INTRODUCTION TO THE BALANCED SCORECARD

WHY MEASUREMENT IS SO IMPORTANT

In the dense fog of a dark night in October 1707, Great Britain lost nearly an entire fleet of ships. There was no pitched battle at sea; the admiral, Clowdisley Shovell, simply miscalculated his position in the Atlantic and his flagship smashed into the rocks of the Scilly Isles, a tail of islands off the southwest coast of England. The rest of the fleet, following blindly behind, went aground as well, piling onto the rocks, one after another. Four warships and two thousand lives were lost. For such a proud nation of seafarers, this tragic loss was distinctly embarrassing. But to be fair to the memory of Clowdisley Shovell, it was not altogether surprising. Though the concept of latitude and longitude had been around since the first century B.C., still in 1700 no one had devised an accurate way to measure longitude, meaning that nobody ever knew for sure how far east or west they had traveled. Professional seamen like Clowdisley Shovell had to estimate their progress either by guessing their average speed or by dropping a log over the side of the boat and timing how long it took to float from bow to stern. Forced to rely on such crude measurements, the admiral can be forgiven his massive misjudgment (Niven, 2003, p.3-4). What caused the disaster was not the admiral's ignorance, but his inability to measure something that he already knew to be critically important - in this case longitude (Buckingham and Coffman, 1999).

We have come a long way since Clowdisley Shovell patrolled the seas for his native Great Britain. Today's instrumentation ensures that any failure of navigation may be pinned squarely on your shoulders (Niven, 2003, p.4). Since the introduction of the Balanced Scorecard in 1990, it has been embraced by corporations around the world. Recent estimates suggest at least fifty present of Fortune 1000 organizations use a Balanced Scorecard (Niven, 2003, p.x).

Organizations must cope with increased competition, more diversity among constituents, higher expectations from the public, increasing costs, declining support, rapidly changing technology, and substantially different ways of conducting business. Surviving in such an environment (sustainability) depends upon the ability to adopt (Wolf, 1999, p.314).

DOING BUSINESS IN THE POST-ENRON ERA

Nowadays, it is difficult to pick up a newspaper, turn on a radio or television, or open up a news magazine without almost immediately hearing or seeing a reference to yet another corporate scandal. Everywhere you turn there is news that another organization has run afoul of the law in its almost maniacal pursuit of pleasing shareholders. Leading this infamous pack is of course Enron. Once the seventh largest company in the United States, Enron has become the butt of endless jokes; but more importantly, it has also become the defendant in countless lawsuits launched by those who have collectively lost billions since the company's demise. Enron's bankruptcy was later dwarfed by that of fellow-wrongdoer WorldCom. The list goes on and on: Tyco, Xerox, Global Crossing, Adelphia, and dozens of others (Niven, 2003, p.5). Johnson & Johnson, for example, an organization renowned for ethical business practices, was cited for irregularities at a manufacturing facility in Puerto Rico (Jones, 2002).

Trust in organizations has never been lower. In one recent poll, fifty-seven percent of respondents said they do not trust corporate executives to give them honest information (Harwood, 2002, p.A4). The public is demanding greater disclosure of information. The rationale is that the more we know about the company's financial situation, the better equipped we are to discern the true state of its operations. A great stride forward in this direction is the Sarbanes-Oxley Act. All companies required to file periodic reports with the Securities and Exchange Commissions (SEC) are affected by the Act. However, such a reform misses a fundamental point: We need more than just financial information and disclosure to judge the health of an enterprise. To make an informed decision about any organization's true state of affairs, we require information that covers a broader perspective (Niven, 2003, p.6). If directors were getting a Balanced Scorecard, they would be much more likely to be informed about their companies on an ongoing basis. The scorecard's emphasis on strategy (linking it to all activities, day-to-day and long-term) could help directors stay focused (Lorsch, 2002, p.9).

LIMITATIONS OF FINANCIAL MEASUREMENTS

Traditionally, the measurement of all organizations has been financial. Bookkeeping records used to facilitate financial transactions can be traced back thousands of years (Niven, 2003, p.7). The inclusion of only those items that could be expressed in monetary terms motivated managers to focus excessively on cost reduction and ignore other important variables which were necessary to compete in the global competitive environment that emerged during the 1980s (Drudy, 2001, p. 493). Competition was ruled by scope and economies of scale, with financial measures providing the yardsticks of success.

There are some of the criticisms levied against the over-abundant use of financial measures. The financial measures are not consistent with today's business realities (Niven, 2003, p.8). Accounting figures do not emphasize the elements which will lead to good or poor future financial results. One of the problems with accounting figures is that the financial consequences of the uncompleted chains of actions extend beyond the time of measurement. For instance, the performance measures of accounting systems ignore the financial value of a company's intangible assets (Norreklit, 2000, p.65). A company, in order to survive, must focus on the intangible assets such as product quality, delivery, after-sale service and customer satisfaction.

Using only financial measures creates a tendency to reinforce functional silos. Especially, mission-based organizations recognize the importance of collaboration in achieving the goals.

Another limitation of financial measurement is that it can sacrifice the long-term thinking. If a company is facing a funding cut, it mostly eliminates the employee training and development or even fires employees (Niven, 2003, p.9). Managers may refuse to invest in growth and innovation potential so that they can present acceptable short-term results (Norreklit, 2000, p.66). The short-term impact is positive, but what about the long-term? Ultimately, organizations that pursue this tactic may be sacrificing their most valuable sources of long-term advantage (Niven, 2003, p.9). While possibly improving short-term profitability, such actions may lead to low efficiency and loss of customer loyalty and satisfaction, which may render the company vulnerable to competitor attacks (Norreklit, 2000, p.66).

Financial measures are also not relevant to many levels of the organization. The financial reports, compiled information at a higher level, contain usually abstract words and therefore almost unrecognizable and useless in the decision-making process of most managers and employees. Employees at all levels of the organization need performance data they can act on. This information must be imbued with relevance for their day-to-day activities. Another limitation is called 'driving by rear view mirror.' One might be very efficient in the operations one month, quarter, or even year. But does that signal ongoing financial efficiency? It is known that anything can, and does, happen. Financial results on their own are not indicative of future performance.

Despite their many shortcomings, financial yardsticks are an entirely necessary evil. Pursuing goals with no regard to the financial ramifications of one's decisions will ultimately damage everyone (Niven, 2003, pp.8-10).

STRATEGY: EXECUTION IS EVERYTHING

The interesting thing about strategy in the business sense of the word is that nobody seems to agree on what it is, specifically. There are as many definitions for them as there are academics, writers, and consultants to muse on the topic. The execution of a strategy is more important, and more valuable, than the formulation of a strategy (Niven, 2003, p.10). In fact, a 1999 Fortune magazine story suggested that 70 percent of CEO failures came not as a result of poor strategy, but of poor execution (Charan and Colvin, 1999).

Why is strategy so difficult for even the best organizations to effectively implement? Research and experience in the area have suggested a number of barriers to strategy execution: the vision barrier, people barrier, resource barrier, management barrier.

1. The Vision Barrier

   Only five percent of the workforce understands the strategy. Employee empowerment, two-way communication, and information sharing - executives and managers alike frequently espouse the benefits of these concepts. Talk is cheap. The fact of the matter is that the vast majority of organizations have a long way to go when it comes to getting their most important messages - their vision and strategy – out to their most important constituents: their employees. Today's value is created largely from intangibles assets like customer knowledge and information-rich networks. To contribute in a meaningful way, one must know where the organization is headed and what the strategy is to get there.

2. People Barrier

   Only twenty-five percent of managers have incentives linked to strategy. The danger with incentive plans is the possibility that managers will sacrifice long-term value-creating activities and initiatives in order to reach a short-term financial target and receive a monetary award. Strategy cannot be executed if the focus is continually on the short term. Financial incentives can distort or entirely block an organization's strategic view.

