2019
Vol.19 No.2

POLISH JOURNAL OF MANAGEMENT STUDIES
Terdpaopong K., Visedsun N., Nitirojntanad K.

VALUE CREATION THROUGH MANAGEMENT ACCOUNTING PRACTICES IN LARGE THAI MANUFACTURING COMPANIES

Terdpaopong K., Visedsun N., Nitirojntanad K.*

Abstract: This research explores the extent to which various management accounting practices (MAPs) have been implemented in large Thai manufacturing companies. Although IFAC 1998, which describes management accounting evolution, has been studied extensively in the two decades since its release, MAPs and their diffusion for business value creation has received relatively little attention. This study uses a survey questionnaire to collect information on this subject. Of the 1,500 companies that received the survey, 205 provided usable, complete responses, for a 13.67% response rate. Cluster analysis is used to group a set of data objects into four clusters with hierarchical agglomerative methods, and a discriminant analysis is used to assure the cluster analysis classification's accuracy. The results show that the respondents used Budgeting for product cost controlling the most. We also discovered that the new, advanced MAPs are used increasingly among many large Thai companies. MAPs are used to create value for large Thai companies, but not yet to the highest stage, based on the IFAC evolution model. Adoption is still far behind compared to the pace of change in production processes, especially in light of increasing competition on the global level.

Keywords: management accounting practices, value creation, IFAC, evolution, diffusion, competitiveness

DOI: 10.17512/pjms.2019.19.2.34

Article's history:
Received January 19, 2019; *Revised* March 21, 2019; *Accepted* April 10, 2019

Introduction

There are various definitions of the term "Management Accounting." Scapens (1991) stated that there is no generally agreed-upon definition. Among the several definitions that have been presented, some are too general to provide a suitable explanatory structure while others simply emphasize one particular research approach (Rekik, 2018; Scapens, 1991). Scapens and Jazayeri (2003) suggest that Enterprise Resource Planning (ERP) systems, such as SAP, that have become widely adopted in recent years, particularly in large companies, are a leading driver for MAP changes. The authors argue that further longitudinal studies after implementing ERP systems are needed to study how they facilitate and reinforce management accounting process changes. As defined by the Institute of Management Accountants (IMA, 2008, p. 1), management accounting is "a

* Dr. **Kanitsorn Terdpaopong,** Dr. **Nimnual Visedsun,** Assistant Professor, Faculty of Accountancy, Rangsit University, Pathumthani, Thailand; **Kanibhatti Nitirojntanad,** Assistant Professor, Department of Accountancy, Chulalongkorn University, Thailand
✉ Corresponding author: kanitsorn@rsu.ac.th
✉ nimnuan@rsu.ac.th; kanibhatti@cbs.chula.ac.th

profession that involves partnering in management decision-making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy."

Management accounting has evolved in four main stages. The trends of management accounting from before 1950 to 1995 are grouped as follows.

Stage 1: Cost determination and financial control (CDFC) - Before 1950

During this stage, management accounting focused on cost determination and financial control using budgeting and cost accounting techniques. Production technologies were relatively simple.

Stage 2: Information Provision for management planning and control (IP) - By 1965

During this phase, the focus shifted to providing information for management planning and control through using technologies such as decision analysis and responsibility accounting. The emphasis was on manufacturing and internal administration rather than strategic and environmental considerations (Ashton et al., 1995; Rismayadi and Maemunah 2018).

Stage 3: Waste Reduction (WR) - By 1985

In this phase, the focus was on reducing manufacturing waste through process analysis and cost management techniques. To respond to the impact of greater global competition, new management and production techniques were introduced such as the Just-in-Time (JIT) inventory method and Activity-Based Costing (ABC) for their decision-making.

Stage 4: Creation of value (CV) - By 1995

During this phase, attention shifted to generating or creating value through the effective use of resources via increased use of techniques to examine drivers of customer value, shareholder value, and organizational innovation. New model techniques, such as total quality management (TQM), activity-based management (ABM), benchmarking, and reengineering methods, had been launched to eliminate activities that did not create value. The use of real-time information to create value became an integral part of the management process.

