An Exploratory Study on the extent of Budgeting Practices within Small and Medium sized Enterprises and the Factors Therein

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ABSTRACT--_The purpose of this research is to identify the extent of usage of budgeting practices among small and medium companies (SMEs) in Malaysia and to investigate the effect of size of firm, sophistication level of operations and level of competition, computerized accounting system, and workers participation in budgeting practices. To achieve these objectives, this research employed a questionnaire method to interpret and generate the results. Several statistical methods were used to analysis the responses, which are descriptive analysis and inferential analysis. In term of budgeting practices, the research revealed that the sales, production and purchase budget are the most heavily used among SMEs in Malaysia. In addition, the results also revealed that there are significant and positive relationship between size of firm, sophistication level of operation and level of market competition, computerized accounting system, participation of workers in budgeting practices among SMEs in Malaysia. This research provides new empirical evidences and contributes a better understanding of the use of budgeting practices among SMEs in Malaysia._

Keywords--_Budgeting practices, SMEs, SME Corp_

I.   INTRODUCTION

In Malaysia, all the Small and Medium Enterprises (SMEs) is governed by a Central Coordinating Agency called Small and Medium Enterprise Corporation Malaysia (SME Corp. Malaysia) which is under the jurisdiction of the Ministry of International Trade and Industry Malaysia. SME Corp. Malaysia is responsible to formulate strategies and policies for Small and Medium Enterprises (SMEs) and coordinate with related Agencies and Ministries regarding SME development programs. Moreover, SME Corp. Malaysia function's as the central point of reference for data dissemination and research on SMEs. SME Corp. Malaysia also provides advice to businesses, information sharing, and guidance for SMEs in Malaysia. It builds close partnerships in both private and public industry associations and strategic partners to grow and strengthen sector and industry-specific cooperation coupled with collaboration to further support and promote the development of SMEs in Malaysia (SME Corp. Malaysia, 2018).

According to the SME Corp. Malaysia, two significant criteria was used as a definition of SMEs, which are the sales turnover and number of full-time employees of the enterprise. Therefore, small and medium enterprise (SMEs) is defined as an enterprise that employs not more than two hundred full-time employees or generates sales turnover not exceeding RM 50 million for manufacturing sector. For the services and other sectors, enterprise that

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employs less than 75 employees or generates sales turnover not exceeding RM 20 million is considered as SMEs. Besides, SMEs must be those entities that have been registered at the Suruhanjaya Syarikat Malaysia (SSM) or other equivalent bodies (SME Corp. Malaysia, 2018). According to the Economic Census 2016, SMEs population involves 98.5 percent of total business in Malaysia. Majority of these businesses included wholesale & retail trade, manufacturing, construction, agriculture and mining & quarrying. During year 2016, Small and Medium Enterprises (SMEs) recorded growth of 5.2 percent in real GDP (Gross Domestic Product), resulting an increase in the SME contribution to 36.3 percent of Malaysia's GDP. Consumption and investment activities that come from tourism and domestic are the main reasons in boosting the SME GDP during the year (SME Corp. Malaysia, 2018). Therefore, SMEs' plays a significant role as a fundamental and important part in developing economy in Malaysia. SMEs could make a better financial decision with better understanding on financial practices. Furthermore, policymaker with better understanding of financial practices may create an enhanced financing environment to fulfill the demand of the SMEs by increasing the sufficiency and availability of financing activities (Mohamed Zabri, 2012).

Budgeting Practices: Budget is defined as a systematic method to mapping out the future; therefore, allocating scare resources included financial and physical to accomplish the strategic goals. Enterprise use budgeting to monitor progress toward their goals, predict cash flow and profit, and control the spending of the enterprise. For example, budgeting ensured the enterprise keep the business on the right track and do not easily get bogged down in day-to-day problems. Besides, budget ensures that the enterprise allocates the resources effective and efficient to achieve the company's goals. However, budgeting can never be perfect since prediction is involved. Especially in now-a-days, the fast pace of technological chance and globalization make budgeting practise more difficult and important (Beatrice & Thuo, 2013).

