



Modern Management Accounting Practices for Large Manufacturing Enterprise in Lower Northern Provinces Group I Thailand

Kanogporn Suranatthakul^{1*}

Supaporn Dokmaithong²

Ruankwan Intanon³

Warawit Phetruen⁴

Nuatip Sumkaew⁵

^{1,2,3,4,5}Accounting Department, Faculty of Business Economics and Communications, Naresuan University, Phitsanulok, Thailand.

*Email: kanogporns@nu.ac.th

Abstract

The rapidly increasing global and technological changes have given rise to the need of changing enterprise management. Therefore, modern management accounting practices (MAPs) are important for the enterprise and its manager to support the decision-making process, improve management activity, and help the operation effectively. Generally, the larger the organization, the greater the management's need for information. This work studies the modern MAPs that the enterprise applies, including barriers to the adoption. A descriptive study was performed in 10 large manufacturing enterprises in the lower northern provinces group I Thailand. Structured questionnaires and in-depth qualitative interviews with manager/ owner show that most large manufacturing enterprises are low level to apply for modern MAPs. Most large manufacturing enterprises prefer to use part of target costing, balanced scorecard, quality cost, and environmental management. All firms do not implement activity-based management and product life cycle costing. A few firms used the theory of constraint and just-in-time. Although those modern MAPs have not been fully applied and some modern MAPs are rarely or never used, managers are trying to apply modern MAPs slowly. However, the study also indicated that the managers have moderate satisfaction on current modern MAPs for decision making. Moreover, this study revealed that the key barriers limiting the implementation of modern MAPs were lack of employee skills/ training/ consultant about modern practices, high cost to implement, and no significant problems with current practices, respectively.

Keywords:

Modern Management Accounting Practice
Large Manufacturing Enterprise
Lower Northern Provinces Group 1.

JEL Classification:

L69; M19; M41

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Publisher:

Scientific Publishing Institute

Received: 11 February 2020

Revised: 13 March 2020

Accepted: 24 March 2020

Published: 3 April 2020

Funding: This study was supported by the Faculty of Business Economics and Communications, Naresuan University.

Competing Interests: The authors declare that they have no competing interests.

Acknowledgement: The author would like to thank the staff and the participants in the Lower Northern Provinces Group 1 Thailand, who participated in the study.

1. Introduction

The role of management accounting is very different now than it was years ago. Management accounting practices are important for enterprises to support the decision-making process and improve management activity. Apak, Erol, Elagöz, and Atmaca (2012) suggested that the fierce competition of today's world and the gradual shortening of the product life cycle compel the enterprises to simultaneously achieve lower cost,

higher quality, and faster as compared to their competitors. A manager needs information to pursue the goals. The information needs of management range across financial, production, marketing, and environmental issues. All managers use the practices of management accounting. The management accounting information is crucial at all levels of management, whether it be lower level, operational management, tactical decision-makers, and the strategic manager use the management accounting practices as a key source for decision making (Daniel, Yapa, & Dellaportas, 2014).

In order to meet the needs of the customers, this accomplishment can be realized by using modern MAPs. The modern MAPs help an enterprise and its manager run the operation effectively and provide helpful insights and useful guidelines to managers who are responsible for making sure that their companies move in an appropriate direction (Tuanmat & Smith, 2011). The modern empirical MAPs reveal that activity-based costing, target costing, quality cost, life cycle costing, the theory of constraint, total quality management, just-in-time, environmental management and balanced scorecard disclosure are the most common modern practices in the manufacturing enterprises (Karanja, Mwangi, & Nyaanga, 2012; Tabitha & Oluyinka, 2016).

Generally, the larger the organization, the greater the management's need for information. The reason is that larger organizations have larger amounts of resources to control. Therefore, organization size may have an impact on modern MAPs that large organizations tend to adopt these practices compares to small and medium enterprises. This fact is similar to the finding of Nair and Nian (2017) and Oyerogba (2015) found that organization size has significant relationships with management accounting practices. The manufacturing companies using modern technology in the production activities have an impact on modern MAPs, mainly in larger companies. The production processes have become more complex. As such, the manufacturing company requires modern MAPs.

