



The Relationship of Implementing Management Accounting Practices (MAPs) with Performance in Small and Medium Size Enterprises

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Abstract

The following study aims at exploring the implementation of MAPs in the Small and medium enterprises (SMEs) in Malaysia and focuses on identifying the relationship that exists between the MAPs and SMEs. There is limited research conducted on the MAPs being implemented in the SMEs, which is apparent in this study. As a part of the research methodology, a survey was conducted with the SMEs in the manufacturing sector of Malaysia. The research article demonstrates that the involvement and implementation of MAPs differ in different organisations; it ranges from the traditional approach to a more sophisticated approach in its implementation. The most commonly used accounting practices for management in the organisations include performance management system and costing systems. On the other hand, in terms of sophisticated approach, the larger organisations frequently make use of the MAPs in accordance with the theoretical arguments that are made in the context of the impact of size in adopting such practices. The findings of the study also indicate that there are certain MAPs that are related to the organisational performance. These practices hold a significant relationship with the productivity and performance of SMEs, which has helped in reinforcing the significance of such practices in today's business environment.

Keywords: Management Accounting Practices, Small and Medium Enterprises, Performance

Introduction

The existing MAPs have included both the financial and non-financial techniques used in the businesses that are focussed on providing useful information throughout the organisation. In the recent era, there has been a change in the MAPs that are used by the organisations.

With the introduction of concepts such as lean manufacturing, total quality management and supply chain management; the need for adaptation of new accounting practices has also grown. The organisations have started adopting more sophisticated practices including target costing, activity-based costing, and balance scorecard methods in their working in order to ensure efficiency in their operations (Ittner & Larcker, 1998).

The introduction of new MAPs has reinforced the significance of these practices in the organisations in terms of improving performance and efficiency in its operations. However, it is not clear that the application of these practices has the same effect for the SMEs.

The implementation of new MAPs might improve the business performances of SMEs, but it is difficult to state so as the success of any business organisation is the result of several key elements and not just MAPs. Previously conducted research has studied different aspects of such practices on the performance of the firms; however such firms were complex and large in nature.

Research Objectives

The main aim or objective of this study is to find out the relationship between the use of management accounting practices and its impact on the performance of Small and Medium Enterprises.

Research Questions

- What are the impact of using different management accounting practices on the performance of SMEs?

- Would addition on specific management practices helps to enhance the performance of the SMEs?
- What are the relationship being shared by MAPs and performance of SMEs?

Literature Review

So far, there is a limited literature available on the role of MAPs in the SMEs and the relationship that exists between these two variables. According to Mitchell et al. (1998), any research conducted in the discipline of MAPs in SMEs is likely to have implications of a different nature which are of no matter significant for providing the fundamental understanding to the discipline.

The literature reinforces that even though the concept provides a lot of benefits to the large organisations due to its complex operations, its significance for the SMEs should not be undermined. Recent research in the discipline in the context of SMEs has revealed that it can prove to be a great source of providing a competitive advantage in the market. In the developed and emerging nations, SMEs form a significant part of the economy.

In such countries, SMEs hold more than 98 percent of the total businesses (Lucas et al, 2013; Caruso, 2015). It not only contributes to the manufacturing sector but also helps the economy with the income generation, job creation, entrepreneurship, and a source for reducing the country's poverty. Apart from these benefits, SMEs are also responsible for providing flexible niche opportunities to the businesses, they prove to be an effective source for technological innovation and bringing new products, and participating in international networks of production (Mitchell & Reid, 2000; Hobday, 2008).

Despite the importance of SMEs in an economy, there is lack of research conducted to understand the application of MAPs in SMEs. It is observed that the SMEs tend to make use of the conventional

approaches to MAPs in their working and for the purpose of controlling the business activities. There have been a substantial number of studies conducted in the context of studying the relationship between MAPs and performance of organisations.

The earlier studies performed studied performance and individual management accounting areas, such as performance management system, balanced scorecards, or activity-based costing on subjective criteria. The majority of the research conducted has focused on performance management in the organisations. However, beyond performance management, a few studies have also been conducted to study the mediating effects of other variables that establish the relationship between organisational performance and MAPs.

For instance, Chloe (2004) studied learning variable in the organisation in relation to the performance and management accounting. The findings of the study revealed that when the learning facilitators in an organisation are well arranged and utilised effectively, the scope of information is likely to be linked with effective learning, which in turn would eventually contribute to an improved organisational performance.

