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THE MANAGEMENT ACCOUNTING PRACTICES (MAPs) AND FINANCIAL PERFORMANCE OF SMALL & MEDIUM ENTERPRISES (SMES): THE EVIDENCES FROM THE NORTHERN CORRIDOR IMPLEMENTATION AUTHORITY (NCIA)'S REGION.

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ABSTRACT

The objectives of the study are three folds, namely, to investigate; (i) the level of MAPs employed by SMEs in Northern Perak in NCIA region, (ii) any positive relationship between MAPs and the financial performance, and (iii) the explanatory ability of the selected variable towards the financial performance. The present study distributed 100 questionnaires to the small and medium sized enterprises (SMEs) in the Northern Corridor Implementation Authority (NCIA) Malaysia. The 65 useable questionnaires were analyzed using The Statistical Package for Social Sciences (SPSS). Findings showed that the application of the costing system and budgeting system are significantly higher than the decision support system and strategic management accounting. Furthermore, the medium sized firms make greater use of all MAPs as compared to small sized enterprises. However, the research found a weak support for the positive relationship between the use of MAPs and financial performance with the selected variables able to explain 64.9% of the dependent variable. However, the present study was limited to the SMEs, with a limited sample size as well as inherited the survey weaknesses, Research in this area can be enhanced by extending the bigger sample and conducting comparison among different industries.

KEYWORDS

Management Accounting Practices (MAP), Small and Medium Enterprises (SME), Financial Performance, NCIA.

I. INTRODUCTION

Nowadays, business environment is becoming an increasingly competitive while business organization is turning more aggressive and dynamic in identifying strategies that ensure profit return. Thus, these lead the management to vigorously develop business techniques and strategies towards profit maximization for the organization. The profit maximization and cost minimization of an organization shall create a competitive advantage to industry.

Much had written on the failure of small business due to lack of adequate working capital, poor market selection and rapid changing external market conditions. However, the most significant reason on the high failure rate is the inability of SMEs to practice adequate business essential and management practices. [1] further affirmed in study that many small firms fail to develop an initial plan. However, [2] argued that one of the reasons for business failure is poor management ability which includes accounting problem-solving.

In Malaysia, The International Trade and Industry (MITI) reported that the number of local SMEs grew from 638,790 in 2010 to 907,065 in 2015. The average increment of more than 260,000 new businesses, or a 7.3% annually. In term of the GDP contributions, MITI reported that SMEs contributed 36.6% to the national economy, 18.6% to exports and 65.3% to national employment [3].

Instead of their pivotal role in Malaysian economy, the estimated failure rate for SMEs is 60% [4]. Further, there is a dearth of evidence in the empirical literature on Malaysian SME failures. Previous studies on Malaysian business failures have focused on listed companies [5] SMEs are riskier than large firms; thus, the replication of failure prediction models developed for large firms could lead to deterioration in the model's performance. As such, the arguments on pros and cons of the direct cross-border model replication is always subjected to the purpose of reporting and the level of insolvency code differences[6].

It is strongly suggested for SME to adopt MAP in their organization as to avoid failing [7]. It lead to another issue, that is the use of MAPs among the SMEs especially in NCIA region. Despite many researches done in management accounting in the past decade, little is known of its form and effectiveness within SMEs in specific region. This issue creates a further challenge to the study of MAPs in SMEs. However, [8] stated that research in management accounting for SMEs provides possibilities of a different type which are nonetheless of great importance to the fundamental explanation and understanding of the discipline.

With regards to the NCIA region, information on the extent of MAPs application among SMEs is limited. This unknown information contributed to limited knowledge and awareness in using of MAPs which cause failure to take full advantage of the opportunities. Thus, given the significant economic importance of SMEs and the existence of gap in the literature, the present study aims to obtain an overview of MAPs application within SMEs in Northern Perak in NCIA region. As such, the objectives of the present study are three-folds: (i)To investigate the extent to which MAPs are employed by SMEs in Northern Perak in NCIA region, (ii) to seek a positive relationship between MAP use and the financial performance of SMEs, and (iii). to investigate the explanatory level of the selected variable toward financial performance of SMEs under study.