Theories underpinning Budgeting: There are six types of theories underpinned the budgeting practices. These theories provided the insight on how several factors influence budgeting. Firstly, permanent income theory has been formed by the Milton Friedman in the 1957 years. Permanent income theory is a consumption theory that described about changes in permanent income is a critical part to decide the choices performed by consumers on their consumption patterns. In simple terms, it means that permanent changes in income may largely affect the spending behaviour of a consumer compared to little effect on temporary changes in income. This theory claim that the spending behaviour of those enterprises also determined by the level of permanency of the streams of income. Therefore, the businesses will use the perceived permanent level of revenue in their budgetary purposes for risk reduction. It is a theory that assuming the spending behaviour of the enterprise is similar to the individual persons, which will spend according to the level of expected permanency in incomes. If the level of permanency of income does not take in consideration in budgeting, it may lead to failure for the SMEs (Beatrice &Thuo, 2013).

The second theory is the cash flow theory and it is also known as liquidity theory. This theory was formulated by Meyer & Kuh in the year 1957. This theory stated that investment decisions are mainly determined by the remaining funds, and future profitability. Cash flow budget shows the overall cash inflow and outflow during a specified period according to this theory. When the firms are unable to raise enough money from the internal resources to finance their investment needs, they will use the retained earnings or external financing. This theory suggested that budget practises and amount must involve the cash flows of the SMEs (Beatrice &Thuo, 2013).

he third theory is zero based budgeting theory which was originated by Pyrrh in the years 1970. This theory is focus in which all expenses must be justified for each new period. It means that every function or event of the organization must be analysed for its needs and costs, from a "zero base". The budgeting practise in this theory is mainly focus on what is needed in the upcoming period. Zero based budgeting theory focus on activities and programs rather than departments or units. This theory is related to this research by explaining the factors affect budgeting behaviour among SMEs. In this theory, the budgeting activity was controlled by the need to justify the use of every coin right from the basic responsibility centre. Therefore, zero based budgeting theory may help in this research to explain the factors affect the budgeting practise used by the SMEs (Beatrice & Thuo, 2013). Followed by the priority-based budgeting theory published by Kavanagh, Johnson & Fabian in 2011. This theory emphasize that budget is made according to the priorities of the corporate. How an entity should invest resources to meet its plans is the foundation philosophy of priority-driven budgeting. Besides, proper funding, transparency and accountability is required in the budgeting process at all levels among the SMEs argued by Kavanagh (Beatrice & Thuo, 2013). Following by the target-based budgeting theory as the fifth theory. Target-based theory is a derivative of zero-based theory. This theory required that each decision units (for example, program, division, department, etc.) need to submit a budget for a given target spending amount. Besides, these units may submit requests above the target amount. Lastly, the risk-based budgeting theory by Maillard, Roncalli and Teiletche in the years 2010. Risk is involving in the budgeting process based on this theory. Risk based budgeting also known as risk allocation is the process of break down the combined risk of the entire investment process (or the portfolio) into its constituents on a quantitative basis (Beatrice &Thuo, 2013). Diversification is involved in this risk-based investment. This theory suggested that all businesses should doing the budgeting practise with including the risk in order to reduce variation in various aspects of their budgets. By carefully addressing the sources and effects of risk in the budgeting process, it also can reduce the variation in return (Beatrice & Thuo, 2013).

II. STATEMENT OF PROBLEM

Due to advancement and innovation on technologies especially after popularized of network, the effect of globalization has brought huge amount of foreign businesses into Malaysia. Many local SMEs in Malaysia has been threatened to survive in the rapid changing circumstance. Other than rapid changing circumstances, many reasons that might cause the survive problem for running the business among SMEs: such as inadequate working capital, insufficient use of management practices. Many small firms unable to develop a plan or update the plan against the rapid changing environment and serve it as benchmark (Seranmadevi & Kumar, 2019; Senthil & Easwaran, 2019; Kumar, 2019). Budgeting practices should serve as a management tool to control and monitor the operation of company (Ahmad, 2012; Mohamed, 2012). This research is carried out to identify the factors that would affect the budgeting practices among SMEs in Malaysia and provide knowledge for SMEs to increase the sustainability of the firm in the midst of intense competitive environment. Although there are few studies were conducted to examine the extent of usage of management accounting practices in others developing countries; however, lack of studies in management accounting field particularly budgeting practices among Small and Medium Enterprises in Malaysia is apparent. Hence, this research paper may fill the gap by providing the extent of usage of budgeting system in SMEs Malaysia.

