(NIMS)
NUST Institute of Management Sciences

MBA 2002
FINAL THESIS

Critical Analysis of Balanced Scorecard as a Strategy Translation Tool

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Dated: November 20, 2004

Acknowledgement

I gratefully acknowledge the support, assistance and encouragement of all those people who have contributed towards the preparation of this research paper, management of OMV Pakistan, my teachers especially Mr. Naukhez Sarwar, Mr. Wasiq Waheed Chaudry and Mr. Fazl-e-Muqeem, and my colleagues at MTHR for their invaluable support.

I would like to thank my dissertation advisor, Mr. Naukhez Sarwar for his helpful insights, as he not only helped me in better understanding the topic concerning the details of Balanced Scorecard but has also made us realize the significance of research study to analyze the practical applications of the subject.

Apart from that, I would like to express my gratitude to my friends, Faraz Syed and Habiba Butt who have been a great source of insight and learning for me, their questions have often probed me to go into depths of the subject and in all times they have stuck by me.

Last but not the least; I thank my family, for supporting and encouraging me throughout the making of this research paper.

Abstract

The Balanced Scorecard (BSC) is a performance measurement and strategic management system. It translates an organization's mission and strategy into a balanced set of integrated performance measures. The balanced set of performance measures provides a concise yet complete picture about the achievement and performance of an organization toward its mission and goal. Organizations that have adopted this newer management tool have had varying success in the use of this performance measurement system as a motivator and form of performance feedback. This dissertation is an endeavor to conduct a critical analysis of the balanced scorecard as a strategy implementation tool. The theory and application of BSC is analyzed in corporate environments. Based upon the study, a BSC was developed and implemented in an IT firm to carry out a comparison to better understand the extent to which the BSC really cascades down the strategic vision of an organization, the reason for its success and failures and the varying levels of satisfaction.

Table of Contents

Chapter 1

1. Introduction

1.1 Need for Performance Measurement & BSC

In today's competitive global economy, it is more important than ever to understand the process of value creation in your organization. The need to manage with a high level of customer focus, a clearer understanding of core business processes, the necessity of motivation and commitment of employees, the need for change on continuous basis, and effective strategy implementation have led to the increased transparency of measuring business performance and the value drivers.

Before embarking upon the discussion of BSC as strategic management and performance measurement tool, let us bring into discussion the need of performance measurement in the translation of corporate strategy and see why balance in this measurement has become so imperative in the present times.

1.1.1 Strategy Translation -Why Performance Measurement is so Important

Before we explore the Balanced Scorecard in detail, let us look at some of the factors that have given rise to this new framework for tracking organizational performance.

Organizations have never emphasized so much on performance measurement and management before. Worldwide, three factors have fueled the need for improved performance reporting: the recent spate of corporate accounting scandals, a longstanding reliance on financial measures of performance as the one true way to gauge success, and the inability of many organizations to successfully execute their strategies. Restricting our concern to Pakistan only, the emerging role of HR, the pre-WTO era requisites and the due diligence requirements of the foreign firms for the outsourcing of offshore work has influenced firms' attempts at streamlining their HR practices and managing the performance of their human resources. We will look at each of these and discover how they have contributed to the need for a Balanced Scorecard system. We will then return to an overview of the Balanced Scorecard and learn how this deceptively simple tool is revolutionizing the management of performance.

As I write this in late 2004, 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 organizations like Shell, Arthur Anderson, and Halliburton have all been found guilty of some corruption in the systems. The Enron scandal in 2002 is still fresh in our memories. Once the seventh largest company in the United States, it has become the defendant in countless lawsuits launched by those who have collectively lost billions since the company's demise. Of course Enron's $63.4 billion bankruptcy was later dwarfed by that of fellow-wrongdoer WorldCom. WorldCom sought Chapter 11 protection in a $107 billion disaster. The list goes on and on: Tyco, Xerox, Global Crossing, Adelphia, and dozens of others. Even those organizations once considered paragons of corporate virtue have been tainted by the sting of scandal. Johnson & Johnson, for example, an organization renowned ethical business practices, was cited for irregularities at a manufacturing facility in Puerto Rico. Not surprisingly, these activities have not gone unnoticed by you and me. Trust in organizations has never been lower. In one recent poll, 57 percent of respondents said they do not trust corporate executives to give them honest information. Clearly, something has to change. In response to the much-publicized shenanigans taking place in boardrooms around the world, the people today are more aware and demand greater disclosure of information. The rationale is that the more we know about a company's financial situation, the better equipped we are to discern the true state of its operations.

All of the developments just described have prompted leaders and those who work in, and follow, organizations to further embrace concepts that place a premium on providing a balanced view of performance.

As the preceding discussion has clearly demonstrated, we require balanced performance information to fully assess an organization's success. Despite this realization, recent estimates suggest that 60 percent of metrics used for decision-making, resource allocation, and performance management are still financial in nature.

It seems that for all we have learned, we remain stuck in the quagmire of financial measurement. Perhaps tradition is serving as a guide unwilling to yield to the present realities. Traditionally, the measurement of all organizations has been financial. Bookkeeping records to facilitate financial transactions can be traced back thousands of years. At the turn of the twentieth century, financial measurement innovations were critical to the success of the early industrial giants like General Motors.

The financial measures created at that time were the perfect complement to the machinelike nature of the corporate entities and management philosophy of the day. Competition was ruled by scope and economies of scale, with financial measures providing the yardsticks of success. Over the last hundred years, we have come a long way in how we measure financial success, and the work of financial professionals is to be commended. Innovations such as Activity-Based Costing (ABC) and Economic Value Added (EVA) have helped many organizations make more informed decisions. However, as we begin the twenty-first century, many are questioning our almost exclusive reliance on financial measures of performance.

1.1.2 Criticism on Financial Measures

Here are some of the criticisms levied against the over-abundant use of financial measures:

• *Not consistent with today's business realities.* Tangible assets no longer serve as the primary driver of enterprise value. Today, it is employee knowledge (the assets that ride up and down the elevators), customer relationships, and cultures of innovation and change that create the bulk of value provided by any organization. In other words; it is the intangible assets. If you buy a share of Microsoft's stock, you are buying a promise of value to be delivered by innovative people striving to continually discover new pathways of computing. Traditional financial measures were designed to compare previous periods based on internal standards of performance. These metrics are of little assistance in providing early indications of customer, quality, or employee problems or opportunities.

• *Driving by rear view mirror.* This is perhaps the classic criticism of financial metrics. You may be highly efficient in your operations one month, quarter, or even year. But does that signal ongoing financial efficiency? Financial results, on their own, are not indicative of future performance.

• *Tendency to reinforce functional silos.* Working in mission-based organizations, you know the importance of collaboration in achieving your goals. Whether it is improving literacy, decreasing risks rates, or increasing public safety, you depend on a number of teams working seamlessly together to accomplish your tasks. Financial statements do not capture this cross-functional dependency. Typically, financial reports are compiled by functional area. They are then "rolled-up" in ever-higher levels of detail and ultimately reflected in an organizational financial report. This does little to help you in meeting your noble causes.

• *Sacrifice of long-term thinking.* If you face a funding cut, what are the first things to go in your pursuit to right the ship? Many organizations reach for the easiest levers in times of crisis: employee training and development, or maybe even employees themselves! 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.

• *Financial measures are not relevant to many levels of the organization.* Financial reports by their very nature are abstractions. Abstraction in this context is defined as moving to another level and leaving certain characteristics out. When we roll up financial statements throughout the organization, which is exactly what we are doing: compiling information at a higher and higher level until it is 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.

Despite their many shortcomings, financial yardsticks are an entirely necessary evil. This is especially the case in the public and nonprofit sectors. In an era of limited, often decreasing, funding, you must consistently tread the delicate balance between effectiveness and efficiency. Results must be achieved, but in a fiscally responsible manner. The stakeholders will be looking toward s the organization to achieve its missions, thus non-financial measures of performance become critical in the organizational efforts. However, pursuing the goals with no regard to the financial ramifications of the decisions will ultimately damage everyone: the organization will be the victim of decreased funding as it becomes clear that it is unable to prudently manage its resources. The donors will be discredited and, potentially, unwilling to support it in the future. But most important, the target audiences will not receive the services they need as a result of the inability to reach them in both an effective and efficient way.

1.2 Purpose of the Study

The aim of this dissertation is to carry out an in-depth analysis of the balanced scorecard from the origin and development of the scorecard and the implementation problems. The barriers that come along the way while translating the vision into strategy and implementation of the strategy would also be explored. The purpose of this study is to theoretically explore the benefits and possible drawbacks of using Balanced Scorecard in strategy context at different levels in the organization. Only a few firms in Pakistan have opted for BSC as a performance management/strategy implementation tool, the purpose is to bring out the success or failure of the BSC and to draw a conclusion based upon the research findings how credible BSC is in translating the firm’s strategy into action with its capacity to measure performance.

1.3 Research Questions

The core issue is to examine, explore and evaluate the role of the Balanced Scorecard in cascading the strategic vision in the corporate sector. The other main questions that the researcher would make an attempt to answer are:

- Is BSC just a navigational tool for strategy translation?
- How effective BSC is as a performance measurement/ management tool for service sector?
- What are the different barriers in the implementation of BSC?

To provide insight into this area, OMV Pvt. Ltd and MTHR have been used as research organizations for the interpretative research. In order to present the research this dissertation will:-

- Set the historical context of Balanced Scorecard as a background to the research through a review of the literature on BSC.

- Describe the different types of performance indicators and metrics being used in the BSC system.
- Examine the barriers in the strategy implementation and evolution of different types of scorecards.
- Present and discuss the research findings for BSC in two organizations, i.e. OMV & MTHR.
- Draw conclusions and make recommendations for a future strategy for the Balanced Scorecard.

Chapter 2

2. Literature Review

2.1 What is Performance Management?

There are a wide range of definitions for performance objective, performance goal, performance measure, performance measurement, and performance management. To frame the dialog and to move forward with a common baseline, certain key concepts need to be clearly defined and understood, such as:

Performance Objective: This is a critical success factor in achieving the organization's mission, vision, and strategy, which if not achieved would likely result in a significant decrease in customer satisfaction, system performance, employee satisfaction or retention, or effective financial management.

Performance Goal: A target level of activity expressed as a tangible measure, against which actual achievement can be compared.

Performance Measure: A quantitative or qualitative characterization of performance. Performance Measurement: A process of assessing progress toward achieving predetermined goals, including information on the efficiency with which resources are transformed into goods and services (outputs), the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied) and outcomes (the results of a program activity compared to its intended purpose), and the effectiveness of government operations in terms of their specific contributions to program objectives.

Performance Management: The use of performance measurement information to effect positive change in organizational culture, systems and processes, by helping to set agreed-upon performance goals, allocating and prioritizing resources, informing managers to either confirm or change current policy or program directions to meet those goals, and sharing results of performance in pursuing those goals.

Output Measure: A calculation or recording of activity or effort that can be expressed in a quantitative or qualitative manner.

Outcome Measure: An assessment of the results of a program compared to its intended purpose.

American Compensation Association in 1996 gave the definition as such: "An effective performance management system aligns individual performance with the organization's mission, vision, and objectives.

2.2 Performance Management System Goals

A leading-edge organization seeks to create an efficient and effective performance management system to:

Translate agency vision into clear measurable outcomes that define success, and that are shared throughout the agency and with customers and stakeholders;

Provide a tool for assessing, managing, and improving the overall health and success of business systems;

Continue to shift from prescriptive, audit-and compliance-based oversight to an ongoing, forward-looking strategic partnership involving agency headquarters and field components;

Include measures of quality, cost, speed, customer service, and employee alignment, motivation, and skills to provide an in-depth, predictive performance management system; and Replace existing assessment models with a consistent approach to performance management.

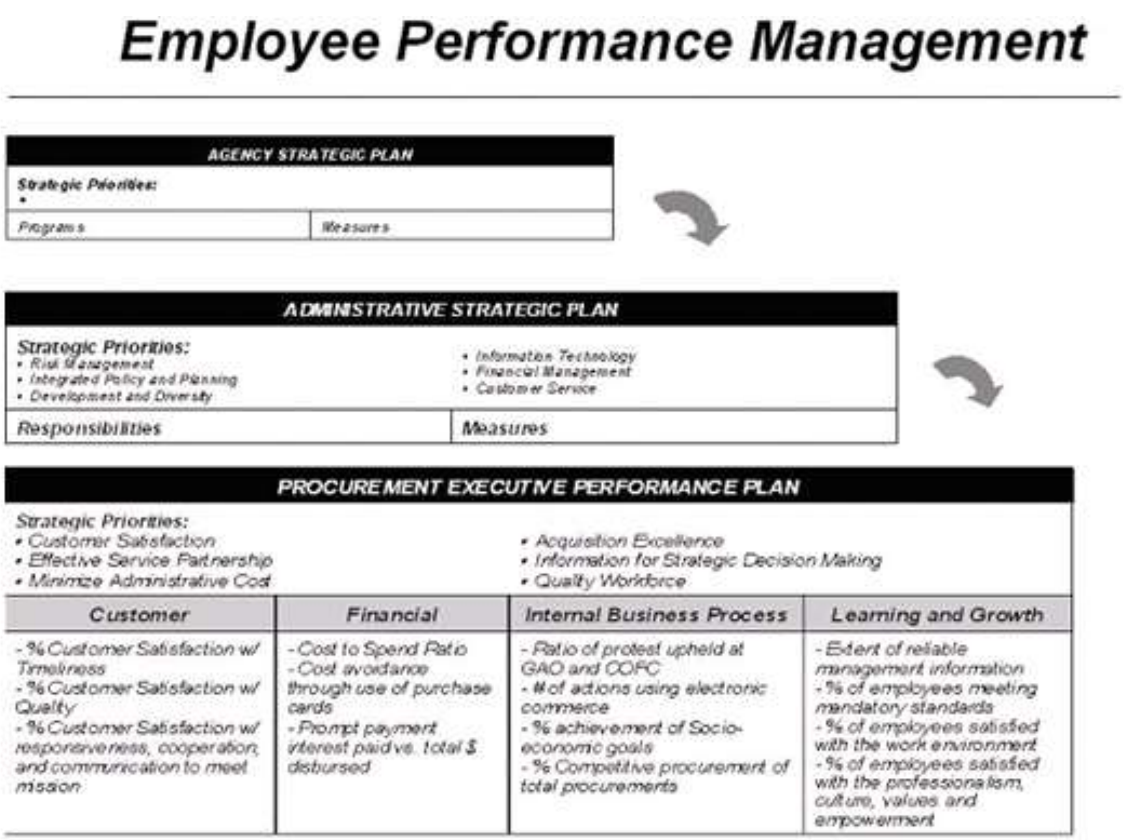


Figure 1: Employee Performance Measurement-BSC Model

2.3 Balancing the Act of Performance

Balance - a seven letter word that provides the essence of a healthy organization. Like a mobile that plays a favorite melody, balance is necessary for efficient and effective movement, for the achievement of its rich sound, and for assisting in reaching its fullest potential. In the same way, performance measurement systems must achieve a balance which supports progress against pre-determined objectives, without sub-optimization. According to the Webster's Third New International Dictionary, "Balance suggests a steadiness that results when all parts are properly adjusted to each other, when no one part or constituting force outweighs or is out of proportion to another." Balance is the essence of the BSC conceptual framework. Before moving on to the BSC methodology, let us first visit the origin of the BSC.

2.3.1 The Origin

The Balanced Scorecard was developed by Robert Kaplan, an accounting professor at Harvard University, and David Norton, a consultant from the Boston area. In 1990, Kaplan and Norton led a research study of a dozen companies with the purpose of exploring new methods of performance measurement. The impetus for the study was a growing belief that financial measures of performance were ineffective for the modern business enterprise. Representatives of the study companies, along with Kaplan and Norton, were convinced that a reliance on financial measures of performance was affecting their ability to create value. The group discussed a number of possible alternatives but settled on the idea of a scorecard, featuring performance measures capturing activities from throughout the organization—customer issues, internal business processes, employee activities, and of course shareholder concerns. Kaplan and Norton labeled the new tool the Balanced Scorecard and later summarized the concept in the first of three *Harvard Business Review* articles, "The Balanced Scorecard—Measures That Drive Performance."

2.3.2 The Driving Forces of Balanced Scorecard

The balanced scorecard resulted from the confluence of three streams of late 1980's management thinking:

Total Quality Management (TQM) practitioners were discovering that non-financial measures were much more useful in the day-to-day management of their organizations ("you get what you measure") and were struggling with determining the vital view metrics that they should use in steering their organization's limited resources. Accountants were losing both the eyes and ears of management to the new non-financial measures and were failing in their effort to regain their past prominence by reengineering traditional product cost systems (Activity Based Costing) in light of the compelling criticism by both internal and external advocates of the Theory of Constraints (TOC). IT professionals were desperately seeking non-transactional IT applications to expand their internal market from operations to management in the hope that that would forestall their eventual relegation to a part of those operations.

2.3.3 The First Scorecard

The first balanced scorecard was created in 1987 at Analog Devices, a mid-sized semiconductor company. Although it was "balanced" in the current sense, its inclusion of financial measures was for pragmatic not conceptual reasons. Three years later it was discovered by a collaborating accounting professor and IT consultant, who recognized that it also provided a solution to both of their professions' most pressing challenges.

Bob Kaplan had discovered its scorecard which was based upon quarterly performance indicators and tied to its five year development plan. The period beginning 1988-1991 was the deployment period for the BSC and later Kaplan recorded the development and balancing of Analog’s scorecard which also included the automation process and translation of the corporate vision into specific actions.

Over the next four years, a number of organizations adopted the Balanced Scorecard and achieved immediate results. Kaplan and Norton discovered these organizations were not only using the Scorecard to complement financial measures with the drivers of future performance, but they were also communicating their strategies through the measures they selected for their Balanced Scorecard. As the Scorecard gained prominence with organizations around the globe as a key tool in the implementation of strategy, Kaplan and Norton summarized the concept and the learning to that point in their 1996 book, *The Balanced Scorecar*d.

Since that time, the Balanced Scorecard has been adopted by nearly half of the Fortune 1000 organizations, and the momentum continues unabated. So widely accepted and effective has the Scorecard become that the *Harvard Business Review* recently hailed it as one of the 75 most influential ideas of the twentieth century.

Once considered the exclusive domain of the for-profit world, the Balanced Scorecard has been translated and effectively implemented in both the nonprofit and public sectors. Success stories are beginning to accumulate and studies suggest the Balanced Scorecard is of great benefit to both these organization types. In one public sector study funded by the Sloan Foundation, 70 percent of respondents agreed that their govern-mental entity was better off since implementing performance measures.

Calls for use of the Balanced Scorecard are ringing out from observers around the globe. In Canada, for example, the Society of Certified Management Accountants (CMA) has developed a new management accounting guideline entitled, “The Balanced Scorecard for a Board of Directors.” The document serves to address corporate governance and management issues that have arisen in the wake of the Enron collapse.

France now mandates what it calls “sustainability reporting” for all publicly traded companies. The government has outlined indicator*s*—in the areas of workplace, community, and environmen*t*—that companies must legally report on in annual reports.

