

Management Accounting Practices (MAPs) of Small and Medium-sized Manufacturing Enterprises in The City of Tarlac

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ABSTRACT

Management accounting exists to provide financial and non-financial informational needs of the management to make informed business decisions, and consequently help attain the company's goals and objectives. This study described the management accounting practices (MAPs) of small and medium-sized manufacturing enterprises in the City of Tarlac. Relevant data were gathered through questionnaire and substantiated with interviews. Data revealed that majority of the 22 listed MAPs were adopted by the respondents. Using the viewpoint of Sino-Japanese Management Accounting, most SMEs had evolved to Stage 2 -Traditional MAPs with focus on product costing, variances and cost control. Likewise the most frequently used MAP was Standard Costing, under Stage 2 which was imperative to the SMEs that were mostly engaged in the manufacture of foods and beverages. Multiple Regression, NPV Analysis and Zero-based Budgeting were the least adopted and never used MAPs. On the other hand none of the respondents had reached to Stage 3 - Quantitative MAPs. The study also showed that MAPs were utilized mostly in sales and marketing related business decisions. Time requirement to adopt and implement the practices appeared to be primary problem encountered by the SMEs. Recommendations were made to optimize the utility of MAPs.

Keywords: management accounting, small and medium sized enterprise, manufacturing, accounting.

Introduction

A challenge for every business manager is on how to utilize and sustain the organization's resources – manpower, machinery and capital, to maximize the owners' wealth. Every decision made by the management or decision makers spells the success or failure of the business. Success comes to the people who get the big decisions right, and failure begins from poor or wrong decisions. To make a sound business decision, the information must be clear, factual, timely and relevant.

Accounting is the language of business. Business decision makers rely on information provided by accounting to communicate and make economic decisions

(Reyes & Mayol, 2001). The management establishes the company's competitive edge and its position in the market through efficient and effective allocation of its limited resources.

One of the important tools utilized by management in the discharge of its planning and controlling function is management accounting. It follows no general principles. Companies develop management accounting systems that are relevant and company-specific. Successful organizations worldwide evidently observed that management accounting information is a competitive tool.

Management accounting is defined as the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information (both financial and non-financial) used by management to plan, evaluate, and control within an organization and to assure use of accountability for its resources (FMAC-IFAC, 1989). It uses accounting data to provide the management with scientific and not merely speculated information useful in the decision making process. It provides information to the management that will help them control and improve business operations within the firm, prepare budget, schedule and forecast, evaluate projects, reduce waste and risk, and to decide what products or services to produce, how to source those products, how to cost and price the product and which managers to entrust with the company's resources. Hence, management accounting plays a vital role in the business.

Management accounting practices (MAPs) are management accounting tools or techniques used in coining business decisions in various business operations or activities. These are indispensable to any organization – profit oriented or not. Every business organization must adopt management accounting practice regardless of the size, market and operation. Among the three types of business operations – service, merchandising and manufacturing, manufacturing business maximizes the most advantage of management accounting because of its complex business activities and operations. Manufacturing businesses undergo the process of production where costs assignment and allocation is very crucial hence businesses compete on costs and prices. Moreover, most manufacturing businesses make use of the most recent technological innovations in production and information processes.

Today's business environments are becoming more complex and challenging as brought about by the advances in technology, market liberalization, increasing

global competition and changing demands of the consumers. As the business environment continuously changes, and so the focus of management accounting for the entity's survival and advantage. Prior to 1950's, the focus was on cost determination and financial control. By 1965, the focus had shifted to the provision of information for management planning and control. By 1985, attention was focused on the reduction of waste in resources used in business processes. Finally by 1995, attention had shifted to the generation or creation of value through the effective use of resources, the use of technologies, which examine the drivers of customer value, shareholder value, and organizational innovation (IFAC, 1998).

In the middle of 1980s, Japanese Management Accounting (JMA) came to attract the world attention due to Japan's bubbly economy. Professor Akira Nishimura (2002) developed the Sino-Japanese perspective of management accounting practices evolution also described into four stages. "Drifting" stage uses financial accounting data for business management. "Traditional" stage uses accounting techniques such as budgetary control, standard costing, break-even-point analysis and variance analysis. "Quantitative" stage utilizes quantitative and information theory such as mathematical formulas. Lastly, "Integrated" stage also known as "total package" realizes the need to integrate various organizational functions with the management accounting system such as using target costing, activity-based costing, and balance scorecard.