III.   OBJECTIVES OF RESEARCH

After the issues and problems discussed above, current study identifies two main objectives:

1.   To investigate the extent of usage of budgeting practices among SMEs in Malaysia.

2.   To identify the factors or variables that affect budgeting practices among SMEs in Malaysia.

IV.   LITERATURE REVIEW

The purpose of this topic is to investigate the relevance of several factors or variables which affects the budgeting practices among Small and Medium Enterprises in Malaysia. There are two simple hypotheses need to be tested in the research paper.   There is no positive relationship between size of firm and budgeting practices. and there is no positive relationship between Sophistication level of operation and budgeting practices.

Studies on Budgeting Practices: Besides, in other contingency researches, Cadez and Guilding (2008) found that sophisticated management accounting practise is positively associated with the size of firm. This result is similar with the research done by Albu and Albu (2012) who revealed that size of firm is one of the major factors for the use and implement of the management accounting techniques. The larger firms are able to perform more sophisticated management accounting practise because of the greater resources own by the firm. Other than that, large information fields and the necessary infrastructure that owned by the larger firm also facilitate the firm in adoption of sophisticated management accounting practise (Bjornenak, 1997).   Furthermore, the nature of budgeting practise adoption is generally influenced by the size of firm and its sophisticate level of operation (Beatrice & Thuo, 2013). Other than that, when the size firm become larger, formal management control and sophisticated management accounting practices is expected to become more critical in terms of controlling and monitoring the whole organization (Ahmad, 2012).

According to all these researchers' findings above, larger firms tend to use more sophisticated and formalized budgeting practises making the firms' performance more succeed.In this connection, current research aims to find out whether size of firms affects budgeting practise among SMEs (Beatrice &Thuo, 2013). Malmi and Brown in year 2008 illustrated that the more sophisticated costing and budgeting system is needed to control and monitor the complex manufacturing process of the product. Thus, wastage and any risk on distortion of manufacturing plan is minimized by the budgeting practices. When there is deviation on the actual and expected production output, budgeting practices allow management to take the corrective actions effectively and efficiently (Malmi and Brown, 2008). Besides, Ahmadadeh et al. (2011) said that product diversity might increase the level of consideration on adoption Activity Based Costing system. In addition, sophistication level of operation is an important element affect the extent usage of budgeting practices claimed by Kallunki and Sivola.Kallunki and Sivola also demonstrated that the sophistication level of operation is positively associated with the extent usage of budgeting practices (Kallunki and Sivola, 2008). However, according to the empirical research of Schoute in year 2011, the result show that relationship between activity-based costing adoption and product diversity have generally been inconclusive, but he proposed that either may be no strong relationship between product diversity and activity-based costing, or there are some methodological issues done by the researcher (Schoute, M., 2011).

Besides, Ismail and Mahmoud in year 2012 also found that the relationship among product diversity and level of application of costing system is an insignificant relationship (Ismail & Mahmoud, 2012).

According to the discussion and arguments above, sophistication level of operation will be one of the contingent variables to illustrate the extent of use budgeting practices among SMEs, because sophistication level of operation might affect the extent usage of budgeting practices in SMEs. However, there is still lack of studies on the impact of product diversity on budgeting practices. Therefore, this research will examine the product diversity variables in order to understand the relationship between the sophistication level of operation and extent of usage of budgeting practices. According to a Canadian study by Armitage and Webb (2013), 10/11 of SMEs used operating budgets at highly sophisticated levels of operation. For example, master budgets, quarterly and rolling budgets. Therefore, they found that these operating budgets were perceived to be important. Furthermore, this study found that the small firm is more focusing on the cash component of the operating budget. In addition, the sophistication of the operating budget increased as the size of firm increased. According to the questionnaire survey by Ahmad (2012), the use of budget in 160 Malaysian SMEs from manufacturing sector was investigated. In that research it was found that 76% of the Small and Medium Enterprises used budgets. The medium enterprises had a significant higher usage of 81% compared to the small enterprises which had only 64%. The most frequently used budget that used by the sampled companies is the sales budget. There are 71% of sampled companies performed sales budget, followed by cash flow budgets used by 70% of the sampled companies. In addition, production budgets and financial position budgets were equally used by 71% of the SMEs, whereas purchases budgets were used by 70% of the SMEs. Furthermore, Ahmad also studied about the budgeting methods used by SMEs. Ahmad revealed that 63% of the sampled SMEs used flexible budgeting which is the more popular method, followed by incremental budgeting used by 59 %, then continuous budgeting used by 58 % of the sampled companies. Another study carried out in Cape Metropolis in South African aim to investigate the use of budget in Small, Medium and Micro Enterprises (SMMEs). The study found out that cash budget is the most popular budget which used frequently by 15.69% of the sampled SMMEs. Besides, cash flow budgets and cost of sale budgets were used by 13.73% of the sampled SMMEs. The fourth budgets were operating budgets used by 11.76%, followed by inventory budgets used 9.81% by the sampled SMMEs. Lastly, capital budgets were only utilized by 9.8% of the SMMEs on a quarterly basis, and 3.3% of the entities on an annual basis.

