Accounting under American Perspective

In 1998 the FMAC - IFAC issued a statement describing the evolution of management accounting through four sequential stages which are historic chronology. (Figure 1)

The Evolution of Management Accounting

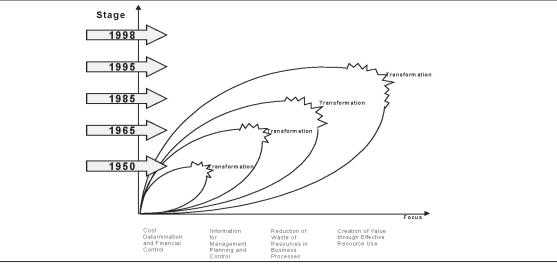


Figure 1: The four phases of evolution of management accounting IFAC 1998 : Revised International management accounting practice 1

Stage 1 - cost determination and financial control Prior to 1950, western countries were strong in the international market. Production technology was rather simple and the products could be sold well. So management was concerned with the internal matters. Management accounting was considered as a technical activity which focus on cost determination and financial control..

Stage 2 -Information for management planning and control From 1950 to 1965, IFAC viewed management accounting as a *management activity*, but in a staff role to support the line management by using such technologies as decision analysis and responsibility accounting. Thus management accounting would be a part of the management control system.

Stage 3 -Reduction of resource waste in business process From 1966 to 1985, The 1970 world recession, the oil price shock and the global competition in the early 1980s threatened the western established markets. Increased competition was accompanied and underpinned by rapid technological development in various areas such as production process and computerized system. In response to the changing environment, new production and management concepts were developed and at the same time controlled the costs by reducing the resource waste in the business process. This was done through the use of process analysis and cost management technologies.

Stage 4 - Creation of value through effective resources use After 1986, the development of the

internet and associated technologies led to the appearance of E-commerce which increased the global competition. Management accounting was focus on the generation or creation of value through the effective use of resources. This was achieved through the use of technologies which examine the drivers of customer value, shareholder value, and organizational innovation.

Management accounting in stage 3 and 4 are seen as an *integral part* of the management process. As real time information becomes available to management directly, the distinction between staff and line management becomes blurred. The focusing of the use of resources to create value is an integral part of the management process in organization. (IFAC 1998)

Evolution of Management Accounting under Japanese Perspective

Over the last decade, Japanese manufacturing methods such as Total Quality Management (TQM), Just- in - Time (JIT), KANBAN, Kaizen and etc. have implemented widely around the world. These techniques have contributed to Japanese preeminence in many areas. However in the early stage (1970s) of the industrial age, Japanese enterprises created a new type of management accounting based on the traditional management accounting approach that imported from the western countries in the 1950s

and 1960s. After Japan entered the world market in the middle of 1980s, they systemized Target costing, Cost Design (Genka kikaku) and cost improvement or kaizen costing (Genka kaizen), related these to JIT processes, embodying the integration of feed forward control and market strategy (Nishimura 2005).

Since Management Accountants have to provide cost information to managers who direct, regulate and supervise the production and service process of the firm. Therefore control is the focal point for the development of management accounting practices. There are two types of control: feedback control and feed-forward control. Feedback is the control which is monitoring the variance between plan and actual values. While feed-forward control is control system that monitors and censors the variances among the planned values in the light of changing environmental information, and adopts various proactive methods and equipment before hand to realize the most practical goal. Briefly, the feed-forward control system has a long-term and more strategic aspect relative to the feedback control system. (Nishimura 2005)

Based on the management orientation and the control concept mentioned above, Nishimura classify the development of Asian management accounting, into 4 stages (Figure 2).

Strategic orientation

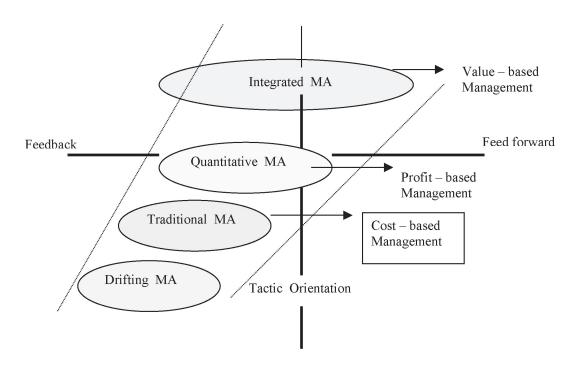


Figure 2: Map of the Development of Management Accounting by Nishimura, Akira, The Development of Management Accounting and the Asian Position, Japanese Title Journal, 2005

Stage 1 Drafting Management Accounting. Since the business operations are controlled through "unsystematic" management accounting, based upon actual costs using the same financial data used for financial reporting and compliance purposes. Management accounting techniques in this stage are ratio analysis using financial statements. The use for control and policy making is formal. Many small firms and SME in Asia probably fall into this stage of development.