Management accounting draws in any type of business organization, the nature of its operation, geographical location, industry affiliation or size. Recent policy thrusts of governments around the world are geared towards harnessing the potential contribution of Small and Medium-sized Enterprises (SMEs) to achieve equitable economic growth and development. In the Philippines, SMEs play a vital role not only in wealth creation but also in dispersing new industries to the countryside that contributes to a more equitable distribution of income, encouraging entrepreneurial development, stimulating gainful employment, support export growth and a potent force in efforts against poverty (Ibarra, 2012). SMEs are defined as any business activity or enterprise whose total assets are valued ranging from over P3 million to P100 million (RA 9501). SMEs generally have limited resources hence there is a need for proper utilization and accountability on the company's resources through the right managerial decisions.

In 2012, the Province of Tarlac has been adjudged by the Philippine Chamber of Commerce and Industry (PCCI) as Most Business Friendly Local Government Unit.

The trade, investments, and tourism promotions; micro, small and medium enterprises (MSME) development; and quality management system, innovations, and human resources development were three of the five criteria in this national search. Undoubtedly, SMEs have caused to this continuous progress. SMEs have to keep up-to-date with changing business practices and so the management or decision makers if they want their strategies to remain relevant and effective and to stay commercially successful in attaining their goals and objectives.

It is at this position that the study on the Management Accounting Practices (MAPs) of small and medium-sized manufacturing enterprises in the City of Tarlac was conducted. The study aimed to contribute a help to the management in making informed business decisions in their planning, organizing, leading and controlling business operations with the use of relevant MAPs.

Statement of the Problems

The study described the Management Accounting Practices (MAPs) of small and medium-sized manufacturing enterprises in the City of Tarlac.

Specifically, it sought to answer the following questions:

1. How is the profile of the small and medium - sized manufacturing enterprises described in terms of:
 - 1.1. Type of Industry
 - 1.2. Years in Operation
2. How is the extent of adoption of Management Accounting Practices (MAPs) by the small and medium – sized manufacturing enterprises described?
3. How is the stage of management accounting evolution of the small and medium – sized manufacturing enterprises described when grouped as to
 - 3.1. Drifting Management Accounting
 - 3.2. Traditional Management Accounting
 - 3.3. Quantitative Management Accounting
 - 3.4. Integrated Management Accounting
4. In which aspects of business decisions the MAPs are utilized by the small and medium – sized manufacturing enterprises?

5. What are the problems encountered by the small and medium-sized manufacturing enterprises in relation to the adoption of MAPs?

Methods and Materials

The descriptive method of research was used to gather, analyze and present data pertinent to the study of the management accounting practices (MAPs) of small and medium-sized manufacturing enterprises in the City of Tarlac. A questionnaire was formulated to gather information to the respondents who were deemed qualified to provide the relevant data of the study such as the owner, supervisor, accountant, production manager, finance officer or officer in charge of the SME. The questionnaire contains a list of 22-MAPs which were adopted mainly from the study of Mahfar & Omar (2004). The management accounting evolution in the viewpoint of Sino-Japanese perspective - Drifting Management Accounting, Traditional Management Accounting, Quantitative Management Accounting, and Integrative Management Accounting was also used to describe the stages of the adoption to MAPs. Unstructured interviews with the aid of interview guide were conducted to clarify and substantiate the veracity of the answers of the respondents.

The study covered eleven sole-proprietorship small and medium-sized enterprises engaged in manufacturing which were located in the City of Tarlac and registered in the Bureau of Internal Revenue RDO17A as of December 31, 2011 during its pre-audit on December 2012. Nine (9) out of 11 SMEs responded to the questionnaire and 7 out of 9 accepted the interview.