The earlier studies also ensured that it is not necessary that there is uniformity in the results. There can also be a negative relationship between performance and MAPs. According to the literature provided by Klammer (1973), there is no significant relationship between organisational performance and techniques used by the organisation for capital budgeting.

The literature emphasises that simply adopting the analytical tools in a business does not ensure success or superior performance, rather there are other factors as well that determine the overall profitability and productivity of an organisation. These factors may be in the form of executive recruitment, marketing, training and development, and product development.

Overall, it is clear that there are many researchers who have studied the discipline, but the number of studies in this discipline and especially in the context of SMEs is limited. This report is, therefore, an attempt to study the relationship between MAPs and the performance of SMEs.

Methodology

In an economy, it is observed that the manufacturing sector is the most complex sector in terms of production environment and operations as compared to the trading and service sector. In the Malaysian economy, it is one of the sectors that boost the export activities significantly. According to the data released by the Department of Statistics, the manufacturing sector individually contributed to 33.9 percent to GDP of Malaysia in 2014 (Department of Statistics, 2016).

The performance of this sector has also significantly improved over the years. Thus, for this study, the SMEs working in the manufacturing sector of the country are taken as the target population for effectively studying the implementation and use of MAPs in SMEs. According to SME Corp Malaysia (2014), in manufacturing sector, SMEs may be defined as an organisation that has employee strength of five to two hundred or sales turnover of RM 300,000 to RM 50 million.

Survey and Sample

For the purpose of this study, as a part of the exclusive criteria, the micro-sized organisations are excluded. This signifies that the organisations that employ less than five employees or which have a turnover of not more than RM 300,000 equivalent to USD 75,000 are excluded. This is due to the fact that these firms are very small in size and it would be inappropriate for such firms to have management systems that can depend on the MAPs.

The literature provided by Hoque (2004) also indicates that such small enterprises are less likely to be in a need for complex

management systems and also lack resources to install such systems. Therefore, for this research, as a part of the inclusion criteria, the organisations falling into the category of SME as per the definition provided by the Malaysian norms would be studied, which is organisations having employees not less than 5 and not more than 200 (Hoque, 2004).

The research has made use of stratified random sampling technique in order to ensure that each sub-sample has an equal chance of representation and getting selected. With the help of this technique, a sample of 500 SMEs was selected from the manufacturing sector of Malaysia. The database of the SMEs was taken from the Federation of Malaysian manufacturers. Approximately, 500 survey questionnaires were distributed to the groups in order to obtain potential responses (Hoque, 2004).

These questionnaires were accompanied by a cover letter, which was sent to the finance executives and accountants of SMEs by mail. The questionnaires requested the executives to provide information about the size, nature of the business, the frequency of usage of MAPs, and the degree of non-financial and financial performances of their respective enterprises.

The initial response to the questionnaires included responses from 87 respondents, while the follow-up responses gathered approximately 160 responses to the questionnaire which could be used, thereby obtaining a response rate of 16 percent. The researcher also received unusable responses because of the discontinuation of operations by organisations, small organisational size, respondents not belonging to the manufacturing sector, uncompleted questionnaires, and refusal to be a part of the study.

Measurement of Variables

For this study, there were two variables developed for exploring and understanding the relationship between MAPs and performance. These two variables are discussed below-

- Usage of MAPs- in this study, in order to understand the utilization of MAPs in SMEs, these practices are broadly categorised into five heads. These are performance management system, budgeting system, strategic management accounting (SMA), costing system, and decision support system (DSS). The questionnaire initially determined whether the SMEs practised each of the management practice in their organisations or not by providing the options of 'yes' or 'no'. After ascertaining this, a follow-up question was provided which ascertained the frequency of usage of these MAPs with the help of five-point Likert scale ranging from 1- never to 5- very frequently.
- Performance measures of MAPs- In the context of SMEs, it was difficult to measure the performance of the firm due to the unavailability of the financial data as it is not published in the case of SMEs. For this study, it was required that a perpetual performance measure was devised to determine the performance. For this purpose, the measure was decided to be the perception of the managers regarding performance so that the research aim can be accomplished. The participants were asked to rate their performance of the last three years on the basis of a self-rating scale which ranged from 1- decreased significantly to 5- increased significantly.

