THE EFFECT OF STRATEGY, STRUCTURE, AND THE BALANCED SCORECARD (BSC) ON FIRM PERFORMANCE

by

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ABSTRAK

Tujuan kajian ini adalah untuk menyelidik faktor-faktor yang mungkin berpotensi dalam mempengaruhi prestasi syarikat-syarikat perniagaan di Malaysia iaitu diversifikasi (strategi korporat), BSC (sistem pengukuran prestasi), dan desentralisasi (struktur organisasi). Di dalam kontek kawalan pengurusan, teori kontingensi menekankan bahawa pemilihan system kawalan yang paling sesuai di dalam sesebuah organisasi adalah kontingen ke atas faktor persekitaran dan faktor dalaman organisasi tertentu. Dengan mengambil perspektif teori kontingensi di dalam kajian ini, strategi korporat dan struktur organisasi adalah dianggap sebagai faktor-faktor kontektual yang berpotensi untuk mempengaruhi tahap gunapakai BSC di dalam sesebuah syarikat dan kajian ini cuba meninjau bagaimana prestasi syarikat di pengaruhi oleh tahap gunapakai tersebut. Memandangkan strategi korporat adalah sesuatu perkara yang biasanya melibatkan pihak pengurusan tertinggi di dalam sesebuah organisasi dan ianya lebih menonjol di dalam sesebuah syarikat yang besar, maka kajian ini telah memilih 500 syarikat dari berbagai sektor ekonomi yang disenaraikan di Bursa Saham Kuala Lumpur sebagai rangka persampelan dan pegawai-pegawai kanan syarikat sebagai responden kajian. Sementara strategi dan struktur organisasi menentukan jenis kawalan pengurusan yang sesuai, BSC digunakan untuk meningkat dan mempengaruhi proses perlaksanaan strategi. Oleh yang demikian, kajian ini melihat adanya sesuatu kaitan di antara strategi, struktur organisasi dan BSC, dan interaksi atau keserasian di antara faktor-faktor ini adalah penting kepada prestasi syarikat yang mendorong untuk kajian ini di jalankan. Penemuan-penemuan daripada kajian ini menunjukkan bahawa terdapat perhubungan yang positif dan

signifikan di antara pembolehubah takbersandar dan pembolehubah bersandar dan juga di antara pembolehubah-pembolehubah takbersandar yang panggil sebagai kesan takbersandar. Seterusnya, kesan bersama pembolehubah-pembolehubah takbersandar ke atas prestasi syarikat di dapati lebih berkesan daripada kesan pembolehubah-pembolehubah tersebut secara berasingan; bagaimanapun, kehadiran diversifikasi di dalam model kajian gagal untuk meningkatkan kesan bersama kerana terdapat kesan pertindihan. Sementara itu, keputusan daripada ujian ke atas kesan interaksi menunjukkan bahawa terdapat kesan interaksi yang signifikan untuk desentralisasi dengan BSC ke atas prestasi syarikat tetapi tidak untuk diversifikasi dengan BSC, dan untuk diversifikasi dengan desentralisasi. Selaras dengan rangkakerja kajian, kesan perantaraan gunapakai BSC telah dilihat secara jelas dengan terdapatnya kesan tidak langsung diantara desentralisasi dan prestasi syarikat melalui gunapakai BSC tetapi tidak terdapat kesan yang sedemikian di antara diversifikasi dan prestasi syarikat. Kajian ini diharap dapat menawarkan kepada pengamal-pengamal perniagaan dan ahli-ahli akademik sebuah model untuk meramal prestasi syarikat dengan mengenengahkan peranan BSC sebagai pencelah.