Collected data were presented and described qualitatively. Simple frequency count, percentage and ranking were used to interpret the results. Weighted mean was used to analyze the extent of adoption to MAPs using the Likert-scale as follows:

Rating	Ranges	Equivalent Adjectival Rating
5	4.45 – 5.00	Always Used (A)
4	3.45 – 4.44	Almost Always (AA)
3	2.45 – 3.44	Occasional (O)
2	1.45 – 2.44	Seldom (S)
1	1.00 – 1.44	Never Used (NU)

MAPs with mean score of 2.45 or more were interpreted as adopted practices, whereas mean score of less than 2.45 implied minimal or non-adoption of the techniques. Based on the adoption of management accounting practices, the predetermined stages of management accounting evolution as described by Sino-Japanese perspective were established. The SMEs were evaluated individually. The SME was said to adopt or evolve at the stage of management accounting when at least half of the MAPs were adopted or with an extent of adoption of 2.45 or more.

Findings and Discussions

1. Profile of Small and Medium – Sized Manufacturing Enterprises

Six (6) out of 9 SMEs were engaged in the industry of food and beverages. Most of these SMEs produced bakery and bakeshop products. Some were associated in the manufacturing of processed food, refreshments, herbal preparation or restaurant. Two (2) were engaged in the production of wood, furniture and wood products such as cabinets, sofa, chairs, beds and the likes. The remaining one was engaged in the production of garments such as personalized t-shirts and apparels.

Five (5) out of 9 SMEs were in business operations for 20 to 29 years, 2 SMEs were operating for 10 to 19 years, and an SME was in business operations for 30 to 39 years and another SME for 40 years and above.

2. Extent of Adoption of Management Accounting Practices (MAPs) by Small and Medium – Sized Manufacturing Enterprises

Table 1 presents the weighted mean, adjectival rating and ranking of the 22 management accounting practices (MAPs) and the extent of adoption by SMEs.

Most MAPs were significantly adopted and practiced by the respondents as shown in the table where 13 out of 22 MAPs, ranging from Standard Costing to Statistical Analysis, earned mean scores of 2.45 or above. On the other hand, 9 out of 22 MAPs had mean scores of less than 2.45 which implies minimal or non-adoption of the MAPs. These 9 MAPs ranged from Kaizen Costing to Zero-based Budgeting.

The most frequently used management accounting tool was Standard Costing with the highest mean score of 4.67. Since most of the respondents manufacture homogenous products by batch or mass production, it was imperative to them to set standard, recipe or formula in their productions.

Cash remained to be the lifeblood of a business thus the respondents were particular in the monitoring of their cash. This was supported with the Cash Flow Analysis earning a mean score of 4.33.

On the 4th rank is Benchmarking. Respondents evaluated their performances and improved their operations by studying and considering the best and leader among the business processes and practices in the manufacturing or related industries. On the same rank is the Cost-Volume-Profit (CVP) Analysis. Since the respondents were engaged in mass production, it was essential to them to determine the volume or quantity, some termed as quota, to be produced and sold to cover the related (variable) costs and ensure profitability. The table also showed that respondents still monitored and evaluated the results of their business operations - income, expenses and profit with the use of their Income Statement.

Respondents utilized Variance Analysis, with mean score of 3.78, to ensure that their plans, budgets, targets or set standards, financial or non-financial, were achieved. Respondents prepared financial plan or budgets, with mean score of 3.67, of their resources in carrying out different business activities.

Respondents still monitored and evaluated their financial status or condition of their business' assets, liabilities and equity with the use of Balance Sheet, with mean score of 3.56. Respondents were particular in determining and controlling the desired or target cost of their products that they eventually used in determining the desired price and profit. This was supported by a mean score of 3.44 for Target Costing.

Since most of the respondents were engaged in mass or batch production, many of them acquired materials or ingredients when which were needed, or during regular schedules or forecast so as not to overstock the same in their warehouses. These were the characteristics of Just-in-time (JIT) with mean score of 3.33.

Respondents still evaluated their competitiveness by considering their strength, weakness, opportunity and treats using SWOT Analysis. Likewise, respondents

evaluated their company performance with the use of percentages, decimals or ratios with the use of Financial Ratio Analysis. Respondents used Statistical Analysis to forecast and evaluate their volume of production and sales.