3. Resource Barrier

   Sixty percent of organizations do not link their budgets to strategy. If the budget is not linked to some form of strategic plan and goals, then what does that say about the organization's priorities?

4. Management Barrier

   Eighty-five percent of executive teams spend less than one hour per month discussing strategy. Undoubtedly, we live in an era of fast-paced organizations, but virtually all of us attend regular management meetings. In order to have any chance of executing strategy, these meetings must be transformed. No longer should we sit around and examine the 'defects' that result when actual results do not meet budget expectations. Instead, these meetings should be used to discuss, learn about, and debate our strategy (Niven, 2003, pp.11-13).

WHAT IS A BALANCED SCORECARD?

Prior to the 1980s management accounting control systems tended to focus mainly on financial measures of performance. The inclusion of only those items that could be expressed in monetary terms motivated managers to focus excessively on cost reduction and ignore other important variables which were necessary to compete in the global competitive environment that emerged during the 1980s. Product quality, delivery, reliability, after-sales service and customer satisfaction became key competitive variables, but none of these were measured by the traditional management accounting performance measurement system.

During the 1980s, much greater emphasis was given to incorporating into the management reporting system those non-financial performance measures that provided feedback on the key variables that are required to compete successfully in a global economic environment. The need to link financial and non-financial measures of performance and identify key performance measures led to the emergence of the **Balanced Scorecard** (Drudy, 2001, p. 493).

The Balanced Scorecard (BSC) is one of the latest innovations in management. It is a tool of strategic control developed by Harvard's Robert Kaplan and his consulting partner, David Norton, and described in their 1996 book *The Balanced Scorecard* (Norreklit, 2003, p. 591). The BSC was developed to communicate the multiple, linked objectives that companies must achieve to compete on the basis of capabilities and innovation, not just tangible physical assets (Kaplan and Atkinson, 1998, p. 368). Based on a firm's overall strategy, the scorecard typically contains a diverse set of 16 to 28 measures, commonly organized into four categories: financial performance, customer relations, internal business processes, and the organization's learning and growth activities (Salterio and Webb, 2003, p.39).

The Balanced Scorecard is a strategic management system that translates the vision and strategy of an organization into operational objectives for each of four perspectives and then establishes specific performance measures for each of the objectives. Each organization must decide what its critical performance measures are. The choice will vary over time and should be linked to the strategy that the organization is following (Drudy, 2001, p. 493).

One of the most innovative characteristics of the BSC is the identification of unique drivers of performance for each business division across the four key areas. Although divisions within a company may have several BSC measures in common (e.g., sales growth), the unique measures represent what individual business units must accomplish in order to succeed (Libby, Salterio and Webb, 2003).

As a result of Kaplan and Norton's experiences in implementing the Balanced Scorecard in organizations, they became aware of the importance of tying the measures in the Balanced Scorecard to an organization's strategies. They observed that most companies were not aligning performance measures to their strategies. Instead, they were trying to improve the performance of existing processes (through lower cost, improved quality and shorter customer response times) but they were not identifying the processes that were truly strategic (i.e. those that require exceptional performance) for an organization's strategy to succeed. The Balanced Scorecard has evolved from an improved performance measurement system to a core strategic management system. Although many companies have performance measurement systems that incorporate financial and non-financial measures they use them for the feedback and control of short-term operations. According to Kaplan and Norton the objectives of the Balanced Scorecard are more than just an *ad hoc* collection of financial and non-financial performance measures; they are derived from a top-down process driven by the mission and strategy of the business unit. In particular, the Balanced Scorecard should translate a business unit's mission and strategy into a linked set of measures that define both the long-term strategic objectives, as well as the mechanisms for achieving those objectives. The measures incorporate a balance between external measures relating to customers and internal measures relating to critical business processes and innovation and learning. They also incorporate a balance between outcome measures (the results from past efforts) and the measures that drive future performance (Drudy, 2001, p. 493).

A company's strategy is usually formulated by using abstract words and is often not clear enough to the individual employees. The Balanced Scorecard helps to formulate a strategy into concrete company's goals with the targets and the indicators about how to meet those targets (Peppelenbosch, 2003, p. 22). The Balanced Scorecard acts as a medium for senior management to communicate their strategy throughout the organization and monitor its implementation. It is aimed at evaluating business performance based on a coherent set of financial and non-

financial, leading and lagging measures. The underlying logic is that, in order to consistently create value for their shareholders, companies must be able to deliver value too their customers in ways that are superior to their competitors. In addition, they must provide the internal processes, systems, and learning environment to support their employees in their value creation mission (Slagmulder, 2003, p. 14).

THE BALANCED SCORECARD AS A MEASUREMENT SYSTEM

FINANCIAL PERSPECTIVE

The financial perspective focuses on the shareholders' interests: Is the company generating satisfactory return on investment and creating shareholder value (Epstein and Manzoni, 1997, p. 31)?

Financial- focuses on shareholder interests and demonstrates whether the strategy has succeeded financially (Dye, 2003, p.21). The financial perspective serves as the focus for the objectives and measures in the other scorecard perspectives. This perspective reflects the concern in for-profit enterprises that every action should be part of a network of cause-and-effect relationships that culminate in improving short- and long-run financial performance. In the process of identifying goals and measures, different financial metrics may be appropriate for different units within the organization, linking that unit's financial objectives to the overall business unit strategy (Chow, Haddad, and Williamson, 1997, p.22). The Balanced Scorecard retains the financial perspective since financial measures are valuable in summarizing the readily measurable economic consequences of actions already taken. Financial performance measures indicate whether the company's strategy, implementation, and execution are contributing to bottom-line improvement. Financial objectives typically are related to profitability-measured, for example, by operating income, return-on-capital-employed, or, more recently, economic value added. Alternative financial objectives can be rapid sales growth or generation of cash flow (Kaplan and Atkinson, 1998, p.368).

Financial measures include such traditional general measures as return on sales of investment but should also relate to the business unit's strategic objective (Salterio and Webb, 2003, p. 39). Financial performance measures have been extensively discussed. At the strategic business unit level operating profit, return on investment, residual income and economic value we discussed and such measures should be used for measuring the financial objective of the business unit. Other financial objectives include revenue growth, cost reduction and asset utilization. Typical financial objectives are to increase return on investment by 20% and/or to increase sales and operating income by 100% over the next five years (Drury, 2001, p. 495-496). Building a strategy map typically starts with a financial strategy for increasing shareholder value. (Nonprofit and government units often place their customer or constituents-not the financials-at the top of their strategy maps.) Companies have two basic levers for their financial strategy: revenue growth and productivity. The former generally has two

components: build the franchise with revenue from new markets, new products, and new customers; and increase value to existing customers by deepening relationships with them through expanded sales-for example, cross-selling products or offering bundled products instead of single products. The productivity strategy also usually has two parts: improve the company's cost structure by reducing direct and indirect expenses, and use assets more efficiently by reducing the working and fixed capital needed to support a given level of business. In general, the productivity strategy yields results sooner than the growth strategy. But one of the principal contributions of a strategy map is to highlight the opportunities for enhancing financial performance through revenue growth, not just by cost reduction and improved asset utilization. Also, balancing the two strategies helps to ensure that cost and asset reductions do not compromise a company's growth opportunities with customers.

Mobil's stated strategic vision was "to be the best integrated refiner-marketer in the United States by efficiently delivering unprecedented value to customers". The company's high-level financial goal was to increase its return on capital employed by more than six percentage points within three years. To achieve that, executives used all four of the drivers of a financial strategy that we break out in the strategy map-two for revenue growth and two for productivity. The revenue growth strategy called for Mobil to expand sales outside of gasoline by offering convenience store products and services, ancillary automotive services (car washes, oil changes, and minor repairs), automotive products (oil, antifreeze, and wiper fluid), and common replacement parts (tires and wiper blades). Also, the company would sell more premium brands to customers, and it would increase sales faster than the industry average. In terms of productivity, Mobil wanted to slash operating expenses per gallon sold to the lowest level in the industry and extract more from existing assets by reducing the downtime at its oil refineries and increasing their yields (Kaplan and Norton, 2000, p. 170-172).