II. LITERATURE REVIEW

- *Management Accounting Practices (MAP): an overview*

  Management Accounting (MA) can be defined as a system that provides relevant information to the management for decision making. The goal of MA is to provide both (financial and non-financial) types of information that are helpful in internal planning, controlling and decision making for the managers, owners, investors and employees [9]. Management Accounting Practices (MAP) has significant roles as a managerial tool for adding value to the overall operational functions. Traditional MAPs such as costing, budgeting or profitability analysis focus mostly on cost determination and financial control and have been used extensively by both small and large companies all around the world for many years [10]. Parallel with economic development, companies started adopting to the modern MAPs while trying to create and focusing in more strategic orientation [10]. Five specific areas of MAPs are, i) Costing, ii) Budgeting, iii) Performance evaluation, iv) Decision making practices (Decision support system) and v) Strategic analysis.

- Costing

  There are two types of costing; activity base costing (ABC) and inter organizational cost management. Due to the rapid change in the business environments the use of activity based costing, just in time, total quality management tools have been emerged in the organizations [11]. According to [12]noted that among other most popular tools for costing system are, Fixed and variable costs; Overhead rates on the basis of plant and department; Learning curve; Cost of quality; Target costing; and Activity based costing.

- Budgeting

Budgeting is a tool used in forecasting and controlling the firms' financial activities. It consists of entire summary of firm's activities. The purpose of budgeting activity is to ensure the organizational resources were fully utilize for achieving the firm's goals and objectives. Additionally, budgets may also be used as a tool to evaluate the organization performance. According to [13] budgeting for planning, budgeting for controlling costs, and budgeting for long term (strategic) plans were ranked to be the highest in terms of importance in Jordanian financial sector. [12] has listed the following practices that belong to budgeting: Planning purposes budgeting; for controlling cost budgeting; for strategic planning; Flexible budgeting; and Activity based budgeting (ABB).

- Performance Evaluation

[14] stated that performance evaluation is an important function in management accounting. Performance evaluation provides information for managers to support the achievement of their organization's strategic objectives [15]. Among others popular techniques for delivering a wider set of performance measures are the balanced scorecard [16], tableau de bord [17] and performance hierarchies [18]. Other than that, CIMA developed the frameworks for performance measurement which include the value-based management (VBM); ABC, activity-based management (ABM), the Balanced Scorecard (BSC), European Foundation for Quality Management (EFQM) excellence model benchmarking, Strategic Enterprise Management (SEM) and Six Sigma [3].

A survey conducted by [19] on South Africa companies found that the profitability measurement is very important in performance evaluation of the firm. However, in Thailand [20] found that about 80% of the respondent companies were using benchmark of products features as performance evaluation measure.

- **Decision making practices (Decision support system)**

Decision making is the most important key factor in today's rapid and changing competitive environment [21]. Decision support analysis is divided into two categorized, i.e., long term and short term analysis. Short-term or regular decisions, the management accountants can apply product profitability analysis, the CVP analysis, stock control models, and the customer profitability analysis [12], while the long-term basis assist in generating and reviewing the accounting rates of return and the payback periods besides the complex signals on the basis of the discounted cash flow. Previous researcher has found that the payback period approach to investment evaluation is common in most of the countries [12], and [22]. However, NPV and IRR/ROR technique have been adopted at relatively low rates. In contrast,[22] found that NPV method is the most popular method in the Dutch companies they surveyed.

- **Strategic analysis (SA)**

SA is known as the final stage of MAPs, which is also called as a strategic management accounting (SMA). SMA can be defined as the provision and analysis of financial information in product markets, cost of the competitors and cost structures and the monitoring of the strategies of the enterprise and those of its competitors in the markets over a number of periods [23]. Three important activities of SMA practices are, i) collection of the competitor's information, ii) exploitation of the opportunities of cost reduction, and iii) matching the accounting emphasis with strategic position [24]. Other than that, [25] determined 12 accounting techniques of strategic management which falls under 3 categories: (1) brand value accounting, (2) pricing attribute costing and strategic costing, and (3) competitor accounting [26].