Table 1
Extent of Adoption of Management Accounting Practices (MAPs) by SMEs

MAPs	Mean	Adjectival Rating	Rank
1. Standard Costing	4.67	Always used	1
2. Cash Flow Analysis	4.33	Almost always	2
3. Benchmarking	4.00	Almost always	4
4. CVP Analysis	4.00	Almost always	4
5. Income Statement Analysis	4.00	Almost always	4
6. Variance Analysis	3.78	Almost always	6
7. Budgets	3.67	Almost always	7
8. Balance Sheet Analysis	3.56	Almost always	8
9. Target Costing	3.44	Occasional	9
10. Just - in - Time	3.33	Occasional	10
11. SWOT Analysis	3.22	Occasional	11
12. Financial Ratio Analysis	3.00	Occasional	12.5
13. Statistical Analysis	3.00	Occasional	12.5
14. Kaizen Costing	2.11	Seldom	14.5
15. Responsibility Accounting	2.11	Seldom	14.5
16. Variable Costing	2.00	Seldom	16
17. Activity - Based Costing	1.67	Seldom	17
18. EOQ for Inventory	1.44	Never used	18
19. Balanced Scorecard	1.22	Never used	19
20. Multiple Regression	1.00	Never used	21
21. NPV Analysis	1.00	Never used	21
22. Zero-based Budgeting	1.00	Never used	21

The minimal adoption of respondents to Kaizen Costing was due to the fact that the management accounting tool was not (well) known to them. Similarly, the minimal adoption to Responsibility Accounting was because most of the respondents

were centralized in operations and reports were being done by authorized (limited) individuals who were mainly the owner or designated manager.

Most of the respondents had not adopted Variable Costing in their business operations with mean score of 2.00. Respondents were practicing Full Absorption Costing in contrast of the Variable Costing. In the same manner, respondents have minimal adoption to Activity-based Costing (ABC) because this management accounting tool entails high cost, time and complex processes.

Respondents had not adopted the EOQ formula in determining the optimum order quantity of their inventories as supported by a mean score of 1.44. The four BSC perspectives – financial, customer, business process and learning growth, and their interrelationships were not applied in the business decision making process of the respondents as supported by a mean score of 1.22.

The least or never practiced management accounting techniques were Multiple Regression, NPV Analysis and Zero-based Budgeting with mean score of 1.00. Said management accounting techniques were deemed not familiar or not useful to the respondents.

Thus, majority of the MAPs were adopted by the respondents. Furthermore, majority of the MAPs were used in the business decision making process of the respondents.

3. Stage of Management Accounting Evolution of the Small and Medium – Sized Manufacturing Enterprises

The MAPs were grouped on the viewpoint of Sino – Japanese Perspective. The SMEs were evaluated individually and an SME was believed that it had evolved to the stage when at least half of the total MAPs per stage were adopted or with an extent of adoption of 2.45 or more.

3.1 Drifting Management Accounting

Table 2 shows that 7 out of 9 respondents had evolved to the drifting stage of management accounting. SME B, C, D, E, G, H and I still evaluated their company

performances using past financial accounts. Managerial reports were basically derived from statutory governed financial statements.

The table further shows that all 5 Drifting MAPs were significantly utilized. The most frequently used drifting management accounting tool was Cash Flow Analysis. Cash remained to be of high significance. The least adopted Drifting MAP was Financial Ratio Analysis.

Table 2
Drifting Stage of Management Accounting Evolution

MAPs	SMEs' Extent of Adoption									Mean	Adjectival Rating
	A	B	C	D	E	F	G	H	I		
1. Cash Flow Analysis	5	5	3	5	5	3	4	4	5	4.33	Almost always
2. Income Statement Analysis	2	5	3	5	5	2	4	5	5	4.00	Almost always
3. Balance Sheet Analysis	1	4	4	5	4	2	3	4	5	3.56	Almost always
4. Strength – Weakness – Opportunities – Threat (SWOT) Analysis	1	4	3	2	4	3	5	2	5	3.22	Occasional
5. Financial Ratio Analysis	1	4	3	1	3	2	3	5	5	3.00	Occasional
Total No. of MAPs Adopted	1/5	5/5	5/5	3/5	5/5	2/5	5/5	4/5	5/5	5/5	
Adoption to Stage	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	

3.2 Traditional Management Accounting

Table 3 presents that 8 out of 9 respondents had evolved to traditional stage of management accounting. SME A, B, C, D, E, G, H and I were particular on product costing, variances, cost control and budgetary control. The result also drew the significance of the traditional stage to the respondents' costing since they were engaged in mass production and special orders.