However, some people have argued that by improving the non-financial measures in the scorecard improved financial measures should follow. They argue that financial measures should be de-emphasized on the grounds that by making fundamental improvements in operations the financial measures will take care of themselves. In other words, financial success should be the logical consequence of doing the fundamentals well. Kaplan and Norton reject the view that financial measures are unnecessary on the grounds that improvements in the operational measures are not automatically followed by an improvement in the financial measures. Operational improvements can create excess capacity but this excess capacity will only yield financial benefits if it is eliminated or used to generate additional revenues. The

financial measures therefore provide feedback on whether improved operational performance is being translated into improved financial performance. They also summarize the economic consequences of strategy implementation (Drury, 2001, p. 495-496).

CUSTOMER PESPECTIVE

Current wisdom is that every company needs to pay attention to the needs and desires of its customers because customers pay for the company's costs and provide for its profit (Chow, Haddad, and Williamson, 1997, p.22). The core of any business strategy is the customer value proposition, which describes the unique mix of product and service attributes, customer relations, and corporate image that a company offers. It defines how the organization will differentiate itself from competitors to attract, retain, and deepen relationships with targeted customers (Kaplan and Norton, 2000, pp. 172-173). Companies need to identify the customer and market segments in which they choose to compete. This customer perspective allows companies to align their measures of customer values(i.e., satisfaction, loyalty, retention, acquisition, and profitability)with targeted customers and market segments (Chow, Haddad, and Williamson, 1997, p.22). Customer-measures that reflect how the company is creating customer value through its strategies and actions (Dye, 2003, p.21).

In the customer perspective of the balanced scorecard managers identify the customer and market segments in which the business unit will compete. Target segments may include both existing and potential customers. Managers should then develop performance measures that track the business unit's ability to create satisfied and loyal customers in the targeted segments. The customer perspective typically include several core or generic objectives and measures that relate to customer loyalty and the outcomes of the strategy in the targeted segments. They include core objectives relating to increasing market share, customer retention, new customer acquisition, customer satisfaction and customer profitability (Drury, 2001, pp.495-496). These measures may appear to be generic among all type of organizations. For translating a particular strategy, however, they should be customized to the targeted customer groups from whom the business unit expects its greatest growth and profitability to be derived. More detailed descriptions of these core customer outcome measures (Kaplan and Atkinson, 1998, pp.368-370):

- **Market Share**

Market share represents the proportion of sales in a particular market that a business obtains. It can be measured in terms of sales revenues, unit sales volume or number of customers. It is a measure of the market penetration. Estimates of total market size can sometimes be derived from public sources such as trade associations and industry adopted is achieving the expected results in the targeted market segment.

- **Customer Retention and Loyalty**

One method of maintaining or increasing market share in targeted customer segments is to ensure that existing customers are retained in those segments. Customer retention can be measured in terms of the average duration of a customer relationship. In addition surveying defecting customers to ascertain where they have taken their business and why they have left can provide valuable feedback on the effectiveness of the firm's strategy. Customer loyalty can be measured by the number of new customers referred by existing customers since this would suggest that a customer must be highly satisfied before recommending a company's products or services to others.

- **Customer Acquisition**

Customer acquisition can be measured by either the number of new customers or the total sales to new customers in the desired market segment. Other measures include the number of new customers expressed as a percentage of prospective inquires or the ratio of new customers per sales call.

- **Customer Satisfaction**

Measuring customer satisfaction typically involves the use of questionnaire surveys and customer response cards. Customer satisfaction can also be measured by examining letters of complaint, feedback from sales representatives and the use of 'mystery shoppers'. The latter normally involves external agencies sampling the service as customers and formally reporting back on their findings. The major limitation of customer satisfaction measures is that they measure attitudes and not actual buying behavior.

- **Customer Profitability**

A company can be very successful in terms of market share, customer retention and acquisition, and customer satisfaction but this may be achieved at the expense of customer profitability. A company does not want just satisfied customers, it also wants profitable customers. The four measures described able relate to the means required to achieve customer profitability but they don not measure the outcome. Customer profitability measures meet this requirement. Profitability should be analysed by different customer segments and unprofitable segments identified. Newly acquired customers may initially be unprofitable and life-cycle profitability analysis should be used for determining whether the focus should be on retention or on abandoning them. For unprofitable existing customers, actions should be taken to try and make them profitable. Such actions might include trying to alter their buying behavior so that they consume less resources, or price increases. If neither of these strategies is successful they should not be retained.

- **Measuring Value Propositions**

Besides describing the core or generic measures relating to the customer perspective Kaplan and Norton focus on the customers, which they define as the attributes the supplying companies provide through their products and services to create loyalty and satisfaction in targeted customer segments (Drury, 2001, p. 495-496).

Customer measure should be based on the value propositions to be delivered to the targeted customers (Salterio and Webb, 2003, p. 39). The value proposition is the key concept for understanding the drivers of the core measurements of customer satisfaction, acquisition, retention and market share. The value proposition is crucial because it helps an organization connect its internal processes to improved outcomes with its customers (Kaplan and Norton, 2000, p. 172-173).

Typically, the value proposition is chosen from among three differentiators: operational excellence (for example, McDonald's and Dell Computer), customer intimacy (for example, Intel and Sony). Companies strive to excel in one of the three areas while maintaining threshold standards in the other two. By identifying its customer value proposition, a company will then know which classes and types of customers to target.

It has been found that although a clear definition of the value proposition is the single most important step in developing a strategy, approximately three-quarters of executive teams do not have consensus about this basic information. Specifically, companies that pursue a strategy of operational excellence need to excel at competitive pricing, product quality and selection, speedy order fulfillment, and on-time delivery. For customer intimacy, an organization must stress the quality of its relation ships with customers, including exceptional service and the completeness of the solutions it offers. And companies that pursue a product leadership strategy must concentrate on the functionality, features, and overall performance of its products or services (Kaplan and Norton, 2000, p. 172-173).

Although value propositions vary across industries and across different market segments within industries, there are a common set of attributes that establish the value propositions in most industries. These attributes fall into three categories (Drury, 2001, p. 495-496):

- **Product/Service Attributes:**

Product and service attributes encompass the functionality of the product or service, its price, and its quality (Kaplan and Atkinson, 1998, p.368-370).

- **Customer Relationship**:

The customer relationship dimension includes the delivery of the product or service to the customer, including the response and delivery time dimension and how the customer feels about the experience of purchasing from the company (Kaplan and Atkinson, 1998, p.368-370).

- **Image and Reputation**:

The image and reputation dimension enables a company to proactively define itself for its customers (Kaplan and Atkinson, 1998, p.368-370).

Although individual companies have developed their own ways of measuring attributes along the above three dimensions, Kaplan and Norton point out that in virtually all the Balanced Scorecards they have observed three dimensions stand out as particularly important. They are time, quality and price.

Many organizations seek to increase customer satisfaction by providing a speedier response to customer requests, ensuring 100% on-time delivery and reducing the time taken to develop and bring new products to market. For these reasons performance measurement systems are starting to place more emphasis on, which are now an important competitive variable. Customer lead time, the time taken from when or service is delivered, is a widely used measure for providing feedback on the extent to which lead times are being reduced for meeting target customers' expectations.

Quality is also a key competitive variable. For the customer perspective the emphasis is on the quality of goods or services delivered to the customer rather than the quality measures within the manufacturing process. Typical quality measures include number of defective units delivered to customers, number of customer complaints, returns by customers and warranty claims. In addition, many companies conduct survey to measure customer satisfaction in relation to product or service quality.