Stage 2 Traditional Management Accounting. In this stage management accounting practices are

basically to control through the plan (budget or standard) and the control system is based on feedback control in the form of variance report. They focus mainly on the enhancement of efficiency and improvement the firm's productivity. From the results of the research reports, most of the firms surveyed, fall into this stage of development.

Stage 3 Quantitative Management Accounting.

This stage took place in the 1970s in North America and other western countries. In order to make precise decisions, management uses mathematical and quantitative management accounting techniques such as linear programming, inventory model, opportunity cost analysis and etc. By using quantitative model, management accounting was shift from traditional management accounting to partially strategic goal in the future. However, this approach is still the feedback control because the variances are recognized later, not before the actual situation.

Stage 4 Integrated Management Accounting Nishimura (2005) claimed that this method occurred in some large organizations in the western and Japan during the 1980s. A number of innovative management accounting techniques have been developed across a range of industries and publicized internationally such as activity-based costing and management, value chain, target costing, balance

scorecard, Genka kikaku, Genka kaizen and etc. Although American and Japanese costing systems have a common feature in terms of integrated management accounting, the former is based on feedback control, while the latter on feed-forward cost control.

Because of different purposes in preparing management reports, Thai management accountants in some companies have varieties of cost systems (i.e. full costing, variable costing and mixed up with standard costing) to choose while preparing the reports, so we modified Nishimura's table (Nishimura 2005) in Table 1 and matching the stages between two perspectives in Table 2.

Table 1 Development stages of management accounting under Japanese Perspective

Management acco	unting	Features	Methods	Meanings
Stage 1 Drifting management accounting	ent	Not systematic	Ratio analysis Actual costing Full Costing	Management through financial accounting
Stage 2 Traditional manage accounting	ement	Tactics and feedback	Standard costing budgetary control Full Costing Variable Costing	Efficiency control management through planned value
Stage 3 Mathematical mana accounting	igement	Tactics and feedback partly with strategic and feed forward thought	Profit forecast variance opportunity costing EOQ CVP (uncertainty) Linear Programming	Decision and performance control and opportunity cost concept
Stage 4 Integrated management accounting	US	Strategic and feedback	Activity based costing Activity based costing Balance Scorecard Strategic costing	Optimum decision making, global business management
	Japan	Strategic and feed forward	Genka kikaku, Genka kaizen target costing	Preventive and proactive strategic cost management

Source: Modified from Nishimaru, Akira (2005), the development of Accounting and Asian position.

 Table 2
 Comparison of management accounting practices under two perspectives

American	Level	Japanese
Cost determination and financial	Stage 1	Drifting management
control		accounting
Information for planning and	Stage 2	Traditional management
control		accounting
Reduction waste from processes	Stage 3	Quantitative management
		accounting
Create value through efficiency	Stage 4	Integrated management
uses (feedback)		accounting (feed forward)

Source: Modified from Nishimura (2005), the Development of Management Accounting and Asia Position

Briefly, a strategic control orientation and feed-forward control is the main characteristic of Japanese management accounting in contrast with a strategic decision-making orientation and feedback control in the western.

International Surveys of Management Accounting Practices

There are several accounting literatures and surveys designed to determine the management accounting practices being used by all types of businesses in various countries around the world. The main focus of all studies has been on current and future triggers or drivers of change in the management accounting profession, changes in the management accounting functions or roles, and changes in the tasks performed and the skills required by management accountants. Here are some examples of researches of management accounting practices:

A 1990 UK survey (Bromwich & Bhimani, 1994) revealed that the cost management techniques

most commonly used or planned to be used by UK firms were; ABC, cost modeling, and costs of quality. Other techniques were; target costing, strategic management accounting, and throughput accounting. It was also concluded that traditional techniques such as standard costing and budgetary control systems are still being used. New systems have been developed without regards for the managers requirements. This survey is consistent with Boer (2000) that found an emphasis on strategic management accounting.