The shift from Stage 1 to Stage 2 was driven by management's need for more accounting information, while the critical differences between Stages 2, 3, and 4 were changes in focus. As management required more information about resource management, waste reduction became important for simultaneously maintaining quality and reducing costs, while Stage 4 was more focused on value creation. These changes occurred due to shifts in the competitive environment that required management to think about adding more value to their products. The change at every stage represents adapting to a new environment in which organizations had to reshape and reformulate their strategies to remain competitive.

In Singapore, Ghosh and Chan (1997) examined MAPs in large Singaporean companies operating in the manufacturing and services sectors. The results revealed a high level of adoption of traditional MAPs, such as operating and capital

budgeting (more than 80 percent), moderate use of long-range planning (ranging from 56 percent to 80 percent), while break-even analysis, return on investment and standard costing, and a very low uptake (11 percent) of ABC usage were discovered. Phadoongsitthi (2003) found similar results in Thailand to those in Singapore and India. The study reported that for Thai companies in the manufacturing and services sectors, adoption of budgeting, planning, and performance evaluation practices were high, but adoption of contemporary approaches such as target costing, product life cycle analysis, and zero-based budgeting (ZBB) was low. Nimtrakoon (2009) conducted a study of Thai MAPs. The findings confirm the popularity of, and high perceived benefit from, traditional MAPs and reveal disappointing adoption rates of, and relatively low perceived benefit from, contemporary MAPs. Sulaiman et al. (2008) summarized the previous findings on MAPs in developing countries: while the use of contemporary management accounting tools is lacking in the four countries considered (China, Singapore, India, and Malaysia), the use of traditional management accounting techniques remains strong. The probable reasons for this are: a lack of awareness of new techniques, a lack of expertise, and perhaps most importantly, a lack of top management support.

Hypothesis 1: *Large Thai manufacturing companies rely more on traditional MAPs than on contemporary practices.*

The comparative study on MAPs between Thailand and Malaysia (Terdpaopong et al., 2017; Rosli and Siong 2018) was a primary research of past literature. Several previous studies also concluded that modern MAPs have not received much attention or successful adoption and implementation in Thai industry. Rodpetch (2003) and Wajeetongratana (2016) found that contemporary or new management accounting tools are not widely used in Thailand.A few companies reported using advanced or contemporary practices using JIT and ABC. Additionally, JIT and ABC are not new in Thailand, but they do not seem to be popular among Thai companies, some of which abandoned them due to the difficulty in data collection, especially ABC (Chongruksut, 2009; Intakhan, 2014; Salim and Hariandja 2018). Very advanced companies adopted contemporary MAPs, such as TQM, ABM, target costing (TC), and other creative value methods, but it is unusual for other businesses to adopt such innovative methods (Nimtrakoon and Tayles, 2015; Shutibhinyom, 2014; Terdpaopong and Visedsun, 2014; Yongvanich and Guthrie, 2009; Samaila et al., 2018). The low adoption of MAPs found to be more on advancing stages or later stages in Thailand. From such statements, our second hypothesis is formed (Hussain et al., 2018).

Hypothesis 2: *Adoption of MAPs in Thailand is at lower stages (defined as either IFAC Stage 1 or 2) rather than higher stages (IFAC Stage 3 or 4).*

Research Methodology

This study categorizes each management accounting practice into one of the four IFAC-defined stages. Each practice is classified based on IFAC statements and

prior literature. In the few instances where researchers have classified them differently, we use the approximate timeline with which each stage is principally associated to classify them. Classification of 45 MAPs against four IFAC stages was a challenging process and required some compromises. We accept that our categorization is ambiguous and, in some cases, may be anachronistic. It should be remembered that each stage of evolution encompasses the practices of the previous stage.

The population used in this study is drawn from the business data warehouse of the Department of Business Development, Ministry of Commerce, Thailand. The study uses purposive and quota sampling. Based on the data from the data warehouse, companies located in Thailand's central industrial cluster are selected. A total of 15 provinces included in the industrial cluster and located in a central part of the country are chosen for the study. These 15 provinces are bases for manufacturing production and have a relatively high economic impact on the country's economy. Only large companies with total assets greater than THB 500 million (USD 15.625 million) as of December 31, 2016, with continuing operation in 2015–2016, are included in the study.