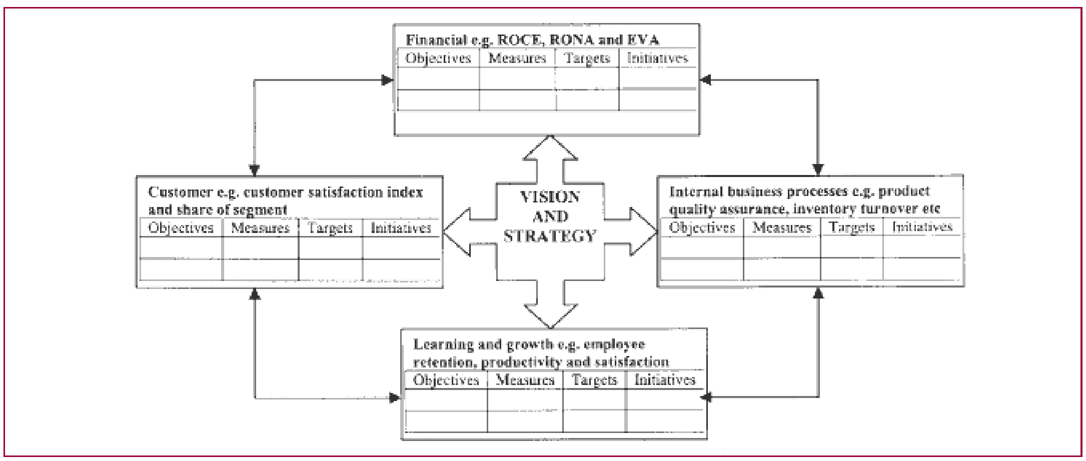
Here in the United States, the American Institute of Certified Public Accountants (AICPA) has noted its support of the Balanced Scorecard in annual reporting to satisfy enhanced reporting requirements. Harvard University professor Jay W. Lorsch very nicely sums up the value of the Balanced Scorecard in this capacity: *"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*."

Many organizations script inspiring visions and compelling strategies, but then are often unable to use those beautifully crafted words to align employee actions with the firm's strategic direction. In his book, *The Fifth Discipline*, Peter Senge describes this dilemma when he notes, *"Many leaders have personal visions that never get translated into shared visions that galvanize an organization."*

2.4 What is a Balanced Scorecard?

A Balanced Scorecard acts as a visual catalyst to align the organizational measurement system with its strategy and tactics. It does this by drawing together a family of measurements either from the perspectives of its various stakeholders (Common ones are customers, employees, stockholders, owners, suppliers, and communities), four-to-five areas for breakthrough work, or even using the six categories of the Baldrige national quality award criteria—financial performance; product/service quality; supplier performance; customer satisfaction; process and operational performance; and employee satisfaction. Regardless of the criteria used, the scorecard's ultimate purpose is a proactive, more precise design, translation, and communication of strategies (a series of cause-and-effect relationships) within the organization.

Figure 2: Kaplan and Norton balanced financial and non-financial factors



Source: GartnerG2, November 2001

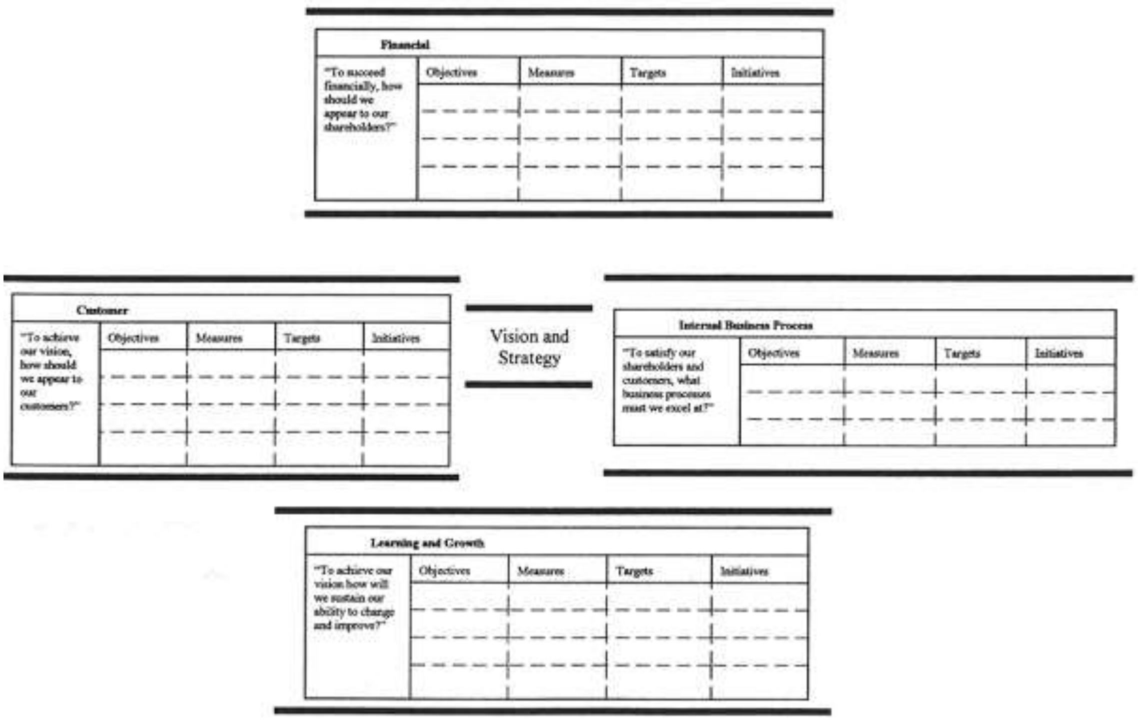
It is generally a group of 10 to 15 (but no more than 20!) measures that address three basic questions:

- How are we doing with respect to our core process?
- How are we doing with respect to our strategy?

- Who are the customer groups that we wish to “hear from” on a monthly basis and what measures could predict their future satisfaction with the organization?

While the Scorecard retains financial measures, it complements them with three other distinct perspectives:

Figure 3: The Overall Model



2.4.1 Customer, Internal Processes, Financial and Learning & Growth

2.4.1.1 Customer Perspective

When choosing measures for the Customer perspective of the Scorecard organizations must answer two critical questions: ‘Who are our target customers?’, and ‘what is our value proposition in serving them?’. Both of these questions present many challenges to organizations. Most organizations will state that they do in fact have a target customer audience, yet their actions reveal an “all things to all customers” strategy. Strategy guru, Michael Porter suggests this lack of focus will prevent an organization from differentiating itself from competitors.

Choosing an appropriate value proposition poses no less of a challenge to most organizations. Many will choose one of three “disciplines” articulated by Michael Treacy and Fred Wiersema in *The Discipline of Market Leader*s. They are:

Operational excellence. Organizations pursuing an operational excellence discipline focus on low price, convenience, and, often, “no frills.” Wal-Mart provides a great representation of an operationally excellent company.

Product leadership. Product leaders push the envelope of their firm’s products. Constantly innovating, they strive to offer simply the best product in the market. Nike is an example of a product leader in the field of athletic footwear.

Customer Intimacy. Doing whatever it takes to provide solutions for unique customer’s needs help define the customer intimate company. They do not look for one-time transactions, but instead focus on long-term relationship building through their deep knowledge of customer needs. In the retail industry Nordstrom epitomizes the customer-intimate organization.

As organizations have developed and experimented with value propositions, many have suggested it is difficult, if not impossible, to focus exclusively on just one. A more practical approach is to choose one discipline in which the organization possesses particularly strong attributes and maintains at least threshold standards of performance in the other disciplines.

McDonald’s, for example, is a truly operationally excellent organization, but that does not stop it from continually introducing new menu items.

2.4.1.2 Internal Process Perspective

In the Internal Process perspective of the Scorecard, we identify the key processes at which the organization must excel in order to continue adding value for customers. Each of the customer disciplines outlined previously will entail the efficient operation of specific internal processes in order to serve customers and fulfill value proposition. The task in this perspective is to identify those processes and develop the best possible measures with which to track progress.

To satisfy customers, one may have to identify entirely new internal processes rather than focusing efforts on the incremental improvement of existing activities. Service development and delivery, partnering with the community, and reporting are examples of items that may be represented in this perspective.

2.4.1.3 Learning and Growth Perspective

In order to achieve ambitious results for internal processes, customers, and financial stakeholders, where are these gains found? The measures in the Learning and Growth perspective of the Balanced Scorecard are really the enablers of the other three perspectives. In essence, they are the foundation upon which the Balanced Scorecard is built. Once one has identified measures and related initiatives in Customer and Internal Process perspectives, one can be certain of discovering some gaps between current organizational infrastructure of employee skills, information systems, and organizational climate (e.g., culture) and the level necessary to achieve the results you desire. The measures designed in this perspective helps close that gap and ensure sustainable performance for the future. Like the other perspectives of the Scorecard, we would expect a mix of core outcome (lag) measures and performance drivers (lead measures) to represent the Learning and Growth perspective. Employee skills, employee satisfaction, availability of information, and alignment could all have a place in this perspective. Many organizations have worked with struggle in the development of these measures. Perhaps the reason is that it is normally the last perspective to be developed, hence the teams are intellectually drained from their earlier efforts of developing new strategic measures; or they simply consider this perspective "soft stuff," best left to the human resources group. No matter how valid the rationale, this perspective cannot be overlooked in the development process. Remember, the measures developed in the Learning and Growth perspective are really the enablers of all other measures on the Scorecard.

2.4.1.4 Financial Perspective

Financial measures are important components of the Balanced Scorecard, in the for-profit, public, and nonprofit worlds. In the for-profit domain, the measures in this perspective tell us whether our strategy execution—which is detailed through measures chosen in the other perspectives—is leading to improved bottom-line results. In the nonprofit and public sectors, financial measures ensure we're achieving our results in an efficient manner that minimizes cost. We normally encounter classic lagging indicators in the Financial Perspective. Typical examples include: revenue, profitability, and budget variances.

2.4.2 The Overall Model

The implicit strategic measurement model structure consists of five parts:

Mission, Vision, and Values
What the organization is (products, services, customers/markets, overall strengths),
The future goal(s) of the organization,
What the organization stands for,
How do current strengths and weaknesses position this vision vis-à-vis the competition?

Key Success Factors and Business Fundamentals
What the organization needs to focus on to beat its competitors and achieve its vision.

Performance Metrics
A balanced scorecard: Past – Present – Future
Aligns entire organization from top to bottom

Goals / Objectives
The desired annual and long-term levels for each metric,
These goals are based on *research* and should *not* be arbitrary!

Strategies

Activities implemented to achieve the goals

2.4.2.1 First Step: Evaluating Current Measures

It is usually a good idea to use the purpose statement of the organization as a guide and then start by capturing already existing data to make more efficient use of it. For the available data, however, measures of quality, customer satisfaction, market share, and cycle times may not be as complete or well-defined as financial measures. Some of it may even be out-of-date, uni-dimensional, hard to get, hard to understand, inappropriately defined, and so on. Exhausting available data is always the first strategy of choice because, to quote Princeton statistics professor John Tukey, "The more you know what is wrong with a figure, the more useful it becomes."

Dr. David Norton says that 75% of the needed information exists internally, the other 25% present strategic opportunities. Are they important enough to organize a systematic way to obtain them? The biggest benefit usually comes from these "missing measures," e.g., "people skills," "customer satisfaction," and defining them measurably can be quite difficult. For example, take "customer satisfaction"—Does one mean "convenience," "low price," "knowledge"? An "index" combining all three (or even more) aspects?

It is hoped that any subsequent data design will be simple, flexible, focused, more efficient, better-defined, and an opportunity to capture some of the missing "25%."

2.4.2.2 Second Step: Selecting the Right Metrics

Questions to consider are—who is the user of information? What are the uses of the information? What critical questions must the user have answered? If the work environment involves professionals, be aware that intellectual work is very difficult to measure objectively, e.g., "ideas," "information," and "problems avoided." Brown suggests that four categories are virtually "universal"—Productivity; Cycle time; Safety index; Rework index.

Can current data supply a family of measures that serves both as an indicator of present performance and a predictor of future performance? What else is needed? It should also include the key business drivers or success factors that need to be focused on so as to differentiate one's organization from its competitors.

Taken as a whole, the set of measures should drive and predict the future direction of the system. Senior leadership's job becomes planning and managing improvement efforts to leverage the entire family of measures while understanding the inter-relationships and trade-offs among them that are fixed by the current system.

They should include both process and results measures. Results measures respond to the need of stakeholders to know how the system is doing and to predict how it is likely to do in the future. *These should not be separated from financial reporting.* Process measures are more readily used to fuel system improvements. Results cannot be directly managed, but the systems and processes that produce them can be.

2.4.2.3 Third Step: Establishing Appropriate Goals

Goals function as a “rudder” for steering the organization towards needed performance for profitability and survival. Arbitrary goals can actually be destructive. No further elaboration will be made here except to offer Brown’s observations on five common mistakes in setting goals:

- Goals that are really projects, activities, or strategies,
- Goals that are solely based on past performance,
- Numerically arbitrary “stretch” goals,
- Inconsistent short- and longer-term goals,
- Inconsistencies in goals at different levels of the organization.

2.4.2.4 Fourth Step: Reporting and Analyzing Performance Data

Three key words apply when reviewing data:
Level

- Goals
- Past performance
- Competitor’s performance
- Benchmark organizations

Trend

- Graphical presentation (No tables of numbers), preferably a Shewhart control chart (or “run chart”)
- Multiple points over time
- Improving? Getting worse? Flat?

Variation

- No straight “two point” comparisons
- When is a “variance” a *true* “variance”?
- When is “seasonality” *truly* seasonality?
- Awareness of natural variation fluctuation (“common cause”) and current “capability” of system versus desired performance
- Reducing inappropriate and unintended variation through statistically valid strategies

- *Every* employee needs access to *no more than* 20 indicators relating organizational goals *specifically* to his/her job in the above format.

All backup data that have heretofore been routinely published and reported should transition to a requested-as-needed-basis. If performance on any overall metric is good, one does not need to see any charts on the subsidiary measures.

We can describe the Balanced Scorecard as a carefully selected set of quantifiable measures derived from an organization's strategy. The measures selected for the Scorecard represent a tool for leaders to use in communicating to employees and external stakeholders the outcomes and performance drivers by which the organization will achieve its mission and strategic objectives.

A simple definition, however, cannot tell us everything about the Balanced Scorecard. In best-practices research, this tool can be witnessed as three elements: measurement system, strategic management system, and communication tool.

2.4.3 The Balanced Scorecard as a Measurement System

Earlier a discussion was carried on about the limiting features of financial performance measures. To review: They provide an excellent review of what has happened in the past, but they are inadequate in addressing the real value-creating mechanisms in today's organization—the intangible assets such as knowledge and networks of relationships. We might call financial measures *lag indicators*. They are outcomes of actions previously taken. The Balanced Scorecard complements these lag indicators with the drivers of future economic performance, or *lead indicators*. But from where are these performance measures (both lag and lead) derived? The answer is: strategy.

All the measures on the Balanced Scorecard serve as translations of the organization's strategy.

2.4.4 The Balanced Scorecard as a Strategic Management System

For many organizations, the Balanced Scorecard has evolved from a measurement tool to what Kaplan and Norton have described as a "Strategic Management System."

While the original intent of the Scorecard system was to balance historical financial numbers with the drivers of future value for the firm, as more and more organizations experimented with the concept they found it to be a critical tool in aligning short-term actions with their strategy. Used in this way the Scorecard alleviates many of the issues of effective strategy implementation discussed earlier in the chapter. Let us revisit those barriers and examine how the Balanced Scorecard may in fact remove them.

2.4.4.1 Overcoming the Vision Barrier through the Translation of Strategy

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, for example: “superior service” or “targeted customers.” Through the process of developing the Scorecard, an executive group might determine that “superior service” means responding to inquiries within 24 hours. Thereafter, all employees can focus their energies and day-to-day activities on the crystal-clear goal of response times, rather than wondering about, and debating the definition of, “superior service.” Using the Balanced Scorecard as a framework for translating the strategy, these organizations create a new language of measurement that serves to guide all employees’ actions toward the achievement of the stated direction.

2.4.4.2 Cascading the Scorecard to Overcome the People Barrier

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. All organizational levels distinguish their value-creating activities by developing Scorecards that link to the highest-level organizational objectives.

By cascading, you create a “line of sight” from the employee on the front line back to the director’s office. Some organizations have taken cascading all the way down to the individual level with employees developing personal Balanced Scorecards that define the contribution they will make to their team in helping it achieve overall objectives.

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.

2.4.4.3 Strategic Resource Allocation to Overcome the Resource Barrier

Developing Balanced Scorecard provides an excellent opportunity to tie resource allocation and strategy together. Creation of a Balanced Scorecard makes one think in terms of objectives, measures, and targets for each of four perspectives, but just as critically one must consider the initiatives or action plans that should be put in place to meet your Scorecard targets. If one creates long-term stretch targets for the defined measures, one can then consider the incremental steps along the path to their achievement. The human and financial resources necessary to achieve Scorecard targets should form the basis for the development of the annual budgeting process.

No longer will departments submit budget requests that simply take last year's amount and add an arbitrary 5 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 (unless they have unlimited means) to make tough choices and trade-offs regarding which initiatives to fund and which to defer.

Adapted from material developed by Robert S. Kaplan and David P. Norton.

Figure 4.

Barriers to Strategy Execution

The building of a Balanced Scorecard also affords a great opportunity to critically examine the current myriad initiatives taking place in your organization. Many executives have pet projects and agendas they hope to advance, often with little thought of the strategic significance of such endeavors. Initiatives at every level of the organization and from every area must share one common trait: a linkage to the organization's overall strategic goals. The Balanced Scorecard provides the lens for making this examination. Once you have developed your Scorecard, you should review all the initiatives currently under way in your organization and determine which are truly critical to the fulfillment of your strategy and which are merely consuming valuable and scarce resources. Obviously, the resource savings are beneficial, but more importantly you signal to everyone in the organization the critical factors for success and the steps you are taking to achieve them.

2.4.4.4 Strategic Learning to Overcome the Management Barrier

In rapidly changing environments, we all need more than an analysis of actual versus budget variances to make strategic decisions. Unfortunately, many management teams spend their precious time together discussing variances and looking for ways to correct these "defects." The Balanced Scorecard provides the necessary elements to move away from this paradigm to a new model in which Scorecard results become a starting point for reviewing, questioning, and learning about your strategy. The Balanced Scorecard translates vision and strategy into a coherent set of measures in four balanced perspectives. Immediately, one has more information to consider than merely financial data. The results of Scorecard performance measures, when viewed as a coherent whole, represent the articulation of strategy to that point and form the basis for questioning whether results are leading any closer to the achievement of that strategy.

Any strategy we pursue represents a hypothesis, or the best guess, of how to achieve success. To prove meaningful, the measures on Scorecard must link together to tell the story of, or describe, that strategy. If, for example, an investment in employee training will lead to improved quality, one needs to test that hypothesis through the measures appearing on the Scorecard. If, say, employee training increases to meet target, but quality has actually deteriorated, then perhaps that is not a valid assumption; instead, maybe one should be focusing on, for example, improving employee access to key information. It may take considerable time to gather sufficient data to test such correlations, but simply having managers begin to question the assumptions underlying the strategy is a major improvement over making decisions based purely on financial numbers.

2.4.5 The Balanced Scorecard as a Communication Tool

The Scorecard has the power of translating the strategy and telling its story to all employees—that can be referred to as *communicatin*g.

A well-constructed Scorecard eloquently describes strategy and makes the vague and imprecise world of visions and strategies come alive through the clear and objective performance measures that have been chosen. Much has been written in recent years about knowledge management strategies within organizations and many schools of thought on the topic exist. One common trait of all such systems may be the desire to make the implicit knowledge held within the minds of workforce explicit and open for discussion and learning. We live in the era of the knowledge worker, the employee who—unlike his or her organizational predecessors who relied on the physical assets of the company—now owns the means of production: knowledge. There may be no greater challenge facing organizations today than codifying and acting on that knowledge. In fact, Peter Drucker, widely considered the father of modern management, has called managing knowledge worker productivity one of the great management challenges of the twenty-first century.