ABSTRACT

The objective of the study is to examine factors that potentially influence the performance of business corporations in Malaysia i.e. diversification (corporate strategy), the BSC (performance measurement system), and decentralization (organization structure). In the context of management control, contingency theory holds that the most appropriate control system in any organization is contingent on the circumstances within and surrounding the organization. Taking a contingency theoretical perspective in this study, the corporate strategy and organization structure are considered as potential contextual factors of BSC adoption and the study explores how firm performance is affected by different levels of BSC adoption. Since corporate strategy is a subject of concern of high raking individuals in an organization and is more easily identifiable in large organizations, the study has selected 500 companies listed on the Kuala Lumpur Stock Exchange across industries as the sampling frame and the senior executives in the organizations as the respondents to the survey. While strategy and organization structure dictate the appropriate type of control, the BSC is used to enhance and influence the strategy implementation process. Hence, the study sees that there is an important link between strategy, organization structure, and the BSC and an interaction or a congruent matching of these variables is essential to firm performance which warrant for the study be carried out. Findings of the study reveal that there are positive and significant relationships between the independent variables and the dependent variable also between the independent variables referred to as the independent effects. Further, the joint effects of the independent variables on firm performance are found to be stronger than their individual effects, however, the presence of diversification in the model fails to improve the joint effects owning to the multicollinearity effect. On the other hand, results of the test on the interaction effects reveal that there is a significant interaction effect of decentralization with BSC on performance but not for diversification with BSC and diversification with decentralization. Consistent with the research framework of the study, the mediating effect of BSC adoption was evidenced with the presence of indirect effect between decentralization and firm performance via BSC adoption but not for such effect between diversification and firm performance. The study is hoped to offer business practitioners and the academia a model for predicting firm performance by incorporating the mediating role of BSC, as a relatively new performance measurement system, in the framework.

Chapter 1

INTRODUCTION

1.1 Preface

The study is structured into 6 chapters. The first chapter briefly outlines the background of the study, the problem statement, the research objectives, the research questions, the scope of the study, the expected contribution of the study to the practicing community and the academia, and followed by the chapter summary. The second chapter reviews the empirical literature pertaining to the issues to be investigated in the current study. The third chapter presents the theoretical frameworks of the study and how they are linked to the literature that subsequently lead to the development of research hypotheses. The research methodology and the operationalization of dependent and independent variables are described in chapter 4. Chapter 5 presents the findings of the study followed by Chapter 6 on discussions and conclusion.

1.2 Background Of Study

A performance measurement system (PMS) is a mechanism for improving the likelihood of the organization successfully implementing its strategy. In setting up a PMS, senior management selects a series of measures that best represent the company's strategy. These measures must be tailored to suit the goals and aspirations of different levels of an organizational hierarchy (McNair, Lynch & Cross, 1990). Measurement of physical and operational issues will be greatest at the lower levels within the hierarchy, while economic and financial measurement will be more important at the higher levels. The changing nature of business, such as demanding customer expectations, warrants for performance measurement be reviewed in order that issues of quality, customer satisfaction, competitive positioning and flexibility, which are inherent within ideas of competitive advantage and strategic choice, be aggregated into performance measurement (Broadbent, 1999). Performance measures must provide a mechanism whereby determinants or drivers of performance are evaluated in parallel with, and prior to, the measurement of results. This view is compatible with the ideas of strategic management accounting (Simmonds, 1981) where aggregate financial performance, as measured by annual accounting profit, is merely a residual from the determinants which contributed to enhancing and maintaining competitive advantage. Hence there is a need to provide a framework which measures both the determinants and the results of organizational performance.

Performance measurement systems play a key role in developing strategic plans, evaluating the achievement of organizational objectives, and compensating managers. Many managers feel that traditional accounting-based measurement systems no longer adequately fulfil these functions. The perceived inadequacies in traditional accounting-based performance measures have motivated a variety of performance measurement innovations ranging from "improved" financial metrics such as "economic value" measures to "balanced scorecards" of integrated financial and non-financial measures (Ittner & Larcker, 1998). While some firms are attempting to overcome perceived limitations in traditional accounting-based performance measures using economic-value metrics, others are using non-financial measures for decision making and performance evaluation. In particular, many firms are implementing "balanced scorecard" systems that supplement traditional accounting measures with non-financial measures focused on at least three other perspectives: customers, internal business processes, and learning and growth (Kaplan & Norton, 1992, 1996). Proponents of the balanced scorecard contend that this approach provides a powerful means for translating a firm's vision and strategy into a tool that effectively communicates strategic intent and motivates performance against established strategic goals.