There were 2,848 companies meeting our selection criteria. The study uses a quota sampling method by taking proportions of the total companies in those provinces. Therefore, 1,500 is the sample number for this study. The research concentrated solely on the manufacturing sector to avoid distractions arising from variations between sectors. A postal questionnaire approach is used as it has been widely used in management accounting research (Haldma and Laats, 2002; Al-Omiri and Drury, 2007; Phadoongsitthi, 2003; O'Connor et al., 2004; Sulaiman et al., 2008; Haseeb et al., 2018). Questionnaires were delivered to the 1,500 companies in the sample during September 2017. We received 220 responses, of which 205 were usable, for a 13.67 % response rate representing 7.19 % of the population. Empirical statistics, including means, standard deviation, a coefficient of variation, and percentages were used. The stages of the companies are confirmed using cluster analysis in order to group a set of data objects into different clusters with hierarchical agglomerative methods. A discriminant analysis is later used to assure the cluster analysis classification's accuracy. This method has been used in previous studies such as Abdel-Kader and Luther (2008), Boer, Labro, Morlacchi (2001), Buysse and Verbeke (2002).

Results

The primary focus of this research is to examine MAPs in large manufacturing companies in Thailand and to assess MAP advancement within these organizations. Each respondent was asked to specify the level of usage of each MAP by choosing answers based on a 5-Likert scale, where 5 (score 4.51–5.00) is "most often used"; 4 (score 3.51–4.50) is "often used"; 3 (score 2.51–3.50) is "sometimes used"; 2 (score 1.51–2.50) is "rarely used"; and 1 (score 1.00–1.50) is "never used."

To interpret how each practice is used by the respondents' organizations, the practices were classified according to their purpose of use or implementation within organizations: costing system, budgeting, performance evaluation, information for decision-making, and strategic accounting management. This study adopts these classifications as they have been widely accepted and used in several other studies (e.g., Ittner and Larcker, 1998; Shields, 2015; Alleyne and Weekes-Marshall, 2011; among others). Each category, therefore, is comprised of several MAPs by which categories may have different IFAC Stages.

Costing System

Seven MAPs are included in the costing system category. These practices are normally used to determine production costs. Table 1 shows the most common practice used within a costing system was "Product cost" which includes variable costs, incremental costs, and fixed costs. The level of use is 65.4 %, with a mean score of 3.60 out of 5.0. The second most often used was "standard costing and cost variance analysis" (57.1 % usage, mean 3.47), and the third most often used was "plan-wide overhead rate" (51.1 % usage, mean 3.33). All have similar SDs and medium coefficients of variation.

Table 1. Management accounting practice on costing system

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
1.1 Job-process or job-order techniques	1	50.2	3.29	1.47	0.45
1.2 Product cost: variable cost, incremental costs & fixed costs	1	65.4	3.60	1.49	0.41
1.3 Activity-based costing	3	34.1	2.73	1.48	0.54
1.4 Use of plant- wide overhead rate or Department or multiple plant-wide overhead rates)	1	54.1	3.33	1.43	0.43
1.5 Standard costing and cost variance analysis	2	57.1	3.47	1.48	0.43
1.6 Quality cost analysis	3	38.5	2.79	1.48	0.53
1.7 Learning curve technique	3	19.5	2.17	1.28	0.59
Total			3.05	0.94	0.48
Note: SD-Standard Deviation; CV-Coefficient of Variation					

Budgeting

The most popular practice in this category was "budgeting for product cost controlling" with a use percentage of 81.0 and a mean score of 4.25; the second most popular was "budgeting for cash flow planning" (80.0 % usage, mean 4.17); and the third was "pro forma financial statement" (64.9 % usage, mean 3.73). Interestingly, the first and second practices were almost equally popular among our survey respondents, while the third most popular practice lagged behind the first two at 64.9 % usage. The remaining practices in this category, such as ABC (38.0 % usage), flexible budget (36.1 %) and ZBB (21.0 %) were far less popular.