Sharing Scorecard results throughout the organization gives employees the opportunity to discuss the assumptions underlying the strategy, learn from any unexpected results, and dialog on future modifications as necessary. Simply understanding the firm’s strategies can unlock many hidden organizational capacities, as employees, perhaps for the first time, know where the organization is headed and how they can contribute during the journey. An employee survey conducted before and after the development of the Balanced Scorecard revealed that prior to implementation less than 50 percent said they were aware of, and understood, the strategy. One year following a full Balanced Scorecard implementation, that number had risen to 87 percent.

2.5 The Balanced Scorecard Methodology

Leading organizations agree on the need for a structured methodology for using performance measurement information to help set agreed-upon performance goals, allocate and prioritize resources, inform managers to either confirm or change current policy or program direction to meet those goals, and report on the success in meeting those goals.

Make a commitment at all levels — especially at the top level. Research clearly shows that strong leadership is paramount in creating a positive organizational climate for nurturing performance improvements. Senior management leadership is vital throughout the performance measurement and improvement process. By senior management, we mean the organizational level that can realistically foster cross-functional, mission-oriented performance improvements — from senior operating or functional managers in the various acquisition and program offices throughout a federal agency, to the Secretary or Administrator of the agency. Senior management should have frequent formal and informal meetings with employees and managers to show support for improvement efforts and implementation initiatives. Also, they should frequently review progress and the results of improvement efforts.

Develop Organizational Goals. Goals need to be specified and publicized to provide focus and direction to the organization. Vision Statements and Strategic/Tactical Plans (including systematic ways to evaluate performance) are important for methodically planning acquisition performance improvements. To be meaningful, they must include measurable objectives along with realistic timetables for their achievement. For acquisition measures, it may be appropriate to use or build upon the performance principles and standards already set forth to develop goals, whether they are stand-alone goals or a subset of larger, overarching organizational goals. Providing guidance on the best way to link acquisition goals to annual, mission-oriented performance plans is also essential. This will demonstrate that the agency is serious about acquisition improvement initiatives.

Offer Training in Improvement Techniques. Training should be provided to appropriate personnel to help them properly make process improvements. The scope of training should include the operation of integrated project improvement teams, the role employees play in exercising sound business judgment, and the specific techniques for making process improvements (e.g., flowcharts, benchmarking, cause-and-effect diagrams, etc.). Comprehensive training is needed to expand employees' technical capabilities and to achieve "buy-in" for undertaking meaningful improvement efforts. Use of facilitators can provide "just-in-time" training to members of process action teams.

Establish a reward and recognition system to foster performance improvements. Agencies should tie any reward and recognition system to performance improvement as measured by the acquisition BSC. Thus, employee incentives will tend to reinforce the organizational objectives being measured by the acquisition BSC. While handing out rewards to individual employees has its place, group reward and recognition systems are also needed to encourage integrated, cross-functional teams of employees, customers and managers to undertake acquisition performance improvement.

Break Down Organizational Barriers. To overcome unfounded fears about the perceived adverse effects of performance measurement and improvement, we believe that the official uses of the acquisition BSC need to be spelled out to employees and managers.

What follows are some additional approaches that will help in successfully implementing a performance measurement and improvement system:

Demonstrate a clear need for improvement. If you cannot demonstrate a genuine need to improve the organization, failure is a virtual certainty.

Make realistic initial attempts at implementation. If your initial attempts are too aggressive, the resulting lack of organizational "buy-in" will limit your chance of success. Likewise, if implementation is too slow, you may not achieve the necessary organizational momentum to bring the BSC to fruition.

Integrate the Scorecard into the organization. Incorporating performance measurement and improvement into your existing management structure, rather than treating it as a separate program, will greatly increase the BSCs long-term viability.

Change the corporate culture. To achieve long-term success, it is imperative that the organizational culture evolve to the point where it cultivates performance improvement as a continuous effort. Viewing performance improvement as a one-time event is a recipe for failure.

Institutionalize the process. Creating, leveraging, sharing, enhancing, managing and documenting BSC knowledge will provide critical "corporate continuity" in this area. A knowledge repository will help to minimize the loss of institutional performance management knowledge that may result from retirements, transfers, promotions, etc.

2.5.1.1 The Importance of Cause & Effect

The best strategy ever conceived is simply a hypothesis developed by the authors. It represents their best guess as to an appropriate course of action given their knowledge of information concerning the environment, competencies, competitive positions, and so on. What is needed is a method to document and test the assumptions inherent in the strategy. The Balanced Scorecard allows us to do just that. A well-designed Balanced Scorecard should describe the strategy through the objectives and measures that have been chosen. These measures should link together in a chain of cause-and-effect relationships from the performance drivers in the Learning and Growth perspective all the way through to improved financial performance as reflected in the Financial perspective. This is to document strategy through measurement, making the relationships between the measures explicit so they can be monitored, managed, and validated.

An example of cause and effect: Let us assume that an organization wants to pursue a growth strategy. Therefore, the company would measure revenue growth in the Financial perspective of the Scorecard. We hypothesize those loyal customers providing repeat business will result in greater revenues so we measure customer loyalty in the Customer perspective. How will we achieve superior levels of customer loyalty? Now we must ask ourselves what internal processes the organization must excel at in order to drive customer loyalty and ultimately increase revenue. We believe customer loyalty is driven by the ability to continuously innovate and bring new products to the market, and therefore we decide to measure new product development cycle times in the Internal Process perspective. Finally, we have to determine how we will improve cycle times. Investing in employee training on new development initiatives may eventually lower development cycle time and is then measured under the Learning and Growth perspective of the Balanced Scorecard. This linkage of measures throughout the Balanced Scorecard is constructed with a series of "if-then" statements; *if* we increase, *then* cycle times will lower. *If* cycle times lower, *then* loyalty will increase. *If* loyalty increases, *then* revenue will increase. When considering the linkage between measures, we should also attempt to document the timing and extent of the correlations. For example, do we expect customer loyalty to double in the first year as a result of our focus on lowering new product development cycle times? Explicitly stating the assumption in our measure architecture makes the Balanced Scorecard a formidable tool for strategic learning.

Creating the cause-and-effect linkages between performance measures can prove to be the most challenging aspect of a Balanced Scorecard implementation. However, as with most endeavors the ultimate reward is worth the hard work since you will now have more than an ad-hoc collection of financial and non-financial measures. Instead, we will have developed a system that articulates the strategy, serves to communicate that strategy to all employees, and allows for ongoing strategic learning as we test and validate this model.

2.6 BALANCE IN THE BALANCED SCORECARD

As we develop the Balanced Scorecard in our organization, we may encounter some resistance to the term itself. Some may feel the Balanced Scorecard represents the latest management fad sweeping executive suites; hence the mere mention of such a buzzword would preclude employees from accepting the tool regardless of its efficacy. This may represent a legitimate concern, depending on the fate of previous change initiatives within our organization.

• *Balance between financial and non-financial indicators of success.* The Balanced Scorecard 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.

• *Balance between internal and external constituents of the organization*. Financial stakeholders (donors, 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.

• *Balance between lag and lead indicators of performance.* Lag indicators generally represent past performance. Typical 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 processes 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. A Scorecard should include a mix of lead and lag indicators. Lag indicators without leading measures do not communicate how we are going to achieve our 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 achievement of mission.

2.6.1 Determinants of Scorecard Ratings-The Performance Indicators

2.6.1.1 Phase One: Building A Balanced Scorecard

Step One is an assessment of the organization's foundations, its core beliefs, market opportunities, competition, financial position, short- and long-term goals, and an understanding of what satisfies customers. Many organizations have completed this basic step, typically as self-assessment at an off-site workshop for managers and executives. Usually, an organization's strengths, weaknesses, opportunities, and threats are developed, discussed, and documented. There is no need to repeat this "environmental scan" of an organization if the information is available and current, say within the past six months. It is important, however, to ensure that the assumptions that underlie the basis for the organization's existence and its business strategies are still valid and sound.

Other important aspects of the self-assessment step are to choose a champion and the core Balanced Scorecard team, set a schedule for the development steps, secure resource commitments necessary to develop and sustain the scorecard system, and develop a roll-out communications plan to build buy-in and support for the changes that will follow. Communications planning includes internal and external public information activities that will be used to spread the word about the Balanced Scorecard initiative and what it means for managers and all employees. *Step Two* is the development of overall Business Strategy.

Figure 5: The BSC Process

In larger organizations, several overarching strategic themes are developed that contain specific business strategies.

Examples of common strategic themes include: Build the Business, Improve Operational Efficiency, and Develop New Products. In addition to describing what the approach is, business strategy, by elimination, identifies what approaches have not been selected. Strategy is a hypothesis of what we think will work and be successful. The remaining steps in the scorecard building phase provide the basis for testing whether our strategies are working, how efficiently they are being executed, and how effective they are in moving the organization forward toward its goals.

Step Three is a decomposition of business strategy into smaller components, called Objectives.

Objectives are the basic building blocks of strategy – the components or activities that make up complete business strategies. Southwest Airlines developed a business strategy to compete successfully in the crowded commercial airline market. The business strategy of Southwest includes the following components: innovation and speed in the redefinition of a marketplace; short-haul, high frequency, point-to-point routing (a significant departure from traditional hub-and-spoke routing); a high proportion of leased aircrafts; a very simple fare structure; and ticketless travel.

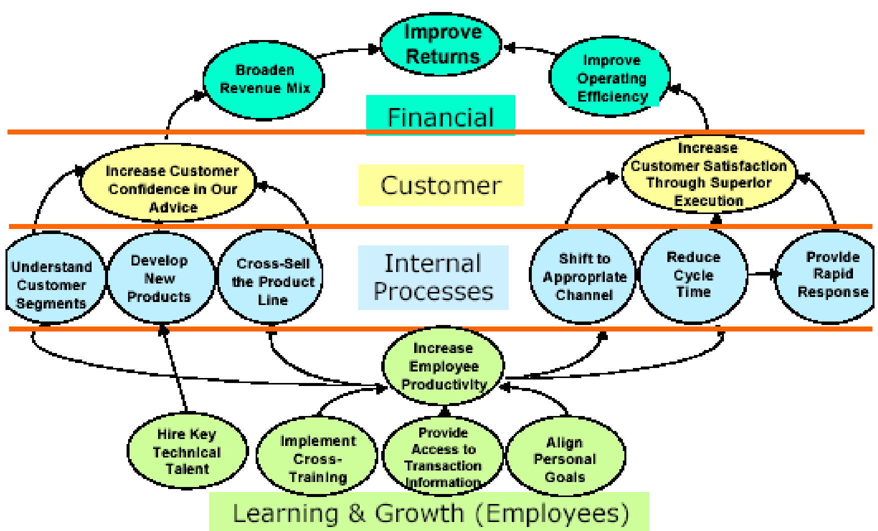
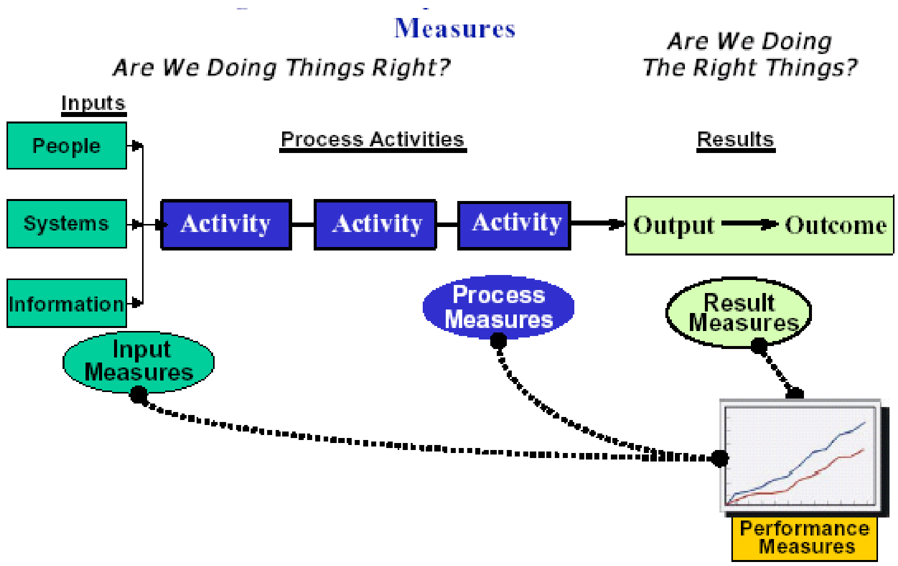


Figure 6: The BSC

Linkage

In *Step Four*, a Strategic Map of the organization's overall business strategy is created. Using cause-effect linkages (if-then logic connections), the components (objectives) of strategy are connected and placed in appropriate scorecard perspective categories. The relationship among strategy components is used to identify the key performance drivers of each strategy that, taken together, chart the path to successful end outcomes as seen through the eyes of customers and business owners. The above figure, a strategic map for a transactions-based company, shows how an objective (effect) is dependent on another objective (cause), and how, taken together, they form a strategic thread from activities to desired end outcomes.

In *Step Five*, Performance Measures are developed to track both strategic and operational progress. To develop meaningful performance measures, one has to understand the desired outcomes and the processes that are used to produce outcomes. Desired outcomes are measured from the perspective of internal and external customers, and processes are measured from the perspective of the process owners and the activities needed to meet customer requirements. Relationships among the results we want to achieve and the processes needed to get the results must be fully understood before we can assign meaningful performance measures.



We use the strategic map developed in Step Four, and specifically the objectives, to develop meaningful performance measures for each objective. Thus, we look for the few measures (key performance drivers) that are critical to overall success.

There has to be a continuous learning framework for measuring and managing both strategic and operational performance. We put our Performance Measurement stethoscope wherever it is required to get meaningful performance information, whether we want to measure if we are doing the right things, or measure if we are doing things right. Developing meaningful performance measures (metrics) and the expected levels of performance (targets) is hard work if done correctly, and the development process is fraught with challenges. One challenge is the tendency to hurry and identify many measures, hoping that a few good ones are in the group and will “stick”. The problem with this approach is that the value of information generated is limited, and the burden of data collection and reporting can quickly become overwhelming.

One of the worst mistakes that organizations make is that they take measures that already exist, categorize them into four scorecard perspectives, and then announce that the corporate scorecard had been built. These “metric” scorecards are of little value to an organization, as they bear little relationship to strategy, desired results, and the processes needed to produce desired results.

Another challenge is a tendency to rush to judgment – not thinking deeply about what measures are important and why. This happens because, usually in response to pressure from a supervisor, we get in a hurry to develop a final set of performance measures. In most strategic plans and scorecard systems the development of performance measures is not taken very seriously, putting into question the whole strategic and operational effort.

Three different models are used to get to the measures that matter most. The goal is to identify the critical business drivers, measure them, and use the information to improve decision-making. ("If it is important to executing good strategy well, and to operating good processes efficiently, measure it –if it isn't, don't".) The three models are:

The Logic Model – This model allows us to explore the relationship among four types of performance measures: inputs (what we use to produce value), processes (how we transform inputs into products and services), outputs (what we produce), and outcomes (what we accomplish). This model reinforces the logic of the strategic map by showing the relationship among the activities that produce good outcomes.

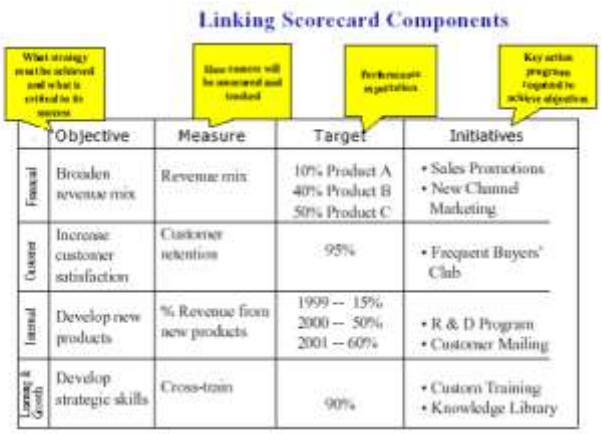
Asking a series of "Why" questions will eventually get one to outcomes. The steps required to secure an end outcome usually include several intermediate outcomes. The process works from outcomes to processes also – just substitute "How" for "Why" in the model above. Start with the outcome and work backwards to the processes that produce the outcome. *Process Flow* – Flow-charting has been around for a long time, and has been a favorite tool of systems engineers and process designers, among others. We apply the technique to build a better scorecard performance system, as flow charting processes helps identify the activities (and measures) that matter most to produce good outcomes. An additional benefit of the technique is that it often identifies places where improvements in efficiency in workflow are needed and possible. And we have found that after applying the model, we usually end up identifying several new initiatives that can be used to test our strategic hypotheses.

Causal Analysis – Causal analysis identifies the causes and effects of good performance. We start with the result (the effect) we want to achieve and then identify all the causes that contribute to the desired result. The causal model is most useful for identifying input and process measures that are leading indicators of future results.

It takes more work to develop a few good measures than it does to develop many poor measures.

In *Step Six*, new Initiatives are identified that need to be funded and implemented to ensure that strategies are successful. Initiatives developed at the end of the scorecard building process are more strategic than if they are developed in the abstract. As in the previous step, one has to be careful to avoid a rush to judgment – initiatives are means, not ends. Customer requirements drive the way an organization responds with products and services to market opportunities; vision, mission, and values shape the culture of the organization, and lead to a set of strategic goals that outline expected performance; business strategies give us the approach chosen to meet customer needs and attain the desired goals; strategies are made up of building blocks that can be mapped and measured with performance measures; targets give us the expected levels of performance that are desired; and new initiatives provide new information to successfully meet challenges and test strategy assumptions. Resource identification and budget setting complete the process of adding the new initiatives to the current operations to get a total proposed budget for the reporting period.

Figure 7: Linking the Components



	Objective	Measure	Target	Initiatives
Financial	Broaden revenue mix	Revenue mix	10% Product A 40% Product B 50% Product C	• Sales Promotions • New Channel Marketing
Customer	Increase customer satisfaction	Customer retention	95%	• Frequent Buyers' Club
Internal	Develop new products	% Revenue from new products	1999 -- 15% 2000 -- 50% 2001 -- 60%	• R & D Program • Customer Mailing
Learning & Growth	Develop strategic skills	Cross-train	90%	• Custom Training • Knowledge Library

Figure 8: The BSC Logic

The presentation of final scorecard results takes a number of different unique forms to support each organization's unique communications and management needs. Most organizations want to see different scorecard views, including: an end outcomes view, a performance measures (metrics) view, a new initiatives view, and a strategic map. The above two figures show different representations. An organization's vision and mission can be decomposed into strategic components that are actionable, specific and measurable.

2.6.2 Development of a BSC-The Planning Phase

Once the BSC has been designed, comes the part to implement it throughout the entire organization. This requires careful planning and coordination with all parts of the organization.

The main points to remember while implementing the BSC are:

- How to organize and kick off the process
- How to coordinate and gain consensus
- How to identify the benefits and difficulties associated with the Balanced Scorecard
- An understanding of project deliverables

Also, knowledge about the factors that influence implementation of the Balanced Scorecard, such as:

- Time required to develop Balanced Scorecard
- Availability of data and resources for building the Balanced Scorecard
- Degree of support from upper level management

The deployment phase will involve reviewing and aligning the first scorecard with other parts of the business (divisions, operating units, departments, etc.). This is followed by the issue of integrating the Corporate or Business Unit Scorecard into lower level scorecards. As one moves the scorecard forward, a more formal collection and reporting system should emerge for the Balanced Scorecard. Once more and more scorecards working is done, an exploration of the possibility of linking compensation to the measurements within the Balanced Scorecard begins.