Although several studies reported various techniques of the SMA (for example [27] and [28], but most of the studies agreed to conclude that the levels of SMA adoption are from low to moderate [25].

- **Business Performance Measurement**

Measurement performance of enterprise via the financial performance are widely used due to an accurate results and a reliable data [29] . They stated that business performance refers to the aggregate technology enabled performance impacts across all firm activities, such as cost reduction, revenue enhancement and competitiveness. Existence of a performance measurement system is required in order to see and understand whether and how the enterprise progresses towards the intended direction that is fulfilling the control function , as well as deriving providing timely data [30].

- **THE IMPLEMENTATION OF MAP IN SMES**

MAP is considered lifeblood of a firm regardless of size as it is very helpful in providing important information about the firm's operations and its position. Thus, SME shall no exception in practicing the management accounting. However, SMEs are unlikely to adopt comprehensive MAPs in their firms due to the organizations size [31]. The study done by[32] reported that the organization size was found to have a positive and significant relationship with MAPs.

For Malaysian SMEs, [24] reported that the basic MAPs is more favorable as compared to sophisticated practices. The basic MAPs consist of costing, budgeting and performance management system, while sophisticated practices inclusive of decision support system and strategic management accounting [24]. She also has revealed that simple approach of basic MAPs is suitable and convenience to adopt in small enterprises. This finding was consistent with the research done by [33] whom noted the significant different of the MAPs between medium-sized and small-sized enterprises. Further, they added that the sophisticated system in MAPs were not widely practices in Malaysian manufacturing SMEs due to the uncertainties, practicalities and cost involved in obtaining the information.

[25] revealed that MAPs play highly-important roles in management process in the organizations. Unfortunately, the adoptions of the newly developed MAPs are still low in the majority of the developing and developed countries although the knowledge and awareness has been conveyed. It is parallel with study in Romanian SMEs by [10], modern MAPs remain at a theoretical level with no connection to the practice level and maintain rely heavily on traditional management accounting techniques.

More encouragement should be given by the local government, public and private sector and the accounting bodies to develop appropriate policies and procedures to allow for better adoption of MAPs [31]. They suggest the training and development scheme to be imposed for better understanding on usage and application of MAPs.

- The Relationship between MAP and Business Performance

An effective and efficient of MAPs shall lead the firms to achieve their objectives and goals. MAPs may assist an organization to survive in the competitive because it provides an important competitive advantage for an organization that guides managerial action, motivates behaviors, supports and creates the cultural values [34]. Several studies noted that the use contemporary MAPs has a positive relationships with the financial performance [35].

Despite contemporary MAPs provide better organization's performance, the basic MAPS not resulting otherwise. For example, the 3 reasons-to-budget; (1) operational planning, (2) performance evaluation, and (3) strategy formation conclude that there is a positive associations with organizational unit performance [35]. Same goes to performance measurement system (PMS), adoption of comprehensive PMS has a significant influence on cognition and motivation level of manager, which leads to a better managerial performance [36].

There are supports for the hypothesized proposition that there are significance associations between on MAPs adopters (costing system, budgeting system, PMS, DSS and SMA) towards the performance [37]. As it's described that MAPs play significant roles in enhancing firm performance.

- Overview of Northern Corridor Implementation Authority (NCIA)

Northern Corridor Implementation Authority Act 2008 (Act 687) was the authorized body to provide direction and devising policies and strategies in relation to socioeconomic development in Northern Corridor Implementation Authority (NCIA) which includes states of Kedah, Perlis, Northern Perak, and Pulau Pinang.

The geographical coverage was subsequently expanded in 2016 to include the whole state of Perak. The region now spans 32,559 square kilometer (sq km) with 1,031 sq km in Penang, 9,425 sq km in Kedah, 795 sq km in Perlis and the whole of Perak (21,308 sq km) (EPU 2014). The policy blueprint for the socioeconomic development in the NCER region over an 18-year period, 2007–2025.