After IFAC published the revised statement related to the evolution of management accounting in 1998, Magdy Abdel-Kader and Robert Luther conducted "An Empirical Investigation of the Evolution of Management Accounting Practices" which applied the FMAC-IFAC concept. The results based on responses from UK industrial companies suggested that the management accounting employed in UK is not sophisticated. Budgeting, product profitability and financial performance measurement remain the central pillars and some of the newer management

accounting techniques are less widely used than might be assumed from expectation from the textbooks. There is also little evidence of management accounting concerned directly with "value creation".

In the US, the Institute of Management Accountants (IMA) supported by the American Institute of Certified Public Accountants (AICPA), commissioned the 1999 Practice Analysis of Management Accounting (Siegel and Sorensen, 1999). In 2003 IMA and Ernst & Young (E & Y) conducted a survey "Roles and Practices in Management Accounting Today" revealed that traditional management accounting tools were still widely used and adopting new cost management tools wasn't a priority in the current economic environment.

Management Accounting Practices in Asia

In the Asian countries, management accounting practices are different from those of the western countries. Some countries have shifted from the state enterprises to market capitalism. Their management systems and organizations have grown slowly comparing to their western counterpart. Moreover, the owners or senior managers (CEO) of local and multinational firms in Asia have resisted to the introduction of new strategic management accounting due to the costs of providing the new cost system is very expensive. (Nishimura, 2005) Thus many Asian firms are still using only the traditional management accounting. There were many surveys of management accounting practices in Asia (except Thailand) such as:

1) Construction of General Database on Costing Practice (Nihon University, 1996) was done by the Faculty of Commercial Science of Nihon University in Japan in 1996. The questionaires were sent to Japanese manufacturing firms and the result showed that budgeting, standard costing and direct costing system were the most relatively applied. On the contrary, the spread rate for mathematical and statistical model was rarely used. And it was concluded also that Japanese enterprises have connected financial accounting more than the mathematical and quantitative model.

Later in 2003 Nihon University has repeated the same survey "The Construction of General Database on Costing and Management Accounting Practices" (Takhashi, 2003) The result revealed that traditional management accounting is widely popular while the newly (latest) tools such as activity-based costing and balanced scorecard were rarely adopted which opposite to the cost design (Genka kikaku) was extensively applied to the production process.

2) Management accounting practices in selected Asian countries (Sulaiman, Ahmad and Alwi, 2004) This study examined the extent to which traditional and contemporary management accounting tools are being used in four Asian countries: Singapore, Malaysia, China and India. The result showed that the use of contemporary (newly or latest model) management accounting tools is lacking in all selected countries. The use of traditional management accounting techniques remains strong.

- 3) Management Accounting in China (Xiao, 2006) This paper investigated management accounting practices in listed Chinese companies in 2004. They also examined whether these practices varied according to a firm's location, industry and size. The findings indicated that the adoption of management accounting techniques has increased since 2000 and that varying degrees of economic development in different regions have had little impact on the practices of the firms. However, the larger firms and those in the manufacturing sector are more likely to implement management accounting method.
- 4) In Singapore the development of management accounting are traced to two longitudinal studies as follows:
- 4.1 Management Accounting Practices by manufacturing and non-manufacturing companies in Singapore (Ghosh, Wan, and Chung ,1987)
- 4.2 Management Accounting in Singapore -Well in Place (Ghosh and Chan, 1997) The two studies identified distinct features in the adoption of management accounting practices by local companies from the 1980s to mid 1990s. Comparing to the first one, the management accounting practices have generally improved, New techniques such as TQM and, to a lesser extent, ABC are also slowly being accepted and used by the local companies. However the findings suspected that in smaller firms, the financial control practice will be considerably weaker.
- 5) Management Accounting Change in Malaysian Manufacturing organization (Sulaiman,

2002) This is the study of management accounting control system (MACS) changes in Malaysian manufacturing organizations. The analysis confirms that most changes in MACS are incremental or evolutionary rather than revolutionary. The great variety of changes and causes demonstrates that management accounting change is not a uniform phenomenon as is often implicitly assumed in the literature.

It is concluded that the tradition management accounting practices such as full costing, standard costing, budgeting, responsibility accounting, etc., are still widely adopted in western and eastern countries. By contrast to the new or contemporary management accounting practices such as ABC, ABM and various strategic costing techniques are less populated because of complexity implementation. Even the academics claimed that these techniques would provide more accurately results than the traditional, but they are too complicated and expensive.