Since strategizing takes place at the upper level of the organization, one place to start building the Balanced Scorecard is at the corporate level. Scorecard can be built at the upper layer of the organization, corporate; and worked way down to the second layer, operating; then way down to shared service departments; next way down to the lowest levels such as department, teams, and individuals. By following this process, alignment can be ensured.

However, most organizations elect to build their first scorecard at the strategic business unit level (such as operating units or divisions within the business). The reason is simple. They want to build a balanced scorecard that covers the entire value chain; i.e. customers, production, sales, innovation, and all elements that go into making a "complete" scorecard. Also, by letting other business units start the process, one may get stronger "buy in" to the Balanced Scorecard. For example, if executive management pushes the scorecard down to divisions, the divisions may see the scorecard as just another phony management program. By letting each division review the scorecard first and report back to executive management, the organization is better positioned for full-scale deployment of the Balanced Scorecard.

Here is a look at each of the building blocks of a successful balanced scorecard project. Specifically, exploring the following developing objectives for the BSC project, determining where to begin the efforts, the importance of executive sponsorship and how to secure it, building an effective to carry out the work ahead, constructing a development plan for the scorecard, and finally strategies for communicating the BSC project.

Before beginning the work of building a BSC, groundwork for the project must be laid. To summarize the planning phase, includes the following steps:

Step 1-Develop objectives for the BSC
Step 2-Detrmine the appropriate organizational unit.
Step 3-Gain executive sponsorship
Step 4-Build the BSC team

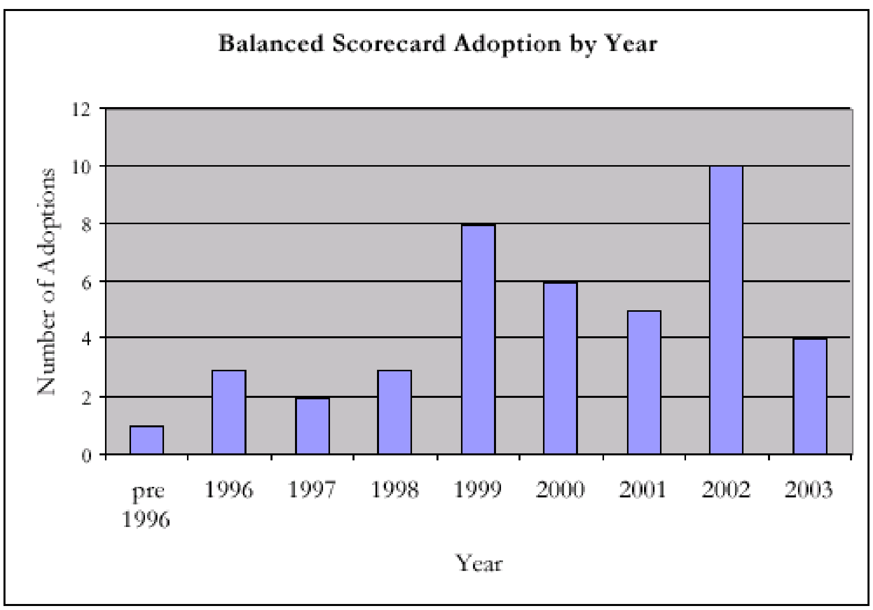
Step 5-Forumulate the project plan
Step 6-Develop a communication plan for the BSC project

If there is a full-time Balanced Scorecard champion leading the events outlined, one should be able to accomplish them within four to six weeks. The communication plan is very imperative and as taken in the Employee Learning and Growth perspective, is considered the enabler of the other three perspectives. The planning phase of the project is similar in that it enables the development work to follow by clearly articulating what is planned to be achieved, with whom, why-and how.

2.6.2.1 Cross Functional Team Approach

Deploying a balanced scorecard is more about strategic alignment, communication, and change management. Since balanced scorecards cut across the entire organization, they are usually developed by cross-functional teams. The cross functional team consists of middle level management since they can serve as the bridge between the executive level where strategic thinking takes place and the lower levels where the strategy gets implemented.

Obviously, we need executive management to sponsor the Balanced Scorecard and support the cross-functional team. And at the same time, we need feedback from lower levels of the organization, especially on the specifics of the scorecard. Managing teams is a big part of any balanced scorecard project since it touches all levels of the organization.



2.6.3 Deployment of Balanced Scorecard

2.6.3.1 Implementation Phases

Several different procedures describing the building process of a Balanced Scorecard have been presented. The procedure described below is just one of them.

Before the organization is ready to implement a balanced scorecard a consensus of the organizations vision and strategy has to be reached.

The actual implementation of a Balanced Scorecard can be divided into five phases:

- Model synthesis
- Technical implementation
- Organizational integration
- Technical integration
- Operation

Many of the phases can be performed parallel. This will shorten the total project schedule significantly.

2.6.3.2 Model Synthesis

During the model synthesis phase the organization seeks consensus about their vision and strategy and derive the needed measures. The model synthesis phase consists of two major tasks:

- Strategy synthesis (structure synthesis)
- Measure synthesis

2.6.3.3 Strategy Synthesis

The objective of the strategy synthesis phase is to form and commit the management to a consensus view about the organizations vision and strategies. It is not unheard of that there exist several different views of vision and the strategic principles within an organization. A good way of finding consensus is to conduct interviews with the management team.

2.6.3.4 Measure Synthesis

During the measure synthesis phase the strategy of the organization is quantified into measures or Key Performance Indicators (KPI's). The measures can be derived from the strategy using Critical Success factors (CSF's) or alternatively using Strategy maps. The CSF approach is more straight forward, but lacks the ability to describe the logical cause and effect relationships between the measures in the different perspectives.

The key properties of each of the measures in a Balanced Scorecard are also defined. Attributes needed to be defined are; measure name, unit, responsible measure owner, time-scale, target and alarm levels.

2.6.4 Technical Implementation

The Visions, Strategies, Critical Success Factors, Measures etc. are entered into the system interactively as they are processed e.g. during a Workshop.
The technical implementation includes the following steps:

- Installation of the software,
- Basic training for the persons building scorecards
- Building of the scorecards (KPI's, ...)
- Setting target and alarm levels
- Setting calculation formulas to consolidate the data

Defining graphical properties for graphs, if needed following additional steps can be taken:

- Importing historical measurement data from text file / excel
- Creating Reports with integrated Crystal Reports tools.

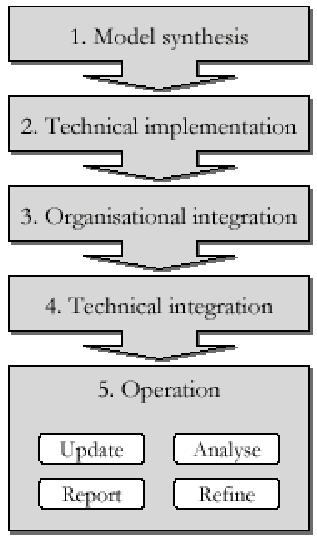
2.6.5 Organizational Integration

The balanced scorecard system should not be set up running as separate process in the organization. The BSC is a management system and should be tightly integrated to the processes of the organization and communicated to all the members of the organization. The organizational integration phase includes the following tasks:

Definition of the persons who are responsible for measure data and their empowerment.
Explanation of the objectives of Balanced Scorecard implementation to the employees.
Re-engineering the management and strategy process
Re-engineering the reporting process.

The BSC system should be used in management processes like "monthly review", "quarterly business review" etc. Action plans and Comments are added as part of the management processes. Usually salary bonuses are based on some measures included in the BSC system.

Figure 9: THE BSC Workflow



2.6.6 Technical Integration

An effective way to reduce the effort needed to collect measure data is to integrate the Balanced Scorecard system to operational IT systems, databases and/or data warehouses. Typically the data for 30%-60% of the measures in a Balanced Scorecard is collected by 1-3 different operational systems such as financial reporting systems, Enterprise Resource Planning (ERP) systems or Customer Relationship Management (CRM) systems. The rest usually consists of intangible measures that need to be collected separately e.g. inputted manually.

The scope of the technical integration varies enormously, number of integrated measures and number of outside systems used being the most important drivers.
The technical integration steps are the following:

- Identification of the imported measures and the source systems
- Analysis of the database structure and exporting capabilities of the operative systems
- Defining the procedure to get measure data from data sources including data identification, modification and scheduling.
- Implementation of the link between BSC and the operative systems.

Technical integration can be performed parallel with organizational integration and often partially overlaps the operation phase. Effort and calendar time needed for this phase are highly dependent on the number and the complexity of the source systems.

2.6.7 Operation of the BSC System

Defining and building a Balanced Scorecard is a very useful learning experience in itself. The organization receives deeper understanding of what drives its business and the cause and effect relationships between the drivers. Still the real benefits from the Balanced Scorecard are realized when the Balanced Scorecard is a part of the day-to-day operations.

During the organizational integration phase the Balanced Scorecard is integrated to the normal management and reporting processes of the organization. Within these processes following tasks are performed regularly.

- Update measure values
- Analyze the Balanced Scorecard results
- Report the Balanced Scorecard Results
- Refine the Balanced Scorecard model

The Balanced Scorecard should also become a standard tool used by the management team in their strategy work.

2.7 Evolution

The balanced scorecard has been adopted by various organizations globally in a customized manner to satisfy the needs of performance measurement and strategy deployment. Also, over the course of an organizations life cycle, the scorecard may go through a number of different phases. The HR scorecard is one of the most remarkable evolutions of the BSC method. There has been extensive research and development in the public sector as well. US Federal Government has implemented the scorecard in various agencies. Other than that, organizations have also developed HSE scorecard (Healthy, Safety and environment), and IT scorecards. For instance, during the early stages of a company's life, the scorecard may focus more on the people, learning and growth perspective as the company seeks out innovative new products to develop. Then later on, as the company matures, the emphasis in the scorecard may shift to product quality and customer satisfaction as those strategies take on more importance for the company. Where a company is in their life cycle determines what parts of the Scorecard they'll focus on. For example, in 1999 The Vanguard Group, the world's second largest mutual fund company, included some performance metrics in its scorecard to support its Year 2000 initiative. Vanguard removed those measures from its scorecard at the end of last year.

2.8 Types of Balanced Scorecard

The following discussion will encompass the types as well as evolution of the BSC; however, first the types will be covered followed by the latest research.

2.8.1 IT Scorecard

As the pressure and the demand on companies increase it is becoming more and more important to continuously analyze and review business strategies and IT strategies to stay competitive. A critical factor for remaining competitive is that the IT strategy and computer systems of the organization support the business strategy. IT scorecard is a result of this growing importance of alignment of strategy. This relationship is best demonstrated by use of a strategy map which provides a visual representation of strategy. The figure shows a strategy map for an IT organization seeking strategic alignment to the corporate strategy.

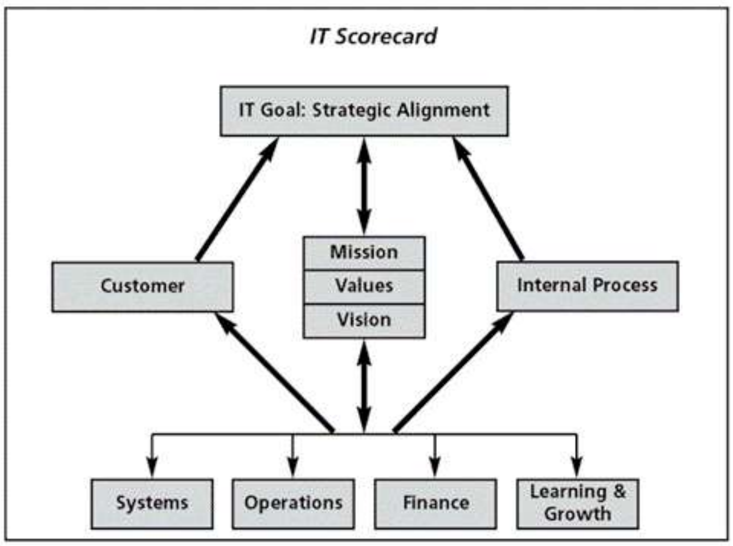


Figure 10: IT Score Card

Having thought through the questions and mapped the strategy, the IT Balanced Scorecard can then be developed.

2.8.1.1 Bridging the Gap with an IT Balanced Scorecard

Like any tool, an IT Balanced Scorecard can be misused. If it is created as a document and merely sent up the line, it is no better than any IT report and will likely be viewed in much the same context. Left to their own devices, business executives are guaranteed to find unintended meaning in the measurements. Without the guidance of the IT leadership, the scorecard could become a weapon.

It is important to remember that the scorecard is a tool for education about and the communication of strategy. To that end, the scorecard is intended to be presented, not submitted. This can be done most efficiently by presenting the scorecard to the entire executive team at the same time. Most importantly, the discussions reinforce the strategy to everyone present.

2.8.2 HR Scorecard

An HR Scorecard is a mechanism for describing and measuring how people and people management systems create value in organizations. Designing an HR Scorecard is not so much a thing as it is a process.

It is based on a strategy map - which is a visual depiction of "what causes what" in an organization, beginning with people and ending with shareholder or other stakeholder outcomes. For example, imagine a firm in the pharmaceutical industry. Their strategy is to grow revenues; revenues are driven by developing innovative drugs and marshalling them through the regulatory process; and developing innovative drugs depends upon a stable, high talent R&D function. The strategy map simply shows us the cause and effect links that show how, in this case, a pharmaceutical firm can grow revenue by creating a high talent R&D function.

The strategy map helps to identify the key deliverables for HR - that is, those things that HR does that really help the firm reach its objectives. In this case, how HR manages the staffing of the R&D function has a direct cause and effect relationship to growing revenue. The measures in the HR Scorecard are linked directly to those deliverables identified in the strategy map.

More generally, typically the metrics are categorized as such:
HR Manager Competencies – Do the managers associated with the HR function have the competencies and capabilities that they need to design an appropriate HRM system? Generally, 360-degree performance appraisal data is used to represent HR competence in each key competency area. For the pharmaceutical example, competencies necessary for excellent recruiting would be used.

The High Performance Work System – those key HR policies and practices that must be in place and implemented well to achieve the firm's strategy. An example of a metric in this area would be the extent to which a validated competency model serves as the basis for hiring R& D employees.

HR Alignment – the extent to which the HR practices that you deploy are (1) internally consistent and not working at cross purposes, and (2) really the right ones to drive firm strategy. An example of a metric in this area would be the survey results from a scale that have been developed to measure what can be called the internal and external alignment of the HR function.

- HR Efficiency- the extent to which there is efficiency in delivering HR services to the firm. An example of a metric in this area would be cost per hire.

- HR Deliverables - the extent to which employee behaviors change in ways that make a real difference to the business. For the staffing example, a key metric in this area would be the percentage turnover among high performing R&D scientists.

A seven-step model has been suggested for implementing scorecards, which is based on a model that was developed at GE. The highlights are:

- Leading change - Who is responsible?
- Creating a shared need - Why should we do it?
- Shaping a vision - What will it look like when we are done?
- Mobilizing commitment - Who else needs to be involved?
- Building enabling systems - How will it be institutionalized?
- Monitoring progress - How will success at implementing the scorecard be measured?
- Making it last - How will it be initiated and sustained?

The difference between the balanced scorecard approach and conventional HRM is that the entire people management and people measurement processes are organized around HR's deliverables, and not around HR's sub- functions such as benefits, recruiting, compensation, etc.

2.9 New Performance Techniques

Also, owing to this R&D, the scorecard is evolving with organizations combining them with other performance and management tools like Six Sigma, Performance Prism, Quantum Performance Management Model and the Tableau de Bord etc.

2.9.1 New Measurement Models

The following measurement models cannot be termed as growth of the Balanced Scorecard; however, these measurement mechanisms find their roots in the BSC philosophy of determining metrics and managing performance aligned with the organizational strategy. For this reason, these models are being discussed as they have been developed to address the shortcomings of the BSC model.

2.9.2 Measurement Framework

Researchers have combined elements of various measurement frameworks yields the measurement model below. It works as follows:

1. The needs and expectations of customers and stakeholders are the primary drivers of strategies. Stakeholders include shareholders and employees, but suppliers, the community, government entities and other organizations could also be important stakeholders.

2. Strategy consists of defining your intended customers and how you are going to compete for them. A company's strategy is made up of individual strategies, which are the key actions a company must take to achieve its vision and goals. When developing strategies, all other elements of the model must be considered.

3. Operations include all direct and support business activities that execute strategies and produce products and services for customers and stakeholders.

4. The capabilities of a company's organization and infrastructure enable its operations to efficiently satisfy customer and stakeholder requirements. Stakeholder capabilities may also be important to a company's operations. In the short-term, capabilities can limit what strategies are feasible; in the long-term they may need to be developed to implement certain strategies.

5. Stakeholder contributions include products or services that are essential to operations. For example, suppliers may provide critical technical support for designing products.

6. Products and services provided to customers create financial returns (7) for shareholders and perhaps other stakeholders as well.

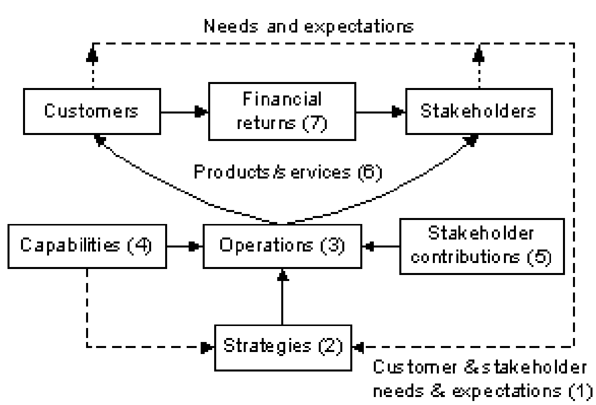


Figure 11: The Measurement Framework

For public sector organizations, the model is similar, but customer and stakeholder satisfaction become the primary desired outcome, not financial returns.

2.9.3 The Balanced Scorecard in the Public Sector

In recent years organizations in the public and non-profit sectors have begun to make use of the balanced scorecard, perhaps because at first sight it appears to be a tool designed for profit-making businesses. Whilst in the public sector optimizing the use of resources, particularly finance, is key, organizations do not exist primarily to maximize returns. According to the original architecture of the Balanced Scorecard the strategy map places the four perspectives in a hierarchy, with the financial perspective at the top. Where maximizing profits is not the main objective of an organization, this is obviously not appropriate and may either lead to the dismissal of the technique as irrelevant or the development of a Scorecard with its main theme as operational excellence, and organizations taking their current mission as a given and trying simply to work more efficiently. To use the Balanced Scorecard as an effective tool for strategic management, it is important to recognize that it is just that - a tool to be adapted as appropriate to the needs of the organization rather than one which has to be applied in the same way in every organization.

Not only is it the case that public sector organizations are not in the business of making profits. It is usually the case that the strategic objectives of public organizations are not measurable simply in financial terms. This can be reflected in a Scorecard with a slightly different structure and emphasis. For example it may mean changing the order of the perspectives in the hierarchy so that the customer perspective appears at the top, or it may involve introducing an overall objective or mission which is supported by all four of the perspectives. Importantly, however, the Scorecard is adapted, it is necessary to ensure that cause-effect relationships still exist between the overall objectives and the four perspectives. It is also extremely likely that a public sector organization will have multiple strategic themes. A separate Scorecard for each theme will make the process of defining objectives, measures, targets and initiatives relating to a particular theme easier. A problem facing public sector organizations is the definition of the customer. The ultimate consumer is generally not the same as the body providing the funding. Public sector organizations have many different stakeholders, such as government, users, funding bodies and other agencies. It may be appropriate to include objectives for several different groups as part of the customer perspective before looking at, for example, the internal processes required to meet the objectives of each different group.

