Evaluating the costing system in place at apple

ASSIGN BUSTER

This report will address three issues of concern to Apple plc. First is the role and nature of management accounting information in strategic and operational decision making. Management needs to understand the type of decisions to be made at both strategic and operational levels, the traditional techniques that supported such decisions and the limitations of those techniques. Also, which contemporary techniques replaced the traditional techniques and why? Understanding this role will enhance management's ability to make sound strategic decisions that will enhance the value of the company. The second issue will involve looking at the costing system of the company. Is the existing costing system in use appropriate or not? If it is appropriate, why? If not, why not? What will be the most appropriate costing technique and why is it appropriate compared to other techniques? Finally, an evaluation of the performance measurement system of the company and recommend either a better system or source for alternative measures to quench the growing rivalry between divisional managers of the company. We will briefly stare with a profile overview of Apple Plc.

There is no single, ideal management accounting system that suits every organization (McWatters et al, 2008). A different organizational circumstance leads to a different management accounting practice.

Introduction

Apple Plc is a confectionary manufacturer. Figure one represents a breakdown of Apple's divisions and the processes they go through to realize the final product. The different colours in each product represent the final output for each division. Although the mixing is done together, the cooking and packaging differs. For the cooking, the product type will determine the

temperature level. While for the packaging, if the company is a monopoly, it would really matter. In a perfect market, customer's preference is placed as top priority. Does the customer prefer to hold the candy bar on a stick or feel it with his/her bare hands?

Nature of Management Accounting

Before establishing a common ground for the consideration of the nature of management accounting, a definition of the term would be appropriate. Management accounting can be defined as a process of providing appropriate information primarily intended to assist managers in making better decisions (Drury, 1998).

In previous years, management accounting techniques like traditional budgeting, cost-volume-profit analysis, standard costing and variance analysis, were adaptable to the business environment when product varieties were few, competition was low, overhead costs were relatively low, automated processes were minimal and firms' were mostly labour intensive (Sulaiman, Ahmad and Alwi, 2004). An example was the traditional accounting system used by Hewlett-Packard (Groot and Lukka, 2000). This system gave Hewlett Packard information on departmental costs which made each manager aware of his/her costs and detail of the costs by type. However, many businesses and environments began to evolve as a result of technological changes, globalization and changing customer mix. Authors identified inadequacies in these techniques, when used as tools in planning and control decisions (Kaplan, 1983; Bromwich and Bhimani, 1994; Lucas, 1997). Awareness amongst companies on the need to achieve excellence in manufacturing/service delivery and use such an achievement as a strategy

to compete effectively grew (Drury, 1998). Companies started linking their strategies with reduction in production and inventory costs, quality improvement and innovation, reduction in lead times and increased flexibility in meeting individual customer's requirements (Lucas, 1997). This paved the way for the introduction of contemporary accounting techniques like target costing, total quality management, Just In Time (JIT), Activity Based Costing (ABC), Balance Scorecard and Process re-engineering, which support organization in achieving their objectives. An example is the case of Hewlett Packard when they advised all their business units to adopt activity-based costing (ABC) systems. Their intention was to provide information to help conceptualize new products (target costing), lower production costs and decide about localization of factories.

Limitations of the traditional management accounting techniques

In their article titled " The rise and fall of management accounting [2}", Johnson and Kaplan (1987) identified certain limitations to the traditional management accounting practices.

-Management accounting reports are of little use to operational managers attempting to maximize productivity and minimize cost. It takes time to prepare the report and even after preparation, the information provided is too distorted for managers to understand. This distracts managers from identifying the key factors for process and production efficiencies.

-Management accounting practices failed to provide relevant set of measures in which such organizations operates. These measures were

meant to reflect the organization's competitive environment, its products, processes and technology.

-Management accounting practices excessively focused on short term financial performance.

-Management accounting systems fail to provide accurate product costs. The use of simplistic and aggregate product costing is useful for financial reporting. However, it does not represent the demands by each product on the firms' resources. Rather, it is based on direct labour. This distortion could result in misguided decisions on product pricing, product mix, product sourcing and rival response.

The role of Management Accounting Information in Strategy

Strategy is the process of establishing a profitable or sustainable position against the forces that determine industry competition (Porter, 1985). The objective is to position the firm so as to gain competitive advantage. This involves producing long term plans while possible plans and actions of competitors. Tricker (1989) compared " the relationship between strategy and management accounting to the relationship between military strategy and military intelligence" (Hopper et al, 2007). For management accounting to play a role in strategic management, managers must provide both internal financial and non-financial information about the internal environment, and external financial and non-financial information, about the external environment in which the company operates.