1.3 Problem Statement

Studies investigating the link between nonfinancial measures and future financial performance have produced mixed results. Brancato (1995) reported that none of her case study participants could precisely quantify the link between key nonfinancial performance measures and the bottom line. Banker, Potter & Srinivasan (1998) found positive associations between customer satisfaction measures and future accounting performance in 19 hotels managed by a hospitality firm. Anderson, Fornell & Lehmann (1994) found that customer satisfaction in 77 Swedish firms was positively related to accounting return on investment. Foster and Gupta (1997) found positive, negative, or insignificant relations between satisfaction measures and current or future customer profitability depending upon the questions included in the satisfaction measures.

Among of the attributes of good performance measurements highlighted by Lynch and Cross (1991) include the need to help managers and workers to link operations to strategic goals and integrate financial and nonfinancial information. There are still limited studies that investigate the impact of PMS, particularly the BSC, on firm performance although more and more companies and organisations are adopting the BSC. The adoption of BSC among Malaysian companies, yet are perceived to remain at the low level. This raises important questions about the net benefits from incorporating non-financial metrics into performance measurement systems. The fact that strategy is the center of the BSC, the review on the strategy-performance literature becomes very relevant. The literature shows that the findings on this area of study, particularly the diversification-performance, have not been consistent. The appropriateness of organization structure and its variations across different level of diversification has been examined (e.g. Chandler, 1962; Rumelt, 1974), however the relationship between the strategy/structure/BSC fit and firm performance has not been examined yet.

1.4 Research Objectives

There is a lack of empirical evidence on how a multidimensional approach to performance measurement is associated with increasing diversification and decentralization in organizations. The current study, therefore, represents an effort to empirically examine the relationships among the three organizational variables (strategy, structure, and BSC) and firm performance. The primary objectives of this study are:

1.4.1 To investigate the direct relationship or independent effects of strategy, structure, and BSC on firm performance.

1.4.2 To identify the contingent relationships or joint effects between firm performance (dependent variable) and the three contingent variables (independent variables): strategy, structure and BSC.

1.4.3 To examine the relationship between one independent variable, e.g. strategy and another independent variable, says, structure.

1.4.4 To examine the indirect or mediating effects of BSC adoption on the relationship between strategy and firm performance, and also between diversification and firm performance.

1.5 Research Questions

In order to provide deeper insights of the objectives to be accomplished, the following research questions are formulated to guide this study:

1.5.1 How is the effect of BSC on firm performance?

1.5.2 How is the effect of diversification (strategy) on BSC adoption, organization structure and firm performance?

1.5.3 How is the effect of decentralization (structure) on BSC adoption and firm performance?

1.5.4 What is the level/extent of BSC adoption, diversification and decentralization among large Malaysian corporations?

1.5.5 Do the effects of strategy (diversification), BSC and structure (decentralization) interact in some way?

1.6 Scope Of Study

The study is a part of a wider study on management control systems which covers budgeting, transfer pricing, incentive and compensation schemes. In order to be able to firmly control the interacting variables, the study focuses on the interaction among strategy, structure and BSC, and their effects on firm performance. Again, despite of the choices of strategies and performance measurement systems that a firm may opt, the focus here is specifically on the corporate strategy and the BSC. The study limits itself mainly to corporate diversification with focus on products diversification. In line with this, the sample of the study is drawn from 'horizontally' and 'laterally' diversified companies. 'Vertical diversification', the operation of the diversified firm in markets that have buyer-supplier relationships with each other is outside the scope of this survey; neither the geographical form of diversification arising from internationalization or globalization of markets. The study is not concerned with identifying firms that have diversified too much or too little. Instead, the aim is to uncover any evidence of an average relationship between diversification and performance in a large sample of firms. As corporate strategy is a matter of concern of high raking individuals in an organization particularly in large organizations, this justifies the view for selecting large Malaysian firms as the sample population, organization as the unit analysis, and senior executives in the organization as the respondents to the survey.

Management control systems are only part of the entire spectrum of control mechanisms used to motivate, monitor, measure, and sanction the actions of managers and employees in the organisations. One important control mechanism deliberated in the study is the organization structure. The firm's strategy has an important influence on its organisation structure (Chandler 1962). With the structure an organisation will be able to monitor whether the strategy and resources are aligned towards attainment of the organisational goals and the BSC performance measures will provide the necessary signals of how a company perform. The structure discussed in this study refers to the levels of hierarchy at which decisions relating to sales and purchasing activities in an organization are made. Thus, determining the level of decentralization is an important element of measuring this independent variable.