2.9.4 A Six Sigma Primer

The philosophy that underlies the Six Sigma process begins with the fundamental assumption that unless we understand a process mathematically, we know little about it. If we know little about it, we are not in a position to control it. If we are not in a position to control it, then we are at the mercy of chance variation.

Six Sigma, is a quality improvement methodology that provides a systematic approach to the elimination of defects that affect something important to the customer. Those aspects of service that are of importance to the customer are termed "Critical To Quality," or CTQs in Six Sigma jargon.

Every human activity contains variation. The term "Sigma" is a symbol for standard deviation, a measure of variation. Six Sigma refers to the idea of being able to achieve six standard deviations between the mean performance of the process and the customer-determined specification limit. If Six Sigma performance is achieved in a process, then that process will generate less that four defects (occurrences of getting it wrong) per one million opportunities.

The idea of measuring the number of standard deviations that fit between the mean performance of a process and the customer's expectation (translated into specification limits) is referred to as the process "Z-Score." The Z-Score allows for comparative analysis of the performance of dissimilar processes, based upon the tendencies of each to either satisfy or disappoint their respective customers, the higher the Z-Score the less probability of customer disappointment.

2.9.4.1 Making Quality the Operating System

Each metric in the value chain is assessed based upon its ability to satisfy or disappoint its customer. Employing this approach allows the institution to essentially make quality the operating system.

A top level institutional Scorecard must be translated to the department level. At the department level, those factors that have the greatest impact on the top level Scorecard must be identified and rigorously controlled. This is another significant opportunity to employ Six Sigma methodology. A typical Six Sigma project will focus on a specific metric referred to as the project's "response variable" or Y. The variation in this Y is a function of one or more causal factors, referred to as Xs. The idea is to mathematically understand the contribution of causal factors to variability of the project's response variable or Y, before specific solutions are designed, thereby maximizing the impact of the solution.

By creating statistical linkages between the Y, metrics on the Balanced Scorecard and the X(s), causal factors, the Six Sigma methodology augments the Balanced Scorecard approach in two important ways. First, every link in the value chain is a causal factor to the subsequent link. Each link may be thought of as a Y in and of itself, and as an X to the next downstream link in the chain. Second, as the value chain metrics at an institutional level are flowed-down to departments, quantification of the causal Xs at a department level will pinpoint specific processes and behaviors that have the greatest impact on the value chain. This provides the foundation for cause analysis.

During the analysis phase, the team identifies the factors or Xs likely to have the greatest impact on the response variable. These factors are classified as either controllable or uncontrollable. If a causal factor (X) is controllable and contributes significantly to variability in the response variable (Y), then an opportunity to achieve a better result presents itself by controlling the causal factor. By focusing on causal factors that have a statistically proven impact on a process, the organization gains an important advantage in being able to predict the effect of proposed changes and create an easily understood family of value propositions.

2.9.4.2 Aligning Systems and Structures

Each phase is integral to the overall process and ensures that the team is using the right techniques to focus on the right objectives for the right reasons.

Taking an improvement initiative to the next level, however, also requires a careful examination of existing systems and structures. In many cases, the way an organization's systems and structures are aligned fundamentally conflicts with the objectives they are trying to achieve. It is important to begin by making sure appropriate resources are deployed where they will have the greatest impact. It is also necessary to look at seven additional elements that are key to the success of the initiative, and critical questions that must be answered:

- Organizational Design: Is your quality program contained within a single department or is the concept of quality spread across every part of the business?
- Staffing: Are you selecting the "best and brightest" from your staff to lead quality and process improvement efforts?
- Development: Have you provided options for continuing education, experiential or project-based training and cross-functional capabilities?
- Measurement: Are your projects supported by the right metrics and aligned with your strategic objectives? Are your performance measurements designed to drive organizational success?
- Rewards/Recognition: Is there a consistent process in place for rewards and recognition linked to key metrics?
- Communication: Does the organization understand the importance of clear and consistent communication?
- Information Technology: Are there sufficient IT solutions in place for project funnel management, financial linkage and program monitoring?

2.9.4.3 Gaining Control

The last and continuing step in this process involves monitoring changes and key metrics. That is the purpose of the Balanced Scorecard itself - to serve as a tool that assures the achievement of the organization's strategy on an ongoing basis. The Balanced Scorecard should have a top level appearance similar to the deployment of Six Sigma, along with the ability to drill down in each one of the five top level sections and review the metrics associated with those activities that create the greatest organizational leverage.

The challenges confronting organizations are complex, and no overnight solution will make the problems disappear. Taking a calibrated approach to performance improvement, however, can help them regain control and realize substantial benefits. Combining Six Sigma with the Balanced Scorecard is a new way to reach and sustain a new level of organizational excellence.

2.9.5 Performance Prism

In order to address this "restrictive model" of the Balanced Scorecard and break out into measuring real sources of value-creation, Accenture (formerly known as Andersen Consulting) and the Center for Business Performance have developed something called the Performance Prism.

The Performance Prism has five sides or facets of how we should view the business:

- Stakeholder Requirements (top layer)
- Strategies
- Processes
- Capabilities
- Stakeholder Contributions (bottom layer)

Each facet of the prism flows from the top to the bottom, linking stakeholder requirements to strategy, strategy to processes, processes to capabilities, and capabilities to contributions made by stakeholders. The key is matching up the capabilities of the organization against each stakeholder group. In his book, 24/7 Innovation, Stephen M. Shapiro describes the total range of stakeholder groups as:

- Employees: All employees, including part-time, contract or others who serve in a role similar to an employee.
- Suppliers: Providers of materials, labor and other resources to the business.
- Customers: The ultimate consumers of the product and/or service.
- Shareholders: Owners of the business.
- Complementors: Partners and others who add value to the final products and services that otherwise cannot be achieved by the business alone.
- Intermediaries: Consultants, quasi-customers, and other specialist that fill in gaps for meeting strategic and operating objectives.

- Regulators: Governmental entities and other groups that have some degree of control or influence over the business.

Building the right capabilities is critical to successful execution of the strategy. Capabilities are the collection of people, technology, products, and all those things that the business must do to meet the expectations of its stakeholders. In its simplest form, capabilities are the functional areas of the business – production, marketing, sales, finance, distribution and all organizational components. However, author Stephen M. Shapiro offers a more all-encompassing definition of capabilities:

- Strategy at all levels of the organization, including customer strategies.
- Measurements for changing organizational behavior and hitting targets.
- Processes on how the work gets done.
- People – The skills, knowledge, structure, and culture of the organization.
- Technology – The information and related infrastructure. Integrating capabilities with stakeholder groups is how strategy is executed and this is the power behind the Performance Prism. It captures the cause and effect relationship over five facets or sides, linking stakeholders to strategy, processes, and capabilities.

For organizations with diverse stakeholders, the Performance Prism offers a more complete model for performance measurement than the Balanced Scorecard. For example, the so-called "virtual corporation" tends to outsource almost everything and thus, it would have a wide array of stakeholder groups. Therefore, the Performance Prism is a preferred measurement model where stakeholders are changing or broad in scope.

2.9.6 The Dynamic Multi-Dimensional Performance (DMP) Model

The DMP model has a number of major characteristics that, when taken together, distinguish it from previous frameworks for assessing organizational success. It also addresses some of the limitations of previous models.

First, it is multi-dimensional in nature addressing the concerns of many scholars. In contrast to the classical, single dimensional financial measures, it offers a richer, more in-depth view of what organizational success means. For example, by adding the Customer dimension, organizational attention is focused on what prominent academicians and practitioners have long preached: "There is only one valid definition of business purpose: to create a customer". Similarly, the
Process dimension is focused on internal dynamic management; namely, how is the organization conducting its operations, how efficient are the internal processes in producing the firm's products or services, and how the organization is learning. The inclusion of the People Development dimension explicitly recognizes the critical role of

firms' employees to its success and addresses the limitations of the Balanced Scorecard by providing a clear series of measures for human capital.

And finally, the Future dimension is focused on preparing for change, defining and managing the future, and sustaining organizational vitality for years to come. It also addresses the needs of employees for a sustaining workplace, and the needs of long-term investors and owners.

Second, the DMP model may be viewed along an ascending continuum of time, reflecting the organization's sustainable performance in multiple time horizons. The financial dimension represents the very short, immediate term, which is probably measured in quarters or at most one year. The marketing dimension represents the short term, perhaps a year or slightly longer. And measures that relate to the long and very long time horizons (3–10 years) can be identified in the process, people development, and future dimensions.

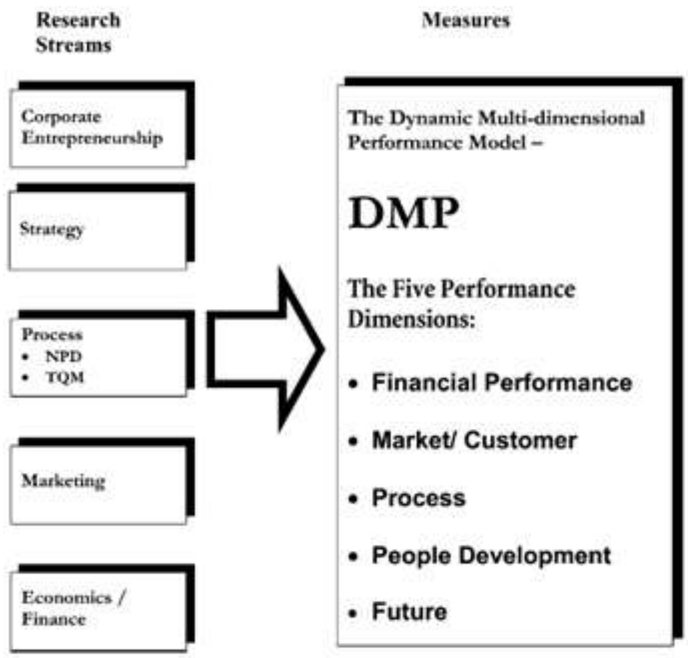


Figure 12: Workflow of DMP Model

Third, with the inclusion of a People Development dimension, the DMP model explicitly acknowledges the critical roles of multiple stakeholders, which were missing in previous frame-works, and were of concern to many scholars (e.g., Atkinson et al., and Smith). The addition of and specific attention to a stakeholders' dimension recognizes the organization's needs from a managerial standpoint and capital markets perspective, and specifically addresses a noted limitation of the Balanced Scorecard. From a managerial perspective, the People Development dimension is critical for internal decision-making in areas such as performance measurement and compensation purposes. The Conference Board tracks companies that base a portion of executive compensation on non-financial measures, and Brancato reports that top executives are often evaluated on individual and business unit performance, stakeholder interests (public affairs, civic involvement, and environmental issues), quality, customer satisfaction, and new product development.

Fourth, to some extent, the proposed DMP framework is wide enough so that different organizations in different industries can select their specific measures within each dimension. Firms such as Amazon.com and Ford Motor Company would clearly use different measures in each dimension and would view the dimensions with varying degrees of importance. While Ford might focus strongly on Finance and Process, Amazon would perhaps be more attentive to the Future dimension. The concept of differing measures for various organizations has also been widely studied in the management accounting literature. Otley stated that "…there is no universally appropriate accounting system which applies equally to all organizations in all circumstances."24 The appropriate set of measures will depend on the particular industry and environment that a firm competes. Specific industries may require specific metrics tailored to specific businesses such as Sveiby's model for knowledge industries.

Therefore, while the implementation of a comprehensive performance measurement system is not simple, the DMP framework provides a barometer for multiple time horizons and a richer view of organizational success.

Chapter 3

3. Findings

In the light of the theoretical evidence provided by the above discussion, a partial view can be formed about the worth of the Balanced Scorecard as a performance measurement and strategy implementation tool. However, unless the application is actually observed and an analysis is done on the basis of research conducted in an organization, the probability of biased results of dissertation is quite high. Also, the working of BSC in a Pakistani environment, even though they are multinational, would not be observed unless a thorough research is carried out in organizations. In addition to this, two organizational case studies will also be discussed so that a comparative analysis can also be drawn in the end.

The organizations chosen for this purpose are:

- OMV Pakistan
- MTHR
- Citibank (Citigroup)

These organizations have been chosen from different industries, OMV from Petroleum-Energy sector, MTHR being an IT Solutions provider and Citibank, a financial institution. The application of BSC in these three organizations would facilitate the learning and coming to a conclusion.

The case studies would include:

- Du Pont Engineering Polymer Divisions' IT Department
- Compaq Computers

The research conducted at OMV and Citibank is based upon the available data through interviews, the depth of what we can achieve is somewhat limited. However, at MTHR, the observations and analysis is more direct without the management's influence, as the researcher is currently employed with this organization. Also, an advantage in either case is that we can be totally objective since we are neither constrained nor influenced by having obtained access to internal data and information.

3.1 OMV Pakistan

3.1.1 Introduction

Founded in 1956, OMV is a joint stock company dealing in E&P (exploration and production) of oil and offering services in the Energy sector, with headquarters in Austria. In Pakistan, OMV is involved in exploration and production (E&P) of oil and gas.

Before going into the details of BSC implementation at OMV, it would be better to put the mission and vision of the organization. The discussion related to OMV in the following paragraphs would be specific to Pakistan only.

3.1.1.1 Mission

We explore for, develop and produce oil and gas in Pakistan to create volume growth and value enhancement for OMV Group. We set high standards in terms of health, safety, the environment and the way in which we deal with people and use of technology.

3.1.1.2 Vision

We aim to become a core contributor for OMV Group in financial terms by equity productions, should continue to be the highest international producer in Pakistan and strive to be the lowest cost operator in Pakistan.

Based on this vision OMV Group has defined its goals for till 2008. This strategy of operations is known as Vision 2008.

3.1.1.3 OMV Group Goals 2008

At the core of the OMV strategy lies the goal of doubling the Group‘s size by harnessing internal energies while maintaining the profitability of invested capital at 13%.

3.1.1.4 Higher Management Level BSC for 2004

	Financials	Customer/ Market	Processes	Learning/ Growth
Strategic Goals	**F1: Increase company value of OMV Pakistan** **F2: Increase OMV Pakistan net gas production to 30,000 BOED by 2008** **F3: Ensure competitive total lifting cost and profitability per barrel**	**C1: Further develop OMV Pakistan gas business** **C2: Create secure opportunities to improve portfolio** **C3: Improve networking with key authorities and partners / competitors**	**P1: Implement and Audit processes in line with IMS** **P2: Optimize Sawan and Kadanwari performance (Site & Islamabad)**	**L1: Ensure OMV Pakistan employees live HSEQ** **L2: Retain and develop potential employees** **L3: Ensure appropriate application of leading edge technologies**

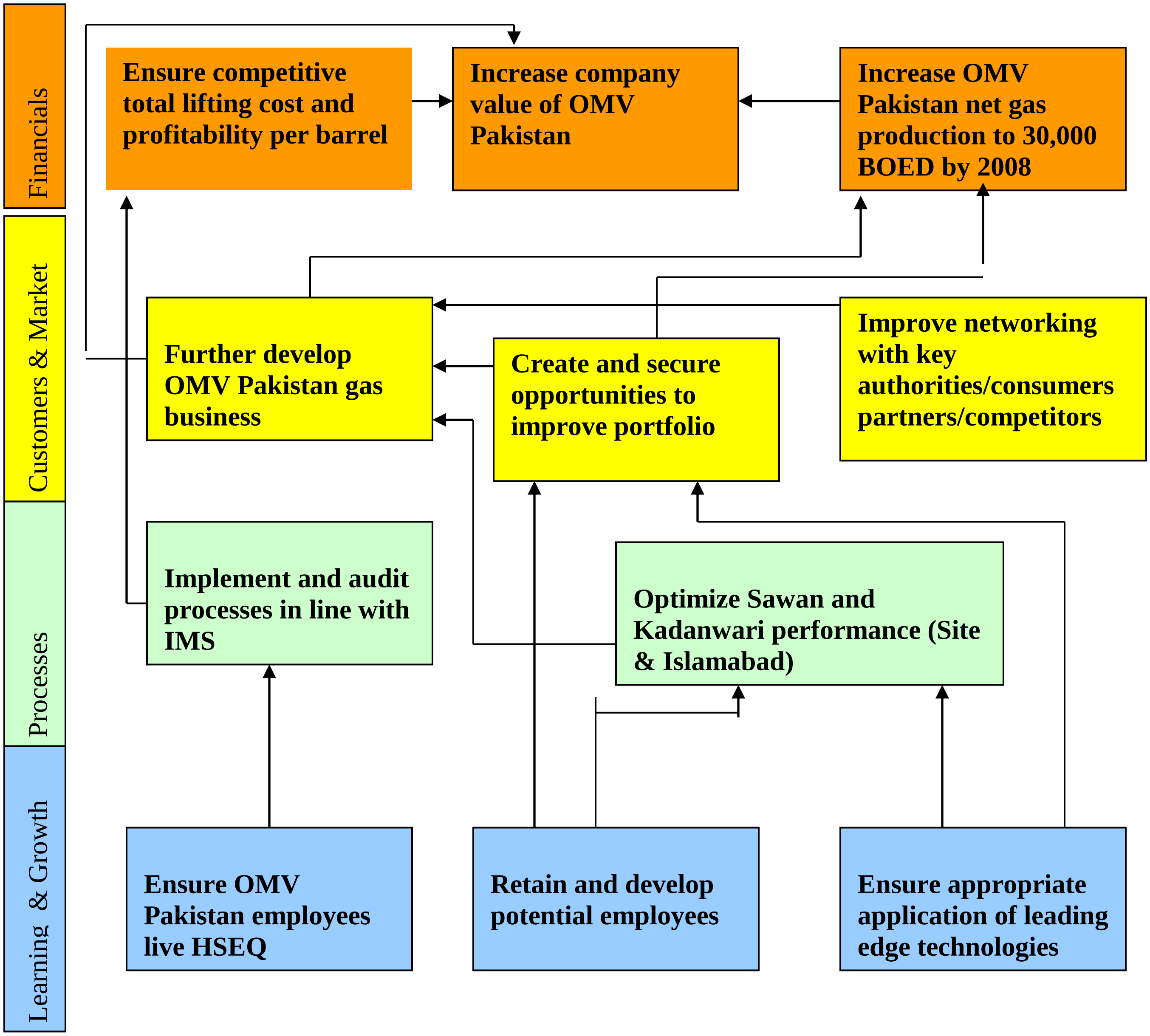
At OMV, the strategic vision is translated through the balanced scorecard to all employees of the Company. Due to the complexity of the BSC system, the human resource function has been involved in creating awareness throughout the organization regarding the strategic goals and individual and team contribution towards achieving that vision.

3.1.1.5 The Application Mechanism

Currently, the Company is pursuing the strategy marked by Vision 2008, which means doubling the size of the Company including the exploration and production capacity and maintaining profitability index of 13%.

Once the OMV Group gives the Company vision, the meetings are held at each level of the organization i.e. team, middle management and higher management. Meetings are held at each level and the Training and Development Manager facilitates the field managers and other middle managers to make their own scorecards depending upon the nature of work of each function.

