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PERFORMANCE MEASURES OF COMPETITIVE AND NONCOMPETITIVE COMPANIES IN MALAYSIA

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PERFORMANCE MEASURES OF COMPETITIVE AND NON-COMPETITIVE COMPANIES IN MALAYSIA

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This project is the requirement for the Masters Degree of Business Administration in Management Graduate School Of Management, Universiti putra Malaysia, Serdang, Selangor Darul Ehsan.

The title of this project is Performance Measures Of Competitive and Non-competitive Companies In Malaysia. This project is prepared by Ong Tze San (GM00366) and is sent to the Management Graduate School Of Management, Universiti Putra Malaysia as a requirement for Masters Degree Of Business Administration.

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Abstract

This study aims to document the current performance measures used by organizations in Malaysia. The purposes of having performance measures and limitations encountered in implementing their performance measurement systems were also examined.

Most of the very competitive organizations achieved all their organisation's goals or objectives compared to the non-competitive organisations.

The majority of the organizations irrespective of their competitiveness, were concerned the performance measurement systems in the organizations

Cash flow, collection period, payment period, gearing ratio and profitability ratios were frequently used accounting performance measures. Capital utilization, labour productivity, inventory level, schedule adherence and supplier product quality were the more frequently employed performance measures in the production functions. As for the marketing functional area, product quality is the most frequently used measure, followed by the price of the product and number of customer complaints. As the capital investment is concerned, payback was the most widely used performance measure and followed by net present value.

Majority of the respondents were satisfied with their existing performance measurement systems. Overall, there are no significant differences in the performance measures used between competitive and non-competitive companies.

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CHAPTER 1

INTRODUCTION

Most companies in Malaysia manufacture and sell a variety of products. Their operations are often complex and top management will have difficulty to directly control their operations. In this connection, it is the practice that the organizations be decentralised or divisionalised into divisions or centres. These divisions or segments will be given the autonomy to make decisions independently. However, they may be a danger that the divisions make by these autonomous divisions may not be goal congruence. In order to motivate managers to pursue their objectives inline with the organisation's goal, performance measures, both financial and non-financial, should be designed in such a way that goal congruence can be attained.

The choice of performance measures is one of the most critical challenges facing organizations. Performance measurement systems play a key role in developing strategic plans, evaluating the achievement of organizational objectives, and compensating managers. However, many managers feel that traditional accounting-based measurement systems no longer adequate to fulfil these functions. This has been shown by the survey done by the Institute of Management Accounting (IMA) in 1996. From the survey they discover that 15 percent of the respondents' measurement systems supported top management's business objectives well, while 43 percent were less than adequate or poor. In response, firms increasingly are implementing new performance measurement systems to overcome these limitations. Sixty percent of the IMA respondents, for example, that

reported they were undertaking a major overhaul or planning to replace their performance measurement systems.

PROBLEM STATEMENT

Today's economic environment has called for a restructuring of cost accounting and cost management. In the face of impending changes such as globalisation and worldwide competitive pressures, companies are forced to review their accounting systems. The traditional accounting system is no longer suitable as it may not yield sufficient useful information. For many companies, the benefits of a more detailed, accurate cost system far exceeds its costs. To stay competitive, companies have to be dynamic and change with the fast-changing environment. To achieve all these, an effective, flexible and suitable performance measure system is required to motivate, control and encourage managers to work towards company's goal congruence. In view of this, it is therefore appropriate that a study on the performance measures used in Malaysia be carried out. This study attempts to achieve a number of objectives. These are as follows:

OBJECTIVE OF THE STUDY

(1) To identify and document the types of performance measures used by the organizations in general.

(2) To identify the objectives of having performance measures used in the organizations.

(3) To investigate whether the organizations are satisfied with the existing performance measures used by the organizations.

(4) To identify the limitations of the existing performance measures used by the organizations.

(5) To investigate whether performance measures used in competitive companies differ from non-competitive companies.

CHAPTER 2

LITERATURE REVIEW

Trends In Performance Measurement

The literature concerning performance measurement has had two main phases. The first phase began in the late 1880s and went through the 1980s. In this phase the emphasis was on financial measures such as profit, return on investment and productivity. The second phase started in the late 1980s as a result of changes in the world market. Companies began to lose market share to overseas competitors who were able to provide higher-quality products with lower costs and more variety. To regain a competitive edge companies not only shifted their strategic priorities from low-cost production to quality, flexibility, short lead time and dependable delivery, but also implemented new technologies and philosophies of production management (i.e. computer integrated performance (CIM), flexible manufacturing systems (FMS), just in-time (JIT), optimised production technology (OPT) and total quality management (TQM). The implementation of these changes revealed that traditional performance measures have many limitations and the development of new performance measurement system is required for success. (Alaa M.G. and James 1996)

Most economic theories analysing the choice of performance measures indicate that performance measurement and reward systems should incorporate any financial and non-financial measure that provides incremental information on managerial effort

(subject to its cost). Despite these models, firms traditionally have relied almost exclusively on financial measures such as budgets, profits, accounting return and stock returns for measuring performance (Balkcom et al. 1997). Many firms now believe that the heavy emphasis placed on financial measures is inconsistent with their relative importance.