In the 1970s, Bowman's (1990) study showed that firms had developed an economic orientation in which external actors were considered as competitors that drive down profit levels. However, Hopper et al (2007) argued that benefits can also come from partnering with competitors, customers and suppliers. The perception that competitors can be cooperative as well as confrontational has broadened the concept of strategic management accounting as a process of information sharing between competitors. Accounting information will be required at each phase of the strategic decision making process.

Strategy Problem identification: This requires non-financial, qualitative information about issues of an internal and external nature. This will involve conducting a PESTEL analysis and analyzing Porter's five forces industry structure.

Strategic alternatives: To generate these alternatives, management requires both financial and non financial quantitative data produced from internal and external issues.

Strategic actions: To select appropriate actions, management requires primarily quantitative, financial, internal information about costs, benefits and probabilities of courses of action.

The necessity of financial and non financial data as well as quantitative and qualitative data is what makes the prior management accounting information insufficient.

Strategic Decisions using management accounting information

The fundamental purpose of management accounting is to assist managers in achieving the organization’s strategic objectives. For this, managers have to consider the strategic decisions involved. These include

-Make or Buy Decisions

Managers have to decide whether to produce the goods and provide the same services within the organization (insourcing) or outsource some of their activities to outside vendors. This decision is based on the firm’s strategy to achieve and maintain a competitive advantage within the market. One of the ways to achieve this advantage would be to reduce the cost of production activities by exploiting within the value chain of the company.

This is either by keeping cost low or differentiating the product. One of the ways it can achieve this is to utilize Porters’ generic strategies to define the position it wants to take. Sometimes, companies prefer to make the product in order to retain control of the product, market and technology. However, companies can also decide to outsource some of the company’s activities to reduce costs of production and enhance quality by outsourcing to specialists in that field.

Traditional technique

The traditional management accounting technique previously adopted by companies was more of a ‘ value added’ perspective which was largely internal to the firm (Shank and Govindarajan, 1993). This starts with payment to suppliers and ends with charges to customers with the aim of maximizing the difference. `For managers from a strategic point of view, this technique was deemed inadequate for three reasons

-It starts too late and ends too soon: Opportunities to exploit linkages with the firm’s suppliers is missed since the cost analysis will at the point of purchase. Also, opportunities to exploit the firm’s customers are missed since the cost analysis will end at the point of sale.

-It arbitrarily distinguishes between raw materials such as maintenance and other purchased inputs.

-Competitive advantage cannot be fully explored without considering all purchased raw materials and cost elements involved.

Contemporary technique

These inadequacies are made up for by value chain analysis which is a contemporary development tool. Unlike the value added perspective, this tool considers both the suppliers and the customers as linkages in the value chain. This provides the company with an opportunity to exploit any of the linkages that will add value to the firm.

Product-Mix Decision

Managers must also decide which product to make and in what quantity (Bhimani et al, 2008). This involves management identifying the direct and indirect cost associated with producing that product. The most important factor to consider when making a choice is to weigh the benefits of the product with the cost of providing the product.

Traditional technique

The traditional management accounting technique adopted is Cost Volume Profit Analysis. It helped managers understand the interrelationship between

quantity sold, cost, selling price, profit. Although this technique is simple to use, there are certain limitations that make it inadequate.

-Fixed and variable costs only approximate costs in an intermediate range of output. If levels of output should vary beyond this range, a valid estimation using CVP analysis will not be possible.

-It assumes a constant sales price which is unrealistic if one wishes to increase sales.

-CVP analysis suggests that price is maximized if an infinite number of units are produced. This is unrealistic given capacity constraints and the need to make price concessions to sell more units.

. Contemporary technique

The use of Activity-Based Costing or throughput accounting will be useful in the long run that considers the entire life-cycle of a product. This is unlike CVP that is only appropriate for short run marginal analysis.

Other decisions include pricing decisions, customer profitability decisions, and one-off special order decisions.

The Existing Costing System Dilemma

Situation

Apple PLC is currently allocating common costs to products using absorption costing system. This is a process of allocating fixed and variable overhead costs to products. This system has become a problem because of the incentive compensation scheme in place. Every division is presently evaluated based on their ability to meet the minimum profit margin of 25%,

which will earn the manger a flat bonus of £100, 000 if achieved. Also, every 1% excess of the 25% the managers makes, he/she earns £2, 500 extra. This has resulted in a growing rivalry between managers

Limitations and consequences of Absorption costing system adoption in Apple PLC

-Divisional managers cannot distinguish between their fixed costs and variable costs. This poses a problem because adequate information for making relevant decisions cannot be obtained. Thus, product costs are distorted.