2004 Strategic Business Model of OMV Pakistan


Financials
Customers & Market
Processes
Learning & Growth
Ensure competitive total lifting cost and profitability per barrel
Increase company value of OMV Pakistan
Increase OMV Pakistan net gas production to 30,000 BOED by 2008
Further develop OMV Pakistan gas business
Create and secure opportunities to improve portfolio
Improve networking with key authorities/consumers partners/competitors
Implement and audit processes in line with IMS
Optimize Sawan and Kadanwari performance (Site & Islamabad)
Ensure OMV Pakistan employees live HSEQ
Retain and develop potential employees
Ensure appropriate application of leading edge technologies

Each quarter the goals and objectives are reviewed and if need be, revised accordingly. A pamphlet is sent to each manager, both line managers and support function managers. This aids in understanding of the overall organizational goals by each manager and apprises him/her of the status of objectives. It gives a depiction of the plans that have divagated, plans that need have not been fulfilled and plans that are on target. This helps each manager realize the corrections/improvements to be made in each function and the expectations of him/her. Here is a sample BSC of a field manager at OMV based upon the overall vision and strategy.

3.1.1.6 Balanced Scorecard of Field Manager Kadanwari

	Objective	Measure	Target	Initiatives
Financial	Profit/employee	Optimum inventory level- Total benchmark Cost	Benchmark cost at 2 million	Reduce the failure/complaint rate
		Total Breakdown Cost	Reduce cost by 5% and below	
		Reduce Cost/ barrel of oil	Reduce the overhead expenses by 10%	Increase cost-profit awareness among employees
Customer	Market Networking	Customer Meetings		Attend seminars/conference related to oil & gas sector
	Product/Service Quality	Reduce the defect ratio	Limit the percentage to 2%	Ensure compliance with quality standards
Internal Processes	Effective Operations	No. of Shut Downs No. of Operation Days Rework Jobs Planned vs. Unplanned Activity	Below 1% i.e. maximum two days shutdown in 365 days Below 10%	Increase the planned activity from 80% and above Reduce the unplanned activity from 20% and below

Learning & Growth	**Human Capital Index**	**Health/Enjoyment of work** **Communication/information** **Staff/Organization** **Training of four days for each employee**	**Above 66**	**HSE Policy Compliance** **Conduct regular TNA and DNA** **Ensure regular trainings for employees**

3.1.2 BSC Perspectives & OMV Strategy

3.1.2.1 Financials

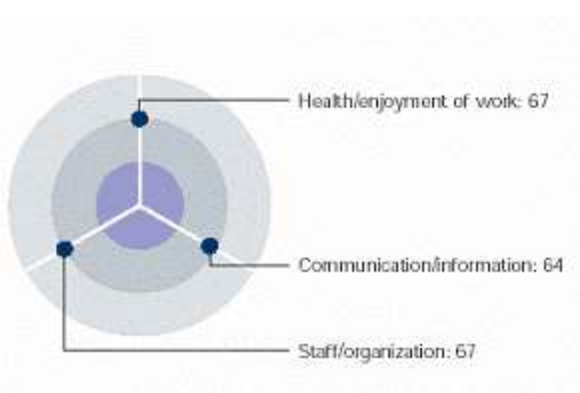
The OMV Group has defined the targets for each year aligned with Vision 2008. For each quarter, the financial objectives are revisited and targets are identified. The financial perspective entails the increase in production of oil and gas. Also, this asks for cutting costs per barrel. This has resulted in optimizing inventory levels and controlling overhead costs.

3.1.2.2 Customer/ Market Perspective

One of the key goals for OMV in 2004 is to increase the business networking in order to create more learning opportunities and to enter into joint ventures. This year, OMV Group has secured the biggest acquisition in its history of International portfolio of Preussag Energie and 45% of Bayernoil-Raffinerieverbund. At the functional level, there is a lot of collaboration going on as well, e.g. OMV has offered its partners and fellow E&P companies like BP, Premier Kufpec and others the opportunity to share trainings for their employees. If OMV organizes a stress management workshop, it asks BP and others to send selected employees from their organization as well. This helps reduce costs by sharing them and also increases networking with other organizations.

3.1.2.3 Internal Processes Perspective

As OMV's site work is very crucial, its processes demand immense attention. They do get their data interpretation done through digitizing mode and have invested greatly in IT and business processing. Also, the work methods at the site is an issue that is handled through close working of the Public Relations Officer and the governmental agencies since a lot of labor laws come into play. The smooth operations of Sawan and Kadanwari plants hold top priority.



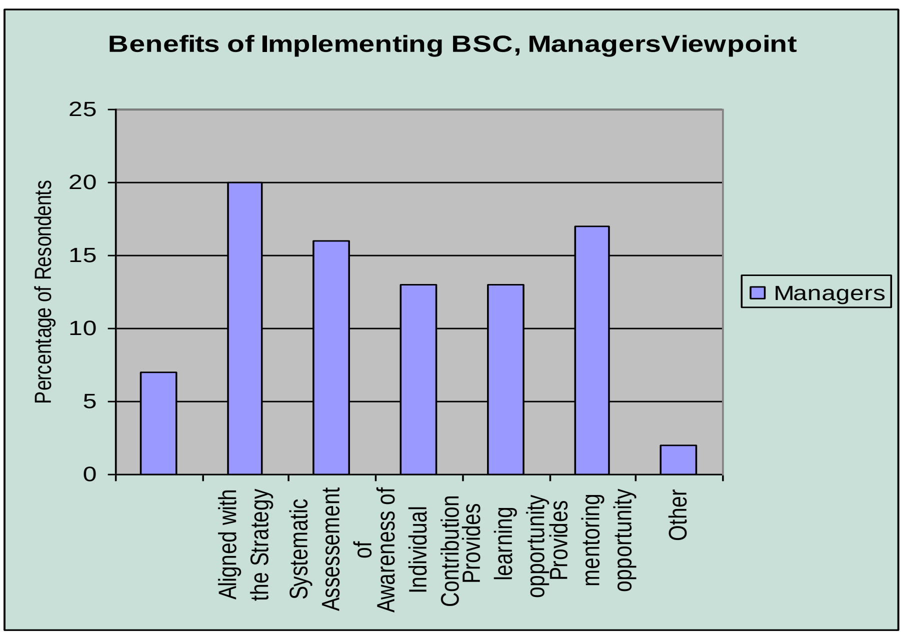
3.1.2.4 Learning & Growth

The human capital index comprising is of utmost significance as OMV exploration and production activities come to a halt because of its employees. This is the reason that OMV realizes the importance of its employees and invests in training and development activities. A very comprehensive T&D program is in place and employee need analysis is done on periodic basis. The training needs are identified upon hiring of an employee and employees are sent for trainings to other cities or external consultants are called in.

Human Capital Index 2004: 66

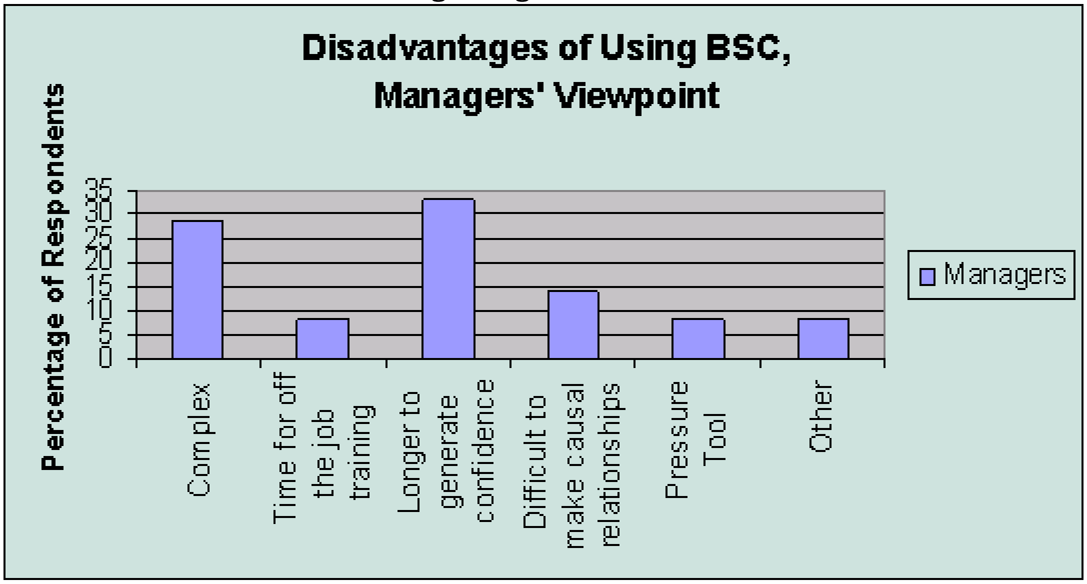
The interviews conducted at OMV office in Islamabad revealed employee involvement and satisfaction. As an example, the Relationship Manager was aware of the critical nature of avoiding shut downs at any times and in any situation. This did not only imply awareness of the job responsibility, but also the number of shutdowns affecting the achievement of strategic objectives.

According to the survey, the employee understanding of the strategy was conducted which revealed the following results:
75% of the workforce understands their company strategy.
86% of executive teams spend one hour per month discussing strategy.
55% of employees are satisfied with the performance measures aligned with the strategy.



When inquired about the problems that the managers face with the application of the BSC, the managers complained about the time that the whole process takes to be implemented the first time. After that, it becomes a systematic process and with the involvement of the HR function, it is comparatively easy. However, still manages do think that it is a complex process and sometimes it becomes difficult to establish the

cause-effect relationships as some measures can be counted both in the process indicators as well as the learning and growth indicator.



However, on the whole the employees seemed aware of the overall organizational strategy and were working towards Vision 2008.

3.2 MTHR

3.2.1 Introduction

MTHR is a Petroleum Information Technology company offering front and back office Applications, Infrastructure and Business Process outsourcing globally. Registered in Mauritius, the Company has its headquarters in Islamabad.
Founded in 1994, with a team of 13 professionals, the company has shown a consistent growth rate of 30% per annum. With acquisition of its majority interest by Landmark Graphics Company (LGC) in 2001, the Company is expanding rapidly owing largely to its business in the field of E&P data management and the growing trend of offsite consultancy.
The Company has its relationship with different IT partners like IBM, Halliburton and BP-SAIC.

3.2.1.1 Mission

"A friendly and cordial working environment providing liberty and access to the latest technology and information which attracts the best candidates and ensures personal satisfaction, professional growth, adequate compensation and recognition for their accomplishments."

3.2.1.2 Vision

"Our vision is to build the best and most successful global company providing solutions to Data Management, Geo-technical and Information Technology industry and to assist our clients in making positive and substantial improvements in their performance and profitability. We strive to attract, develop, excite and retain exceptional professionals."

	Objective	Measure	Target	Initiatives
Financial	**Low Cost Strategy in support units** **Business Development**	**Keep the overheads at minimum** **Increase the geo-technology and data management consultancy services** **Offer specialized services in ERP (Enterprise Resource Planning)**	**Cut expenses by 30%** **$ 10 billion by 2005**	**Make Data Management a separate division** **Divide the ERP and IT sections**
Learning & Growth	**Recruiting the best professionals** **Retention**	**Comprehensive technical and non-technical online tests (OTS)** **Development of Vhire (Online Hiring Application)** **Conductive work environment** **Annual Functions** **Non-monetary incentives** **Car Lease Policy**	**Complete Vhire Application by November 2004** **Arrange at least 2 employee functions** **Send teams on trips**	**Participate in Job Fairs in Universities** **Promote the Company through media campaigns** **Ensure regular trainings for employees**
Customer	**Market Networking** **Client Satisfaction**	**Liaison with clients in O&G industry** **Monitor and reduce client dissatisfaction rate**	**2% and below**	**Regular Meetings/Telephone Contacts** **Quality Audits** **Client satisfaction surveys** **Employee Reports**

Internal Processes	**Developing efficient Business Units**	**Each function becomes a business unit** **Managing Cost Centers**	**Business of $100,000**	**Allocation of Resources** **Leadership**
	Systematic procedures	**Centralized HRIS globally**	**100% completion by December 2004**	**Automation of all HR Policies**
	Efficient Secondment Procedures	**Regular contact with the companies employees seconded to**		**Maintain compensation procedure compliance with regional regulations**

3.2.1.3 Key Points of MTHR Operations

The sample BSC of MTHR is a proposed version that was tested in one function of the organization. The findings of the application results are given in the following paragraphs:

3.2.2 MTHR Strategy & BSC Performance Indicators

3.2.2.1 Financials

MTHR aspires to become a $10 billion by the year 2006 according to the CEO of the organization. As the Company wants to enter into joint ventures with different international companies in the field of oil and gas E&P and data management services. In order to achieve the above target, the company also wants to cut costs through overhead expenses and also through revising the compensation and benefits policy linked to performance.

3.2.2.2 Customer/ Market Perspective

As MTHR is pursuing a business development strategy, the market perspective is very important. Being a service company offering IT services to all companies related to oil and gas in Pakistan, the company has to reduce any margin of error in the client data. This is the reason that quality audits are periodically carried out. The company emphasizes on 98% accuracy and the client satisfaction is quite high as well.

3.2.2.3 Internal Processes Perspective

The key processes are atomization of the HR policies and efficient working of the central HRIS due to the expansion of the Company operations globally. The strategy comprises of dividing the divisions into business unit. So, each team/function involved into a business of more than $100,000 becomes a separate business unit. This would also contribute towards cost control and systemization of the processes.

3.2.2.4 Learning & Growth

Following a low cost strategy in the support functions, the Company does not invest a lot in training and development of the employees. The recruitment procedures are of great significance here as the company is involved in massive hiring due to growing business. The Company is coming with an online testing system accessible from anywhere in the world that would help it reduce costs as well as offer better opportunity of selecting the best professionals.

It is evident from the above discussion that the Company is currently in the process of growth and is undergoing major transformations in terms of establishing new processes, recruitment and selection, and securing more business.

3.3 CITIBANK (Citigroup)

Citibank is the consumer and corporate banking arm of financial services behemoth Citigroup, the largest company of its ilk in the world.

Citibank uses its own performance measurement scorecard derived from the BSC. At the heart of the Citigroup's Innovation Initiative is putting the right measures in place. Before the BSC implementation, the Citibank Division already had an Innovation Index in place that measured revenues derived from new products but that was deemed insufficient.

In order to implement the BSC, a special task force was challenged to come up with more meaningful top-line metrics that could be used to track progress and could be integrated into the balanced scorecard, and ultimately tied to compensation of senior managers. The team eventually settled on 12 key metrics. They included such things as: new revenue from innovation, success transfer of products from one country or region to another, the number and type of ideas in the pipeline (and expected new revenues), and time from idea to profit. The use of the scorecard is more of individual performance measurement than strategy translation.

In order to make the PMS strategically congruent, the HR function incorporated behavior approach in its performance appraisal. It included the soft indicators like customer satisfaction having subjective nature in the PMS for measuring performance. For this purpose, it developed a performance scorecard: the main indicators included Financial, Strategy Implementation, Customer Satisfaction, Control, People, and Standards like leadership, business ethics, customer interaction etc. An individual is measured according to ratings of below par, at par or above par for each of the indicators and their subsequent measures. This scorecard has a quarterly review and ratings are assigned along with the comments by the area manager. The performance planning process includes discussion of goals and expected results between the Regional Manager and Area Manager and then they were cascaded down through the organization via branch managers.

The BSC at Citibank; however, is not currently in balance due to the over-emphasis on quantifiable measures. A lot of case studies also reveal this imbalance and in Pakistan, as the HR function is concentrated in Karachi only, the strategy translation and performance management does create a lot of problem resulting in low morale and rising turnover rate. The anomalies of the scorecard will be brought into discussion in the Critical Analysis section.

	citibank	
Shareholder	Achieve returns of 1% on assets and 15% on equity	Net interest margin / non-interest expense
	Achieve efficiency ratio of 68%	Overhead expenses
	Achieve asset growth of 15%	Asset growth rate
	Loan loss rate of .5% or less	Number of problem loans
	Loan delinquencies of 2% or less	Number of bad loans made
Customer	High personal quality service	Number of complaints / customer satisfaction rating
	Competitive product offerings	Number of product offerings per year / Sales volumes
	Competitive pricing	Cost of doing business / competitive price comparisons
	Customer satisfaction	Customer surveys
Employee	Competitive compensation	Annual market review
	Participation in organization	Bonus pay per personal performance
	Enhance job skills	Training completed
	Quality evaluation of performance	Comparison to best standards
	Increased upward career movement	Number of internal promotions
Com-Munity	Provide community support activities	Extent of employee participation
	Act as a good corporate citizen	Extent employees vote / extent employees support outside activities

3.4 Cases in Focus

3.4.1 DuPont Uses Balanced Scorecard to Drive E-Commerce Initiative

The IT department of DuPont Engineering Polymers, a $2.5 billion division of DuPont Chemicals in Wilmington, Delaware, leveraged the Balanced Scorecard to help meet corporate goals and eliminate projects that were not contributing to the strategic directions of the firm. They quickly discovered that the Balanced Scorecard is an indispensable tool for demonstrating IT's value to the corporation.

According to Linda Bankston, CIO at DuPont Engineering Polymers, the IT department used the Balanced Scorecard to drive value by streamlining e-commerce processes, which helped foster new business models. She used the BSC to establish metrics for key staff members, such as the global program manager and e-commerce technology manager.

Because of the dynamically fluctuating nature of IT—and the need for the IT department to be nimble and flexible—the Balanced Scorecard is more pertinent for IT than for any other department in the organization. Companies like DuPont use the BSC to convert value drivers into a series of carefully defined metrics. This exercise enables CIOs to quantify, qualify, and prioritize the ways in which their departments contribute to the objectives of the corporation. As Bankston discovered, implementing the Balanced Scorecard at the departmental level helps align specific initiatives with stated corporate goals.

She says her team improved communication and streamlined decision-making as a result of the Balanced Scorecard initiative. "The BSC changes the conversation between IT and the business," she says. "The conversation becomes focused around strategy and impact rather than whether or not something can be done."

