

## A Study On Management Accounting Practices in PNG SMEs Sector

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### Abstract

Small Medium Enterprises is the backbone for any economy. It is a newly developed concept for the developed and developing nations. Sustainable economic growth is derived from the small medium enterprise growth in the sector. The researches on the management accounting practices in SMEs sector are limited resulting in the lack of literature reviews for the new research on the cost accounting for the SMEs sector. The success or the failure of any SMEs depends on the pricing strategy, budgeting control, variances and other cost control measures. This article is a study of the traditional management accounting techniques such as marginal costing, capital appraisal techniques and others methods. In addition, the study also includes the modern management accounting techniques such as balanced scorecard, activity based costing, target costing and other modern management accounting techniques. Most SMEs businesses are operated by the owner or a family member who has limited knowledge of cost accounting that can have an impact on their business productivity. This article can be a guideline to enhance the existing conceptual knowledge of the management accounting practices for the existing and the upcoming SMEs.

**Key Words:** Small Medium Enterprises, Traditional Management Accounting techniques and Modern Management Accounting Techniques

### 1. Introduction

The SMEs for any economy consists of the formal and informal sector. Each sector should prove that its employment rate is high so that there is high contribution towards the Gross Domestic Product (GDP) through the show of innovate technology and export income to the country. Most developed and developing nations have failed to set tough policies on SMEs. This has led to the lack of tax incentive and other incentives which have been neglected in the past. Most of the SMEs are reserved for the country citizen or partnership arranged with foreign investors. The economic development of any country needs to have local participating for the future sustainable development of the economy .Small and Medium –sized entities (SMEs)play important roles in

the economics growth and sustainable development of every nation(Moore WC, Petty JW, Palich CH, Longenecker JG., 2008).

Management accounting focuses on the future events while financial accounting concentrates on the past events. SMEs have to be given more weight on the cost accounting application in the business environment. The future decision of any business depends purely on the uncertain event in the competitive environment. This article explains on each traditional management tools and modern cost techniques on SMEs. The World Bank states that if any enterprise has less than 99 employees, it can be termed as SME. The SMEs can help the economy to create more foreign exchange reserve as it creates more export income and less import material. Papua New Guinea has developed SMEs policy in the year 2016 to promote more SMEs section in the country. It has created 20% of GDP from the SMEs and 1,000 odd exporters which generated almost 2 billion dollars to the economy. The main reason is for the growing need of entrepreneurs who can venture into accelerating the economic development through generating new ideas and converting them into profit (Tucker 2000).

The article has been structured in the following manner: the first section is the SMEs sector in Papua New Guinea and the literature review, the Second section explains in detail the traditional management accounting techniques and moderation of management accounting techniques. The final section of this article provides suggestions and recommendations with a conclusion.

### **1.1 SMEs sector in Papua New Guinea**

The independence state of Papua New Guinea has released Small Medium Enterprise Policy (SME Policy -2016) with the aim of local employment and wealth creation with the vision to move Papua New Guinea to middle –income level country in 2020.The Government of Papua New Guinea has reserved certain business section (business undertaking) to the Papua New Guinea citizens so that local populations participation was recognized under SMEs Policy - 2016.The informal SMEs have grown rapidly in Papua New Guinea for the last few decades but most Papua New Guineans are reluctant to start the formal SMEs due to various reasons. Asians are controlling the current SMEs in Papua New Guinea where the business profit or other business earning are remitted to their country of original. Therefore, the foreign reserve has declined and also employment opportunities for Papua New Guinea citizens have been denied with the present system. Most of the SMEs in Papua New Guinea are involved with retail business, agricultural undertaking, handcrafts and fishing. The government of Papua New Guinea has failed to develop the proper database system (National statistics information) in the all sectors of the economy where proper policy and planning have declined. Therefore SMEs sector policy implementation can be very challenging to the state agency. The introduction of SMEs policy for Papua New Guinea can bring it to the next level in the global arena.

## 2. Literature Review

A study on Management Accounting Practices for SMEs sector has emerged recently. Few studies on management accounting practices for SMEs sector has been done in Malaysia, South Africa, Bangladesh and also in some other countries. Most literature review on management accounting practices has been done for larger business organization. Ahmad K 2013 has indicated that the traditional MAPs such as conventional budgeting, traditional costing and financial performance measures are widely used by Malaysian SMEs

This study also shows that a significant number of respondents have adopted one or more measures for both financial and non-financial but relying on financial measures is greater than non-financial measures. Further study, indicated that investment appraisal techniques and modern management account methods have not been widely used by the SMEs sector due to the uncertainly for the future and the limited knowledge of the owner or the family members on the subject matter.