The table further shows that 4 out of 6 traditional MAPs were highly utilized. The most frequently used traditional management accounting tool was Standard

Costing. Respondents were very particular on the standard quantity of materials or ingredients, standard time of production or standard cuts or slices and the corresponding costs of their products. On the other hand, Responsibility Accounting and Variable Costing were not adopted.

Table 3
Traditional Stage of Management Accounting Evolution

MAPs	SMEs' Extent of Adoption									Mean	Adjectival Rating
	A	B	C	D	E	F	G	H	I		
1. Standard Costing	4	5	5	5	4	4	5	5	5	4.67	Always used
2. Cost – Volume – Price (CVP) Analysis	5	5	5	1	5	2	5	3	5	4.00	Almost always
3. Variance Analysis	1	5	4	5	3	2	4	5	5	3.78	Almost always
4. Budgets	4	5	2	3	4	3	5	4	3	3.67	Almost always
5. Responsibility Accounting	1	1	1	5	1	1	1	4	4	2.11	Seldom
6. Variable Costing	1	3	1	1	1	1	5	1	4	2.00	Seldom
Total No. of MAPs Adopted	3/6	5/6	3/6	4/6	4/6	2/6	5/6	5/6	6/6	4 / 6	
Adoption to Stage	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	

3.3 Quantitative Management Accounting

Table 4 shows that none or 0 out of 9 respondents had evolved to the quantitative stage of management accounting. Mathematical formulas, statistics and calculations used in their decision process remained to be simple, narrow and limited.

However, the table shows that only Statistical Analysis out of the 5 Quantitative MAPs was adopted. Statistical Analysis was used to determine the frequency and trend of their sales and of the bad orders too especially during their peak seasons where volume of orders was expected.

Multiple Regression, NPV Analysis and Zero-based Budgeting were not adopted or never used. Interview result also revealed that the SMEs were not aware of these techniques, and some might not bother to practice the same considering the complexity of their business operations.

Table 4
Quantitative Stage of Management Accounting Evolution

MAPs	SMEs' Extent of Adoption									Mean	Adjectival Rating
	A	B	C	D	E	F	G	H	I		
1. Statistical Analysis	1	3	2	5	3	1	5	3	4	3.00	Almost always
2. Economic Order Quantity (EOQ) for Inventory	1	3	1	1	1	1	3	1	1	1.44	Never used
3. Multiple Regression	1	1	1	1	1	1	1	1	1	1.00	Never used
4. Net Present Value (NPV) Analysis	1	1	1	1	1	1	1	1	1	1.00	Never used
5. Zero - Based Budgeting	1	1	1	1	1	1	1	1	1	1.00	Never used
Total No. of MAPs Adopted	0/5	2/5	0/5	1/5	1/5	0/5	2/5	1/5	1/5	1/5	
Adoption to Stage	No	No	No	No	No	No	No	No	No	No	

3.4 Integrated Management Accounting

Table 5 shows that 5 out of 9 respondents had evolved to the integrated stage of management accounting. SME B, C, E, G and I had reached and applied some of the most advanced MAPs in their business operations. The respondents had integrated non-financial information in their business decision making such as market-related, customer-related and technology-related information within their industries not only in the local province but also to the different regions.

The table further shows that 3 out of 6 MAPs was fairly utilized. The most frequently used Integrated MAP was Benchmarking. Majority of the respondents had adopted Benchmarking as part of their continuous improvement aside from

determining the most competitive price in the market to which their products may be offered at. On the other hand, three of the most advanced MAPs were not adopted namely Kaizen Costing, Activity-based Costing (ABC) and Balanced Scorecard (BSC). The costs and the complexities of the process were some of the reasons for the non-adoption.