The argument in this study is heavily based on the contingency theory. The contingency theory holds the view that there is no one 'best' way to approach, for example, organizational design or structure and performance measurement systems. This implies that structure will have to be matched with the strategy and the need to provide a room for a more flexible approach to performance measures. The establishment of performance measurement systems that are wrongly focused and too rigid may result in organizational decline. Though, there are a wide options of performance measures, the current study adopts to measure it in terms of organizational effectiveness during the period under study, i.e. 2000 – 2002, to be consistent with the BSC multidimensional measures deliberated herein.

1.7 Significance Of Study

The study is expected to have both practical and theoretical relevance. From the practical perspective, the study is expected to firstly, promote a balance between strategic financial and nonfinancial measures as in an effort to achieve goal congruence, thus encouraging employees at all levels to act in the best interest of the organization. Secondly, it helps encourage bottom-up communication, instead of top-down, that facilitates more effective feedback on strategy implementation and greater understanding of the BSC concept across the organizational hierarchy. Finally, it provides management with a model which combine the strategic management and management control dimensions for predicting firm performance

On the other hand, from the theoretical perspectives, the study is hoped to offer a number of significant theoretical insights. Firstly, it provides empirical confirmation on how diversification strategy affect Malaysian firms' performance in the light of the inconsistency and non-conclusive findings of the previous studies. Secondly, from the theory development perspective, the study is hoped to add to the stream of research in corporate strategy such as Chandler's (1962) strategy-structure that addresses strategy implementation issues at the corporate level. Thirdly, this study offers a comprehensive framework that integrates strategy, organization structure and the BSC by examining how these factors influence each other and firm performance.

1.8 Summary

This chapter has provided an overview about the need for performance measurement systems that reflect the changing business environment and needs. It begins by introducing the concept of performance system and the balanced scorecard as an example of such system. The chapter also discusses on the problem statement which has prompted for this study to be carried out followed by the research objectives and relevant research questions to be directed towards achieving these objectives. Further, it highlights the contributions from the practitioners and theoretical perspectives that are expected of this study. The scope of study included in this chapter highlights the limitations of the study so as to be more focused and making the finding more meaningful. The next chapter will touch on the literature review that support the theoretical framework of this study.

Chapter 2

LITERATURE REVIEW

2.1 Preface

The purpose of this chapter is to review previous and most recent literatures relating to the current study aimed at identifying the research problems that warrant for the current study be carried out and also to search for arguments that support the hypotheses statements. The chapter begins with the review of contingency theory on which most of the arguments in this study are grounded. Next, the review focuses on the role and evolution of performance measurement systems/models, the scenario leading to the emergence of BSC as a relatively new multidimensional performance measurement system and how this system is linked to the corporate strategy and organizational structure as an effective tool for strategy implementation and perceived as a good predictor for firm performance.

2.2 Theoretical Underpinnings: The Contingency Theory

Contingency theory is essentially a theoretical perspective of organizational behavior that emphasizes how contingent factors such as technology and task environment affect the design and functioning of organizations. In applying contingency theory to control systems design, some researchers have investigated the direct relationships between contextual factors and organizations' accounting and information systems (Khandwalla, 1972). Later, accounting researchers have sought to extend contingency arguments to embrace relationships between firms' strategies and the design of their control systems. Merchant (1981) shows contingent relationships between corporate context (size, product diversity and extent of decentralization) and the uses of budgeting information. Govindarajan and Gupta (1985) extends the concern for contingency relationships between organizational control mechanisms and variables such as technology, environment and size, by exploring the utility of relating these contingency relationships to strategy. Among the assumptions of the theory are that each organization is unique; thus, structure, control and performance measurement systems in each firm will be influenced by the environment of the firm, and will be different from one firm to another.