Irrespective of whether a business unit is pursuing a low cost or a differentiated strategy customers will be concerned about the price they are paying for a product or service. To determine how competitive companies are in terms of price, business units should establish a reporting mechanism for comparing the net selling prices of their products or services with those of their competitors. Where sales are dependent on a competitive bidding process, the percentage of bids accepted provides an indication of price competitiveness (Drury, 2001, p. 495-496).

Mobil, in the past, had attempted to sell a full range of products and services to all consumers, while still matching the low prices of nearby discount stations. But this unfocused strategy had failed leading to poor financial performance in the early ‘90s. Through market research, Mobil discovered that price-sensitive consumers represented only about 20% of gasoline purchasers, while consumer segments representing nearly 60% of the market might be willing to pay significant price premiums for gasoline if they could buy at stations that were fast, friendly, and outfitted with excellent convenience stores. With this information, Mobil made the crucial decision to adopt a “differentiated value proposition.” The company would target the premium customer segments by offering them immediate access to gasoline pumps, each equipped with a self-payment mechanism; safe, well-lit stations; clean restrooms; convenience stores stocked with fresh, high-quality merchandise; and friendly employees. Mobil decided that the consumer’s buying experience was so central to its strategy that it invested in a new system for measuring its progress in this area. Each month, the company sent “mystery shoppers” to purchase fuel and a snack at every Mobil station nationwide and then asked the shoppers to evaluate their buying experience based on 23 specific criteria. Thus, Mobil could use a fairly simply set of metrics (share of targeted customer segments and a summary score from the mystery shoppers) for its consumer objectives. But Mobil does not sell directly to consumers. The company’s immediate customers are the independent owners of gasoline stations. These franchised retailers purchase gasoline and other products from Mobil and sell them to consumers in Mobil-branded stations. Because dealers were such a critical part of the new strategy, Mobil included two additional metrics to its customer perspective: dealer profitability and dealer satisfaction.

Mobil’s complete customer strategy motivated independent dealers to deliver a great buying experience that would attract an increasing share of targeted consumers. These consumers would buy products and services at premium prices, increasing profits for both Mobil and its dealers, who would then continue to be motivated to offer the great buying experience. And this virtuous cycle would generate the revenue growth for Mobil’s financial strategy. Note that the objectives in the customer perspective portion of Mobil’s strategy items like “customer satisfaction”. Instead, they were specific and focused on the company’s strategy (Kaplan and Norton, 2000, p. 172-173).

In summary, the customer perspective enables business unit managers to articulate their unique customer and market-based strategy for producing superior future financial returns (Kaplan and Atkinson, 1998, p.368-370).

INTERNAL BUSINESS PROCESSES PERSPECTIVE

Internal business processes measures indicate how well a company performs on its key internal systems and processes (Dye, 2003, p. 22). They relate to the operational processes of the business unit (Salterio & Webb, 2003, p. 39). Internal business processes deliver the objectives that the financial and customer perspectives have established for customers and shareholders. This component expands the focus beyond improving existing operating processes to defining a complete internal process value chain that includes identifying current and future customer needs and developing solutions for those needs. This perspective will be unique to each company as it identifies the complete chain of processes that add to the value customers receive from its products and services (Chow, Haddad and Williamson, 1997, p. 22-23).

In the internal business processes perspective, managers identify the critical internal processes at which the organization must excel in implementing its strategy (Drury, 2001, p. 498-501). Each business has its unique set of processes for creating value for customers and producing financial results. A generic value chain model, however, provides a template that companies can customize for their own objectives and measures in their internal business process perspective. The generic value chain model encompasses three principal business processes: innovation, operation, and post-sale service processes (Kaplan and Norton, 1998, p. 371-374).

Innovation processes

Objectives for the innovation process include increasing the number of new products, decreasing the time to develop new products and identifying new markets and customers. Historically, because of difficult measurement problems and the over-emphasis on easily quantifiable financial measures little attention has been given to developing performance measures for product design and development processes. Companies are becoming increasingly aware that success in developing a continuous stream of innovative products and services can provide a competitive advantage. Research and development has therefore become a more important element in the value chain of most businesses and increasing attention is now being given to specifying objectives and measures for this business process.

Some of the innovation measures include: percentage of sales from new products; new product introduction versus competitors'; new product introduction versus plan; time to develop next generation of the products; number of key items in which the company is first or second to the market; break-even time, being the time from the beginning of

product development work until the product has been introduced and has generated enough profit to pay back the investment originally made in its development.

Operations process

The operations process starts with the receipt of a customer order and finished with the delivery of the product or service to the customer. Objectives for the operations process include decreasing process time, increasing process efficiency, improving process quality and decreasing process cost. Historically, the operations process has been the major focus of most of an organization's performance measurement system (Drury, 2001, p. 498-501). Operational excellence and cost reduction in manufacturing and service delivery processes remain important goals. Existing operations tend to be repetitive, so scientific management techniques can be readily applied to control and to improve customer order receipt and processing and vendor, production, and delivery processes (Kaplan and Norton, 1998, p. 371-374).

The performance and control measures have traditionally relied on financial measures such as standard costs, budgets and variance analysis. The over-emphasis on financial measure, particularly price and efficiency variances sometimes motivated dysfunctional actions. For example, the pursuit of efficiency encouraged the maximum utilization of labor and machines resulting in excessive inventories that were not related to current customer orders (Drury, 2001, p. 498-501), and switching form supplier to supplier to chase cheaper purchase prices (but ignoring the costs of large-volume orders, poor quality, uncertain delivery times, and disconnected ordering, receiving, invoicing, and collection processes between lower-priced suppliers and the customer). By now, the defects associated with using traditional cost accounting measures in today's short-cycle-time, high-quality, customer-focused environment have been amply documented.

The influence, in recent years, of the total quality management and time-based competition practices of leading Japanese manufacturers has led many companies to supplement their traditional cost and financial measurements with measurements of quality and cycle time. Measurements of operating processes' quality, cycle time, and cost have been developed extensively during the past 15 years. Some aspects of these quality, time, and cost measurements will likely be included as critical performance measures in any organization's internal business process perspective.

In addition to this time, quality and cost measurements, managers may wish to measure additional characteristics of their processes and products and service offerings. Such additional measures could include measurement of flexibility and of the

specific characteristic of products or services that create value for customers. For example, companies may offer unique product or service performance, which could be measured by accuracy, size, speed, clarity, or energy consumption that enables them to earn high margins on sales to targeted market segments (Kaplan and Norton, 1998, p. 371-374).

The emergence of the global competitive environment and the need to make customer satisfactions on overriding priority has resulted in many companies supplementing their financial measures with measures of quality, reliability, delivery and those characteristics of product and service offerings that create value for customers. Companies that can identify the differentiating characteristics of their products and services should incorporate measures of these characteristics in the operation processes component of the Balanced Scorecard.

Cycle time measures

Many customers place a high value on short and reliable lead times, measured from the time elapsed from when they place an order until the time when they receive the desired product or service. Traditionally companies met this requirement by holding large inventories of many different products but, as indicated in the previous chapter, this approach is not consistent with being a low-cost supplier. Because of this many companies are adopting just-in-time (JIT) production systems with the aim of achieving both the low-cost and short lead time objectives. Reducing cycle or throughout times is therefore of critical importance for JIT companies.

Cycle time can be measured in various ways. Total cycle time measures the length of time required from the placing of an order by a customer to the delivery of the product or service to the customer. Manufacturing cycle time measures the time it takes from starting and finishing the production process. Cycle times should be measured and monitored and trends observed.

Reducing set-up times enables manufacturing lot sizes to be reduced, thus leading to shorter manufacturing cycle and greater flexibility. Set-up times should therefore also be measured at the operational level for each process and monitored over time. Modern manufacturing techniques also advocate preventive maintenance to ensure that machines are working effectively at all times, so that quality problem and late deliveries do not occur.