3.4.2 A BSC Analysis of Compaq's Performance

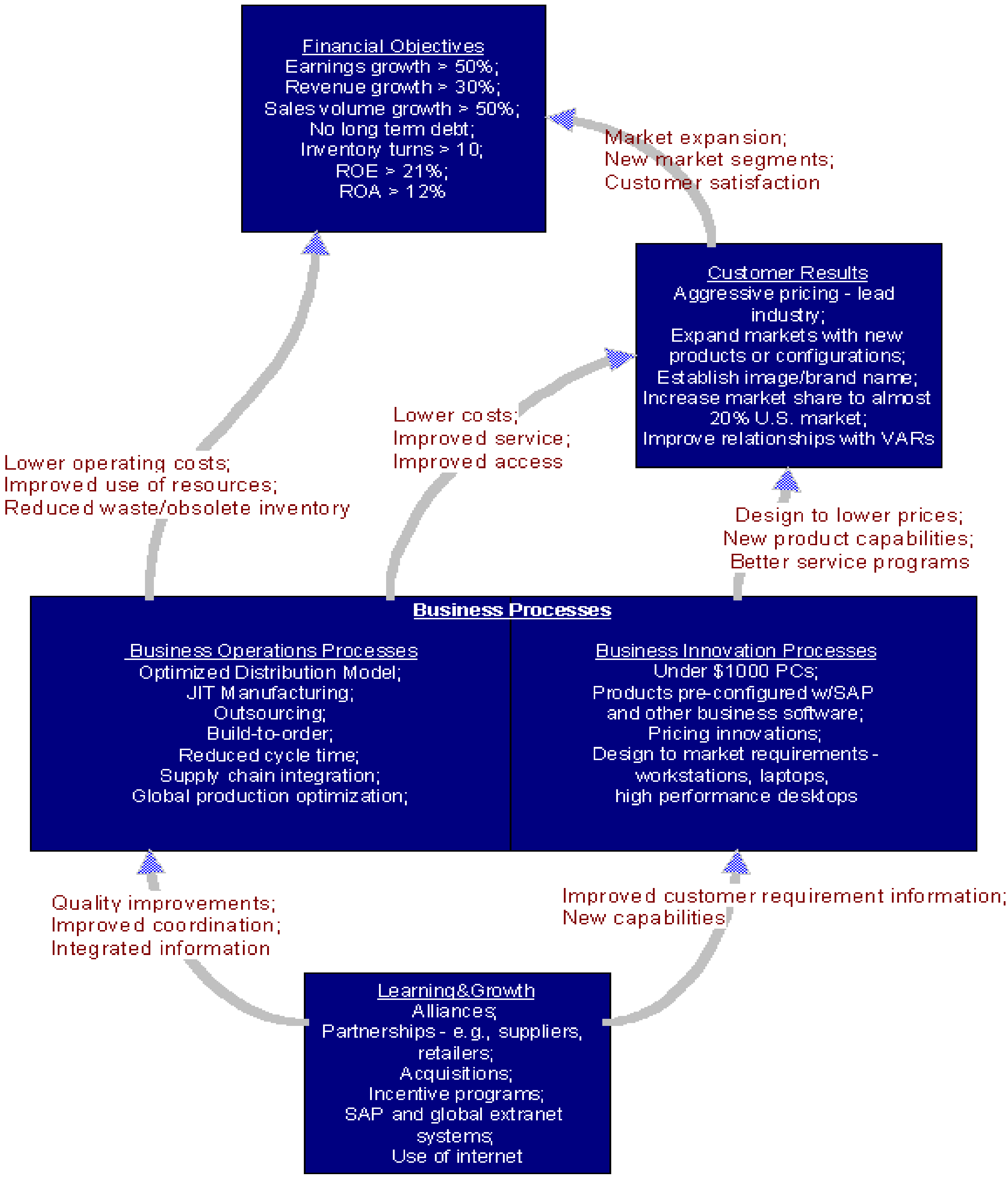
3.4.2.1 Overview

This study provides a comprehensive, detailed analysis of how strategic business use of information technology, in concert with business process redesign, can improve the economic performance of a large-scale manufacturing company, Compaq Computer Corporation. Compaq has relied on strategic use of enterprise-wide IT and BSC measures to enhance its competitive position. The company experienced rapid growth in the 1980s, gaining a well-deserved reputation for producing high quality (and high cost) computers. In the 1990s, however, Compaq felt the effects of increasingly intense competition: it lost sales and market share. In 1992, its annual revenues dipped by more than $300 million to $1.5 billion while its operating costs continued to rise. Earnings per share dropped by over 70%. Compaq's management needed to respond-by developing a new business strategy that would allow the company to compete successfully while remaining financially strong. The success of any change in strategy would depend directly heavily on how wisely Compaq used information technology across, and into, the entire organization.

Through the 1990s, Compaq adopted a new business strategy and the technology-enabled changes also gave way to new business processes. In order to measure the payoff from IT, they did the evaluation in terms of the business objectives that it supports.

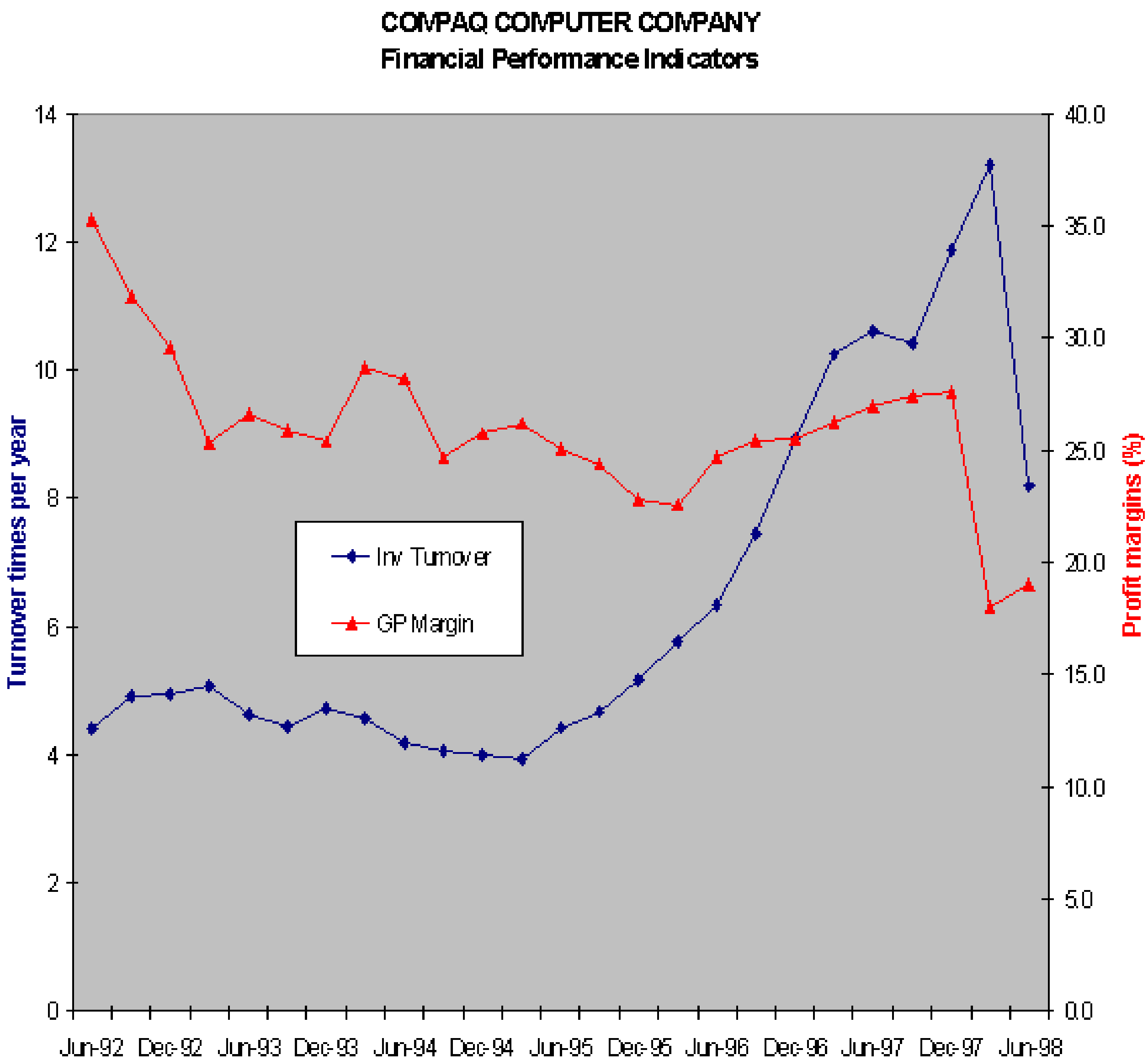
As a result of these measures, Compaq initiated changes that could translate its business strategy of offering low priced PCs through aggressive entry into all computing markets. The following results depict the success of Compaq's changed business strategy and the benefits achieved from its use of enterprise-wide changes with BSC and IT.

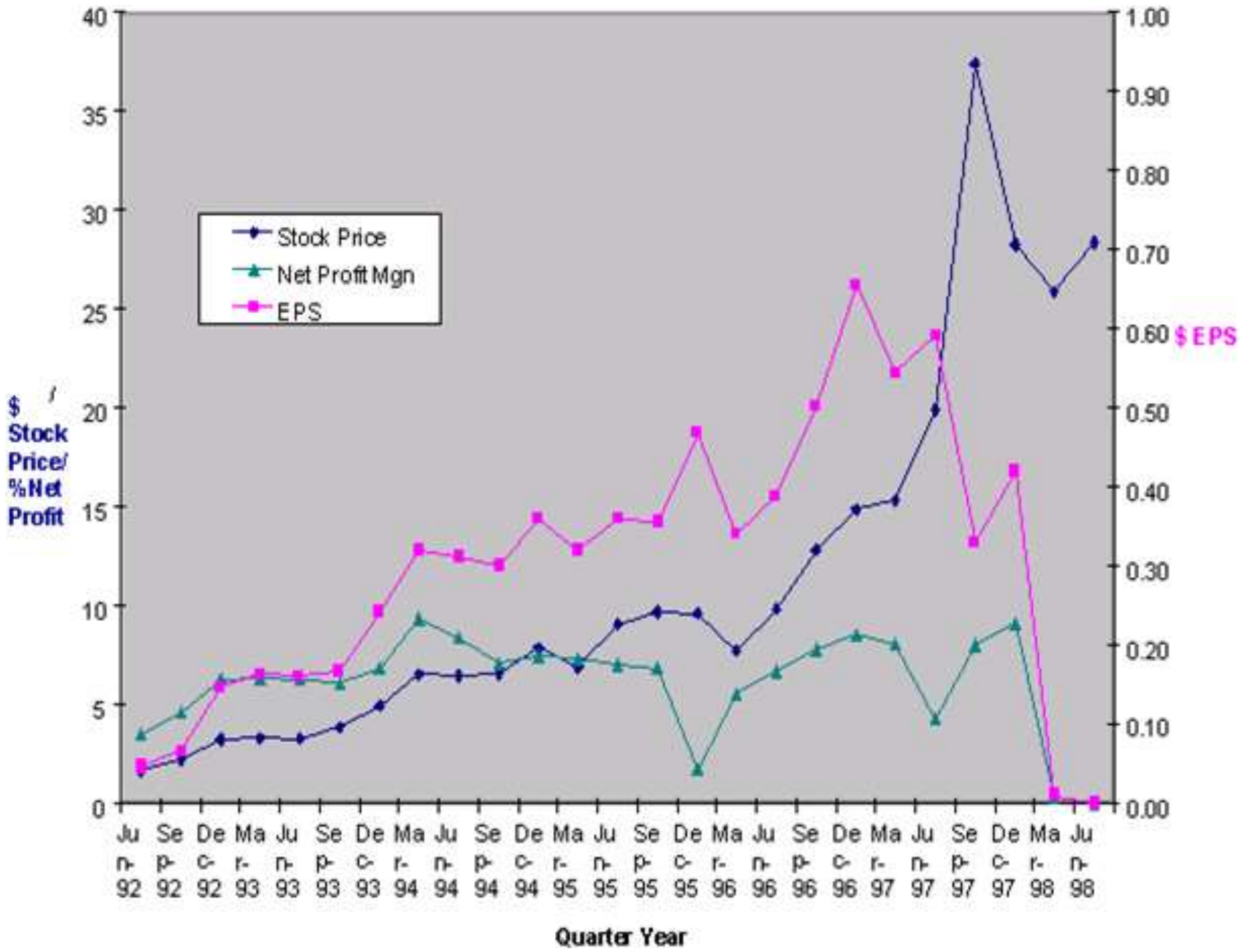
The following figure gives a clear understanding of the BSC implementation at Compaq through the 1990s.


Financial Objectives
Earnings growth > 50%;
Revenue growth > 30%;
Sales volume growth > 50%;
No long term debt;
Inventory turns > 10;
ROE > 21%;
ROA > 12%
Market expansion;
New market segments;
Customer satisfaction
Customer Results
Aggressive pricing - lead industry;
Expand markets with new products or configurations;
Establish image/brand name;
Increase market share to almost 20% U.S. market;
Improve relationships with VARs
Lower operating costs;
Improved use of resources;
Reduced waste/obsolete inventory
Lower costs;
Improved service;
Improved access
Design to lower prices;
New product capabilities;
Better service programs
Business Processes
Business Operations Processes
Optimized Distribution Model;
JIT Manufacturing;
Outsourcing;
Build-to-order;
Reduced cycle time;
Supply chain integration;
Global production optimization;
Business Innovation Processes
Under $1000 PCs;
Products pre-configured w/SAP and other business software;
Pricing innovations;
Design to market requirements - workstations, laptops, high performance desktops
Quality improvements;
Improved coordination;
Integrated information
Improved customer requirement information;
New capabilities
Learning&Growth
Alliances;
Partnerships - e.g., suppliers, retailers;
Acquisitions;
Incentive programs;
SAP and global extranet systems;
Use of internet

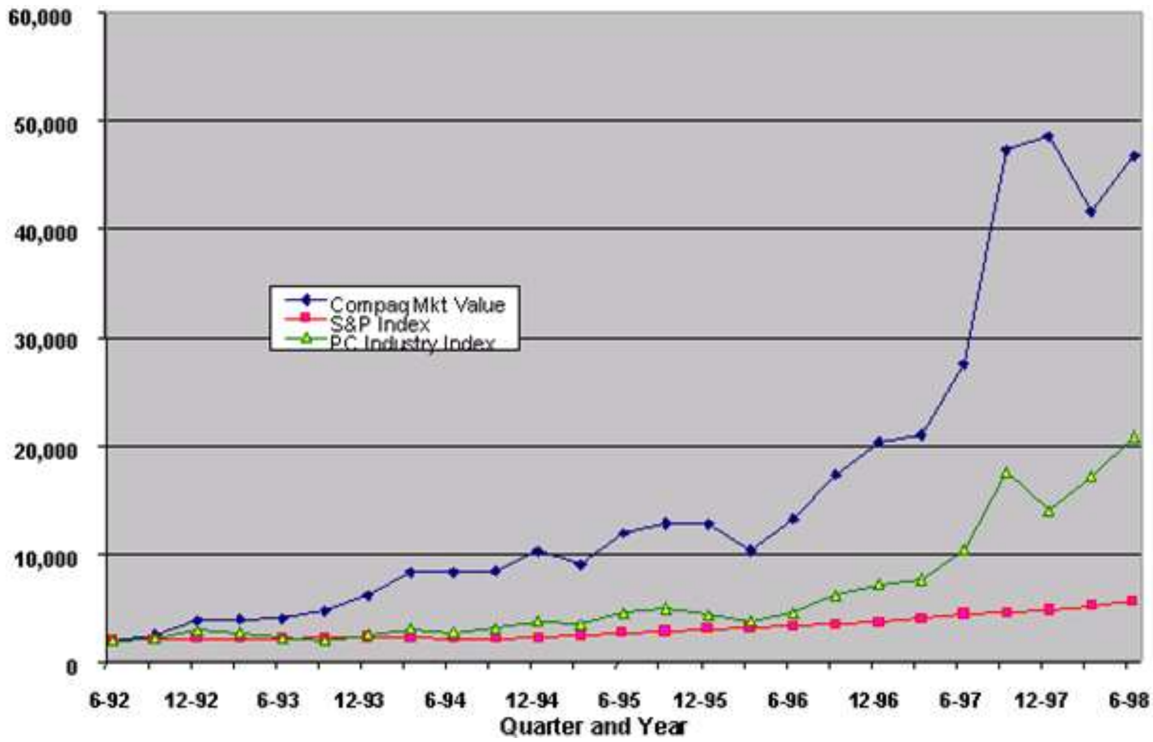
3.4.2.2 Compaq's Balanced Scorecard Objectives

From 1992 to 1997, Compaq's net sales rose from $4 billion to over $24 billion. The firm sustained a revenue growth rate of over 31% over 60 months [Hoovers, 1998]. Annual net income increased from $213 million to over $1.8 billion over the same period, while inventory turnover almost doubled as evident from the figures below:





Compaq Inventory Turnover 1992-1999
Compaq Financial Indicators 1992-1998;
Market Value, S&P and PC industry Indexes
(Source: CSI Inc. via Microsoft investor)



Compaq Financial Highlights 1992-1998;
Financial and Stock Market Data (not including 2qtr 1998 merger costs)

During the fourth quarter of fiscal 1997, Compaq's unit sales jumped 52% versus fourth quarter 1996.

3.4.2.3 Financial Objectives

Over the same time period, Compaq's gross profit margin edged up to 27.6%, and inventory turnover increased from 7.1 to 12.6 times. Compaq's cash balance improved to $6.8 billion (up $3.8 billion in the nine months since the end of fiscal 1996), and the Economic Value Added (EVA) grew by over 150%. The $300 million long-term debt balance at the end of fiscal 1996 was eliminated early in 1997; Compaq was essentially free of long-term debt.

All of these results occurred in a competitive environment where prices for PC products were decreasing as fast as 15% per quarter. Consistent with one of its strategic objectives, Compaq itself drove some of the price reductions, yet it was able to maintain one of the highest gross profit margins in the industry. Compaq's use of IT to improve its processes and implement its strategic objectives contributed to its economic success in a very competitive market.

3.4.2.4 Customer Objectives

Compaq tries to deliver value through its pricing, promotion, and customer service initiatives to increase market share. Compaq steadily improved its market share from 9.3% of the U.S. market in 1993 to 18.1% in the fourth quarter of 1997.

Compaq competes in a dynamic marketplace. Customers' requirements change. Relationships can be short-lived. Therefore, retaining a customer can be difficult. Compaq is betting that it can create and sustain value by expanding its product lines and increasing its service capabilities, combining the resources of Compaq, Tandem, and Digital to "deliver the best computing solutions and innovative products and technologies, all backed by global services and support".

3.4.2.5 Internal Processes

For Compaq, the innovation cycle is focused on speed. Compaq thrives on speed--speedy revenue growth, speedy market share gains, speed in entering new business, speed in manufacturing. John Rose of Compaq summed it up: "The environment is changing, and you'd better be innovative--not just in your products but in every part of your business".

Compaq's reengineering efforts reduced the time-to-market of its new products. These new products emphasize enhanced functionality, or price advantages, which in turn improve customer satisfaction and product image.

Compaq relied heavily on enterprise-level information technology to achieve reengineering gains. It pushed the envelope on emerging technologies. The innovations allow Compaq to achieve process efficiencies.

3.4.2.6 Learning & Growth

In addition to these changes, Compaq's employees also had to take on the daunting task of learning the new systems and continually improving them over time.

Learning and Growth Objectives. A company cannot innovate or operate well without creating long-term learning and growth. Organizational learning and growth come from three principal sources: people, systems, and organizational procedures. Compaq used the systems and procedures provide information about business processes, customers, and the competitive environment. Compaq's people then were equipped with the requisite skills and incentives to accomplish its business strategy.

3.4.2.7 Compaq Falters in 1998 –BSC Perspective

In 1997, Compaq's financial performance was the best in its history. Their strategy was highly successful, as indicated by their results along all the Balanced Scorecard perspectives. In 1998, however, Compaq's financial performance suffered. During the first six months of 1998, they lost over $3 billion. Excluding the $3.6 billion charges attributable to the merger with Digital Equipment Corporation, their net income was barely positive. Revenues grew less than 5% over the same period in 1997. Industry analysts blamed Compaq's problems on its return to the old practice of "channel stuffing" (selling inventory to channel partners in excess of anticipated end user sales), while intense competition in the industry was driving prices down and sales were slowing.

Just as the Balanced Scorecard presented a performance model for Compaq in 1997, it also provides insights into Compaq's misfortunes during 1998. The four Balanced Scorecard perspectives provide a causal model that allows understanding of the complex reasons for Compaq's rapid performance decline in 1998.

Compaq's performance began to suffer as Compaq pursued the acquisition of Digital Equipment Corporation. The DEC acquisition was much larger and more complicated than Compaq's earlier acquisitions of Tandem and Microcom. Compaq's and DEC's product lines overlapped significantly. There were legal and regulatory issues. There were financial and organizational issues. Addressing these myriad issues competed for management attention at all levels in Compaq.