Consistent with this theory, it is not appropriate to assume that all organizations in the same environment will respond or react in the same way by developing similar structures, control and performance systems. Similarly in large organizations, it is not appropriate to assume that all parts of the organization are affected in the same way by contingent factors. Contingency theory provides general explanations of visible differences between organizations. The contingency framework provides a statement of formal links in testable form between the key factors as that of the environment, the organization, the management system, the accounting information system and hence performance measurement.

The change of management practices have contributed to the manner of how a particular organization now operates in response to its environment. This means that performance measurement can no longer be a narrow, inflexible and static process. To remain effective it must be capable of continual adaptive change, hence the move towards the broader, more determinant frameworks considered within the balanced approaches to performance measurement. The performance of different companies may differ because of different level of diversification strategy, different level of decentralization in the organization structure and different level of BSC adoption, though other things may be equal.

2.3 Performance Measurement And Its Impacts

The basic purpose of any measurement system is to provide feedback, relative the organization goals, aimed to improve the chances of achieving these goals efficiently and effectively. The ultimate goal of implementing a performance measurement system is to improve the performance of the organization. The measurement of organizational performance and the use of information in assessing the effectiveness of improvement initiatives are becoming increasingly important

2.3.1 Evolution Of Performance Measurement Models

Within the management accounting literature, performance measurement has evolved from a component of the planning and control cycle relying on financial information (cybernetic view) to an independent process used as signaling and learning devices for strategic purposes based on multiple nonfinancial measures (holistic view). The role of short-term financial performance measurement became inadequate for the new reality of organization (e.g. accelerated changes in technology, needs for innovation and flexibility). The crucial importance of nonfinancial indicators, which are based on organizational strategy, was stressed by several authors (e.g. Kaplan, 1983; Eccles, 1991). Gradually, performance measurement frameworks began to reconcile the use of financial and nonfinancial measures; examples include the balanced scorecard (Kaplan & Norton, 1992, 1996), integrated performance measurement (Dixon, Nanni & Vollman, 1990), stakeholder model (Atkinson, Waterhouse & Wells, 1997), and performance management framework (Otley, 1999).

Traditionally performance measurement is viewed as an element of the planning and control cycle that captures performance data, obtains feedback and influences work behavior (Flamholtz, Das & Tsui, 1985) and monitors strategy implementation (Simons, 1990). It is mainly underpinned by a financial perspective (Johnson & Kaplan, 1987). In a holistic view, performance measurement plays a key role in the development of strategic plans and evaluating the achievement of organizational objectives (Ittner & Larcker, 1998) as well as acting as a signaling and learning device (Simons, 1990).

2.3.2 Models Of Performance Measurement Systems

The holistic view of performance measurement reveals the importance of nonfinancial measures at the operational level, where the information needs differ from those of the top management level. Both levels, as well as financial and nonfinancial dimensions, are handled by various performance measurement models which have been developed during the last decade such as balanced scorecard (BSC), stakeholder model, integrated performance system and performance pyramid. First, the BSC model introduced by Kaplan and Norton (1992) aims to extend the scope of management information from financial measures to include other nonfinancial aspects linked to business unit strategy. Furthermore, these systems measure the achievement of the components of the strategic plan and act as a strategic management system (Kaplan & Norton, 2001). Three areas of performance are added to the financial dimension: customers, internal business process, and learning and growth. Second, the stakeholder model proposed by Atkinson, Waterhouse & Wells (1997) focuses the performance measurement system on the primary and secondary objectives of environmental stakeholders (customers, owners, community) and process stakeholders (employees, suppliers).

The third model, the integrated performance system, introduced by Nanni et al. (1992) concerns with the process of acquiring cost and other performance knowledge and employing it operationally at every step in the strategic management cycle. This reflect a significant evolution from the traditional planning and control cycle. Fourth, the performance pyramid proposed by Lynch and Cross (1991) aims to link strategy and operations by translating strategic objectives from the top down and measures from the bottom up. In this model objectives and measures flow among four successive levels: corporate vision, business units, business operating systems and departments and work centers. To summarize, these four models all use financial and nonfinancial measures for strategy formulation and implementation.