There are three phases involved in this implementation plan. Starting year 2007 until 2012 is categorized under first phase which involves constructing the priority infrastructure and securing the main investor as well. For the second phase, from year 2012 until 2020, it aims to broaden the private sector involvement. The final stage of this plan is from year 2020 until 2025. Its objective is to hold a regional market leadership via sustainable market-led growth. These key thrust areas have a clear target, its aim is to increase the development of the corridor and to ensure the region's socio-economic scales are balance (Oxford Business Group, 2012). The NCIA region has exhibited strong economic progress, with higher annual gross domestic product (GDP) growth rate of 5.8% compared to Malaysia's 5.4% during the period of 2010–2014. The GDP growth was largely driven by the services and manufacturing sectors. SMEs are seen as key players in ensuring this achievement is achieved within the stipulated period as they are the largest economy contributor in the NCIA's economy.

III. RESEARCH METHODOLOGY

- **Research Design**

The present study applied a descriptive and causal research design as it suited well in providing the relevant information to achieve the research objectives. Descriptive research design is appropriate to

describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions in this study.

- **Population and sampling**

The target population for this study was the involved owners of the firm, chief financial officers, accountants and credits officers and managers of SMEs operating within NCIA region. As the target sample involved two groups of firms (small sized enterprises and medium sized enterprises), the stratified random sampling method was applied. The used of stratified random sampling is to ensure that every stratum gets an appropriate representation [38] through the stratification process. According to [38], in a proportionate stratified sampling, the number of elements chosen from each stratum is proportionate to the size of particular strata, relative to the overall population size. In the current study, the sample elements are chosen either according to another factor, such as their relative economic importance, or the variability of the data within each stratum.

[39] provides a specific table to determine a sample size of the target population. Based on the proposed table, therefore the population for this study is 542 SMEs in Northern Perak in NCIA region. Table 2 shows the population and number of samples as based on [39]. Table 2 presented the proportion establishments of small and medium category based on number of establishments within Northern Perak based on the total number of Malaysian SMEs establishments based on the Malaysian Economic Census 2016.

Table 2: Population and Sample size

Subgroup	Total Establishments	Sample Size
Small	3,713	346
Medium	403	196
Total	4,116	542

- **Data collection method and instrumentations**

The present study applied a questionnaire survey. It is chosen due to popular medium for eliciting opinions [40] allows the data to be collected from a representative sample across industries and geographical and is generally the least expensive [40].

The questionnaire comprised of 48 questions and divided into three sections: firm's information; extent of usage of MAPs; and financial performance of the firm. The questionnaire consisted of close-ended and scales format. A scale is a measurement tool to measure a question with a predetermined number of outcomes [38]. It may have five-point or seven-point scale to assess the strength of a group of statements. For the purpose of this study, the five-point Likert scale will be used to measure the extent of the use of MAPs and the perceived financial performance of the firm. With less scaling question, it can make an easier respond by the respondents.

The questionnaire was adopted (and amended) from [11] and [41]. Prior to the actual the survey, the pilot testing was done among 40 accounting staff and lecturers at the of the Universiti Sultan Azlan Shah (USAS). Its aimed was to clarify the wording on both, the questionnaire instructions and questions. No significant issues were raised.

The data collected were analysed based on descriptive statistics, and the dependent and independent variables for hypotheses testing using bivariate and multivariate statistical analysis.

IV. RESEARCH FRAMEWORK AND HYPOTHESES

As per earlier discussion, the MAPs were yet to be applied in the NCIA. It is important to know that the current MAPs in the region and the factors associated to the financial performance of the selected companies. As such the following framework was developed.