Table 5
Integrated Stage of Management Accounting Evolution

MAPs	SMEs' Extent of Adoption									Mean	Adjectival Rating
	A	B	C	D	E	F	G	H	I		
1. Benchmarking	3	5	5	5	3	2	5	3	5	4.00	Almost always
2. Target Costing	1	5	4	5	3	2	5	1	5	3.44	Occasional
3. Just-in-time	1	5	5	2	4	2	5	1	5	3.33	Occasional
4. Kaizen Costing	1	2	4	1	1	1	5	1	3	2.11	Seldom
5. Activity-based Costing	2	2	1	1	1	1	2	4	1	1.67	Seldom
6. Balanced Scorecard	1	2	1	1	1	1	2	1	1	1.22	Never used
Total No. of MAPs Adopted	1/6	3/6	4/6	2/6	3/6	0/6	4/6	2/6	4/6	3 / 6	
Adoption of Stage	No	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	

Summary of Stages of Management Accounting Evolution

Table 6 shows that almost all of the respondents have evolved to traditional stage of management accounting. It provides evidence that stage 1 and 2 management accounting techniques were dominantly adopted by the respondents. Thus, the adoption of the respondents to MAPs had shifted from drifting stage to traditional stage of management accounting evolution. Hence further, that the respondents had shifted their focus on product costing and cost control.

Table 6
Summary of Stages of Management Accounting Evolution
n = 9

Stage of Management Accounting	SMEs	Rank
Stage 1: Drifting	7	2
Stage 2: Traditional	8	1
Stage 3: Quantitative	0	4
Stage 4: Integrated	5	3

It is also worthwhile to note that majority of the SMEs had reached the Integrated stage of management accounting and none had evolved to Quantitative stage of management accounting. Thus, the respondents had integrated non-financial information in their decision making process but mathematical formulas, statistics and calculations used in their decision process were simple, narrow and limited.

4. Aspects of Business Decisions in which Management Accounting Practices are Utilized by Small and Medium – Sized Manufacturing Enterprises

Table 7 shows that respondents used MAPs in various aspects of their business decisions. Data show that MAPs were utilized mostly to decisions related to sales and marketing. Interview result also revealed that the respondents were profit – oriented thus they had focused on sales and profitability.

Drifting stage of management accounting was mostly used for sales and marketing related decisions. Traditional stage of management accounting was mostly used in making price decisions. Quantitative stage of management accounting was mostly used for production & forecasting, and sales and marketing related decisions. Integrated stage of management accounting was mostly used for decisions related to cost control and reduction.

Overall, it is to be noted however that the utilization of MAPs in the different aspects of business decision was very minimal where the highest got only 30% or an average of 2 out of 9 respondents apply them.

Table 7
Summary of Aspects of Business Decisions in which the MAPs are Utilized
(In percentage, n=9)

Aspects of Business Decisions	Stage of Management Accounting				Mean
	Drifting	Traditional	Quantitative	Integrated	
1. Sales and Marketing Decision	44	28	28	19	30
2. Cost control and reduction	9	39	17	26	23
3. Pricing Decision	16	41	6	24	21
4. Production & Forecasting	9	19	28	15	18
5. Product Quality Improvement	13	11	11	24	15
6. Improvement of Operational System	18	22	6	11	14
7. Inventory Management and Valuation	16	9	17	15	14
8. Performance Evaluation	18	17	6	4	11
9. Waste reduction	2	13	11	17	11
10. Cash Budgeting	20	11	6	6	11
11. Scheduling	4	9	17	11	10
12. Cost allocation	13	17	6	2	9
13. Giving rewards and incentives	7	15	6	6	8
14. Planning and Budgeting	18	11		4	8
15. Strategic decision making	9	9	11		7
16. Investment Management and Valuation	9	2	6	2	5
17. Provide information to owner	13				3
18. Preparation of tax return	9	2		2	3
19. Risk management		2		6	2
20. Provide information to relevant government agencies		4		2	1
21. Provide information to creditors / lenders	4				1

5. Problems Encountered by the Small and Medium – Sized Manufacturing Enterprises in Relation to the Adoption of MAPs

Table 8 shows that most respondents believed that the implementation of MAPs was time consuming. Interview result revealed that aside from the preparations of management accounting reports, majority of them found hard time in the preparation of the systems to follow which includes the harmonization of management, procedures, equipment and employees. It required monitoring and controlling the system. The analysis on the reports also required comprehension, thus some of them did not spend much time to scrutinize the findings and they focused on some other business transactions.