Companies that can eliminate waiting time for a service will find it easier to attract customers. The time taken to process mortgage and loan applications by financial institutions can take a considerable time period involving a considerable amount of non-value added waiting time. Thus, reducing the time to process the applications enhances customer satisfaction and creates the potential for increasing sales revenues.

Quality measures

Besides time, quality measures should also be included in the measures relating to operating processes. Most organizations now have established quality programs and use all, or some of the following process quality measurements: process parts-per-million (PPM) defect rates; yields (ratio of good items produced to good items entering the process); waste; scrap; rework; returns. In many companies suppliers also have a significant influence on the ability of a company to achieve its time, quality and cost objectives. Performance measures relating to suppliers' performance include the frequency of defects, the number of late deliveries and price trends.

Cost measurement

Kaplan and Norton recommend that activity-based costing should be used to produce cost measures of the important internal business processes. These costs, together with measurements relating time and quality should be monitored over time and/or benchmarked with a view to continuous improvement or process re-engineering.

The above measures represent generic measures but aspects of quality, time and cost measurement are likely to be included as critical performance measures in any organization's internal business perspective within its balanced scorecard.

Post-sales service processes

This final category relating to the internal business process perspective includes warranty and repair activities, treatment of defects and returns and the process and administration of customer payments (Drury, 2001, p. 498-501), such as credit card administration. Some companies have explicit strategies to offer superior post-sales service. For example, companies that sell sophisticated equipment or systems may offer training programs for customers' employees to help them use the equipment or system more effectively and efficiently. They may also offer rapid response to actual or potential failures and downtime. Newly established automobile dealerships, such as Acura and Saturn, have deservedly earned superb reputations by offering dramatically improved customer service for warranty work, periodic car maintenance, and car repairs. A major element in the value proposition these car companies deliver to their customers is

responsive, friendly, and reliable warranty and service work. Another aspect of post-sales service is the invoicing and collection process. Companies with extensive sales on credit or on company specific credit cards will likely need to apply cost, quality, and cycle time measurements to their billings, collection, and dispute resolution processes. Several department stores offer generous terms under which customers can exchange or return merchandise. And companies that deal with hazardous or environmentally sensitive chemicals and materials may introduce critical performance measures associated with the safe disposal of waste and by-products from the production process.

The internal business process perspective reveals two fundamental differences between the traditional and the Balanced Scorecard approaches to performance measurement. Traditional approaches attempt to monitor and improve existing business processes. The may go beyond mere financial measures of performance by incorporating quality and time-based metrics, but they still focus on improving existing business process. The Balanced Scorecard approach, however, will usually identify entirely new processes at which the organization must excel to meet customer and financial objectives. For example, the organization may realize that it must develop a process to anticipate customer needs or one to deliver new services that targeted customer value. The BSC internal business process objectives highlight the processes, several of which the company may not be currently performing at all, that are most critical for the organization's strategy to succeed.

The second departure of the Balanced Scorecard approach is to incorporate innovation processes into the internal business process perspective. Traditional performance measurement systems focus on the processes of delivering today's products and services to today's customers. But the drivers of long-term financial success may require the organization to create entirely new products and service that will meet the emerging needs of current and future customers. The innovation process is, for many companies, a more powerful driver of future financial performance than short-term operating cycle. For many companies, their ability to manage successfully a multiyear product development process or to develop a capacity to reach entirely new categories of customers may be more critical for future economic performance than managing existing operations efficiently, consistently, and responsively (Kaplan and Norton, 1998, p. 371-374).

THE LEARNING AND GROWTH PERSPECTIVES

The learning and growth perspective defines the core competencies and skills, the technologies, and the corporate culture needed to support an organization's strategy. These objectives enable a company to align its human resources and information technology with its strategy. Specifically, the organization must determine how it will satisfy the requirements from critical internal processes, the differentiated value proposition, and customer relationships.

Although executive teams readily acknowledge the importance of the learning and growth perspective, they generally have trouble defining the corresponding objectives. Mobil identified that its employees needed to gain a broader understanding of the marketing and refining business from end to end (Kaplan and Norton, 2000, p.175). The company may create value for customers and make excellent use of its resources today, but the world does not stand still, and performance requirements keep racketing up over time. To make sure the company will be appreciated by tomorrow's customers and will keep making excellent use of its employees must keep learning and developing (Epstein and Manzoni, 1997, p.31). Additionally, the company knew it had to nurture the leadership skills that were necessary for its managers to articulate the company's vision and develop employee. Mobil identified key technologies that it had to develop, including automated equipment for monitoring the refining processes and extensive databases and tools to analyze consumers' buying experiences (Kaplan and Norton, 2000, p.175). This perspective should group indicators capturing the company's performance with respect to innovation, learning and growth (Epstein and Manzoni, 1997, p31). Organizational learning and growth—measures that show how well a company is prepared to meet the challenges of the future through its organizational and human assets (Dye, 2003, p.22).

The learning and growth perspective identifies the infrastructure that the organization must build to create long-term growth and improvement. This perspective stresses the importance of investing for the future in areas other than investing in assets and new product research and development (which is included in the innovation process of the internal business perspective). Organizations must also invest in their infrastructure (people, systems and organizational procedures) to provide the capabilities that enable the accomplishment of the other three perspectives' objectives (Drury, 2001, p.501-502). The customer and internal business process perspectives identify the factors most critical for current and future success. Businesses are unlikely to be able to meet their long-term targets for customers and internal processes using today's technologies and capabilities. Also, intense global competition requires that companies continually

improve their capabilities for delivering value to customers and shareholders. Organizational learning and growth come from three principal sources: people, systems, and organizational procedures. The financial, customer, and internal business process objectives on the Balanced Scorecard will typically reveal large gaps between existing capabilities of people, systems, and procedures and what will be required to achieve targets for breakthrough performance. To close these gaps, businesses must invest in deskilling employees, enhancing information technology and systems, and aligning organizational procedures and routines. These objectives are articulated in the learning and growth perspective of the Balanced Scorecard (Chow, Haddad, and Williamson, 1997, p.23).

Based upon their experiences of building balanced scorecards across a wide variety of organizations Kaplan and Norton have identified the following three principal categories, or enablers, for the learning and growth objectives: 1. Employee capabilities; 2. Information system capabilities; 3. Motivation, empowerment and alignment.
They point out that although they have found that many companies have made excellent progress on specific measures for their financial, customer, innovation and operating processes virtually no effort has been devoted to measuring the outcomes relating to the above three categories. As companies implement management processes based on the balanced scorecard framework more creative and customized measures relating to the learning and growth perspective are expected to emerge.

- **Employee Capabilities**

Kaplan and Norton observed that most companies use three common core measurement outcomes: employee satisfaction, employee retention and employee productivity. Within this core, the employee satisfaction objective is generally considered to be the driver of the other two measures. Satisfied employees are normally a pre-condition for increasing customer satisfaction. Many companies periodically measure employee satisfaction using surveys. Typically, they are requested to specify on a scale, ranging from dissatisfied to highly satisfied, their score for a list of questions that seek to measure employee satisfaction. For example, questions may relate to involvement in decisions and active encouragement to be creative and to use one's initiative. An aggregate index is constructed which can be analyzed on a departmental or divisional basis. Employee retention can be measured by the annual percentage of key staff that leaves and many different methods can be used to measure employee productivity. A generic measure of employee productivity that can be applied throughout the organization and compared with different divisions is the sales revenue per employee.

- **Information system capabilities**

For employees to be effective in today's competitive environment they need excellent information on customers, internal processes and the financial consequences of their decisions. Measure of strategic information availability suggested by Kaplan and Norton include percentage of processes with real time quality, cycle time and cost feedback available and the percentage of customer-facing employees having on-line information about customers. These measures seek to provide an indication of the availability of internal process information to front-line employees.