Management Accounting in Thailand

Thailand is a developing country located in the Asia Pacific and is also referred to as a newly industrialized country (NIC). In the early 1960s, Thailand began to pursue a policy of industrialization. Between 1985 and 1995 Thailand was the world's growing economy, supported by high levels of foreign investment. This growth came to the halt in 1997 and in 1998 Thailand was in the midst of the worst economic crisis. After the financial crisis, Thai Government has attempted to enhance economic stability.

During 1970s - 1980, Thai accounting standard derived from the US accounting standard. After the crisis In Thailand there were two studies which conducted on management accounting practices .After the crisis International Accounting Standard (IAS) was taken to consider for the Thai Accounting Standard (TAS) which was set by Federation of Accounting Professions (FAP).

Because the accounting standard is the foundation of financial accounting and also the financial accounting is a requisite for the formulation of management accounting. To date, Thailand has not developed separate standards or guidelines on management accounting, thus the quality of management accounting and the expertise of management accountants would vary between business firms Both of financial accounting and management accounting are also influenced by the western accounting standard or American and European types of accounting.

Besides, the western management accounting practices, Thai business educational or professional institutes also uses and adapted western textbooks. Most of the lecturers from Thai universities have studied in the western countries or learned management accounting by using western textbooks. So the Thai management accounting practices tend to be Anglo - American Style. It was concluded that Thailand do not have their own foundations for the formulation of management accounting practices. Therefore, similarly to previous research, this study attempts to investigate the situations of the application on

management accounting practices in their own environments.

Research of Management Accounting Practices in Thailand

The survey of management accounting practices in Thailand started in 1990. Until now. There are a few researches relating to management accounting practices

- 1) Budget preparation and Goals in Thailand (Bailes and Tabtieng, 1990) According to his study, he mailed the survey questionnaire to the controllers or the accounting managers. This survey focused on the nature of the budgeting systems employed in Thai companies. The result of this study suggested that there could be scope for educating the non-accounting management.
- 2) Management Accounting Practices of Thai Manufacturing Firms (Rattanaporn, Komaratat, Cheniam and Bailes, 2000) This study collected data on the usage and usefulness evaluation for several types of management accounting practices. Most of the respondents adopt traditional management accounting practices such as product costing, budgeting, variance analysis and etc.
- 3) Comparative Study of Management Accounting Practices in Asian Countries (Rattanaporn, Nishimura, Rahman, Omar and Kai, 2002) This results concluded that the management accounting practices of the large companies in Thailand are still in the traditional stage: using budgetary control, standard costing

and cost variance analysis. Most of them use the same product cost information for decision making purposes as those used for inventory valuation in preparing financial statements. Quantitative and information theory are not being used by most of these companies. They are quite satisfied with their current accounting system in providing accurate product cost information. Rattanaporn et. El claimed that it should be further investigated about the reasons behind the real management accounting practices in Thailand.

In conclusion, the above survey in Thailand showed the same results as the others from western and eastern countries as mention above. This objective of this research is to study and classify the stage of the status of management accounting practices in Thailand under the Japanese perspective by using the management accounting methods in Table 1.

Research Method for This Present Study

The main purpose of this present study aims to gather management accounting tools of the emerging Thai listed companies in order to review the stage and observe the diversification of management accounting practices in Thailand. Therefore, the research method employed in this study is a questionnaire survey. Using a questionnaire is able to collect all potential companies. It is to provide all information needed in the questionnaire. The questionnaire was sent to accounting managers of the listed firms. Sending the questionnaire to top management may not be

appropriated due to his current knowledge in managerial accounting. This highly assumes that all respondents currently know situations in their company. A total 420 subjects were mailed a covering letter, the questionnaire and a prepaid envelope. Data collection period covered 2 months during August and September 2006.

Questionnaire Development

Based on reviews previous research, two managerial accounting perspectives of management accounting practices are found: America and Japanese methods. However, in Thailand the Japanese perspectives is more suitable that the America one. Therefore, this present study develops the questionnaire based on the Japanese-American style.

Further, the authors extend the Japanese perspective by introducing new paradigm. Because Thai accounting are still using financial accounting database in preparation of unit costs of products and prepare related cost reports. This means that the Thai listed companies are still using traditional cost accounting methods. However, some observations have indicated that some alternative cost accounting methods are being used. Figure 1 shows the choices of management accounting practices in Thailand. The authors theoretically classify Traditional accounting systems into 3 systems. Full costing (absorption costing) is dominated by financial accounting standards. Variable costing are used to support planning, control and decision making of management. Also, standard costing focuses on productivity and cost deduction. In order to prepare reports under the 3 systems, various techniques of management accounting techniques are applied as shown in Table 3.