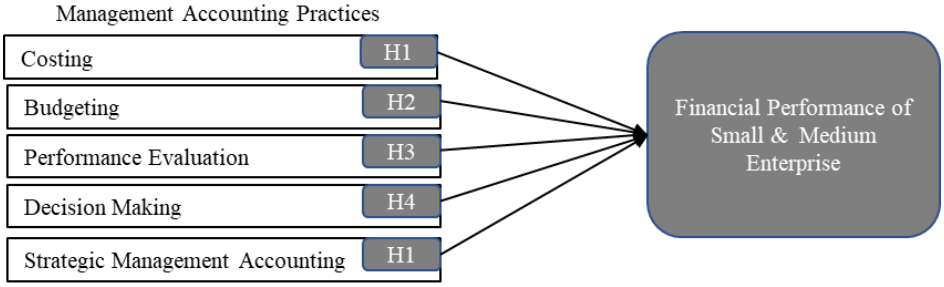

Figure 1: Proposed research framework

Based on the above figure, the following hypotheses have been formulated:

Ho : There is a significant positive relationship between the costing practices and the financial performance;
Which;

H1 : the costing practices and the financial performance;
H2: the budgeting practices and the financial performance;
H3: the performance evaluation practices and the financial performance;
H4: the decision making practices and the financial performance;
H5: the SMA practices and the financial performance;

The final hypothesis is to fulfilled the third objective of the present study, which can be stated that:

$Fpt = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + et,$
where,
Fpt = Financial Performance; X1= costing ; X2 = budgeting ; X3 = Performance Evaluation; X4= decision making; X5 = strategic accounting practices; β0 = constant or intercept ; β1 to…. B5 are regression coefficients.

V. RESULT AND DISCUSSION

- **Demographic of respondents**

The overall respond rate is 65%, out of 100 questionnaires were distributed, 78 questionnaires were returned and only 65 of them were useable and analysed. Table 3 not only present the response rate of the respondents but also the demographic profile of respondents based on the year of business, business sectors, number of employees and annual sales of the year. As can be seen in Table 3 35.4% of the firms has operated a business between 1 - 3 years which the services sector contributed the biggest portion as compared to others sector with total of 48 out of 65 (73.8%). In terms of the firm size, it is shown that almost 89.2% of respondent has reported annual sales between RM300,000 to RM3.0 million. The table also indicated the population of employee between 5 to 29 is the highest (69.2%).

Table 3 : Profiling firms and Response Rate

Items	Questionnaires distributed	Responses	%	% of contributions (categories)
Years of business				
1-3 years	34	23	68%	35%
4 – 10 years	34	20	59%	31%
More than 10 years	32	22	69%	34%
Business sectors				
Services	66	48	73%	74%
Manufacturing	15	9	60%	14%
Construction	10	4	40%	6%
Agriculture	5	3	60%	5%
Mining & Quarrying	4	1	25%	2%
Number of employees				
5 – 29	60	45	75%	69%
30 – 75	20	10	50%	15%
76 – 200	15	8	53%	12%
More than 200	5	2	40%	3%
Annual sales turnover				
RM 300,001 to RM3.0million	78	58	74%	89%
RM 3.001 to RM15.0 million	12	6	50%	9%
RM15.0 01 to RM20.0 million	5	0	0%	0%
RM20.001 to RM50.0 million	5	1	20%	2%

- **Descriptive Analysis - Variables**

Section B and section C of the questionnaire consisted the management accounting tools and the Performance respectively. Section B, which focused on the usage of five major MAPs namely, the use of costing systems; types of budgeting systems employed; the range of performance evaluation systems; decision support techniques used; and the range of strategic management accounting techniques used. While section C enquired input of financial performance resulting from the MAPs applied.

Table 4 presented the result for mean and standard deviation of the MAP which noted that the means were ranging between 2.88 to 3.08, and the Standard Deviation ranges between 1.005 to 1.293.

Table 4: Mean and Standard Deviation of Management Accounting Practices

No.	*Management Accounting Practices*	*Mean*	*Std.Deviation*
1	Costing Practices	3.08	1.005
2	Budgeting Practices	3.15	1.202
3	Performance Evaluation Practices	3.06	1.144
4	Decision Making Practices	2.92	1.190
5	Strategic Management Accounting Practices	2.88	1.293

Table 5: The results relating to the use of management accounting practices and the ranking of practices