Size of firm: Chenhall (2003) discovered that the several factors were discovered which have significant effect on management accounting practices, such as firm size, technology, environment,strategy, structure and culture. Besides, many researchers also indicated that size of firm is an important element that help in determined the budgeting practise used by the firms. The size of firms affected the implementation of budgeting practise in various ways for example method and type of the budgeting practise. Regarding to the size of firm, literature review about budgeting always compares the application of budgeting practise between small and large firms. Merchant (1991) studied that the different in size, diversity, and level of decentralization would affect corporate-level budgeting systems. For example, formal sophisticated budgeting is used by the larger and more diverse firms, however, the smaller firms would use a less formal budgeting practices. Besides, Merchant stated that the performance of firms is related with the sophistication of the budgeting practise used by the firms. Based on the sophistication level of operation, large firm normally choose to apply more formal budgeting practices. Hence he found that the larger firms appeared to have a stronger relationship to good performance compared with

the smaller firms.   On top of this, another research conducted by Joshi et al in years 2003 at Bahrain about the budgeting planning and control, budget participation and rewards, and performance evaluation between medium and large sized of firms. They found that the larger firms that implemented a more comprehensive budgeting system is better to achieve a good performance.   Besides, in other contingency researches, Cadez and Guilding in year 2008 found that sophisticated management accounting practise is positively associated with the size of firm (Cadez & Guilding, 2008). This result is similar with the research done by Albu and Albu in year 2012 who revealed that size of firm is one of the major factors for the use and implement of the management accounting techniques (Albu & Albu,2012). The larger firm able to perform more sophisticated management accounting practise because of the greater resources own by the firm. Other than that, large information fields and the necessary infrastructure that owned by the larger firm also facilitate the firm in adoption of sophisticated management accounting practise argued by Biornenak (Bjornenak, 1997). Furthermore, the nature of budgeting practise adoption is generally influenced by the size of firm and its sophisticate level of operation (Beatrice & Thuo, 2013). Other than that, when the size firm become larger, formal management control and sophisticated management accounting practices is expected to become more critical in terms of controlling and monitoring the whole organization (Ahmad,K, 2012). According to all these researchers' findings above, larger firms tend to use more sophisticated and formalized budgeting practises making the firms' performance more succeed. In this connection, current research aims to find out whether size of firms affects budgeting practise among SMEs (Beatrice & Thuo, 2013).

Sophistication level of operation: The second factor is sophistication of level of operation. In SMEs, sophistication level of operation is one of the significant issues that might promote the implementation of budgeting practices. Many researchers were studied on the effect of employee's productivity, diversity of services and product upon the firm performance and other variables. However, very limited studies were done by researchers on the product diversity and linked it with management accounting research, especially in budgeting practices. The view of the sophisticated level of operation that applied in this study refer to the diversity of product and services provided by the firm to its customers. Simply saying that more diverse the product and services are produced or provided by the firm indicate that a more sophisticated operation. In Malaysia, SMEs is the largest proportion in the business population. Therefore, they are facing high level of competition in the industry. To increase the competitive advantage, a firm should not only provide or produce one single type of product or service (Ahmad, K., 2012). The firm should increase its diversity of products and services in order to differentiate itself from the competitors and survive in the industry. However, higher potential for cost distortion might happen when the firm provide too many types of products and services. Thus, to record the diversity in resources allocation for various types of services and product, advanced level of management accounting system is needed (Ahmad, K., 2012). The definition of product diversity can be separate into two conditions. Such as cost objects place different demands on activities, or activities place different demands on resources. For example, uneven allocation of costs might happen when there is a difference in mix or volume of products. Diversity can be separated into several types, such as: customer, market, product mix, distribution channels, batch size, and volume (Ashor, 2008). On top of that, the manufacturing process complexity might increase due to product diversity (more activities are required in production). Since the manufacturing process become more complicated, more sophisticated operation is required to be done to run the business. As a result, budgeting system is needed to support the sophisticated

level of operation, for example: to control and monitor over the business operation, and to measure the consumption of resources for different products in a complicated setting.