- **Motivation, empowerment and alignment**

The number of suggested improvements per employee is proposed as a measure relating to having motivated and empowered employees. The performance drivers for individual and organizational alignment focus on whether department and individuals have their goals aligned with the company objectives articulated in the balanced scorecard. A suggested outcome measure is the percentage of employees with personal goals aligned to the balanced scorecard and the percentage of employees who achieve personal goals (Drury, 2001, p.501-502).

Learning and growth measures should be related to employee capabilities, information systems capability, and employee motivation and empowerment (Chow, Haddad, and Williamson, 1997, p.23). In addition, the learning and growth perspective includes specific drivers of these generic measures, such as detailed, business-specific indexes of specific skills required for the new competitive environment. Information systems capabilities can be measured by real-time availability of accurate, critical customer and internal process information to employees on the front lines of decision making and actions. Organizational procedures can examine alignment of employee incentives with overall organizational success factors and measured rates of improvement in critical customer-based and internal processes (Kaplan and Atkinson, 1998, p.374-375). Based on the objectives established in the financial, customer, and internal business process perspectives, a company needs to identify objectives and measures to drive continuous organizational learning and growth. The objectives in the learning and growth perspective should be the drivers of successful outcomes in the other three perspectives (Chow, Haddad, and Williamson, 1997, p.23).

IMPORTANCE OF CAUSE-AND-EFFECT

Many organizations do have a mix of financial and nonfinancial indicators, and they dutifully monitor them on a monthly or quarterly basis. However, this ad hoc collection of indicators does little to provide them with a guide for learning about and executing their strategy. The true value of performance measures is derived from examining the results in light of the assumptions you make about the relationships among the indicators (Niven, 2003, p.36).

It's critical to tie performance measures to desire outcomes. According to Club Chef's owner, "The use of these linkages has helped us to achieve performance in certain areas that far exceeded our initial expectations." Here is one example of a cause-and-effect linkage in Club Chef's Balanced Scorecard framework. The measurement is to increase employee training, and the desired outcomes are:

- decrease employee turnover,
- increase product quality and efficiency,
- improve customer satisfaction, and
- increase revenue and margins (Frigo and Krumwiede, 2000, p. 53).

A strategy is a set of hypotheses about cause and effect. The measurement system should make the relationships (hypotheses) among objectives (and measures) in the various perspectives explicit so that they can be managed and validated. The chain of cause and effect should pervade all four perspectives of a Balanced Scorecard. For example, return on capital employed (ROCE) may be a scorecard measure in the financial perspective. The driver of this financial measure could be repeat and expanded sales from existing customers, the result of a high degree of loyalty among existing customers. So, customer loyalty is included on the scorecard (in the customer perspective) because it is expected to have a strong influence on ROCE. But how will the organization achieve customer loyalty? Analysis of customer preferences may reveal that on-time delivery (OTD) of orders is highly valued by customers. Thus, improved OTD is expected to lead to higher customer loyalty, which, in turn, is expected to lead to higher financial performance. So both customer loyalty and OTD are incorporate into the customer perspective of the scorecard.

The process continues by asking at what internal processes must the company excel to achieve exceptional on-time delivery. To achieve improved OTD, the business may need to achieve short cycle times in operating processes and high-quality internal processes, both factors that could be scorecard measures in the internal perspective. And how do

organizations improve the quality and reduce the cycle times of their internal processes? By training operating employees and improving their skills, an objective that would be a candidate for the learning and growth perspective. We can now see how an entire chain of cause-and-effect relationships can be established as a vertical vector through the four Balanced Scorecard perspectives.

Thus, a properly constructed Balanced Scorecard should tell the story of the business unit's strategy. It should identify and make explicit the sequence of hypotheses about the cause-and-effect relationships between outcome measures and the performance drivers of those outcomes (Kaplan and Norton, 1998, p. 376-377).

Developing tight cause-and-effect linkages is a challenge for any organization (Niven, 2003, p.38).

THE BALANCED SCORECARD AS A STRATEGIC MANAGEMENT SYSTEM

The Balanced Scorecard has evolved from a measurement tool to what Kaplan and Norton have described as a 'Strategic Management System' (Niven, 2003, p.19). The scorecard system helps managers to better align operational improvements with the overall strategy of the organization (Lawson and Stratton, 2003, p.25).

The Balanced Scorecard is ideally created through a shared understanding and translation of the organization's strategy into objectives, measures, targets, and initiatives in each of the four scorecard perspectives. The translation of vision and strategy forces the executive team to specifically determine what is meant by often vague and nebulous terms contained in vision and strategy statements. All employees can then focus their energies and day-to-day activities on the crystal-clear goal. Using the Balanced Scorecard as a framework for translating the strategy, the organizations create a new language of measurement that serves to guide all employees' actions toward the achievement of the stated direction (Niven, 2003, pp. 19-20).

The BSC provides means of control to accomplish the company's strategy. It often occurs, however, that companies fail to properly execute their business strategy because they use inadequate performance measurement systems. To overcome this problem, companies must design their performance measures as indicators of their business success and align them with their strategies. The BSC is more than just a performance measurement tool; it acts as a strategic management system that helps communicate the organization's desired strategic outcomes and the way in which those outcomes are to be achieved. When properly constructed, a Balanced Scorecard enables every employee in the organization to understand the company's strategy and his or her contribution to realizing that strategy. Two conditions have to be met for a Balanced Scorecard to be an effective strategic performance measurement system. First, senior management must have clearly laid out the firm's strategic vision, and second, the key performance indicators must be correctly chosen so as to measure the firm's progress in achieving its strategic objectives as well as the success of the strategy itself (Slagmulder, 2003, pp.14-15).

Moreover, to successfully implement any strategy, it must be understood and acted upon by every level of the firm. Cascading the scorecard means driving it down into the organization and giving all employees the opportunity to demonstrate how their day-to-day activities contribute to the company's strategy. By cascading, one creates a 'line of sight' from the employees on the front line back to the director's office. Rather than

linking incentives and rewards to the achievement of short-term financial targets, managers now have the opportunity to tie their team, department, or agency rewards directly to the areas in which they exert influence. All employees can then focus on the performance drivers of future value and on which decisions and actions are necessary to achieve those outcomes (Niven, 2003, pp. 19-20).

The BSC is a strategic management system that is used for goal setting, compensation, resource allocation, planning and budgeting, and strategic feedback and learning (Malmi, 2001, p.208). No longer will departments submit budget requests that simply take last year's amount and add an arbitrary five percent. Instead, the necessary costs (and profits) associated with Balanced Scorecard targets are clearly articulated in their submission documents. This enhances executive learning about the strategy, as the group is now forced to make tough choices and trade-offs regarding which initiatives to fund and which to defer (Niven, 2003, pp. 20-21).

BALANCE IN THE BALANCED SCORECARD

The BSC represents the balance between financial and nonfinancial indicators of success. It was originally conceived to overcome the deficiencies of a reliance on financial measures of performance by balancing them with the drivers of future performance. This remains a principle tenet of the system (Niven, 2003, pp.23-24).

Next, there is a balance between internal and external constituents of the organization. Financial stakeholders (funders, legislators, etc.) and customers represent the external constituents represented in the Balanced Scorecard, while employees and internal processes represent internal constituents. The Balanced Scorecard recognizes the importance of balancing the occasionally contradictory needs of all these groups in effectively implementing strategy.

Furthermore, there is a balance between lag and lead indicators of performance. Lag indicators generally represent past performance. Typically examples might include customer satisfaction or revenue. While these measures are usually quite objective and accessible, they normally lack any predictive power. Lead indicators, in contrast, are the performance drivers that lead to the achievement of the lag indicators. They often include the measurement of process and activities. Response time might represent a leading indicator for the lagging measure of customer satisfaction. While these measures are normally thought to be predictive in nature, the correlations may prove subjective and the data difficult to gather. Lag indicators without leading measures do not communicate how one is going to achieve his or her targets. Conversely, leading indicators without lag measures may demonstrate short-term improvements but do not identify whether these improvements have led to improved results for customers, ultimately allowing one to achieve his or her mission (Niven, 2003, pp.23-24).