Each of the models highlighted above may entail certain strengths and weaknesses from the perspective of different users. However, the most popular model has been the Balanced Scorecard proposed by Kaplan and Norton (1992) as it has been widely implemented in corporations, organizations, and government agencies worldwide to boost their performance. It also has been the subject of numerous publications including three articles in the Harvard Business Review, a best selling business book, numerous case studies and public conferences, and has been selected by Harvard Business Review as one of the "seminal ideas" and most innovative management practices of the past 75 years. In view of the foregoing it appears appropriate for the current study to choose BSC as the performance measurement model to be examined in the research framework.

2.3.3 Trends In The Choice And Use Of Performance Measures

Based on a survey of 203 firms, Lingle and Schiemann (1966) demonstrate that while financial information is still very important, nonfinancial measures like customer satisfaction, operating efficiency, employee performance, community and environment as well as innovation and change are highly valued by executives. In a context of healthcare organizations, Chan and Ho (2000) find moderate success in the development of balanced scorecards for which, however, measures are reported on all four perspectives, while Malina and Selto (2001) demonstrate its effectiveness as a strategy communication and control device. A rate of adoption of 30% of the new performance measures approach (balanced scorecard and integrated performance measurement) is reported in Canadian manufacturing firms (Gosselin, 2001). The use of financial and nonfinancial measures to evaluate unit performance is examined by Schiff and Hoffman (1996) demonstrates that both types of information are used but more weight is assigned to financial measures.

Meanwhile Lipe and Salterio (2000) find that managers are not paying enough attention to nonfinancial measures of balanced scorecards to drive the expected benefits from this approach. Kaplan (1983) was among the first who insists on the need of senior management to abandon short-term financial measures based on manufacturing standardization in favor of developing indicators that foster long-term competitiveness and profitability.

2.3.4 Reasons For Adopting Nonfinancial Measures

While some firms are attempting to overcome perceived limitations in traditional accounting-based performance measures others are embracing the use of nonfinancial measures for decision making and performance evaluation. In particular, many firms are implementing balanced scorecard system that supplement traditional accounting measures with nonfinancial measures (Kaplan & Norton, 1992, 1996). Case studies by Fisher (1995) and Brancato (1995) have identified three principal reasons firms are adopting nonfinancial measures: (1) perceived limitations in accounting-based measures – such as too historical, backward-looking, short-term outlook, and failed to capture key business changes until it is too late, (2) competitive pressure – in the light of changes in the nature and intensity of competition forced firms to determine and measure the nonfinancial value drivers leading to success in the new competitive environment, and (3) outgrowth of other initiatives – adoption of nonfinancial measures in some firms were prompted by the need for new performance indicators required by other improvement initiatives carried out such as the total quality management (TQM).

One major critique of traditional performance systems is that it concerns with financial measures. Financial measures basically report the financial outcome of activities and thus are lagging measures. Traditional performance measurement systems tend to neglect the drivers of the future financial outcome, so called leading measures. In a balanced performance measurement system, the focus is not only on one or a few aspects of the business, but rather takes a comprehensive view. This type of performance measurement system includes both lagging and leading measures to address all important aspects of the business. By incorporating non-financial indicators of the drivers of strategic and financial success, the balanced performance measurement system provides strategic feedback and promotes learning through the monitoring of short-term strategic results, therefore allowing firms to modify objectives or strategies before financial results turn down.

2.4 BSC As A Performance Measurement System

Much has been written about the importance of timely, relevant, and actionable information for capitalizing on market opportunities and effectively defending against competitive challenges. This culminated awareness has caused many managers to become increasingly frustrated with the inadequacy of their existing performance systems. As organizations begin to evaluate their current systems, they discover that the development on an effective performance measurement system requires a thorough integration of the organization's strategic direction with several key management systems such as planning, performance appraisal and compensation. Kaplan and Norton (1992,

1996) developed the balanced scorecard concept to address the perceived shortcomings in financially-oriented performance measurement systems.

2.4.1 BSC Performance Measures

The BSC is an example of a performance measurement system. It contains a diverse set of performance measures, spanning from financial performance, customer relations, internal business processes, and the organization's learning and growth activities (Kaplan & Norton 1992). This large set of measures is designed to capture the firm's desired business strategy (Kaplan & Norton 1993, 1996) and to include drivers of performance in all areas important to the firm. The BSC is used to improve managerial decision making by aligning performance measures with the goals and strategies of the firm and the firm's business units. Kaplan and Norton (1992) argue that managers should not have to choose between financial and non-financial performance measures, but should be provided with a comprehensive overview of the business. Their balanced scorecard includes financial measures that highlight the results of actions already taken. These financial measures are then complemented with a series of operational measures from which that financial performance is derived. In other words, the BSC is an integrated set of leading and lagging performance measures designed to capture the organization's strategy.