V.   METHODOLOGY

There are two hypotheses constructed in this study on comparison of factors that affect budgeting practices among SMEs in Malaysia.

H_1:   There is a positive and significant relationship between size of firm and budgeting practices

H_1:   There is a positive and significant relationship between sophisticated level of operation and budgeting practices

Research design and instrument: This research paper used positivism as research philosophy, because hypothesis is applied in this research to identify what are the factors affecting budgeting practices. Positivism used to generalize the result of this research from sample to answer the research questions and problems. Besides, positivism philosophy shows the causal relationship between size of firm, sophisticated level of operation, level of market competition, computerized accounting system, participation of workers and budgeting practices among SMEs in Malaysia.

Sampling design: This research paper is focused on two objectives, i.e to study the extent of usage of budgeting practices among SMEs in Malaysia and the factors influencing therein. Therefore, the target population was the SMEs in Malaysia from different industries for example services, manufacturing, agriculture and so on. Data collection was done on the two distinct size of enterprises under SMEs. Small and Medium Enterprises as two distinct sizes of enterprises, the target population was categorized into small and medium. The questionnaire was distributed to the 10 targeted companies. After the collection of the responses from these companies, it was then followed by another 10 targeted companies. The questionnaire was halted upon reaching 100 samples. Sample sizes of minimum 30 will usually bring out a result which its mean is very close to normal distribution suggested by Saunders, Thornhill and Lewis (2015). Besides, according to Kent (2001), to generate a more significant result and more reasonable statistical analysis, he said that 100 samples is required. Therefore 100 samples were reasonable to reflect the target population. Target population comprised 900,000 of all the registered SMEs located in Malaysia. Stratified random sampling was employed in selecting the sample. A total 100 samples are selected involve in the research. On the questionnaires, it was separated into four sections. Such as profile of the SMEs, extent of the use of the budgeting practices, factors affect the extent of the use of the budgeting practices, and profile of the respondent. The questionnaire was designed in several form for different questions, such as yes or no question, multiple choices and five- point Likert Scale. The questionnaire was designed to be simple, so that the respondent will feel comfortable to respond and that the process will take lesser time.   This research paper used an online survey to collect the primary data for the purpose of understand the modern situation of budgeting practices in Malaysia. The questionnaire was distributed through email to the respondent. Low cost and time efficiency were the major factors that influenced this research paper to be conducted on an online basis. Besides, there is no cost to the respondent apart for a

short time spent in filling in the questionnaire. In addition, representative sample from different geographical regions and business sectors of small and medium enterprise can be collected through such online survey.

Cronbach's alpha test was applied to test the internal consistency of the various variable. It shows in the value between 0 to 1. According to Malhotra (2010), the internal consistency reliability is satisfied when the coefficient alpha value is more then 0.70. The inferential analysis involved Pearson correlation and coefficient, and multiple regression analysis. Therefore, the relationship between various variables and budgeting practices is tested through inferential analysis. Pearson correlation analysis helps to discover whether there is a positive or negative relationship between two variables. The correlation value can be -1 to 1. In addition, it helps to determine whether there is a significant relationship between two variables through P-values. If the P-values is less than 0.05, it is indicated that there is strong evidence to reject the null hypothesis. Hence, if the p-values is less than 0.05, the hypothesis of this research can be accepted. Hair*et al* (2006) explained that multiple regression analysis is a statistical method which uses to examine the relationship among two and more independent variables with one dependent variable through regression equation and calculation of coefficient of multiple determinations. The coefficient of determination can demonstrate how well the application of budgeting practices among SMEs in Malaysia can be explained by all independent variables, as it determines the strength of the relationship among between independent and dependent variables.