The relative adoption of traditional accounting practices is higher than modern MAPs in many countries, including Vietnam, Egypt, Greece, and Bangladesh (Angelakis, Theriou, Floropoulos, & Mandilas, 2015; Hieu & Dung, 2018; Hussein, 2018; Khan, 2018). In contrast, Malaysia, Jordan, Romania, Australia, and Canada are positive with the adoption of modern MAPs and the level of success of modern MAPs was moderate (Alzoubi, 2018; Cuzdriorean, 2017; Nuhu, Baird, & Bala, 2017; Pollanen & Abdel-Maksoud, 2010; Tuanmat & Smith, 2011).

Thai manufacturing firms should be informed about the importance of modern MAPs, which are serving the management's objectives. In order to stay ahead in a globally-competitive environment.

2. Research Objectives and Methodology

This research investigates the use of modern MAPs for large manufacturing enterprises in lower northern provinces group 1 Thailand: Phitsanulok, Tak, Sukhothai, Petchaboon, and Utharadit. Specific objectives were to investigate the modern MAPs that the enterprises apply, including the barrier to adopt. In order to achieve the research objectives, the study was carried out by gathering data from primary sources by using structured questionnaires in an in-depth qualitative interview with large manufacturing enterprises owner/manager. In lower Northern provinces group 1 Thailand, there were 10 registered large enterprises by the time the study was conducted. In this study, the primary data was collected from a group of 10 large enterprises. Descriptive statistics were used to analyze these data. The structured questionnaires were developed in this study based on research objectives and divided into three topics: large manufacturing enterprise profiles, the use of modern MAPs and level of satisfaction on current MAPs, and the barrier to the adoption.

3. Results and Discussion

3.1. Large Manufacturing Enterprise Profiles

Profiles of large manufacturing enterprises were collected to gain a broad overview of enterprises participated in this study. Four questions consist of years of operations, the number of employees, years of manager experiences, and the presence of an accounting department. The gathered information is useful to understand the background of large manufacturing enterprises. The results are summarized in Table 1. Half of the large manufacturing enterprises have been in business for more than 30 years, and 70 % of enterprises have more than 200 employees. The majority of managers have more than 20 years of experience (60%). All of the large manufacturing enterprises have an accounting department for preparing financial and management reports.

Table-1. Large manufacturing enterprise profiles participated in this study.

| Profiles of firms | Number of large manufacturing enterprises | Percent |
|--|---|---------|
| Years of operations | | |
| 16-20 | 2 | 20 |
| 21-30 | 3 | 30 |
| More than 30 | 5 | 50 |
| Total | 10 | 100 |
| Number of employees | | |
| 151-200 | 3 | 30 |
| 201-250 | 3 | 30 |
| More than 250 | 4 | 40 |
| Total | 10 | 100 |
| Years of manager experiences | | |
| 11-15 | 1 | 10 |
| 16-20 | 3 | 30 |
| More than 20 | 6 | 60 |
| Total | 10 | 100 |
| The presence of an accounting department | | |
| Yes | 10 | 100 |
| No | - | - |
| Total | 10 | 100 |

3.2. Current Modern Management Accounting Practices and Level of Satisfaction

Table-2. Current Modern management accounting practices.

| Current Modern management accounting practices | Number of large manufacturing enterprises | Percent |
|--|---|---------|
| Activity-based management | - | - |
| Target costing | 6 | 60 |
| Quality cost | 5 | 50 |
| Product life cycle costing | - | - |
| Theory of constraint | 1 | 10 |
| Total quality management | 3 | 30 |
| Just-in-time | 1 | 10 |
| Environment management | 5 | 50 |
| Balanced scorecard | 5 | 50 |

Table 2 shows the current modern MAPs. Most large manufacturing firms adopt target costing, balanced scorecards, quality cost, and environmental management. The reason is that target costing is an important practice to enhance management's awareness of costs and therefore focus on profit margin, which strengthens the competitive position. Meanwhile, a balanced scorecard contributes to providing a clear vision of the enterprise about its current status and future. These are the main reasons that most enterprises choose target costing and balanced scorecard practices. These results agree with the studies with samples from Jordanian industrial corporations that showed that target costing had been widely adopted (Alzoubi, 2018). Similarly, Šiška (2016) and Khan (2018) investigations in the Czech and Bangladesh manufacturing companies indicated that there were relatively moderate applications in target cost. Furthermore, the recent study in Malaysian listed firms demonstrated that the use of balanced scorecards had been extensively adopted in Malaysian listed firms (Abdullah & Chaabane, 2015).