According to Mitchell & Reid (2000) empirical management accounting research, is particularly designed to investigate technical innovation and development, and to concentrate on the larger enterprise. This shows that more researches are needed for the management accounting practices for SMEs sector.

According to Ismail 2010 concludes that the development of a sound accounting information in SMEs depends on the owner's level of accounting knowledge.

According to Michael L., Malcolm P., and Glynn L studies have found that the emphasis on management accounting in SMEs tends to be controlling information rather than aiding decision –making; there is a tendency to make decisions without adequate , or indeed any, financial analysis. The information sharing is vital within an entity for as long as the information is not sensitive or in others word knowledge sharing can enhance the productivity of the organization.

According to Nandan, 2010 has suggested that the failure or the underperformance of SMEs is often due to their failure in utilizing appropriate management accounting tools. Most of the owners or the family members have limited knowledge on the management accounting resulting in the failure of the SMEs.

Pavlatos and Kostakis (2015) argued that new economic environment mainly triggered by the global economic crisis imposes the need for adaptation of Management Accounting practices to encounter the dynamics of the market. The management accounting techniques is fundamental for the business organization where every decision taken by the business needs detailed analysis.

My article on the A Study on Management Accounting Practices in PNG SMEs Sector can fill the gap within the studies on management accounting practices for large organizations with SMEs.

### **3. Traditional Management Accounting Techniques**

The traditional management accounting techniques provide the basic understanding of cost techniques used in SMEs, The owner or family member of the SMEs need to have basic knowledge on the conceptual and traditional management accounting tools. The SMEs performance depends on the implementation of management accounting practices. According to Kamilah (2017, p.342), the current management accounting practices have incorporated financial and non-financial levels that aim to provide crucial information at both operational and organizational levels. The modern quality management is vital for SMEs such as total quality management, Just in Time (JIT), supply chain management and Lean manufacturing. This article explains on the analysis of overhead costing, marginal costing, budgeting control and capital appraisal techniques under the traditional costing methods. In the recent study by Fonsekaat, all showed that the gap between the theory and the practical aspect of management accounting, about thirty - six management accounting practices is recognized and used by organisations in different circumstances. SMEs performance have been repeatedly claimed to be connected with their incapability to exploit proper Management Accounting Practices (MAP) (Hopper et al., 1999; Nandan, 2010; Lucas et al., 2013) the ability of reducing the risk of business failure is by supplying efficient information that may increase the competitive advantages of the business. The traditional management accounting techniques are still dominating the SMEs sector. Therefore, SMEs has to get a clear understanding on the MAP to create sustainability in the business environment.

#### **3.1 Overhead Costing**

The production overhead costing is not directly related to the production, but it's necessary for the production process. The SMEs has to properly plan the overhead costing that is involved in the production process including fixed cost and the production overhead which needs to be considered in the profitability of the business entity. The overhead costing follows a few procedures for the allocation of relevant costing to determine the total cost of the production. Some production overhead can be easily identified through their relevancy to a particular production, so that overhead costing is directly allocated to that particular production, but some production overhead costing cannot be easily identified to the production. Therefore, Production overhead should be appropriate to the particular production. The recent study has revealed that the most of the SMEs in Sri Lanka are using the production costing, and inventory control which are relatively high compared with other management accounting techniques (Karunaratne, K 2013).

### **3.2 Marginal Costing**

Marginal costing is often referred to as a variable costing SMEs have to identify relevant variable factors that are directly related to the production process. There is a positive relationship between marginal costing and the output of the manufacturing process; however the marginal cost can be reduced by using the economics of scale. The marginal costing is plays a major role to determine the pricing strategy of the SMEs. The SMEs sector is in a competitive environment with the large business entity so it has to develop two types of strategies which are cost leadership and its differentiation in the competitive business environment. The marginal costing applies to short term decision making in limiting production factors such as labor hour, material and machine hours. Marginal Costing Technique helps to maximize profit for any SMEs under circumstances where production resources are scarce and to make the choice where production mix can help to increase the profitability. The Marginal costing can enhance decision making on the SMEs to buy goods outside (outsourcing) or those goods manufactured in house. The absorption costing cannot be used for the decision making since it includes fixed production overhead costing. The owners or the family members of the SMEs have to identify the relevant variable costing to the operation so that accurate decision can be made.