VI.   ANALYSIS

Respondents demographic profile: Information of profile regard to the survey respondents and the respondents' company is provided below. These include overall view of background of the responding company and data for further statistical analysis. Most of the respondents' business (67%) fall under the category of more than 10 years. It is followed by 6 to 10 years (14%) and 2 to 5 years (10%). However, there is only 9% of the respondents' business fall under the category of less than 2 years. Thus, the majority respondents' companies may reasonably be expected to adopt the budgeting practices and have developed budgeting system in the business operation. Majority of responding companies (50%) are involve in the services sector. The second most is manufacturing sector (31%). Followed by construction and agriculture sectors which both only have 8%. In addition, there are 3% of responding companies fall under others sector. Most of the responding companies employ less than 10 full time employees (45%). Followed by the number of full-time employees in the category of 50 to 200 (29%) and 26% of the responding companies employ 10 -49 full-time employees. However, none of responding companies employ more than 200 full-time employees. Most of the responding companies employ less than 10 part time employees (49%). Furthermore, there are 31% of the responding companies employ 10 to 49 part-times employees and 20% of it employ 50 to 200 part-times employees in the business. At last, 0% of responding companies employ more than 200 part-times employees. **M**ost of the responding companies (50%) generate RM3 million to RM 20 million annual sales. Followed by 30% of the responding companies generate RM 1 million to RM 3 million annual sales. Furthermore, 14% of the responding companies generate RM 300,000 to RM 1 million annual sales. In contrast, the categories of less than RM300,00 and more than RM 20 million are both occupy 3% in the responding companies. **A**nnual expenses by the responding companies: The majority responding companies are in the category of RM 3 million to RM 20 million (48%). Followed by 30% of the

responding companies have a RM 1 million to RM 3 million annual expense and 14 % of them have RM 300,000 to RM 1 million annual expenses. However, the categories of less than RM300,00 is 5% and more than RM 20 million is 3%.

Central Tendencies Measurement of Variables

Table 1: Size of firm - Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SOF1 Number of part-time employee	100	1.00	3.00	1.7100	.78232
SOF2 Number of Full-time employee	100	1.00	3.00	1.8400	.84948
SOF3 Annual sales turnover	100	1.00	5.00	3.3600	.87062
SOF4 Annual expense	100	1.00	5.00	3.3000	.92660
Valid N (listwise)	100				

Source: Primary data

The table 1 shows that SOF3 has the mean value of 3.36 which is the highest. However, SOF1 has the mean value of 1.71 which is the lowest. On top of that, SOF4 has the standard deviation value of 0.92 which is the highest; meanwhile standard deviation value of 0.78 for SOF1 which is the lowest. This result indicated that the data most deviated from mean among the group is SOF4.

Table 2: Sophistication level of operation - Descriptive Statistics

	Item	N	Min.	Max.	Mean	Std. Deviation
SLOP1	How many types of products/services are produced by your company?	100	1.00	3.00	1.1200	.38350
SLOP2	How many types of product/services are sold by your company?	100	1.00	4.00	1.5100	.77192
SLOP3	How frequently are new products/services, or major design changes, introduced?	100	1.00	4.00	2.1700	.89955
SLOP4	How many product lines for every type of products does your company has?	100	1.00	4.00	1.5500	.70173
SLOP5	What is the degree of diversity of products/services?	100	1.00	5.00	3.8100	1.06073

SLOP6	What is the degree of complexity of these products?	100	1.00	5.00	3.4400	1.36567
Valid N (list-wise)		100				

Source: Primary Data

Based on the table SLOP5 has the highest mean value of 3.81. However, SLOP1 has the lowest mean value of 1.12. On the other hand, SLOP6 has the highest standard deviation value of 1.36. But SLOP1 has the lowest standard deviation 0.38. Therefore, standard deviation value of SLOP1 indicates that the data points tend to be close to the mean value.

Table 3: Budgeting practices - Budgeting System

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	76	76.0	76.0	76.0
	No	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

Based on the data collected from the responding companies, there are 76% of the responding companies apply budgeting system in their business operation.