Table 2. Management accounting practice on budgeting

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
2.1 Budgeting for product cost controlling	1	81.0	4.25	0.99	0.23
2.1 Budgeting for cash flow planning	1	80.0	4.17	1.07	0.26
2.3 Activity-based budgeting	3	38.0	2.80	1.47	0.52
2.4 Pro forma Financial Statement	1	64.9	3.73	1.30	0.35
2.5 Flexible budget	1	36.1	2.81	1.46	0.52
2.6 Sensitivity analysis of cost	2	34.6	2.68	1.46	0.54
2.7 Zero-based budgeting	3	21.0	2.18	1.41	0.65
Total			3.23	0.90	0.28

Performance Evaluation

In this category, most of the practices are under IFAC MAP Stage 4–Creation of Value. As shown in Table 3, to evaluate business performance, most respondents use "financial measurements" and "non-financial measurements related to customers—customer satisfaction" with usage percentages equaling 69.3 and 55.1, and mean levels of usage of 3.92 and 3.38, respectively. The third most popular was "non-financial measurements related to operation and innovation such as patents, certificates, and awards" (51.2 % usage, mean usage level of 3.43).

Table 3. Management accounting practice on performance evaluation

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
3.1 Balanced scorecard	4	35.1	2.82	1.40	0.50
3.2 Financial measurements	1	69.3	3.92	1.21	0.31
3.3 Non-financial measurements related to customers–customer satisfaction	4	55.1	3.38	1.40	0.41
3.4 Non-financial measurements related to operation and innovation such as patents, certificates, awards	4	51.2	3.43	1.26	0.37
3.5 Non- financial measurements related to employees such as employee satisfaction, staff–turnover	4	41.5	3.07	1.34	0.44
3.6 Benchmarking	4	48.3	3.21	1.43	0.45
3.7 Residual income	2	45.4	3.13	1.48	0.47
3.8 Economic value added	3	34.1	2.77	1.37	0.49
Total			3.22	0.95	0.30

Information for Decision-making

Several practices are categorized under this topic, as shown in Table 4. The most used practice for information-based decision-making was "Profitability analyses," with a usage percentage of 80.5, and a mean level of usage of 4.14. The second most used was "Profit analysis of product" with 69.8 % usage at a mean level of 3.71. This practice is different from profitability analyses since profit analysis of products is primarily focused on determining the profitability of each product individually and comparing them to each other. The third most highly-ranked practice according to respondents was "Evaluation of capital investments based on payback period and/or accounting rate of return" (66.6 % usage, mean usage level of 3.78). The use of this practice was similar to the break-even point analysis and the evaluation of major capital investment based on a discounted cash flow method.

Table 4. Management accounting practice on Information for decision-making

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
4.1 Break-Even point analysis	2	65.4	3.64	1.44	0.40
4.2 Stock control models	2	49.3	3.01	1.50	0.50
4.3 Evaluation of major capital investment based on a discounted cash flow method	3	63.4	3.55	1.37	0.39
4.4 Evaluation of capital investments based on payback period and/or accounting rate of return	2	66.3	3.78	1.30	0.34
4.5 Sensitivity analysis of cost model	2	39.0	2.83	1.51	0.53
4.6 Incremental analysis	2	46.8	3.11	1.46	0.47
4.7 Profitability analysis	1	80.5	4.14	1.07	0.26
4.8 Profit analysis of product	2	69.8	3.71	1.42	0.38
4.9 Customer profitability analysis	4	38.5	3.02	1.36	0.45
Total			3.42	1.05	0.31

Strategic Management Accounting

There are 14 practices included in the strategic accounting management category, 10 of which are in IFAC Stage 4–Creation of value. Table 5 shows that several practices are used by a similar percentage of respondents. *"Lean management"* was used most, with 67.3 % usage and a mean usage level of 3.64, while the second most used was *"Target costing management"* with 61.5 % usage and a mean of 3.51. The third most used was *"TQM"* with 60.00% usage and a mean of 3.43.