BENEFITS OF USING A BALANCED SCORECARD

The Balanced Scorecard is a set of measures that gives top management a fast but comprehensive view of the organizational unit (i.e. a division/strategic business unit). Kaplan and Norton's experiences of innovative companies implementing the Balanced Scorecard indicated that they were using it, not only to clarity and communicate strategy, but also to manage strategy (Drury, 2001, p.493-495).

Developing and using a Balanced Scorecard can bring several benefits to a firm, some quite obvious, others more subtle. One of the most obvious, advantages is that the Balanced Scorecard summarizes four different perspectives on the company's performance in a single, succinct document. Most organizations collect some performance measures addressing some or all of these perspectives, but these measures typically are reported in several different documents, often bulky and usually containing too much information to allow good analysis. A Balanced Scorecard has a small set of selected indicators in one concise document. Because the four perspectives provide a more balanced view of the company, they also allow managers to keep an eye on the way performance is achieved (on the means managers use). The Balanced Scorecard in particular highlights trade-offs between measures. A particular liquor company was in the habit of pushing sales to distributors during the last week of each period, thus overloading the distribution pipeline and "borrowing" sales from the next period. Everybody knew the practice was common, but no one (except the people close to the operations) knew the exact amounts involved. In a Balanced Scorecard context, such practices could be spotted easily through various measures focuses on customer satisfaction and number of weeks of distributor inventory (Epstein and Manzoni, 1997, p.32-34).

The Balanced Scorecard ensures that management does not lose sight of those non-financial metrics that are leading indicators of shareholder value creation. However, according to Kaplan and Norton (2001), the Balanced Scorecard is more than just a performance measurement tool; it acts as a strategic management system that helps communicate the organization's desired strategic outcomes and the way in which those outcomes are to be achieved (Slagmulder, 2003, p.14-16). The presence of a Balanced Scorecard does not eliminate the need for top managers to explain what they are trying to achieve and why, but it reinforces traditional means of communication by translating the strategy into quantifiable indicators. The firm's Balanced Scorecard, in turn, can be translated into localized scorecards for lower-level units, thus cascading the strategy and creating a set of nested performance management systems. In both cases,

developing the Balanced Scorecard forced the top management team to work out a clear and shared view of what they were trying to achieve (Epstein and Manzoni, 1997, p.32-34).

The Balanced Scorecard also aids in communicating the company's goals and rewarding those goals. This is not an easy task. Many organizations struggle with individuals pursuing their own goals, often at the expense of the company. The Balanced Scorecard approach helps firms develop measures that are in harmony. According to Club Chef Controller William Petty, the Balanced Scorecard focuses everyone on the company's mission. In other words, it makes it easier for everyone in the organization to aim in the same direction (Frigo and Krumwiede, 2000, p.51). Achieving effective corporate governance and accountability for results will not only be critical in our current environment, but also in the long-term best interests of organizations and their stakeholders. Adoption of a Balanced Scorecard for the board of direction can do much to help companies fulfil these goals (Dye, 2003, p.23). The BSC is that they help operationalize the strategy into value drivers that are within the influence of business unit and functional managers. This controllability principle is important from a motivational and fairness point of view. An increasing number of firms are using strategic performance measurement systems to clarify and codify their high-level strategies into concrete business objectives and performance metrics. These systems also help identify which improvement initiatives are in lines with the business strategy and should be applied to achieve the company's strategic objectives (Slagmulder, 2003, p.14-16).

According to Kaplan and Norton, the implementation and rollout of a scorecard can communicate and clarify to employees the key strategic objectives and their critical drivers. This claim is important because research shows that effective communication of strategy can have an impact on the success of strategy implementation (Salterio and Webb, 2003, p.40-41). When properly constructed, a Balanced Scorecard enables every employee in the organization to understand the company's strategy and his or her contribution to realizing that strategy. Two conditions have to be met for a Balanced Scorecard to be an effective strategic performance measurement system. First, senior management must have clearly laid out the firm's strategic vision, and second, the key performance indicators must be correctly chosen so as to measure the firm's progress in achieving its strategic objectives as well as the success of the strategy itself (Slagmulder, 2003, p.14-16).
A recent institute of Management Accountants survey on performance management indicates that the scorecard can be an effective strategy communication and

clarification tool. One of the first studies shows that at Sears, employee attitudes have a positive impact on customer satisfaction (both lead indicators), which in turn has a significant effect on revenue growth (lag indicator). Interview date reported in a recent case study of a Fortune 500 company indicates managers believe the cause-and-effect relations included in their scorecard have led to improved efficiency and profitability. The evidence also suggests that the provision of the nonfinancial data clarifies the lead-lag relation between quality spending and future profit. This finding is relevant to scorecard users and designers as it indicates that inclusion of nonfinancial performance measures, which clarify lead-lag relations between other key measures, can have beneficial effects on managerial decision making. The provision of feedback as to whether the strategic objectives are being accomplished is one of the scorecard's most important benefits, according to Kaplan and Norton. By monitoring whether performance on the critical lead measures is having the expected consequences on key lag measures, managers are able to evaluate whether the cause-effect relations are valid and whether or not the strategic objectives are achievable. Our tentative conclusion is that a properly implemented and consistently employed scorecard may aid some organizations in better articulating and communicating their performance and detecting the superiority of one strategy over another (Salterio and Webb, 2003, p.40-41).

The Balanced Scorecard is that it puts strategy, structure, and vision at the centre of management's focus. Another advantage is that because the Balanced Scorecard emphasizes an integrated combination of traditional and non-traditional performance measures, it keeps management focused on the entire business process and helps ensure that actual current operating performance is in line with long-term strategy and customer values. In so doing, the Balanced Scorecard helps maintain a balance between building long-range competitive abilities and recognizing investors' attention to financial reports. To this extent the Balanced Scorecard does retain traditional financial measures. But these financial measures are viewed n the larger context of the company's competitive strategies for creating "future value through investment in customers, suppliers, employees, processes, technology, and innovation." Because of the way the Balanced Scorecard aids in successful restructuring by linking together all subunits and members in a concerted effort to enhance the overall goals and objectives of the organization, many leading-edge companies have begun to adopt this new approach. For example, in late 1989, Montreal Bank's "corporate performance was heading downhill fast." Chairman and Chief Executive Officer Mathew Barrett and his team, deciding that "a successful turn around strategy had to include a new approach to performance measurement," used the Balanced Scorecard to help solve the company's problems.

Because the Balanced Scorecard expands the company's set of objectives beyond traditional financial measures, managers will be able to measure how their business units create value for current and future customers. The Balanced Scorecard also helps to measure the need to enhance internal capabilities and the firm's investment in people, systems, and those procedures necessary to improve future performance. In other words, the Balanced Scorecard is an attempt to capture the essence of the organization's critical value-creating activities. The Balanced Scorecard approach over traditional models is that it focuses management's attention on managing results from the perspective of customers, internal business processes, and learning and growth. These real-time learning perspectives can increase organizations' nimbleness in modifying strategies in response to changing circumstances (Chow, Haddad, and Williamson, 1997, p.22-26).

CRITICISM ON THE BALANCED SCORECARD

Overall, like any other managerial tool, the Balanced Scorecard has good features and not so good features. It is up to accountant within the organizations to ensure that if a scorecard is implemented, the benefits will be maximized and the limitations recognized when making decisions based on scorecard information (Salterio and Webb, 2003, p.41).

Butler et al. (1997) considers Kaplan and Norton's model to be too general. They point out that it may not fit the organizational culture and jargon. They also feel that BSCs may ignore corporate missions; in situations where employees accept the company mission it may be better to build metrics on that mission instead of importing an unfamiliar concept from outside the company.

Laitinen (1996) in turn considers the selection of (four) basic dimensions and their interrelationships problematic. He claims that measures in practical applications appear to be only loosely connected to each other, being unable to provide any clue about which company-internal factors should be developed to achieve success in the market place and in financial terms.