### **3.3 Break-even Point Analysis**

The Break –even point is where there is neither profit nor loss for the SMEs and the fixed overhead is fully covered at the break –even point. The break –even point analysis is paramount for any SMEs to determine the minimum production level to make a profit without any loss. Most of the SMEs have failed to compute break-even point at the first place resulting in the business failure in a highly dynamic competitive environment. Most of the SMEs have failed to compute fixed overhead costs due to limited knowledge. The Break -even point analysis can help SMEs in the right direction without incurring any loss for the business.

### **3.4 Capital Appraisal Techniques**

Capital budgeting concept or Investment appraisal techniques mean the same. It Challenges the SMEs managers to balance the long-run and short-run issues of the business with a project. It also analyzes ways to increase capital (value) or owner’s value of business with the projects to which their life span is in multiple years.

Capital appraisal technique looks at long-run decisions of those projects that spend multiple years. The focus moves in the operation of a year-to -year approach and to the entire life span of a project. The accounting for capital budgeting on a project-to-project approach is similar to the life-cycle costing. The role of the management accounting is highlighted in the six stages of capital budgeting.

An investment is involved with large amount of money where decision making is done in a prudent manner. Most of the investment appraisal techniques are involved with the quantity factors and not the quality factors. The investment appraisal needs to be done with feasible studies. The investment appraisal deals with the future forecast of the revenue and the expenditures with the assumption that inflation rate remains unchanged. The Investment appraisal is done based on the economics and social factors are remained unchanged. The Investment appraisal is concern with the tangible cash inflow and cash outflow but the notional flow is not considered under the Investment appraisal. The notional flow stands for the non- cash flow factors such as depreciation and other notional expenditures. The correct application on the investment appraisal plays a vital role determining the investment viability.

The success of the investment appraisal techniques depends on the information provided and the corrected computation of the investment appraisal techniques. Furthermore, the investment appraisal needs to consider the quantity and quality factors of the investment.

An Investment may be financed by equity sources or debts sources. The Investment starts with the initial cash outflow followed by the cash inflow. Most of the time, investment is referred to as a project. The outcome of the project should enhance the current operation of the business or add value to the owners of the SMEs.

Four quantitative methods are used in making capital budgeting decisions as described. The two methods that focus on cash flows and the time value of money are the net present value and the internal rate-of-return which is known as the discounted-cash flow models.

Typically, the discounted cash-flow methods are superior for providing information in the decision-making process because they are the most comprehensive in the scope. The concept of money having time value is the main feature of these models. The other methods presented are the payback method and the accrual accounting rate-of-return. The payback method uses cash flow as a basis but does not incorporate time value of money nor profitability. The accrual accounting rate-of-return does not focus on cash flow but uses measures from the income statement. The role of income taxes and inflation is incorporated within those methods that don't require time value of money.

Investment appraisal is the evaluation of investment with regard to their profitability and / or cost of effectiveness (Panos Konstatin, Margarete konstatin 2018).

Although the methods presented provide a basis to make quantitative financial decision, the capital budget concept examines the importance of non -financial quantitative and qualitative aspects for each decision. The owners or manager of the SMEs have to develop specialized knowledge on the investment appraisal techniques.

### **3.5 Standard Costing**

Standard costing refers to the unit cost of production and is regarded as a vital information for SMEs decision making process. The standard costing is a part of the cost control, measurement and variance analysis. Detailed report on variance analysis can help the SMEs to find out the reason behind the deviation from the budgeting figures. Most of the SMEs have failed to use the variance analysis due to lack of knowledge on the standard costing and sometimes it's very difficult to establish the standard costing for the SMEs. The variance analysis is the main cost control measurement to ascertain the actual performance of the SMEs with forecast figures. The result of variance analysis can be favorable or unfavorable with proper explanations so that future planning can be established with accurate figures.

### **3.6 Budgetary Control**

The SMEs is the fastest growing business and needs proper budgetary control and also measurement in place to have its perpetual success in the business. The budget is the forecast of cash inflow and cash outflow for the SMEs. The cash budget of the SMEs identifies for the cash surplus or deficit so proactive measures can be done based on the forecast figures. This is to invest in surplus cash to make extra revenue and in financing any cash deficit. Most of the SMEs have not prepared cash budget for the business since owners are working on their own experience in the business, However, some SMEs are required to prepare their budget for the purpose of obtaining loan from lending institution and other business proposals. The cash is the lifeblood for the long - term survival for the SMEs. Most of the SMEs fail due to not having proper set of budgetary control measurement from the start.