Table 8
Problems Encountered in Relation to the Adoption of MAPs
n=9

Problems	Frequency	Rank
1. Time consuming	7	1
2. High Cost to implement	6	2.5
3. Too many transactions	6	2.5
4. Lack of training and seminar	5	4.5
5. Lack of qualified personnel	5	4.5
6. Complex Operations	3	6.5
7. No clear management accounting control system	3	6.5
8. Not deemed necessary	1	8

Data also revealed that high cost, lack of qualified personnel and training and seminar and lack of clear management accounting control system restrict the full implementation of the MAPs.

6. Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Majority of the respondents were engaged in the industry of food and beverages and all respondents had been in business operations for 10 years and even more.

2. Majority of the management accounting practices (MAPs) were adopted by the respondents. The most frequently used management accounting tool was Standard Costing. On the other hand, the least adopted and never used MAPs were Multiple Regression, NPV Analysis and Zero-based Budgeting.

3. The adoption of most SMEs to MAPs had evolved to the traditional stage of management accounting. Almost all respondents had adopted the traditional stage of management accounting. Similarly, the most frequently used management accounting tool was Standard Costing and was classified to traditional stage. Majority of the respondents had adopted the drifting stage of management accounting. Likewise, majority of the respondents had reached the integrated stage of management accounting. None of the respondents had evolved to the quantitative stage of management accounting.

4. MAPs were mostly utilized by the SMEs in making business decisions related to sales and marketing. The Drifting stage of management accounting was mostly used in making sales and marketing decisions; Traditional stage, in making price decisions; Quantitative stage, in production and forecasting, and in making sales and marketing decisions; and Integrated stage, in controlling and reducing (product) costs.

5. The primary problem encountered by the respondents in relation to the adoption of MAPs was the time it requires in its implementation. Majority of the respondents found that the implementation of MAPs entails high cost. Likewise, majority of the respondents were also lacking of qualified personnel and training and seminar that limit the full implementation of the MAPs.

7. Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

1. Majority of the management accounting practices (MAPs) were used by the SMEs in their business decision - making process hence, other enterprises shall also adopt the suitable MAPs in their business operations.

2. The management or decision makers of SMEs and other enterprises as well shall apply MAPs not only to monitor or evaluate the business performances and short-term profitability, but also for continuous improvement of the business operations, quality of product or service and customer relationship which will eventually result to long-term profitability and stability. MAPs shall also be aligned with the organization's vision and strategy.

3. The SMEs and other enterprises as well shall invest in human resources. They should hire qualified employees that will be responsible in the implementation of management accounting practices or provide relevant managerial training and seminar to the existing managers and employees to develop and update their skills and technical knowhow on managerial decision making with the aid of management accounting practices. This could make the management realize that if the MAPs are performed by qualified employees, it could not consume much time and other business transactions could not be compromised. Sending the employee or manager to post graduate studies is also advised.

4. The SMEs and other enterprises as well shall establish a clear management accounting control system that will utilize and coordinate the company's (limited) resources efficiently, and empower and motivate their employees to implement MAPs accordingly. They shall also clarify the functions of the management accounting system from among the other systems or units. Likewise, there must be a cooperation and teamwork between the management, departments and employees of the organization to fully utilize the management accounting applications, and so the management could realize that the benefit of using the MAPs could exceed the cost. Installation of management accounting software application is an advantage.

5. The study may serve as an instructional material to the Management Accounting professors in teaching management accounting subjects in schools. The study could give them a picture of the adoption of MAPs of the SMEs.

6. The study may serve as framework for similar researches related to management accounting. Moreover, further researches may look into the details of the MAPs along with:

6.1 The effectiveness of the MAPs in the business performances of the SMEs and other enterprises;

6.2 The reasons why some SMEs had not adopted some MAPs particularly to the latest ones or modern techniques; and

6.3 The implementation process of the aspects of the business decisions in which the MAPs are utilized

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