-The existing cost system distorts profit estimation due to Apple's exposure to stock fluctuations as a result of its costing profit being a function of both sales and production.

-Apple's divisional managers have to deal with fixed overheads being capitalized in unsaleable stock. Assuming there is a decrease in sales demand, Apple will be left with surplus stock. If such surplus is not disposed of, the profit calculation for the current period will be misleading.

The consequences of these limitations are that costs are unfairly divided amongst the managers despite the fact that not all of them are involved in all the processes. This will result in the distortion of profit margins achieved by managers.

The profit margins are highly inaccurate because the costs have been equally split amongst the divisions. This in turn, faults the appraisal system which is dependent on the profit margin to assess performance of managers.

F(x) = y, where X represents the profit margin and why is the performance

Adoption of Activity-Based Costing System at Apple Plc

Activity-Based Costing is a system that calculates the costs of individual activities and assigns costs to cost objects on the basis of the activities undertaken to produce each product or service. It is claimed that ABC is particularly useful in companies when:

-Varying demands on resources.

-Volume does not drive costs;

-Overheads are a large percentage of total cost;

-Diverse product range;

Implementation of ABC at Apple plc will involve certain stages:

-Identifying the major activities that take place in an organization- For Apple Plc, packaging is the only activity that involves the three divisions

-Assigning costs to cost pools/cost centres for each activity- For Apple plc, each activity is assigned cost centres

-Determining the cost driver for each major activity-

-Assigning the cost of activities to products according to each product's demand for activities.

These factors will apply to Apple Plc. A wide variety of products are produced with highly automated processes. The products are likely to consume/cause

different costs in their manufacture and it highly unlikely that volume drives many of the costs. From figure 1, not all the products pass through the three processes. For example, the question states that the products pass through a combination of common processes: one such process could be cooking. The factory pot used can be used as long as the current flavour that is being cooked is needed but when a new flavour is needed the pot has to be cleaned out. This causes costs. Therefore, it can be seen that the driver of this cost is " flavour change", not volume. Apple plc currently allocates most of its costs based on volume, the products that have very few flavours will be bearing too much cost.

Table 3: Hypothetical calculation (assuming ABC)

Limitations of ABC

Apple plc will need to think very carefully about the nature of the costs. The scenario says that " some but not all the processes are common". How can these be costed? Although ABC will help with the activities that surround the processes for example set-ups, sluicing and so on rather than the process itself, it is very doubtful that ABC can offer much help here. Other limitations to ABC include

-It is based on historical analysis and thus become invalidated when there is a change in the method or system of doing business.

-It is not a regular reporting routine

-It does not identify the true cost of a product or service.

Performance Measurement

Benefits of using profit margin to measure managerial performance include-

-Managers can assess whether the profit being generated covers the capital invested in the unit.

-Management use it to promote discipline in the organization's capital budgeting process.

However the use of Return On Investment by Apple Plc was based on a faulty profit margin that did not take into account the accurate costs incurred by each division. With the introduction of ABC, the accuracy of the profit margin for each division will be higher.

Table 4: A Hypothetical manipulation of the ROI

The table may present a clear increase in ROI. However, decomposition will show how a manger might attempt to manipulate his performance evaluation by giving an illusion of a nice increase in profitability when actually managers increased their ROI but decreased the long run value of each division. These and other limitations have led to the introduction of the balance scorecard. For Apple a suitable balance scorecard will consist of a linked series of objectives and measures that are both consistent and mutually reinforcing.

Conclusion

The introduction of ABC could lead to greater awareness of some drivers of costs and therefore this will lead to a robust and defendable base for those costs. This will, in turn, make the managers responsible for their actions and

turn their focus towards efficiency. However, it will not solve the issues discussed. There is possibly a sign of weak management here. ABC will enable a better view of cost drivers to be formed and should therefore lead to better activity management but it will not cure the problems of an inappropriate performance appraisal system. Thus the introduction of the balanced scorecard will assist management in aligning the performance of managers with the vision of Apple Plc. The balanced scorecard might not be sufficient and should be considered as a template for measuring performance. Economic Value added or Process re-engineering could be used to complement the balanced scorecard.