In the view of the Thai manufacturing firms, official authorities have been monitored about quality, waste, and environment every year. Thus, most enterprises prepare quality and environment reports, especially ISO 9002, ISO 14000, and ISO 18000. Abdel-Kader and Luther (2008) and Abdullah and Chaabane (2015) revealed that calculation and reporting of the cost of quality were extensively used.

Elements of target costing, balanced scorecard, quality cost, and environment management are used because the entire practices are considered too cumbersome. These results agree with the studies in Nigeria listed manufacturing companies, which demonstrate that the use of the balanced scorecard has not been fully

embraced (Oyerogba, 2015). However, Thai manufacturing firms have a significant influence on target costing, balanced scorecards, quality cost, and environment management for the decision-making process.

The theory of constraint and just-in-time are rarely used, while the activity-based management and product life cycle costing are never used. These results agree with that of Daniel et al. (2014) in activity-based management practices that were rejected by large multinational manufacturing companies.

Table-3. Level of satisfaction on current management accounting.

| Level of satisfaction | Number of large manufacturing enterprises | Percent |
|-----------------------|---|---------|
| Low | 3 | 30 |
| Moderate | 6 | 60 |
| High | 1 | 10 |
| Total | 10 | 100 |

In addition, results from the extensive interviews with the owners/ managers show that 60 % of large manufacturing firms were moderately satisfied with the use of the current MAPs Table 3. Most Thai manufacturing enterprises still prefer traditional accounting practices and some modern MAPs that their accounting staffs prepare because they do not face a serious problem with current MAPs. The owners/ managers can use current MAPs for improving their business performance and decision making. These results agree with the study done in South Africa, which confirmed that the impact of modern MAPs on organizational performance and that the increase in the use of such practices leads to increased productivity (AlKhajeh & Khalid, 2018).

3.3. The Barrier to the Adoption of Modern Management Accounting Practices

Table-4. Barrier to the adoption.

| The barrier to the adoption | Number | Percent |
|--|--------|---------|
| Take a longer time to change the modern practices | 1 | 10 |
| High cost to implement modern practices | 5 | 50 |
| Lack of financial fund | 2 | 20 |
| Lack of software package related to modern practices | 2 | 20 |
| Lack of employee skills/ training/ consultant about modern practices | 7 | 70 |
| Modern practices are too complex | 1 | 10 |
| No significant problems with current practices | 3 | 30 |
| Benefits of modern practices are difficult to observe | 1 | 10 |

Table 4 shows 8 barriers adopted from studies. The key barriers limiting the implementation of modern MAPs were lack of employee skills/ training/ consultant about modern practices (70%), high cost to implement (50%), and no significant problems with current practices (30%), respectively. The least barrier was modern practices are too complex, take longer time to change, and the benefits of modern MAPs are difficult to observe. This result is similar to Hussein (2018) finding in Egypt that the key barriers due to the high costs and lack of expertise. Besides, Khan (2018) indicated that contemporary management accounting tools are very slow to be adopted in Bangladesh because of the greater emphasis is on traditional management accounting tools and high costs with implementing. Moreover, Nimtrakoon and Tayles (2015) highlighted that while respondents perceived ABC as beneficial, they did not adopt due to lack of expertise to implement. The main barriers from this study and those articles are similar, but the order of barriers has changed.

4. Conclusions and Limitations

Most of the manufacturing enterprises adopt modern management accounting practices at different levels; wide adoption of practices: target costing, balanced scorecard, quality cost, and environmental management. The theory of constraint and just-in-time are rarely used while the activity-based management and product life cycle costing are never used. It can be concluded from the results that modern MAPs is still at the introductory stage. These findings are in line with various other international researches that the level of adoption of modern MEPs remains low. It also confirms the results from earlier Thai research of Komaratat and Boonyanet (2008). Although the use of modern MAPs is at a low level, this is not because the other modern MAPs are without prospects, but adequate awareness might not have been carried out. There are

several obstacles to implement modern MAPs, such as lack of employee skills and high cost to implement, but the owners/managers are moderately satisfied with the current management accounting.

Based on the results, the study recommends that managers should consider enhancing the adoption of modern MAPs applied in the manufacturing enterprises by considering the benefits of using the practices. Although many modern MAPs too cumbersome and impractical simplicity of the manufacturing processes, the fundamental management responsibilities gave to ensure the ability to utilize many modern MAPs and believed to be more useful for their needs.

The main limitation of this study is the small number of the large manufacturing companies in lower Northern provinces group 1 Thailand participated.

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