Financial measures will include traditional measures such as return on assets and net income. Measures related to customers include results of customer surveys, sales from repeat customers, and customer profitability. Internal business process measures relate specifically to the operational processes of the business unit such as delivery time and process quality. The final set of performance measures relates to learning and growth which may include measures of employee capabilities, information system capabilities, and employee motivation and empowerment. The scorecard is therefore "balanced", as it seeks a balance between financial and non-financial measures, drivers and outcomes, the long-term and short-term, and generic and strategy specific measures (Chia & Hoon, 2001). More recently, Kaplan and Norton (1996) argue that a BSC is not merely a collection of financial and nonfinancial measures in various categories, but an integrated set of measures developed from a "theory of business" that explicitly links the scorecards metrics in a casual chain of performance drivers and outcomes.

The BSC is a systematic approach for organizing performance measures into an integrated and understandable framework based on four perspectives or key variables that define a firm's objectives (Kaplan & Norton 1992). It offers a framework which measures both the determinants and the results of organizational performance. The balanced view of performance measurement is a part of a typology of measurement system Euske, Lebas & McNair (1993). It is important that each business organization develops its own measures of performance as a product of the type of business, its strategy, its organizational structure and so on. A firm's strategy and vision are the center of the BSC. The strategic objectives are translated into measures that managers use to track how they create value for customers, how internal business processes can be enhanced, and how the investment in people supports improved future performance (Kaplan & Norton 1996).

Although measurement is critical to improved performance, organizations don't always get what they measure. Measurement only provides organizations with data. If the data are not used to make good business decisions and to drive improvement efforts, a good measurement system is of little value (Brown, 1994). The BSC is a management tool to deploy and monitor a strategy by using the appropriate mix of financial and non-financial measures. Despite its popularity, there have been as many unsuccessful implementations as successful ones e.g. because measures are accepted but never implemented (Venkatraman & Gering, 2000). The BSC provides a framework to look at the strategy used for value creation from four different perspectives: (1) Financial, (2) Customer, (3) Internal-business process, and (4) Learning and growth. The use of a BSC does not mean just "using more measures"; it means putting a handful of strategically critical measures together in a single report, in a way that make cause-and-effect relations transparent and keeps managers from sub-optimizing by improving one measure at the expense of others. To achieve a balance among four dimensions of the BSC, a company should pay attention to all of them.

2.4.2 Shortcomings Of Financial Performance Measures

The emphasis of the cybernetic view on the financial information has led to inadequacy of control information and the absence of long-term performance measures (Johnson & Kaplan, 1987). The information developed for external users is adequate but insufficient for internal users. Atkinson et al. (1997) conclude that performance measurement based primarily on financial performance measures lack the focus and robustness needed for internal management and control. Moreover, as suggested by

Kaplan and Norton (1992), they worked well for the industrial era, but they are out of step with the skills and competencies companies are trying to master today. Among of the perceived limitations of traditional accounting-based measures are: (1) too historical and backward-looking, (2) lack of predictive ability to explain future performance, (3) reward short-term or incorrect behavior, (4) lack of actionability, (5) lack of timely signals, (6) too aggregated and summarized to guide managerial action, (7) reflect functions instead of cross-functional processes, and (8) give inadequate guidance to evaluate intangible assets (Ittner & Larcker, 1998).

2.4.3 Factors Affect The Mix And Use Of Financial And Nonfinancial Measures

Grounded in contingency approach, a number of studies reveal different factors or contexts that may affect the mix and use of financial and nonfinancial measures. These include environmental uncertainty, decentralization, organizational interdependence, task uncertainty, market competition and life-cycle stage (Gordon & Narayanan, 1984; Mia & Chenhall, 1994). In a field study, Burns and McKinnon (1993) observe that unit data is the metric that feeds managers' communications and actions. According to Dixon, Nanni, Jr. & Vollman (1990), the right mix depends on three critical dimensions: (1) the level in the management hierarchy, (2) market stability, and (3) integration of process technology.