Figure 1 Diversification of traditional managerial accounting techniques in Thailand

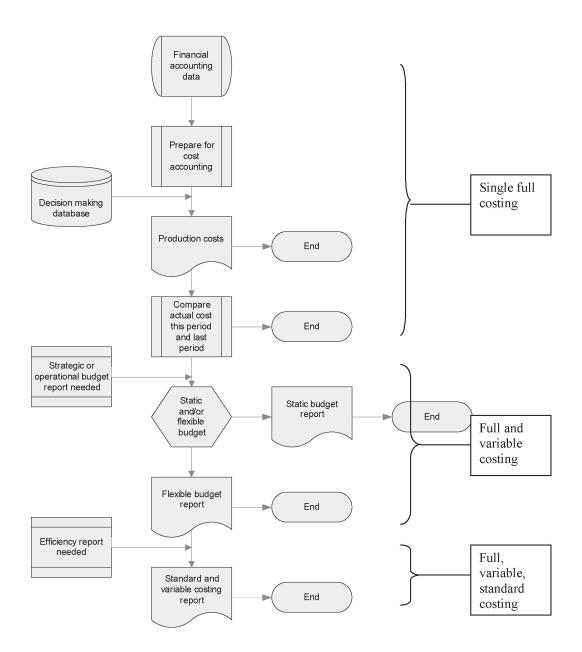


Table 3 Relationship between cost accounting records and its usefulness

Cost accounting records	Usefulness	Techniques
Full costing	Inventory valuation and	(FIFO, Weighted average, Job
	external financial	order/process costing, etc.
	accounting reporting	
Full & variable costing	Planning & control	Budgeting
	Decision making	Responsibility accounting
	Performance evaluation	Transfer pricing
		Variance report
Full & standard costing	Planning & control	Budgeting
	Decision making	Responsibility accounting
	Performance evaluation	Transfer pricing
		Variance report
		Pricing
		Special order
		CVP
		Flexible budget
Full, variable & standard	Planning & control	Budgeting
costing	Decision making	Responsibility accounting
	Performance evaluation	Transfer pricing
		Variance report
		Pricing
		Special order
		CVP
		Flexible budget
		Set standard cost
		Standard cost variance report
		Cost reduction

In this study, Figure 1 and Table 3 are developed as the questions in the survey. It is to analyze what techniques that the Thai listed companies are adopting in each cost system.

Findings

The questionnaire was sent to 420 subjects consisting of management accountants. The overall response rate of 13.1% was received from the survey. Even if the response rate is low, generally, the studies relating to managerial accounting seems to get very low feedback from

respondents. The response rate of this present study is considered outstanding response rate. This is because managerial accounting research is considered as very complicated study in accounting areas. Most information is kept with certain persons and high confidence.

Table 4 shows how the respondents firms set their managerial accounting methods. It is pointed that the most influence to adopt managerial accounting techniques is management, while accounting persons do not take major roles in recommending the techniques.

Figure 4	Managerial	accounting	method	setters
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Setters	Number of
Setters	companies
Local management	28
Accounting department	11
Local parents	1
Parents in foreign	3
Mixed	12
Total	55

Table 5 demonstrates the situations influencing to adopt managerial accounting choices. It shows that the most selected environments are likely to influence managerial accounting practices, except

competitor pressure. Table 5 supports the finding in Table 4 that accountants are less influences in setting managerial accounting techniques.

Figure 5 Factors influencing managerial accounting choices

Factors	Number of	companies
raciois	Yes	No
Information technology	44	9
Motivation and support by management	50	4
Potential of accountants	38	15
Competitor pressure	13	39
Popular techniques	45	11
Cooperative among employees	44	9

Managerial Accounting Levels in Different Types of Business

Table 6 shows crosstab between business types and managerial accounting methods. The table point out that the Thai listed firms are still mostly in full costing. All respondents companies are most likely to adopt traditional managerial accounting tools. It means the firms are still using Tradition management accounting techniques.