Table 5. Management accounting practice for strategic management

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
5.1 Value chain analysis	4	25.4	2.48	1.36	0.55
5.2 Transfer prices technique	2	26.8	2.49	1.33	0.53

Management Accounting Practice	IFAC Stage	Usage (%)	Mean	SD.	CV.
5.3 Shareholder value analysis	4	41.0	3.05	1.37	0.45
5.4 Industry analysis	4	44.9	3.03	1.38	0.46
5.5 Analysis of competitive position	4	49.8	3.16	1.4	0.44
5.6 Product life cycle analysis	3	34.1	2.79	1.37	0.49
5.7 The possibilities of integration with suppliers and/or customers value chains	4	26.0	2.58	1.36	0.53
5.8 Analysis of competitors strengths and weaknesses	4	50.7	3.27	1.42	0.43
5.9 Activity-based management	4	33.2	2.71	1.36	0.50
5.10 Total quality management	4	60.0	3.43	1.39	0.41
5.11 Just-in-time: JIT	3	53.2	3.26	1.45	0.44
5.12 Target costing management	4	61.5	3.51	1.42	0.40
5.13 Lean management	4	67.3	3.64	1.41	0.39
5.14 Long-range forecasting	2	57.1	3.58	1.32	0.37
Total			3.07	1.38	0.45

Results Discussion

Our research findings confirm the top three most popular MAPs among large Thai manufacturing companies are 1) budgeting for product cost controlling (81%), 2) profitability analysis (80.5%), and 3) budgeting for cash flow planning (80.0%). All of these are classified under IFAC Stage 1–cost determination and financial control. Furthermore, the practices used most are primarily in IFAC Stages 1 and 2; the most popular practices in Stage 2 are profit analysis of product (69.8 %), evaluation of capital investment (66.3 %), and break-even point (65.4 %) which are more popular than practices from Stage 4–lean (67.3 %), TC (61.5 %), and TQM (60.0 %), or Stage 3–discounted cash flow (63.4%), JIT (53.2 %), and quality cost analysis (38.5). Clearly, the most used MAPs within these companies are traditional rather than contemporary. Despite this, MAPs have not advanced accordingly. Especially at this current stage, businesses have been overwhelmed by advancements in digital technology. However, most respondents still rely on traditional MAPs. Our first hypothesis is supported by our results.

From our finding, most (65–81%) businesses' practices fall into Stage 1; they use management accounting for cost determination and financial control, while some use it for management planning and control. A minority (38.0–67.3 %) are more advanced and fall into Stage 3 by using discounted cash flows, JIT, and quality cost analysis, and Stage 4 by using Lean, TC, and TQM. Even though JIT and ABC are not new in Thailand, they seem unpopular among Thai companies. Some abandoned these practices after using them for some time due to difficulty in data collection, especially ABC (Chongruksut and Brooks, 2005; Intakhan, 2014). Very advanced companies adopt TQM, ABM, TC, and other creative value methods, but it is unusual for other Thai businesses to adopt such innovative methods (Nimtrakoon and Tayles, 2015; Shutibhinyom 2014; Terdpaopong and Visedsun, 2014; Yongvanich and Guthrie, 2009). Overall, we find a low adoption of MAPs at

advanced IFAC stages. However, the finding that practices in Stage 3 were less widely adopted supports our conclusion that MAPs used by large Thai manufacturing companies are primarily categorized in the early stages (Stages 1-2) rather than in the later stages (Stages 3-4). To confirm our second hypothesis, a cluster analysis was conducted.