Data Analysis and Results

Data Analysis

Six variables depicting the financial and non-financial performance indicators were used as performance measures for this study. The financial performance indicators included operating profit, growth in sales, and growth rate in the cash flows. On the other hand, the non-financial performance

indicators included frequency of on-time deliveries, quality of the product, and degree of the organisation's productivity.

These selected items are capable of providing enough information about the performance area in the context of SMEs. These data gathered from the survey questionnaires and measured on the above-mentioned variables were analysed by statistical tests. The research made use of Chi-square and Mann-Whitney non-parametric tests to make a comparison between the early and late responses.

There was no case of non-bias response found in the study. A reliability test was also conducted which indicated that all the measurements used in the study are reliable and good. The Cronbach's alpha values for the items of MAPs (46 items) and of 6 items for performance were recorded as 0.896 and 0.861.

Results

- The application of MAPs in SMEs- the results revealed that the majority of the responding SMEs indicated the adoption of all the five areas of MAPs. Overall, performance management system, costing system, and budgeting are significantly used by SMEs. The most commonly used was costing system (83%), followed by performance management system (79%), and budgeting systems with 76% responses. The implementation of DSS was moderate with 63% responses and SMA with only 50% of the respondents. The results also revealed that in comparison to smaller firms, the medium firms tend to utilise such practices more.
- The frequency of usage of MAPs- the frequency of use of MAPs is categorised and analysed under five heads. The results of each are discussed below:
 - Costing techniques- process costing most frequently used with 58% of the total costing users. Variable absorption and job costing applied by around 38% of the users followed by absorption and batch costing with 34% and 28% each.
 - Budgeting techniques- Financial budgeting is the most commonly used budgeting technique. Most frequently used budgets included production budget, sales budget, financial position budget, and cash flow budget.
 - PMS techniques- SMEs implement financial-based performance measures in their working, sales growth and operating system being the most prominent ones. In terms of non-financial performance, the most commonly used measure was found to be on-time delivery which constituted 70% of the total respondents.
 - DSS techniques- the results indicate that the implementation of DSS is moderate with less than 50% users implementing it. However, the most commonly and widely used technique was found to be product profitability analysis.
 - SMA techniques- there is a low uptake observed in the case of SMA along with its frequency of use in the SMEs.
- Test of differences for the adopters of MAPs and non-adopters- Shapiro-Wilk test for normality was used to test whether the non-financial and financial performance were normally distributed. The test revealed that they were not normally distributed, due to which non-parametric approach was used for further analysis. The further analysis revealed that a higher usage of budgeting, cost information, and performance management leads to better financial performance. In case of non-financial performance, SMA and costing system had a positive relationship with the operational performance and there was no

correlation found between performance and usage of DSS.

Research Limitation

This article has tried to cover all the aspects related to the depiction of the relationship between management accounting practices and the performance of SMEs. Though, the limitation of this project is that it has not undertaken comparative analyses that reflect the success rate of MAPs on performance of SMEs belonging to different regions or areas.

Discussion

The main aim of this research was to find out about the relationship being shared between different MAPs and the performance of SMEs. On the basis of the research, it was found out that costing system, budgeting as well as performance management system (PMS) were the most commonly used MAPs in SMEs as compared to the other sophisticated MAPs like Decision support system (DSS) as well as the strategic management accounting (SMA). The commonly used costing technique which was used by SMEs includes absorption as well as the variable costing method. The results also revealed that full financial budgeting along with annual budgeting is widely used by the respondents of the research. It has also revealed that an increase in this management accounting practices usage shows a significant positive increase on the performance of the SMEs. The results of this research are also in line with the research conducted by Joshi (2001), who emphasize the difference between the usages of different MAPs (Joshi, 2001). Also Abdel-Kader (2008), in their research, has concluded that despite the fact that modern MAP techniques have developed, SMEs still continue to use the traditional MAP techniques (Abdel-Kader & Luther, 2008).

Conclusion

The study was conducted to determine the extent of the application of MAPs in the SMEs of developing economies and to determine if there is any relationship between the practices and the performance. The results of the study indicate that there is a high acceptance for the basic MAPs, such as budgeting, costing and performance management systems, whereas there is a low uptake for the sophisticated MAPs, such as SMA and DSS.

These results have reflected that the application of simpler practices is suitable and convenient for the small and medium enterprises. Despite the changes in the MAPs, it is observed that the traditional practices are still dominant in today's business scenario. This can be related to the fact that the expertise and information available regarding these measures is readily and easily available in comparison to the modern accounting practices.

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