Table 4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Sales Budget	76	3.00	5.00	4.3947	.56754
Purchasing Budget	76	3.00	5.00	4.4079	.56986
Production Budget	76	1.00	5.00	3.5132	1.59577
Cashflow Budget	76	1.00	5.00	4.0658	.98435
Financial Budget	76	1.00	5.00	3.7632	1.23146
Monthly Budget	76	2.00	5.00	4.1579	.76686
Annual Budget	76	1.00	5.00	4.2105	.77142
Continous/rolling Budget	76	1.00	5.00	3.1447	1.62238
Fixed Budget	76	1.00	5.00	3.9737	.81607
Flexible Budget	76	1.00	5.00	4.1447	.79505
Incremental Budget	76	1.00	5.00	3.6447	1.30337
Zero-Based Budget	76	1.00	5.00	1.6974	1.20022

Valid N (listwise)	76					

Based on the table above, Sales budget, purchasing budget, and cashflow budget has a high mean value among various budget which indicate that the responding companies are using these budget practices frequently. Besides, in term of the period of performing budgeting, monthly budget and annual budget have the high mean value which indicates that monthly and annual budget was frequently used by the responding companies. In addition, in terms of types of budget used, flexible budget was frequently used by the responding companies and has a high mean value of 4.14. Overall, each budget has a high value in standard deviation which is ranging from 0.7 to 1.4 except sales and purchasing budget.

Table 5: Reliability analysis - Summary of Reliability Statistic

Construct	Cronbach's Alpha	Number of items
Size of firm (IV1)	.895	4
Sophistication level of operation (IV2)	.573	6
Budgeting practices (DV)	.852	12

Source: Primary Data

Cronbach's Alpha was used to test the reliability of the research instrument (survey through online). According to theory of Cronbach's Alpha, values that fall between 0.7 to 0.9 is considered accepted, 0.5 to 0.6 is considered poor, and more than 0.95 is not necessarily desirable. Therefore, based on the table above, the Cronbach's Alpha value of sophistication level of operation was considered poor, as it has a value of 0.573. This may be caused by the number of items is not adequate. However, other variables are between 0.7 to 0.9, it indicates the items in the test measures the same concept and object.

Table 6: Inferential analysis - Pearson Correlation and Coefficient

Summary of Pearson Correlation analysis

	Budgeting practices BUD	
Size of firm IV1	Pearson Correlation	.704
	Sig. (2-tailed)	.000
Sophistication level of operation IV2	Pearson Correlation	.427
	Sig. (2-tailed)	.000
Budgeting practices DV	Pearson Correlation	1
	Sig. (2-tailed)	

In this section, the second research objective and question of this research paper is answered by using the Pearson Correlation analysis. The second objective is to identify the variables that influence the budgeting practices. Thus, hypothesis is formed in the format of 'there is a positive and significant relationship between

selected contingent factors and budgeting practices.' According to the Pearson correlation and coefficient theory, there is a number between negative 1 to positive 1 that shows the extent of two variables are linearly related. Thereby according to the table above, all the independence variables has a positive correlation with dependent variable (budgeting practices). IV2 has a moderate positive correlation with the budgeting practices which it has a correlation value between .40 to .59. IV1 has a correlation value of .704, therefore it has a strong positive correlation with the dependent variable. Besides, according to the P-values theory, IV1 and IV2was consider significant and indicate strong evidence to reject the null hypothesis because the P-values of IV1 and IV2was less than 0.05.

Table 7: Multiple Regression analysis - Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720[a]	.518	.498	.47091

a. Predictors: (Constant), Participation of worker, Size of firm, Sophistication level of operation

Based on the table above, the adjusted R Square indicates that 50 % of the variability in budgeting practices explained by Participation of worker, Size of firm, and Sophistication level of operation.

Table 8: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	17.172	3	5.724	25.813	.000[b]
Residual	15.966	72	.222		
Total	33.138	75			

a. Dependent Variable: BUD

b. Predictors: (Constant), Participation of worker, Size of firm, Sophistication level of operation

Based on the table above, the P-values was less than 0.05 and 0.01 which indicated that the overall regression model was statistically highly significant and very strong evidence to reject the null hypothesis. Therefore, these three predictors can explain the variation of the budgeting practices well.

Table 9: Summary of Regression Co-efficient[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	1.286	.325		3.957	.000	.638	1.935
IV1	.654	.102	.619	6.436	.000	.452	.857
IV2	.131	.119	.104	1.105	.273	-.106	.369
IV5	.090	.063	.123	1.442	.154	-.035	.215

a. Dependent Variable: BUD

Based on the table above, only IV1 (Size of firm) has a significant positive relationship with budgeting practices as its p-values is less than 0.05. The P-values of others two variables are more than 0.05 which indicate fail to reject the null hypothesis. From the results, size of firm has greatest impact on budgeting practices as it has greatest beta value of 0.654. Hence, when size of firm increases by 1 unit, budgeting practices will increase by 0.654.