Based on the clustering procedures, 205 companies were assigned to clusters as follows: 92 companies to Cluster A, 24 to Cluster B, 41 to Cluster C, and 48 to Cluster D. The ANOVA produced p-values for each group that are smaller than the 0.05 significance level. We conclude that the mean score for each cluster is statistically significantly different from the others. The next step involves labeling the clusters. This is done by matching the clusters to a level of the IFAC model. According to IFAC's theoretical model of management accounting evolution, mean scores of Clusters C are the lowest for all clusters. Therefore, we determine that Cluster C represents Stage 1 in the IFAC model. Cluster A's mean scores are higher than Cluster C but lower than Cluster B and D. Therefore, Cluster A represents Stage 2 in the IFAC model. Since Cluster B has the overall highest scores compared to other clusters, we conclude that this Cluster represents Stage 4, the highest stage in the IFAC model, and Cluster D represents Stage 3. In summary, 41 companies (20%) are classified as Stage 1; 92 companies (45%) as Stage 2; 48 companies (23%) to Stage 3, and 24 companies (12%) to Stage 4 of the IFAC model. Most of the companies in our sample fall into Stage 2, followed by Stage 3, 1, and 4, respectively. Next, we performed a discriminant analysis to determine classification accuracy and found that 91.2% of the companies in our clusters were correctly classified. The cluster analysis confirms Hypothesis 2 that adoption of MAPs in large Thai manufacturing companies is at a fairly low stage since most companies fall onto Stage 2 of the IFAC evolution model.

Conclusion

Based on our findings, large manufacturing companies in Thailand rely more on traditional MAPs. However, we see a shift in the practices used by these large companies. Many modern management accounting techniques have been widely adopted and implemented in Thailand's manufacturing industry. Even though many large Thai companies primarily use traditional MAPs that are considered Stage 1 and Stage 2 practices, there is also a high rate of usage of certain Stage 4 practices. The graph illustrating the usage rates of management practices in all 4 stages peak in Stage 1, decline in Stage 2, fall to the lowest level in Stage 3, then rise again for Stage 4. Despite the fact that most large Thai manufacturing companies use more MAPs from Stage 1, they seem to have the potential to adopt more Stage 4 practices. The cluster analysis confirms most of our samples fall into Stage 2 of the IFAC evolution model. Advanced management accounting tools used by its companies will inevitably influence the companies' management and decision-making. Therefore, the companies' accomplishments will support the country's economy and that of the region. The stage of adoption of MAPs was

previously unclear. Since there has been little research conducted on MAPs in Thai manufacturing companies; this study's findings narrow that research gap. Academics and practitioners can also use this study's findings to fully understand how MAPs are being adopted within their organizations and in the manufacturing industry. In addition, professional organizations, including global institutes such as the CIMA, the IMA, and national institutes such as Thailand's Federation of Accounting Profession under the Royal Patronage of His Majesty The King (TFAC), the Department of Industrial Promotion, the Ministry of Industry, and the Office of Small and Medium Enterprises Promotion (2018) could understand the status of MAPs in Thailand and explore ways to encourage greater implementation and adoption of modern management accounting practices. Educational institutions and scholars trying to understand current practices may see a correlation between a growing economy and the advancement of these practices.

Acknowledgment
The research financed by Rangsit University, Thailand under the Research Project Number 74/2559. The authors acknowledge with great gratitude and appreciation.

Reference

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

Alleyne P., Weekes-Marshall D., 2011, *An Exploratory Study of Management Accounting Practices in Manufacturing Companies in Barbados*, "International Journal of Business and Social Science", 2(10).

Al-Omiri M., Drury C., 2007, *A survey of factors influencing the choice of product costing systems in UK organizations*, Management Accounting Research, 18.

Ashton D., Hopper T., Scapens R., 1995, *The changing nature of issues in management accounting*, [In] Ashton D., Hopper T., Scapens R. (eds), Issues in Management Accounting. Hertfordshire: Prentice Hall.

Boer L.D., Labro E., Morlacchi P., 2001, *A review of methods supporting supplier selection*, "European Journal of Purchasing & Supply Management", 7(2).

Buysse K., Verbeke A., 2002, *Proactive environmental strategies: a stakeholder management perspective*, "Strategic Management Journal", 24(5).

Chongruksut W., 2009, *Organizational Culture and the Use of Management Accounting Innovations in Thailand, RU*, "International Journal", 3(1).

Chongruksut W., Brooks A., 2005, *The Adoption and implementation of Activity-based costing in Thailand*, Asian Review of Accounting, 13.

Ghosh B.C., Chan Y.K., 1997, *Management accounting in Singapore-well in place?* "Managerial Auditing Journal", 12.