Table 6 Crosstab between business types and managerial accounting methods

	Full	Full &	Full &	Full	Total
	costing	Variable	Standard	Variable &	
	2020	costing	costing	Standard	
				costing	
Consumer products	2	1	5	3	11
Industrial products	11	1	3	3	18
Real estates	7	0	2	0	9
Energy &	2	0	0	1	3
Technology					
Services	10	1	0	3	14
Total	32	3	10	10	55

Person Chi-square = 0.026

Table 7 asserts useful information about the relationship between the proportions of owners with managerial accounting levels. The authors set the 70:30 criteria to observe the influence managerial accounting techniques. The rule 51:49 criteria is not proper in the Thai listed companies

regarding the idea of "the nominee assumption" Table 5 points out that the "Pure Thai listed companies" are still in the first stage of managerial accounting level. On the other hand, "Foreigner firms" widely adopt managerial accounting techniques.

Table 7 Crosstab between proportion of investment and managerial accounting methods

	Full	Full &	Full &	Full	Total
	costing	Variable	Standard	Variable &	
		costing	costing	Standard	
				costing	
Thais (more than	27	-	5	6	38
70%)					
Foreigners (more	5	3	5	4	17
than 30%)					
Total	32	3	10	10	55

Table 8 shows how frequent of managerial accounting techniques in different types of businesses. Table 8 shows that an actual full costing is still popular used. Departmental rate and direct method are more widely employed than single rate and step method. In planning and

control, the respondents highly employ budget and responsibility accounting. Incremental and variable costing are used as decision tools. In performance evaluation, standard costs and variable analysis are mainly adopted.

Table 8 Managerial accounting techniques in the Thai listed companies

		Consumer	imer icts	\dashv	Indust	rial pr	Industrial products	\square	Rea	Real estate		Щ	Energy & technology	Energy & echnology			Services	ses	\dashv		All		
Frequency	F	F V	πx	ъ S < ъ	П	V S	S V S	14	F V	ΉS	F > S	П	F	ъх	S < F	ഥ	F V	F S	H > S	т	ъ >	N S	FVS
Actual costing	2	1	4	3	9	-	1	4	L	1	L	1			1	6	1		2 2	22	3	9	7
Normal costing			-		5	_		m		_		_				_				01		3	2
Standard costing			\exists	H	\dashv	_	2	Ц	Ц	Ц	Ц				П				1	Н	Н	1	_
Cost systems Job costing	2	1	3	3	6	1 2	2	4	_	1		1			1	7	1		2	23	3	9	8
Process costing		П	2		2		-	3		-	Ц	-				3			1	6		4	2
Single rate	1	1		1	5		_	5	L	1					1	7			2	13	1	2	4
Departmental rate	-		S	7	9	1 2	m i	7				71				∞	_			19	7	7	9
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Step method	1	1	2	1	2	1		3		1		1				4			2	1	1	4	4
Budgeting	1	1	5	3	7	1 2	4	5	_	7		П			1	6			2	23		6	10
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Variance report	1	_	4		5	1 2	2	S		_		2				9	_		2	19	3	7	∞
Incremental costs	1	Г	1	2	9	H	1	3		1		1				4			2	15	1	4	5
Variable costs	1		1	1	4	1	_	7		1						3			2	10	1	3	4
CVP		1	5	3		1	2			2					1		1		2		3	8	8
Flexible budget			1	2			1				Ц								2		1	2	5
Set standard costs		П	П	3	H	Н	2	Н	Ц	Ц	Ц	Ц			1	П	Н		2	П	Н	Н	∞
Variance analysis				cc			m								_				7				6

Conclusion

This present study points out significant findings. As the author's expectation, the level of managerial accounting technique application is still in traditional perspectives. However, the Thai listed companies attempts to provide flexible cost reporting fitting various situations and management needs. The study points out that classic budgeting and responsibility accounting remains popular. Influential group to apply management accounting is management term, not accountants. As further research, the authors wish to investigate why modern management accounting techniques such as ABC, Target costing, quality costs, and lifecycle costing are unlikely to be adopted in Thailand.

Comments from the 19th Asian Pacific Conference

The Conference commented the results were expected because if management accountants were not enforced by any standard setters such as Professional Accounting associations, management accounting practices would be depending on top management policy of the companies. In addition, most of accounting works are devoted to the preparation of financial statements to regulators who legally require financial statements for their stakeholders.

However, the research in these areas should be continually carried out. Management tool has been changed according to the changing of business environment; therefore, new management accounting practices should be adapted to real situation. Further research should keep up all evolution of management accounting practices.

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