### **3.7 Ratio Analysis**

The ratio analysis provides vital information to the SMEs to measure performance of the business entity. Ratio analysis can be done in different manners to compare the previous year with the current year and to compare the industry benchmark with the business entity operation. Ratio analysis can be used to evaluate operating efficiency, profitability, liquidity and gearing (debt to equity ratio) of the SMEs. The ratio analysis is a very useful tool to evaluate the financial performance and position of the entity.

### **3.8 Inventory Cost**

The cost of the Inventory is a major role in SMEs and the goodwill of SMEs is built by maintaining the proper inventory level and costing. Most of the investments are done on inventory so that the owners and the Manager of the SMEs should have in place a proper inventory control system. The Economic Order quantity is the correct inventory level to be kept and maintained at the same level of the inventory in order to minimize the total cost of inventory. The cost of inventory consists of cost price, holding cost and ordering cost. Most

owners or manager have wide range of knowledge and experience on inventory control system since its inventory can be converted into sales. The proper planning and procedures for purchasing and sales can play a major role in the inventory level. The owners of the SMEs must have wide knowledge on fast moving stocks and slow moving stocks so that proper inventory planning can be created. The owners or the family members maintain three levels of inventory such as Maximum level, Record order level, minimum level. The owners place purchase order when the inventory level reaches the point for reorder.

#### **4. Modern Management Accounting Techniques**

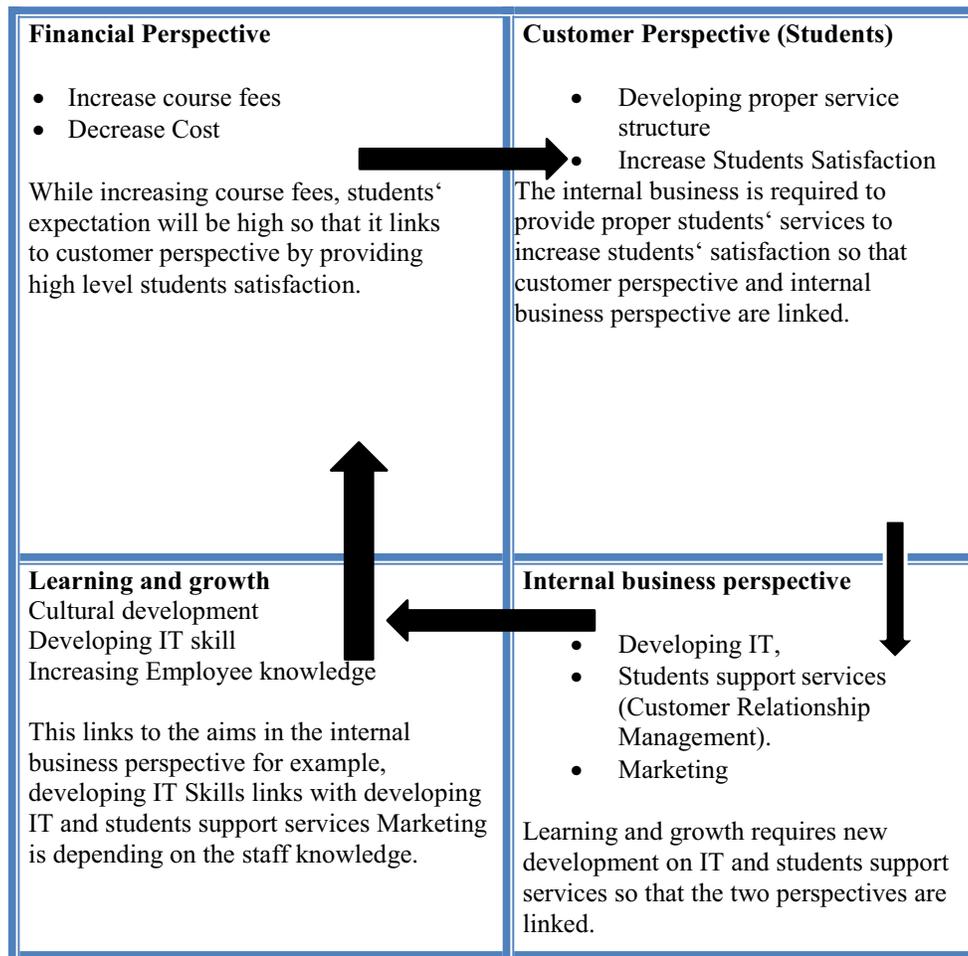
Modern Management accounting techniques are starting to replace the traditional management techniques since production processes are becoming more complex in the modern business environment. The traditional management accounting techniques are obsolete and the applications of the techniques are creating a lot of issues in the modern business environment. The modern management accounting techniques are balanced scorecard, activity based costing, target costing and others.