Norreklit (2000) has similarly questioned the existence of a casual relationship between the four areas of measurement (Malmi, 2001, p. 208). The core of the Balanced Scorecard is that it contains outcome measures and the performance drivers of outcomes, linked together in cause-and-effect relationship (Kaplan & Norton, 1996a, p. 31; Kaplan & Norton, 1996b, p.4 and p.53). Yet, there is no such cause-and-effect relationship between some of the suggested areas of measurements. Specifically, there is not as claimed by Kaplan & Norton a cause-and-effect relationship between customer satisfaction and loyalty, and between loyalty and financial results. Although there is considerable covariation between customer loyalty and financial performance, for example, it is not generic that a *"high level of satisfaction will lead to greatly increased customer loyalty and that increased customer loyalty is the single most important driver of long term financial performance."* (Jones & Sasser, 1995, p. 90). What it might be claimed is that customers which are not loyal are expensive, but it does not follow that loyal customers are inexpensive. Such a conclusion would be a logical fallacy. Similarly, although it is known that, if it is raining, then the streets will be wet, it cannot be conversely concluded that, if the streets are wet, then it is raining. The criteria for a cause-and-effect relationship are usually the following: X precedes Y in time; the observation of an event X necessarily, or highly probably, implies the subsequent observation of another event Y; and the two

events can be observed close to each other in time and space. The events X and Y are logically independent. This means that we cannot rationally infer Y from X but can only do so empirically. It is only through an accounting calculus that one can measure the financial results of cost reducing actions, but only through empirical observation is it possible to see, e.g. the effect of a change in machine speed from energy consumption. As cost is defined as consumption in monetary terms, it is logical that consumption creates costs (Norreklit, 2003, p. 592 and p. 616). The lack of a cause-and-effect relationship is crucial because invalid assumptions in a feed-forward control system will cause individual companies to anticipate performance indicators which are actually faulty, resulting in dysfunctional organizational behavior and sub-optimized performance (de Haas and Kleingeld, 1999, p.244).

Concerns also exist over the practice of adding and deleting scorecard measures as better and/or more strategically relevant measures become available or as existing measures are deemed to be soft and/or unreliable. The practice of frequently adding and deleting measures makes it difficult to detect the cause-effect relationship (Salterio and Webb, 2003, p.41).

Moreover, Norreklit questions the validity of BSCs to serve as a strategic management control tool (Malmi, 2001, p. 208). The claim that the Balanced Scorecard is a strategic control model that is able to handle the problem of strategy implementation also has its shortcomings. First, the model does not monitor the competition or technological developments. This implies that it does not take into consideration any strategic uncertainty in terms of the risk involved in events that may threaten or invalidate present strategy. Second, the formulation of measures and the breakdown and distribution of these to teams and individuals are hierarchical top-down processes. Thus local conditions have been defined by the top management; the top-down decomposition process is a sort of analytical method "that *cascades* high level measures to lower organizational measures" (Kaplan and Norton, 1996a, p. 213), and the vision is communicated through executive announcements, videos, town meetings, brochures and newsletters with no personal involvement of senior management.
The authors disregard any implementation problems, and winning support for the system is considered unproblematic. Such concepts as interactive, employee empowerment and organizational learning are considered unproblematic in the Balanced Scorecard. It is difficult, however, to make these concepts unproblematic in a control system which is based on top-down hierarchical measurements. Therefore, the BSC contains control features that have been widely criticized for not being rooted in a dynamic environment or

in the organization. The effect of such a control model may be seriously dysfunctional behavior and the loss of strategic control (Norreklit, 2003, p. 617). The argument that strategic performance measurement is inefficient and costly often stems from an overemphasis on reporting and discussing performance, at the expense of actually managing and improving it. This problem occurs when there is an overabundance of measures, which dilutes the performance effect of managers' efforts, and the measurement process has degenerated into a bureaucratic exercise that adds little to achieve the company' strategic goals (Slagmulder, 2003, p. 17).

Epstein and Manzoni (1997) question the ability of companies to agree on a strategy in such clear terms that it would enable construction of a BSC (Malmi, 2001, p. 208). When implementing a Balanced Scorecard, there might be a realization that the top management team cannot articulate a concise and shared view of the firm's strategy. In some cases, the strategies not clear; in other cases, members of the top management team hold different views on what the strategy of the firm is or ought to be. Thus, the first step of the process is to get to a consensus on what the firm should try to achieve (Epstein and Manzoni, 1997, p.35).

Epstein and Manzoni also feel that maintaining such a system may prove laborious (Malmi, 2001, p. 208). Developing and maintaining a Balanced Scorecard can create a workload for many people. In particular, some of the data required may not exist within the firm and need to be collected specifically for the scorecard (Epstein and Manzoni, 1997, p. 35). The Balanced Scorecard with its large number of performance measures presents a complex task to a manager asked to use the scorecard to evaluate a division's performance. The manager could, theoretically, weight and combine the many measures into an overall evaluation of the business unit but this is, cognitively, a very difficult thing to do (Lipe and Salterio, 2002, p. 532). Unlike financial measures of performance, there is no common denominator for non-financial indicators, which can be measured in many different ways (time, quantities, percentages, subjective assessment, etc.). Some companies attempt to overcome this problem by using some kind of weighting scheme. However, this method can lead to considerable bias if subjective or arbitrary weightings are used for the qualitative items. In addition, the time and cost of development, usage, and maintenance of the systems may be problematic for some companies. Many believe the investment in information system and the managerial resources spent on educating employees in the new performance measurement philosophy exceed the benefits (Slagmulder, 2003, p. 17).

Research in cognitive psychology has repeatedly shown that humans are able to retain and use only a small number of items on working memory. With this limit on working memory, holding twenty or more individual measures in one's head and mentally manipulating them simultaneously is extremely difficult, if not impossible. Thus, the volume of data in a Balanced Scorecard suggests that it may overload human decision makers with information (Lipe and Salterio, 2002, p. 532). Managers who often are stretched already by their normal workload may not be enthusiastic about this additional demand on their time (Epstein and Manzoni, 1997, p.35).

Kaplan and Norton's advice, which is consistent with theory, is that managers' performance compensation should be based on the scorecard. Implementation of this advice in practice has led to two main approaches, a subjective evaluation approach (Ittner, Larcker and Meyer, 2003, p.754) with no explicit weight on any category or measure and a formula-driven evaluation approach with explicit weights on each measure. Researchers have extensively examined the subjective performance evaluation effects. A widely replicated finding from a Canadian Academic Accounting Association funded study is that managers evaluate their subordinates on measures that are common to all their scorecards but ignore the measures on those scorecards that uniquely reflect the critical drivers of the individual division's success. Reducing this bias can only be done by either the manager account for his or her performance evaluations directly to his or her supervisor, or by providing the manger with an assurance report over the reliability of the measures on the unit's scorecard.

Formula-based scorecard evaluations also have their challenges. Case studies have shown that companies struggle to determine the right measures to reward, the explicit weight to put on any one measure or category of measures, and the potential dysfunctional outcomes that can result from basing rewards on outcomes of only a subset of the measures, not some minimal level on each. Hence, while formula-based evaluations are able to deal with some of the problems of subjective scorecard-based evaluations, they are not a panacea (Salterio and Webb, 2003, p.41). Moreover, the time required to evaluate managers' performance based on diverse set of metrics may prove to be time consuming (Slagmulder, 2003, p. 17).

Vaivio (1995) in turn questions the idea that a handful of quantitative measures can portray the various facets of a company's strategy. In addition to such criticism, a few authors have questioned the novelty of the idea. For example, the French are known to have used a somewhat similar system called Tableaux de Bord for decades. Moreover, the idea of linking measures to strategy is not unique to the BSC (Malmi, 2001, p. 208).