2.4.4 The Level of BSC Adoption

The interest in the BSC has become widespread since 1992, though slowly (Sullivan, 2001). Despite widespread practitioner interest in the subject, little research has been conducted on the implementation or performance consequences of the BSC concept.

A survey of BSC implementation conducted by the consulting firm Towers Perrin in 1996 shows that BSC adopters continue to place the majority of weight on financial measures (mean = 55%), followed by customer measures (19%) and internal process measures (12%). Companies in Singapore are only beginning to see the relevance and importance of such a strategic management system (Chia & Hoon, 2000). As for Malaysia, so far there has been no study conducted to determine the level of BSC adoption neither among Malaysian firms nor public sector organizations.

According to (Chow, Haddad & Williamson, 1997), reported applications of the BSC mostly have been confined to large, international companies. These large companies tend to face more turbulent and competitive environments, have more dispersed and varied products and processes that they need to coordinate and monitor, and also have more resources for undertaking change initiatives. In comparison, small or local companies may have different needs such that what works for large companies may be ineffective or unnecessary for them. One of the biggest problems facing scorecard adoption is that companies typically install the applications in different parts of the organization at first; and as scorecards become more prevalent, they soon realize the need to tie the various applications together (Sullivan, 2001).

2.4.5 Impact of BSC On Performance

Empirical findings to support the relationship between the BSC and organizational performance are still limited. Using information collected from 83 electronics companies located within the USA, results from Sim and Koh's (2001) study support for the balanced scorecard. The finding of the study specifically shows that manufacturing plants that strategically link their corporate goals or objectives to their performance measurement systems, via the scorecard, perform better than those that do not. In another study using a case-based BSC approach, the study reveals that consolidated process for BSC adoption and creation have facilitated better understanding of the vision, strategies and practices; and the scorecard formulated was strategically useful (Chia & Hoon, 2001). Meanwhile, based on survey and interview conducted, the respondents generally support the BSC's potential applicability and benefits (Chang & Chow, 1999). Further, Clarke and Tyler (2000) suggests that due to the experimental nature of the BSC initiative outlined in their study, its implementation within an Irish division of a multinational company cannot be proclaimed a success at this early stage.

However, a study on BSC compensation system in retail branch banks by Ittner, Larcker, and Meyer's (1997) study of a BSC compensation system in retail branch banks shows no evidence that the scorecard approach enhances branch managers' understanding of business goals, plans for meeting these goals, or connections between the managers' job and business objectives. In a survey conducted by Towers Perrin (1996), although 64% of the respondents acknowledge that the satisfaction or value received from their BSC systems is higher or significantly higher than that received from other performance measurement approaches, only 37% feel that employees' understanding of performance measures and goals is higher under the scorecard than under other approaches.

2.5 Linking BSC To Strategy

Opportunities for value creation have shifted from managing physical assets, like infrastructure, to managing 'intangibles', like relationships. In this business environment, delivering shareholder value requires more than just managing revenue and cost. Today, in addition to financial measures, organizations need to manage a variety of operational measures such as customer satisfaction and response time, that serve as 'lead indicators,' enabling them to sustain profitability in long run. The BSC provides an effective tool to capture these financial and operational measures.

2.5.1 Definition Of Corporate Strategy

Firm strategy can be distinguished into three levels: (1) corporate strategy, (2) business strategy, and (3) operational strategy. Corporate strategy is concerned primarily with the scope of the firm in terms of the industries and markets in which it competes (Grants, 1995). Business strategy is concerned with how a firm competes within a particular industry. A central concept in business strategy is competitive advantage. It must be acknowledged that competitive advantage is focused at the business unit level and not at the corporate level. Operational strategy underpins the business strategy and defines the role of each department (marketing, production, human resources, etc.) in delivering business level strategy.

The diversification decision is a typical element of corporate strategy. As diversification is one of the four options defined by Ansoff (1965) to achieve growth, it is justified to analyze diversification at the corporate level. Because corporate performance