Haldma T., Laats K., 2002, *Contingencies influencing the management accounting practices of Estonian manufacturing companies*, Management Accounting Research, 13.

Haseeb M., Abidin I.S.Z., Hye Q.M.A., Hartani N.H., 2018, *The impact of renewable energy on economic well-being of Malaysia: Fresh evidence from auto regressive distributed lag bound testing approach*, "International Journal of Energy Economics and Policy", 9(1).

Hussain H.I., Shamsudin M.F., Anwar N.A.M., Salem M.A., Jabarullah N.H., 2018, *The Impact of Shari'ah Compliance on the Adjustment to Target Debt Maturity of Malaysian Firms*, "European Research Studies Journal", 21(2).

IFAC, 1998, International Federation of Accountants, *International Management Accounting Practice Statement: Management Accounting Concepts*, New York.

IFAC, 2002, International Federation of Accountants, *Competency Profiles for Management Accounting Practice and Probationers, International Federation of Accountants*, New York.

IFAC, 2005, International Federation of Accountants, *Home Page, International Federation of Accountants*. Available at; http://www.ifac.org/on 10 January 2018.

IMA, 2008, Institute of Management Accountants, *Statements on Management Accounting: Practice of Management Accounting*, Montvale. Available at: www.imanet.org/.

Intakhan P., 2014, *Direct & Indirect Effects of Top Management Support on ABC Implementation Success: Evidence from ISO 9000 Certified Companies in Thailand*, Procedia - Social and Behavioral Sciences, 164(0).

Ittner C.D., Larcker D.F., 1998, *Innovations in performance measurement: Trends and research implications*, "Journal of Management Accounting Research", 10.

Nimtrakoon S., 2009, *Organization Strategy, Management Techniques and Management Accounting Practices: Contingency Research in Thailand*, Ph.D Thesis, University of Hull, United Kingdom.

Nimtrakoon S., Tayles M., 2015, *Explaining management accounting practices and strategy in Thailand: A selection approach using cluster analysis*, "Journal of Accounting in Emerging Economies", 5(3).

O'Connor N.G., Chow C.W., Wu A., 2004, *The adoption of "Western" management accounting/controls in China's state-owned enterprises during economic transition*, Accounting, Organizations and Society, 29(3).

Phadoongsitthi M., 2003, *The role of management accounting in emerging economies: An empirical study of Thailand. (Ph.D Thesis)*, The United States: University of Maryland, College Park.

Rekik M., 2018, *The Moderating Effect of Governance Mechanisms on the Relationship Between Innovation Strategy and the Performance*, "International Journal of Business, Economics and Management", 5(3).

Rismayadi B., Maemunah M., 2018, *Creative Economy to Increase Community Revenue Based on Tourism Object, Medalsari Village, Pangkalan District Karawang Regency*, "Journal of Accounting, Business and Finance Research", 3(1).

Rodpetch V., 2003, *The Use of Management Accounting Techniques by Thai Small and Medium Enterprises*, Routledge Handbook of Accounting in Asia, 20.

Rosli A., Siong T.I., 2018, *Determinants of Customers Satisfaction Towards Services Provided by Agencies in Urban Transformation Centre (UTC)*, "International Journal of Economics, Business and Management Studies", 5(1).

Salim M.N., Hariandja N.M., 2018, *Factors affecting joint stock price index (CSPI) and the impact of foreign capital investment (PMA) Period 2009 to 2016*, Humanities and Social Sciences Letters, 6(3).

Samaila M., Uzochukwu O.C., Ishaq M., 2018, *Organizational Politics and Workplace Conflict in Selected Tertiary Institutions in Edo State, Nigeria*, "International Journal of Emerging Trends in Social Sciences", 4(1).

Scapens R.W., 1991, *Agency Theory and Management Accounting*, Management Accounting, Palgrave, London.

Scapens R.W., Jazayeri M., 2003, *ERP systems and management accounting change: opportunities or impacts? A research note*, "Journal European Accounting Review", 12(1).

Shields M.D., 2015, *Established Management Accounting Knowledge*, "Journal of Management Accounting Research", 27(1).