Major Trends In The Today's Changing Environment

Customer Orientation

Referring to Anderson (1994), customer focuses in the heart of cost management system. Companies are concerned with the delivery of value to the customer – this value chain refers to the set of activities required to design, develop, produce, market and deliver products and services as part of the product. Thus, companies must compete not only in technological and manufacturing terms but also in terms of delivery and response.

In brief, customer satisfaction is a summary cognitive and affective reaction to a service incident (or sometimes to long-term service relationship). Satisfaction (or dissatisfaction) results from a service quality encounter and comparing that encounter with what was expected (Oliver 1980).

As a result, customer measures delayed delivery as delivery denied. The accounting system must measure new indicators of customer satisfaction to track quality and productivity.

Total Quality Management (TQM)

According to Daniel (1991), continual improvement and elimination of waste are the two fundamental principles that govern a state of manufacturing excellence – the key to survival in today's world-class competitive environment. The philosophy behind TQM is managers strive to create an environment that enables workers to produce zero-defect products – right the first time and ever time.

Based on the International Quality Study (IQS 1991), TQM is also extended to service industries. This is a little more difficult to meet customers' demands for quality may differ from employee to employee. Thus, service companies are emphasizing consistency though the development of systems to support employee efforts. For example, investing in information technology systems to speed up customer service enables delivery of service at a standard (quality) the firm wants and knows will satisfy customers. As such, quality cost measurement and reporting are key features of the contemporary cost management system for both manufacturing and service industries (Potter and Schroeder 1993).

Time as a competitive element

Time is a crucial element in all phases of a value chain. Companies reduce time to market by compressing design, implementation and production cycles (Bommer 1995). They deliver products and services quickly to eliminate non-value added time e.g. time a product spends on the loading dock. It is important to note that decreasing non-value

added time goes hand-in-hand with increasing quality, not sacrificing the latter (Chen and Dodd 1997).

With the rate of technological innovation, the life cycle of a product has been greatly shortened. Managers must be able to respond quickly and decisively to changing market conditions (Bushman 1996). However, according to Biddle (1998), information to allow the managers to accomplish this task must be available. Hewlett-Packard, for example, found it better to be 50 percent over budget development than to be six months late. Thus, the correlation between cost and time is a part of the cost management.

Advances in Information Technology

Two significant advances relating to information technology is computer-integrated manufacturing and availability of PCs and user-friendly software packages (Peter and Eddie 1994).

Computer-automated manufacturing makes it possible to monitor products continuously as they move through the factory and report on units produced, materials used, product costs, etc. It increases both the quantity and the timeliness of information and facilitates managers in quick decision-making process (Ronald 1994).

Ronald added that, these advancements give cost accountants the flexibility to produce individualised reports on an as-needed basis. This has reduced costs

significantly by eliminating the huge volume of internally generated monthly financial reports.

Advances In The Manufacturing Environment

According to Potter (1993), there are a number of the new management accounting methods being introduced such as activity-based costing (ABC), just-in-time (JIT) manufacturing and computer-integrated (CIM) manufacturing.

Growth of the Service Industry

Referring to Hansen and Mowen (1996), the growing importance and increased competition in the service industry has made managers more conscious of the need to use accounting information for planning, controlling and decision making process.

Global Competition

Vastly improved transportation and communications have led to a global market for many manufacturing and service firms. Coca-Cola, Procter & Gamble, Microsoft are developing markets all over the world. Now, Japanese cars are available in US market in just two weeks time. Investment bankers and management consultants can communicate with foreign offices instantly. Globalisation spells out one clear message – accounting information is required to control costs, improve productivity and assess profitability.

Financial / Economic Value Measures

Traditionally, performance measures have been primarily based on management accounting systems. This has resulted in most measures focusing on financial data (i.e. return on investment, return on sales, price variances, sales per employee, productivity and profit per unit production). Teague and Eilon (1973), stated the following four issues concerning the important of measuring productivity: strategic (i.e. comparison with competitors or related firms); tactical (i.e. management control of the performance of the firms); planning (i.e. comparison of the relative benefits from the use of different inputs); and internal management (i.e. collective bargaining with trade unions).

According to cost accounting textbook (Hirch and Louderback, 1986; moriarity and Allen, 1991), responsibility accounting is one or the most important functions of accounting information. Under responsibility accounting, accounting information is used to evaluate the performance of individual managers. However, concerns have been expressed about the use of accounting information to evaluate managerial performance. For example, several researchers (Hirst 1981, 1983; Hopwood, 1972; Otley 1978) contend that under certain behaviour when evaluation is based upon accounting information. Kaplan (1983, 1984) also argues that the use of traditional accounting measures may be limited as organizations adopt a host of new technologies and management approaches to compete in a global economy. These concerns suggest that accounting information may not represent a useful basis to evaluate the performance of managers within some organization.

While traditional accounting measures such as earning per share and return on investment are the most common performance measures, they have been criticized for not taking into consideration the cost if capital and for being unduly influenced by external reporting rules (Ittner, Christopher 1998). Consulting firms are promoting a variety of financial measures to overcome these limitations. The foundations of these 'new' performance measures are residual income and internal rate of return concepts developed in the 1950s and 1960s.