Management Accounting Practices (MAP)	Small					Medium					Total				
	No	Yes	Total	% of no usage	% of usage	No	Yes	Total	% of no usage	% of usage	No	Yes	Total	% of no usage	% of usage
Costing System	8	50	58	14%	86%	0	7	7	0%	100%	8	57	65	12%	88%
Budgeting system	12	46	58	21%	79%	0	7	7	0%	100%	12	53	65	18%	82%
Performance evaluation system	12	46	58	21%	79%	0	7	7	0%	100%	12	53	65	18%	82%
Decision support system	13	45	58	22%	78%	0	7	7	0%	100%	13	52	65	20%	80%
Strategic management accounting	15	43	58	26%	74%	0	7	7	0%	100%	15	50	65	23%	77%
Total	60	230	290	21%	79%	0	35	35	0%	100%	60	265	325	18%	82%

Table 5 summarize the extent to which there was any use of the designated MAPs by the respondents. As can be seen, the medium sized firms scored the 100% of the MAPs., while the small sizes firms only utilized 79% of all five MAPs. The overall usage (or adoptions) of the management accounting tools recorded that the Costing system scored the highest (88%), followed by the Budgeting with 82%. The better usage of the sophisticated techniques by medium firms (as compared to the small sizes firms) is due to complexities of business activity in medium firms which, may deploy modern technologies and new management processes [12]. Other reason might be due to their ability to invest in a significant amount of capital and investment that may leads to applied analytical approach; decision-making and the development of business strategy.

- **Normality and Reliability**

The Shapiro-Wilk test was run to ensure the normality of the data collected. As the p values were less than 0.005 ($p<0.005$) for all tested variables, it is to assume that the data is normal distributed.

Another important test needed to be run is the reliability test. The result in Table 6 indicates that there is a good level of internal consistency for the scale been use in the sample size. It shows Cronbach's alpha is 0.832.

Table 6: Reliability statistics

Cronbach's alpha	Cronbach's alpha Based on Standardized Items	N of items
.832	.827	6

- **Hypothesis Testing**

For the purpose the testing is to further the predictive influence by the management accounting practices on financial performance of SMEs in Northern Perak within NCIA region.

- **The correlation between the selected variables and the Financial Performance**

The Pearson correlation was run to investigate the possible positive relationship between costing, budgeting, performance evaluation, decision making and SMA practices and financial performance. This will cover the hypotheses statements of H1, H2, H3, H4 and H5 respectively.

Table 7 : Pearson Correlation tests on the selected variables and the Financial Performance

Items	Financial Performance				
	Costing Practices	Budgeting Practices	Performance Evaluation Practices	Decision Making Practices	SMA Practices
Pearson Correlation	.533**	.276*	.015	.275*	.259*
Sig. (2-tailed)	0.000	0.026	0.903	0.027	0.037

Sum of Squares and Cross-products	26.077	16.154	0.862	15.923	16.277
Covariance	0.407	0.252	0.013	0.249	0.254
N	65	65	65	65	65
* Correlation is significant at the 0.05 level (2-tailed)					

Table 7 indicated that out of five selected variables, only one variable Performance Evaluation Practices did not have a positive relationship the financial performance (p= 0.903). Other four variables namely Costing, Budgeting, Decision making and SMA Practices were found to have a positive significant relationship with the Financial Performance. These is due to the $p < 0.05$ (which are ($p = 0.000$, 0.026, 0.027 and 0.037 respectively).

- **The Explanatory Ability of the Model**

The third objective of the present study is to investigate the ability of explaining the selected variable toward the financial performance of SMEs. As such, the following statement noted the hypothesis.

$Fpt = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + et,$
where,
Fpt = Financial Performance; X1= costing ; X2 = budgeting ; X3 = Performance Evaluation; X4= decision making; X5 = strategic accounting practices; β0 = constant or intercept ; β1 to…. B5 are regression coefficients.

The result of multiple regression test as per shown in Table 8 below. The overall result showed that selected variables contributed 64.9% (r value) to explain the financial performance among the SMEs that operates in the NCIA region.