Hypothesis 1

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> H1: There is a positive and significant relationship between size of firm and budgeting practices.

Based on the result above, there was sufficiency evidence to prove that the size of firm has a positive and significant relationship with the budgeting practices among SMEs in Malaysia due to the P-values of less than 0.05 and the Pearson correlation was 0.704. Furthermore, having a Beta result of 0.654 shows that size of firm has a positive impact on budgeting practices. Therefore, this research shows that the larger firms are more likely to implement budgeting practices in their business operation. This result is similar with the researches done by Beatrice &Thuo(2013) and Ahmad,K (2012) which stated that the nature of budgeting practise adoption is generally influenced by the size of firm and its sophisticate level of operation. Others researcher such as Albu and Albu (2012) also revealed that size of firm is significantly related to application of management accounting system in business or organization in a positive magnitude.

As a result, it was able to reject the null hypothesis and accept H1 which indicates the larger firms are more likely to adopt budgeting practices as they have greater resources to afford more sophisticated budgeting system.

Hypothesis 2

> H2: There is a positive and significant relationship between sophistication level of operation and budgeting practices.

Based on this result(Pearson correlation), it proved sophistication level of operation has a positive and significant relationship with the budgeting practices because it has a Pearson correlation value of 0.427 and P-values of less than 0.05. However, based on the result in Section 4.3.2 (Multiple regression test), even though the value of Beta is 0.131 which has a positive impact on budgeting practices, but the P-values is more than 0.05 which indicate insignificant relationship. This result was similar with the research done by Schoute (2011) which said that there may be no strong relationship between product diversity and budgeting practices. As a result, it is failed to reject the null hypothesis and indicate that there is insignificant relationship between sophistication level of operation and budgeting practices.

VII.   CONCLUSION

The purpose of this research is to study the factors affect the budgeting practices among SMEs in Malaysia. The factors used in this research were size of firm, sophistication level of operation, level of market competition, computerized accounting system, and participation of workers. These factors are tested with the budgeting practices to reveal their respective relationships. Based on the respondents' demographic profile formed, it shows that the majority responding companies are involve in services sector and fall into the category of more than 10 years in business operation. Besides, 45 percent of the responding companies employs less than 10 full-times employees and 49 percent of responding companies employ less than 10 part-times employees. Furthermore, half of the responding companies generate RM 3 million to RM 20 million annual sales turnover and 48 percent of the responding companies spend RM 3 million to RM 20 million as annual expenses. Besides, based on the reliability analysis, Cronbach's alpha value of each constructs is greater than 0.70, therefore it has proved that all constructs are able to generate consistent findings, except sophistication level of operation which was less than 0.70. The Pearson Correlation Analysis proves that size of firm (IV1) and Sophistication level of operation (IV2) has a positive and significant relationship with budgeting practices among Small and Medium Enterprises. In addition, the result showed that the size of firm has the strongest relationship with budgeting practices. In addition, according to the regression analysis, it was revealed that almost half of the variability in budgeting practices can be explained by the size of firm (IV1) and sophistication level of operation (IV2)in this research because the value of Adjusted R-square was 0.498. However, through regression analysis, only size of firm (IV1) has been proved was statistically significant to budgeting practices because only the P-value of size of firm was less than 0.05. As a result, only the null hypothesis of size of firm was rejected in this research. Others null hypotheses were failed to be rejected through Pearson correlation and Multiple regression analysis.

VIII.   IMPLICATIONS AND RECOMMENDATIONS

This research was focusing on the extent usage of budgeting practices among SMEs in Malaysia. Although there are some previous studies which investigated on the use of management accounting in different developing countries, but there are hardly any previous studies about the use of budgeting practices among SMEs' in Malaysia. Thus, this research fills in this significant gap and provides a start of further research into budgeting practices among SMEs in Malaysia. Besides, this research was focused only on budgeting practices rather than a wide range of management accounting practices. Therefore, this research provides information to SMEs particularly on

the advantages and impacts of budgeting practices. Furthermore, this research also suggested various variables that may affect the budgeting practices pf SMEs'.

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