Shutibhinyo W., 2014, *Determinants of Balanced Scorecard Usage: Indirect correlation through attitudinal factors*, "Global Journal of Business Research", 8(4).

Sulaiman S., Ramli A., Mitchell F., 2008, *What Factors Drive Change in Management Accounting in Malaysian Organisations?* Malaysian Accounting Review, 7(1).
Terdpaopong K., Visedsun N., 2014, *Target Costing in Manufacturing Firms in Thailand*, "Rangsit Journal of Social Sciences and Humanities", 1(2).
Terdpaopong K., Visedsun N., Nitirojtanad K., 2017, *The Advancement of Management Accounting Practices in Thailand and Malaysia*, "Suthiparithat Journal", 31(100).
The Office of Small and Medium Enterprises Promotion, 2018, Available at/: http://203.154.140.77/sme/Report.
Wajeetongratana P., 2016, *World Academy of Science, Engineering and Technology*, "International Journal of Economics and Management Engineering", 3(3).
Yongvanich K., Guthrie J., 2009, *Balanced Scorecard practices amongst Thai companies: performance effects*, Pacific Accounting Review, 21(2).

TWORZENIE WARTOŚCI POPRZEZ PRAKTYKI RACHUNKOWOŚCI ZARZĄDCZEJ W DUŻYCH TAJSKICH FIRMACH PRODUKCYJNYCH

Streszczenie: Niniejsze badanie bada zakres, w jakim różne praktyki rachunkowości zarządczej (MAP) zostały wdrożone w dużych tajskich firmach produkcyjnych. Chociaż IFAC 1998, który opisuje ewolucję rachunkowości zarządczej, był intensywnie badany w ciągu dwóch dziesięcioleci od jego wydania, MAPs i ich rozpowszechnianie w celu tworzenia wartości biznesowej zyskały stosunkowo mało uwagi. To badanie wykorzystuje kwestionariusz do zbierania informacji na ten temat. Spośród 1500 firm, które otrzymały ankietę, 205 dostarczyło użytecznych, kompletnych odpowiedzi za wskaźnik odpowiedzi 13,67%. Analiza skupień jest używana do grupowania zbioru obiektów danych w cztery klastry z hierarchicznymi metodami aglomeracyjnymi, a analiza dyskryminacyjna jest używana do zapewnienia dokładności klasyfikacji analizy skupień. Wyniki pokazują, że respondenci najczęściej stosowali budżetowanie do kontrolowania kosztów produktu. Wskazano również, że nowe, zaawansowane MAP są coraz częściej wykorzystywane przez wiele dużych tajskich firm. MAPy są wykorzystywane do tworzenia wartości dla dużych tajskich firm, ale jeszcze nie do najwyższego etapu, w oparciu o model ewolucji IFAC. Zastosowanie wciąż pozostaje daleko w tyle w stosunku do tempa zmian w procesach produkcyjnych, zwłaszcza w świetle rosnącej konkurencji na poziomie globalnym.
Słowa kluczowe: praktyki rachunkowości zarządczej, tworzenie wartości, IFAC, ewolucja, dyfuzja, konkurencyjność.

通过大型制造公司的管理会计实践创造价值

摘要：本研究探讨了泰国大型制造企业实施各种管理会计实务(MAPs）的程度。尽管描述管理会计演变的IFAC
1998在其发布后的二十年中已经进行了广泛的研究，但MAPs及其在商业价值创造中的传播却受到的关注相对较少。本研究使用调查问卷收集有关该主题的信息。在接受调查的1,500家公司中，有205家公司提供了可用的完整答复，答复率为13.67%。聚类分析用于使用分层凝聚方法将一组数据对象分组为四个聚类，并使用判别分析来确保聚类分析分类的准确性。结果表明，受访者使用预算编制控制产品成本最多。我们还发现，许多大型泰国公司越来越多地使用新的高级MAP。基于IFAC演化模型，MAP用于为大型泰国公司创造价值，但尚未达到最高阶段。与生产过程的变化速度相比，采用仍然落后，特别是考虑到全球竞争的加剧。
关键词：管理会计实务，价值创造，IFAC，演化，传播，竞争力。