##### **4.1 Balance Score Card -BSC**

The Balance Score Card is considered for internal and external environment factors of the SMEs to measure the organizational performance. The BSC focuses on four different perspectives of the business organization which are Customer, Internal, Innovation & learning and Financial. The BSC is considered the financial and non –financial measure to obtain a balance view about the SMEs performance. The BSC is not a control system, but it helps to enhance translating mission and strategy of SMEs into SMART objectives. The measuring tools from the financial perspective of Balance Score Card are cash flow, monthly sales growth, increase market share and return on investment. While the measuring tools for customer perspective of Balance Score Card are on –time delivery, percentage of sales from new products, number of cooperative supports services and the share of key accounts purchases. In addition the internal business perspective of Balance Score Card measures the actual production schedule vs plan, unit cost, cycle time, Yield and efficiency. Finally, the innovation and the learning perspective of BSC measures the processing time to maturity, time to develop the next generation of products, new product introduction vs competition and the percentage of products.

The practice case study on the Balance Score Card for the higher learning institute explains in detail based on the author’s experience in the sector on table: 1 which includes four performance measurements.

**Table:1:For example for SMEs case studies –Higher Learning Institute Balance Score Card**



**4.2 Activity Based Costing -ABC**

The Activity based costing refers to the identification of the activities (processes) of a particular production and the assigned cost accordingly. Under the traditional costing techniques, it ignores various types of increase in production overhead so that ABC is replaced to overcome these types of major issues in determining the total production cost. Cooper R and Kaplin RS (1991) Harvard Business Review article called for an increased in the use of activity –based cost accounting to identify the true costs of processes and products, so that the company can make sound decisions related to the profitability and the expenses of the products they produce. ABC is not only for manufacturing but also for the services sectors. The Activity Based Costing helps to determine the accurate cost of production by using the cost drivers. The owners or the manager for the SMEs are not aware of the ABC methods since they are resistance to the change in the modern management accounting techniques of the entity. The four big challenges of the SMEs in

ABC implementation are Time, Expertise (know –how), Financial constraints and Organizational learning (Kocakulah MC, Foroughi A. Stogg A, Manyoky L (2017)). The ABC points out the waste and inefficiencies in the production processes. The outcome of the ABC implementation for the SMEs can be a competitive edge in the modern business environment.

#### **4.3 Target Costing**

Target costing involves proactive cost planning, cost management, and cost reduction practice whereby costs are planned and managed at product design and development cycles, rather than the latter stages of product development and production (Akao 1990). Target costing is a pre-determined cost in the competitive environment so SMEs have to develop the new product cost based on the target cost in order for its survival in the market. The main objective of target costing is to enable business executives to manage the business profitably in the competitive marketplace (Zengin and Ada, 2010). The details of the market research need to be done in order to introduce the target costing for the existing market and also it can create cost leadership strategy in the highly competitive business environment. Target costing is based on six principles such as price, customer acquisition, product project forward planning, Inter division cooperation, the product life period (life span) to minimize costs, the value of membership of chain (suppliers, distributors, vendors, etc.).

#### **4.4 Just in Time costing**

Just in time costing refers to zero inventory level so that cost related to inventory can be minimized. The SMEs has become more productive with the minimum cost under Just in Time costing. The Just in time is adopted with reliable suppliers, transport and accessibility between the business organization and customers. Just in Time costing is not suitable for Papua New Guinea SMEs because of no proper transport system and accessibility to road

#### **4.5 Kaizen Costing**

The cost incurred for the continuous improvement and the gradual improvement can reduce the cost of the production. Kaizen cost can be applied to SMEs since owners or a family member of SMEs has deepest knowledge about production process. In this way, they can improve the process in productivity with minimum costing. The continuous improvement can enhance the quality of any manufacturing or services organizations. The Kaizen costing is more applicable in Papua New Guinea SMEs as the concept is very simple, straight forward and more suitable for PNG environment where it is easy to implement. The Customer feedback is a major source of continuous improvement.