Residual Earning

Accounting measures such as levels and changes in residual earning are widely used for performance evaluation and executive compensation (Healy, JAE 1985). Residual earnings are also important for valuation (Ohlson, CAR 1995).

Stern Stewart & Co.'s trademarked "Economic Value Added" or EVA Registered Trademark measure for example, is the firm's proprietary adaptation of residual income. EVA Registered Trademark is defined as adjusted operating income minus a capital charge, and assumes that a manager's actions only add economic value when the resulting profits exceed the cost of capital. To eliminate perceived distortions created by external accounting rules, Stern Stewart recommends up to 160 adjustments that firms can make to their accounting system to more closely approximate 'economic' profits (Stewart 1991).

Cash Flow Return On Investment (CFROI)

Cash flow return on investment essentially is the long-term internal rate of return, calculated by dividing inflation-adjusted cash flow by the inflation-adjusted cash investment (Snyder 1995).

In an article, on the 'metric wars' between consulting firms pushing various financial measures, a partner at HOLT Value Associates claimed, 'CFROIs are ideally suited to displaying long-term track records, whereas a Stern Stewart-type EVA is in millions of dollars, heavily influenced by asset size, and unadjusted for inflation-induced biases' (Myers, 1996,41). It was quite an imaginative development by a consulting firm, but it is not well grounded in the basic elements of corporate finance theory. CFROI attempts to measure shareholder wealth – which is not clearly related to maximizing shareholder wealth (Myers, 1996,42).

A number of impressive claims have been made for each of the financial measures. Stern Stewart, for example, cites in-house research indicating that 'EVA Registered Trademark stands well out from the crowd as the single best measure of wealth creation on a contemporaneous basis' (Stewart, 1991). Dixon and Hedley (1993) of Braxton Associates cite an internal study showing their CFROI measure explains 91 percent of the variation in market capitalisation ratios.

Non-financial Performance Measures

While some firms are attempting to overcome perceived limitations in traditional accounting-based performance measures using financial metrics, others are embracing the use of non-financial measures for decisions making process and performance evaluation. In particular, many firms are implementing 'balanced scored' system that supplement traditional accounting measures with non-financial measures focused on at least three other perspective – customer, internal business processes and learning and growth (Kaplan and Norton 1992,1996).

Recently, there has been an increased emphasis on non-financial measures such as customers' satisfaction, employee satisfaction, product quality, and market share in compensating managers. For example Chrysler Corporation measured the performance based on the attainment of vehicle quality and customer satisfaction targets in addition to measures of profitability (Lavin 1994, a3)

Case studies by Fisher (1995) and Brancato (1995) have identified three principal reasons firms are adopting non-financial measures.

Perceived Limitation in Traditional Accounting- Based Measures

The most significant of traditional performance measures is that they are based on traditional management accounting system that were "initially developed for the purpose of attributing the total costs of operating textile mills, railroads, steel mills, and retail

stores to specific products, department, and activities" (Hayes 1988). During this period labour was the major cost driver that management accounting systems emphasized and other costs were de-emphasized by putting them together in one overhead category. However, today the average labour cost component rarely exceeds 12 percent while overhead is usually 50-55 percent of the manufacturing cost (Business Week, 1988). Since in this case overhead is allocated based on the minor cost element of direct labour this allocation approach is not valid.

Referring to Kaplan (1983), Financial reports are usually closed monthly. Therefore, they are lagging metrics that are a result of past decisions. As a result, operators, supervisors, operational managers consider financial reports too old to be useful for operational performance assessment.

Vickery et al. (1993) added that traditional performance measures have not incorporated strategy. Rather the objectives have been to minimize costs, increase labour efficiency and machine utilization.

Hayer (1988), discovered that traditional measures try to quantify performance and other improvement efforts in financial terms. Yet, most improvement efforts are difficult to quantify in dollars (i.e. lead time reduction, adherence to delivery schedule, customer satisfaction and product quality). In addition, operators find typical financial reports difficult to understand which leads to frustration and dissatisfaction. As a result,

traditional performance measures are often ignored in practice at the factory shop floor level.

Traditional financial reports are inflexible in that they have a predetermined format, which is used across all departments. However, even departments within the same company have their own characteristics and priorities. Thus, performance measures that are used in one department may not be relevant for others (Woods 1989).

The preparation of traditional financial reports requires an extensive amount of data, which is usually expensive to obtain Woods (1989), added.

Fisher (19920 argued that setting standards for performance measures in general conflicts with continuous improvement. "If standards were not carefully set, they had the effect of setting norms rather than motivating improvement. Workers may hesitate to perform to their maximum if they realize that the standard for upcoming periods may be revised upward by current results."

Maskell (1992) argued that traditional performance measures are no longer useful since in order to meet customer requirement of higher-quality products, shorter lead time and lower cost management have given shop floor operators more responsibility and authority in their work. Consequently, traditional financial measures used by middle manager do not reflect a more autonomous management approach.