Table 9 showed the ANOVA results that explain the model via the F statistic and probability of F statistic. The result shows F statistic = 8.582. Since the exact significant level at .000, the F statistic was significant. In this study, all five independent variables (costing, budgeting, performance evaluation, decision making and strategic management accounting) indicate a different (variation) in financial performance. The model summary is significant.

Table 8: Model Summary

R	R square	Adjusted R square	Std. Error of the Estimate
.649	.372	.372	0.60243

Table 9: ANOVA

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	15.573	5	3.115	8.582	.000
Residual	21.412	59	.363		
Total	36.985	64			

Referring to Table 10, it shows the coefficient results for the model variable, the significance (p-value) and the t–value of every independent variable.

Table 10 : Coefficient

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
(Constant)	2.660	.277		9.598	.000
Costing Practices	.429	.100	.567	4.281	.000
Budgeting Practices	.118	.079	.187	1.495	.140
Performance Evaluation	-.352	.101	-.530	-3.484	.001
Decision Making	.174	.102	.273	1.707	.093
Strategic Management Accounting	.001	.097	.001	.008	.993

Dependent variable: Financial Performance

The above table shows the finding of holding costing, budgeting, performance evaluation, decision making and strategic management accounting at 2.660. P-value for three independent variables; budgeting, decision making and strategic management are more than 0.05 (0.140, 0.093 and 0.993), thus it failed to reject null hypothesis and there is no significant different. While another three variables namely, Costing and Performance Evaluation practices showed that they have a significant influence on firm's financial performance.

VI. CONCLUSION, LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

- **Conclusion**

As the present study uphold three objectives, all were successfully achieved. Firstly, the medium sized firms scored the 100% of the MAPs compared to the small sizes firms which only utilized 79% of all five MAPs. In terms of the tools adopted, the Costing system scored the highest (88%), followed by the Budgeting with 82%. The better usage of the sophisticated techniques by medium firms (as compared to the small sizes firms) may be due to complexities of business activities as well as their ability to invest in the more sophisticated tools.

Secondly, four variables (costing, budgeting, decision making and strategic management accounting) out of five have a significant relationship with financial performance ($p < 0.05$). these mean to conclude that the usage of those three mentioned tools will bring some significant impact to their financial performance. Finally, the selected variable managed to explain the significant impact on financial performance of the SMEs in the NCIA by 64.9%.

In term of the body of knowledge, the present study extends the existing MAPs literature in two main approaches. First, the present study will produce new empirical evidence on the use of MAPs among the SMEs in the NCIA region. Second, its also contributes an additional knowledge especially in the new geographical NCIA region regarding the relationship between the use of MAPs and the firm's financial performance. Due to very limited research on MAPs uptake among SMEs especially in Northern Perak, thus the focus of the study in this region become crucial and useful for future references purposes.

- **Limitations of the study**

The sample size of the present study only limited to the small and medium-sized firms in Northern Perak. As such, the results were limited to these two groups of enterprises. This may lead to limited overview of SMEs in adopting the MAPs. The responses survey through questionnaire may not be effective and accurate to illustrate the real involvement of management accounting practices by the respondents. Some respondents refused to answer the questionnaire and some did not return the questionnaires. Further more, some respondents did not accurately disclose their annual sales turnover due to nature of the sensitivity of financial information disclosure. It may also affect proper data analysis.

The analysis was also limited to specific statistics, for example the descriptive and the relationships between variables. Other significant statistics for example the ranking, the Factor Analysis and the more advance tests were not yet tested and interpret.

- **Suggestions for future research**

This research has conducted a survey on all sectors of small and medium exclude microenterprises in implementing the management accounting practices in Northern Perak. Perhaps it could be done in Malaysia as a whole or in other geographical area and the results might have been more receptive. In addition, the study may be extended by expand the SMEs involvement by taking into account the microenterprise.

Secondly, future studies should expand on current model of framework by studying on the larger and better set of variables: activity base costing system, manufacturing accounting practices as well as cost accounting practices by SMEs and its financial performance.

Finally, this study can also further investigate and analyse the MAP of SMEs in specific sectors. Different results may obtain and it might contribute clearer evidence in awareness of MAPs among the SMEs.

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