### **5. Scope of the Study:**

PNG is one of the fastest economy growing country in the Southwestern Pacific. PNG has enormous natural resource. It has more than 9 Million Population in the country. The government is welcoming the PNG nationals for business development which will lead to increase the GDP of the country. In PNG, the banks are giving loans for the business. This article brings the importance of the Management Accounting Practices in PNG SMEs Sector. MAP plays a major role for the new SMEs to understand the new terms and applications about the traditional and modern management accounting practices. Moreover, this study can help the future researcher about the importance of the management accounting practices in SMEs... This is the first publication on a study of management accounting practices in the PNG SMEs sector.

### **6. Data Collection and Analysis:**

A Study on Management Accounting Practices in PNG SMEs Sector is based on published journals, books, website search, and newspaper articles. The author on this study has been working in Papua New Guinea for the last 11 years. His knowledge and experience on the subject matters were widely used to write this article. The formal research has not been done in this study.

### **7. Findings:**

The researcher himself involved to know how far the SMEs are maintaining their costing, budgeting income and expenses transactions. Finally, he has planned to do a research with SMEs about the Management Accounting Practices but due to the lack of source he has prepared the publications based on the secondary data. This study on management accounting practices in the PNG SMEs sector widely shows that most of the SMEs have failed to implement and execute the management accounting practices due to limited knowledge on the subject. If they use the management accounting practice it will bring a wide business range to PNG.

### **8. Suggestion and Recommendations**

Recommendations are based on my contextual knowledge on the management accounting practices for SMEs and not on formal research. The following recommendations are needed for the implementation of the management accounting practices in SMEs.

- Lack of management accounting knowledge from owners or manager of SMEs as they cannot implement the costing techniques, therefore, the responsible authority should come up with more awareness on the management accounting practices in SMEs.

- Many SMEs have not clearly defined standard cost, therefore well – defined standard cost needs to develop SMEs, so the organizations performance can be measured properly.
- The recent study has indicated that management accounting practices is relatively low in its application in SMEs so as the operating efficiency is in its low levels also, therefore they may be other factors influencing the operating efficiency.
- There is Lack of ABC implementation in the SMEs because of the owners /manager of the business entity have limited knowledge of the activity based costing. Owners /manager should have accurate computation of the product costing when implementing ABC techniques.
- The Government of any country should create a separate department or ministry to establish a SMEs unit to provide technical advice including MAP to the owners or manager of the SMEs. Therefore a comprehensive program on the SMEs can be developed.
  
- The Government has to develop the standard on Management Accounting practices for the SMEs as a mandate to have perpetual succession for the sector.
- The implementation of target cost can enhance the sales and profitability of the SMEs.
- SMEs can be incorporated in the formal curriculum for education awareness so that the potential entrepreneurs can be created back from basic primary education.
- The government should develop database based on successful business owners in the SMEs so that their real case studies can help other emerging entrepreneur to start off their businesses without fear of the high risks involved.
- Most researches and Grants are needed for the Management Accounting practices for SMEs to enhance sector for the future growth.

## 9. Conclusions

The study on Management Accounting Practices for SMEs has covered all the traditional and modern management accounting techniques. This study has been done based on practical analysis and with previous researches on the management accounting practices for SMEs. It can be used as guideline for the further researches. The SMEs are the fastest growing business sector in the world and are the keys to most of developed and developing nations. In context of the SMEs sector in Papua New Guinea, it has not developed well in line with global development on the sector. The PNG SMEs sector has faced a big challenge on capital investment, limited knowledge on business practices, high competitions from the Asian owned business and wantok society method. The Government of Papua New Guinea has developed policies on the SMEs section, but the implementation of the policy is in a moving at a slow phase with the state agency failing to monitor the sector. The Economy of Papua New Guinea depends on the imported goods rather than the production within the country so the foreign exchange reserve is in balance. Therefore, the future growth of PNG SMEs sector can boost the economy to the next level. The growth in the SMEs sector can bring immense benefits to the country such as direct and indirect employment, foreign inward remittances and local participation in the sector. The Management

accounting practices in SMEs have not been developed in Papua New Guinea due to limited knowledge on the subject. The success or the failure of the business is purely depending on the pricing for the products or services. The determining of the prices is not an easy task since it involves a lot of cost elements and also competitors' prices. The study of Management Accounting practices in SME sector plays a major role in determining the pricing so that the owners or the family members have to develop detail knowledge of the Management Accounting techniques.

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