Although the DEC acquisition gave Compaq the service infrastructure that it needed to compete in the enterprise computing market, overall learning and growth suffered as Compaq's workforce contemplated the impact of the merger. As many as 20,000 workers were being laid-off. Reorganization and planning for the combined company took precedence over improving the old company. Information systems had to be redesigned. Coordination at all levels became more complicated. Formal networks to support the operation of the company were in some measure supplanted by informal networks addressing merger issues.

The consolidation of facilities and business processes was more important than process innovation in the short run. Compaq could not focus on faster cycle times and lower inventory levels until it decided which products it would keep, which facilities would remain, and how separate workforces would be combined. Compaq failed to follow its own plans for implementing the Full conversion to build-to-order was delayed. At the same time, Compaq's growth objectives pushed it to overestimate sales volumes and deliver excess levels of inventory to its channel partners in late 1997. The competition for management attention may have limited its ability to monitor sales and balance inventory levels. Or, the desire to meet growth objectives unduly influenced its actions. In either case, the result was disastrous. Instead of the targeted level of two weeks inventory in the channel, there was five to six weeks inventory in the channel in early 1998.

Compaq was forced to take drastic action to eliminate excess inventory before the products became obsolete. They cut prices and began aggressive marketing campaigns. They shut down assembly lines for two weeks. While these efforts were successful in reducing inventory, they disrupted internal business processes, delaying new product introductions, and actually causing some shortages. Compaq couldn't bring out the latest Pentium II machines without adversely affecting the value of their products in inventory, so Compaq lost ground to companies using build-to-order production. In 1997, Compaq said its goal was to increase inventory turnover to 30 times by the end of 1998, but after the first six months of 1998, inventory turnover dropped to 10 times per year.

Compaq's customers began to worry. They worried that the merger would reduce competition and lead to higher prices. In general, customers were concerned about the effect that the merger and its attendant changes would have on them. Compaq's market share dropped to 14.4% of the U.S. market, while Dell's jumped 72% to also record 14.4% of the market in the 2nd quarter. Worldwide, however, Compaq remained the clear leader.

In March 1998, Compaq announced that it would accelerate implementation of the ODM and aggressively reduce inventories. By April 1998, those levels were down over $300 million from 4th quarter of 1997. By July, channel inventory levels had dropped to 3.5 weeks. The cost of that success, however, was significant. The price reductions and production cutbacks drove gross profit margins below 20%, down over 8% from 1997. Compaq barely broke even in the 1st quarter, earning only $16 million versus net income of $414 million in the 1st quarter of 1997. By the end of the 2nd quarter, Compaq's management claimed that this setback was now behind them. Analysts predicted that 3rd quarter results will not show much improvement, although earnings were expected to jump up to $0.36 per share in the 4th quarter. That would bring 1998 earnings per share to about $.045 (excluding special charges), a far cry from the $1.17 achieved in 1997.

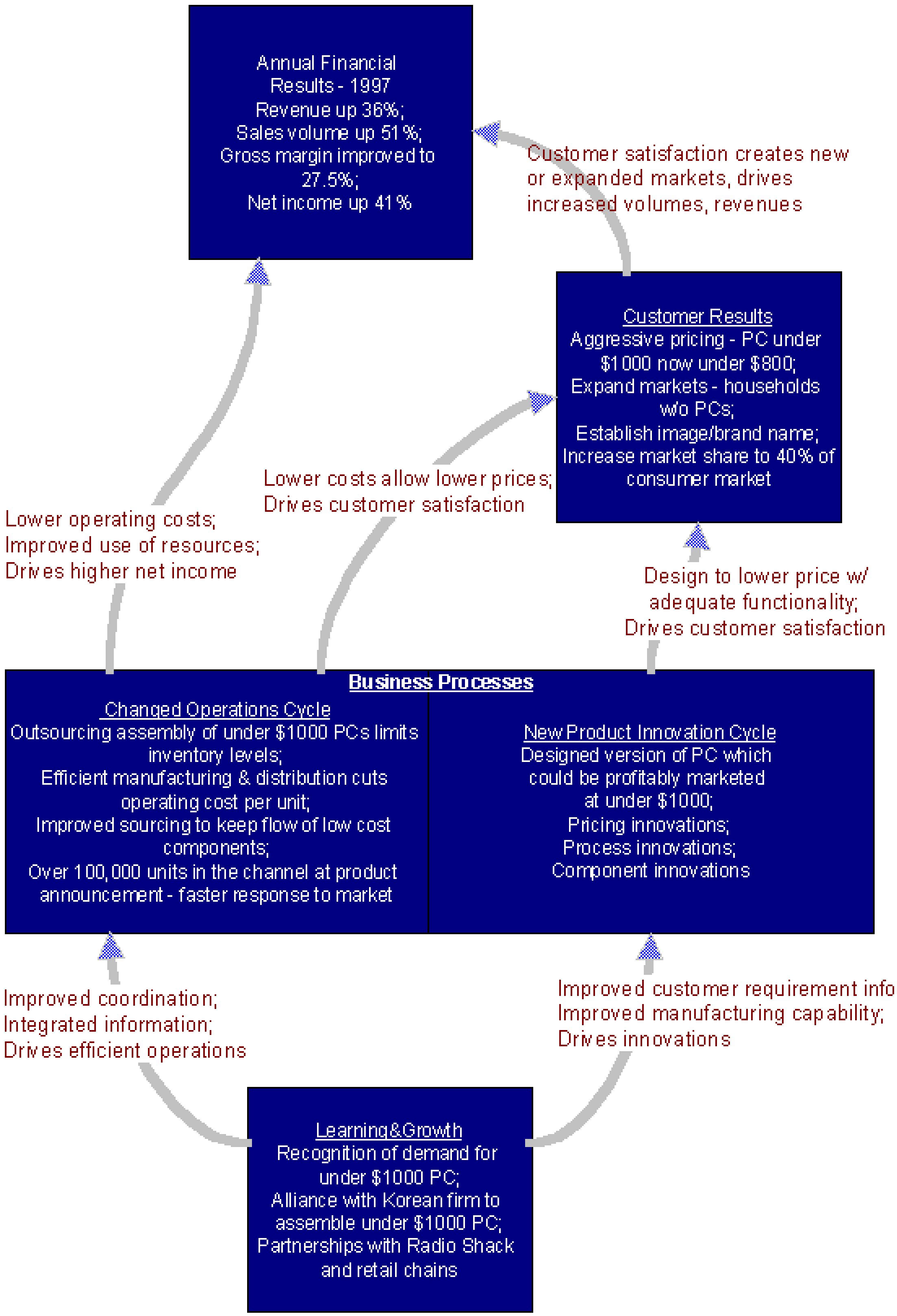
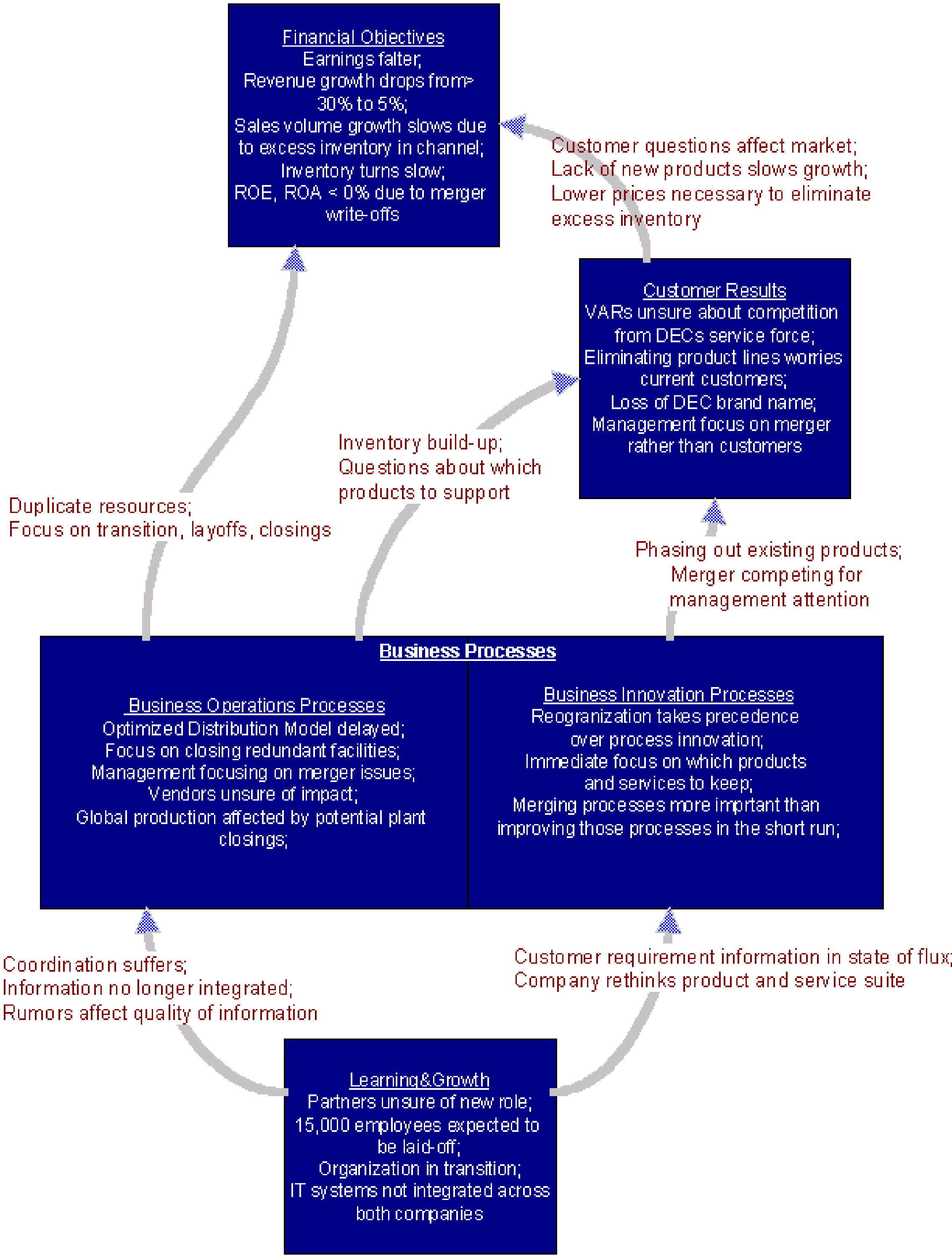


Figure 14: Compaq's 1997 Performance Based on the Balanced Scorecard

Figure 15: Compaq's 1998 Performance Based on the Balanced Scorecard



As shown in the figure above, Balanced Scorecard view of Compaq's performance in 1998, competition for management attention and the problems of merging two large companies seemed to disrupt performance along every dimension. To return to the performance of 1997, the scorecard indicates that Compaq must rebuild its infrastructure, reestablish high levels of learning and growth, refocus its processes and make new innovations, and win back customers.

Better information is necessary if Compaq is to understand and meet its customers constantly changing requirements. Compaq's managers and employees, suppliers, and VARs needed enterprise-wide access to that information to coordinate their activities across the value chain and continuously improve company business processes.

The causal linkages among the various Balanced Scorecard perspectives drive the resulting financial measures and market share results. Compaq's improved sales volumes in 1997 resulted from delivering value, increasing customer service, innovating new products, and reducing time-to-market. The growing sales volume more than offset decreasing prices to generate higher revenue. Improved cycle times and decreasing costs enabled Compaq to operate more efficiently in 1997, which resulted in higher net income levels and higher revenue per employee.

As Kaplan and Norton noted, "Financial measures are inadequate for guiding and evaluating organizations' trajectories through competitive environments. They are lagging indicators that fail to capture much of the value that has been created or destroyed by managers' actions". Therefore, we have also emphasized leading indicators, such as pricing innovations, strategic partnerships, and process reengineering efforts, to assess the contribution of information technology to Compaq's economic success.

It is not enough to excel at one aspect of business; successful companies, like Compaq, use IT as an integral part of all aspects of their businesses to gain and sustain a competitive advantage. Our Balanced Scorecard analysis of Compaq indicates that, rather than a single factor, it is the well-managed combination of factors, facilitated by access to--and prudent use--of information, that leads to good performance.

Chapter 4

4. Critical Analysis

This part of the dissertation would be an attempt at a detailed analysis of the Balanced Scorecard in light of the literature review, latest research regarding performance measurement and also through the result of the findings in the previous section.

As more and more enterprises embrace the ideas of the Balanced Scorecard and attempt to implement a scorecard — the success rate seems to be less than expected. It is not that the scorecard is not in place or even that it is not used, but rather it has not offered the bottom line impact and organizational transformations it has the capability of delivering. The scorecard should allow people to think differently, to better achieve a cultural transition, and get the larger group to move in the same direction.

After having analyzed the Balanced Scorecard's implementation in different organizations through research and surveys, a final analysis can be done in the light of the above observations. It is apparent that like any other tool, BSC also has its advantages and mostly the problems or shortcomings lie in the implementation of the tool, and the difficulties associated with the process. However, before going into the details of the inadequacies, here is a discussion of the things in which BSC facilitates the performance management and strategy translation.

Before proceeding with a general analysis, let us take a look at the individual analysis of the research organizations:

4.1 OMV-A Success Story

One of the main reasons for the smooth working of BSC at OMV has been the strong sponsorship of the higher management and the persistent efforts of the Training & Development Manager. The manager being convinced that BSC can work in a Pakistani environment has created awareness programs regarding the BSC and has also personally helped each manager in setting his/her functional goals/objectives aligned with the organizational strategy. The success of the BSC at OMV is evident from all four of the BSC performance indicators perspectives.

The financial results of Q3 2004 also provides evidence to the successful working of the BSC at OMV.

Q3 2004 Results
OMV, the Central European oil and gas Group, published its January to September and third quarter 2004 results on November 11, 2004, at 8:30 (CET).
EBIT increased by 56% to EUR 742 mn.
Net income increased by 67% to EUR 507 mn.
EPS amounted to EUR 18.80.

4.2 MTHR-The Problem Areas

Here are a few points that need to be remembered before analyzing the test application of the BSC at MTHR.

The company is 11 years old
The management is headed by the owners themselves
Growth Strategy with lost cost perspective
A set of defined processes in place
Mechanistic culture
Flat hierarchy with no development paths
Strong IT Systems with central Lotus Notes database

The above points reveal that there are a lot of things that contradict and conflict each other. Although the company has secure business, still the strategy is not really defined. The employees are not aware of the Company strategy as well. Being a petroleum-IT company, most of the employees are technically skilled and hence being immersed in the work, they focus on project deadlines. Also, the mechanistic culture does not allow much empowerment and the management does not promote development of employees other than technical skills based upon the project requirements. This has been driven by the growing retention problems. The management also does not support awareness of employees regarding the financial targets that the company aspires for. On the contrary; however, the functions are becoming a cost centers with each function bearing its own overhead cost and burden cost. Due to the mechanistic environment, the performance indicators are not received warmly by the managers at MTHR. They are reluctant to learn new performance mechanisms and limit themselves to the old performance measurement system which involves a lot of subjectivity and often results in biased feedback. On the whole, management also does not support any system that would empower employees and make them aware of the financial objectives of the organization.

4.3 Citibank-The Poor Performance Measurement System

The biggest problem with the Citibank's system is that although the BSC is in place there is too much objectivity and the HR people are not much involved in the performance evaluation. This is because of centralized HR function in Karachi.

Some of the anomalies of the present system are listed:

Non-prioritized indicators – The priorities have to be set according to the nature of work. The "customer satisfaction" indicator is dependent on infrastructure e.g. ATMs and phone lines since the bank performs phone banking services as well.
Evaluating a branch manager through this performance scorecard does not take into account his competencies and give importance to his leadership and team building potentials.

The main aim of the scorecard was to align the PMS with the strategy; however, no mechanism of gauging required behaviors has been adopted.
The system is vague and ignorant too.

4.4 Pros and Cons of Balanced Scorecard

4.4.1 Advantages

Although the advantages have been explained in detail in the literature review, still they can be summarized as follows:

- Contribution in terms of: clarifying and obtaining consensus about strategy, communicating strategy throughout the organization
- Aligning departmental and personal goals to strategy, linking strategic objectives to long term targets and annual budgets
- Identifying and aligning strategic initiatives, enabling periodic /systematic reviews
- Providing (double loop)feedback to assist learning /strategy development
- Translating better strategic alignment into 'better results '
- Potential contribution to promoting improved accountability in service delivery.

4.4.2 The Shortcomings

Most people agree that the problem with the BSC lies in the complex nature of its implementation. People do work to achieve their scorecard goals, and may ignore important things which are not on the scorecard. Or, if the scorecard is not refreshed often enough, what looked like an important goal in January may not be very germane in June.

Common implementation problems include: An ambiguous corporate or business strategy. The purpose of the Balanced Scorecard is to implement an organization's strategy and the only way this can be achieved is if the strategy is explicit and made to form the basis of the Scorecard. Ambiguity at this level will mean that the senior executive management team will struggle to translate the business strategy into specific and tangible strategic objectives. Broad consensus at top management level is also crucial followed by acceptance that the Scorecard is to serve as the organizing framework for a wide range of team based management processes.

4.5 A Discussion of the Key Problems

There are a few fundamental problems with the Balanced Scorecard work to date, the scorecards are not balanced, the scorecards are not linked to the enterprises' strategic directions, and the scorecards are not institutionalized within the organizations. Despite the unambiguous success enjoyed by so many companies from their successful Balanced Scorecards, the unhappy truth is that most attempts to install a Balanced Scorecard fail.

The Balanced Scorecard model is incomplete because it fails to: (1) adequately highlight the contributions that employees and suppliers make to help the company achieve its objectives, (2) identify the role of the community in defining the environment within which the company works, and (3) identify performance measures to assess stakeholders' contributions. Smith noted that The Balanced Scorecard fails to account for the role of "motivated employees", a critical issue especially in the service sector.[11] Finally, while The Balanced Scorecard framework provides constructs for multiple measures and overcoming the limitations of single measures, there is no clear provision for very long-term measures; the distinction between means and ends is not well defined, and the model probably needs additional empirical validation.

While the "Success Dimensions" approach provides a framework over both short and very long time-frames, its primary limitation is that no specific operational measures are provided for any dimension. The constructs of "strategic leverage" and "creating the future" do not easily translate into measurable variables for organizations.

The lack of focus on a company's human resources dimension is perhaps the most notable weakness in both The Balanced Scorecard and the Success Dimensions models. Several companies noted the issue of a lack of people orientation in The Balanced Scorecard. For example, while Best Foods (now part of Unilever) has been using The Balanced Scorecard for years, the company felt it necessary to add a fifth dimension, "People Development" to address this critical issue Similarly, many European firms (e.g., Nokia) have emphasized the importance of human resources management and the way they treat their employees as a critical component to their success. These realizations have prompted companies to include specific assessment of management training, slack time, and issues relating to the company's global employee population.

Kaplan and Norton's 'Balanced Scorecard' provides a 'learning and growth perspective,' which includes elements of employee capabilities, information system capabilities and motivation, empowerment, and alignment. However, Kaplan and Norton's internal business process perspective also includes the innovation process. It is unclear where one would apply these critical learning elements in their framework.

4.5.1 Are the Balanced Scorecards really *balanced*?

The Balanced Scorecard Collaborative, the official organization of the authors of The Balanced Scorecard (Kaplan and Norton), report that based on a survey of the Hackett Group, for most users (those claiming to use the Balanced Scorecard), 75% of their measures were financial. This compares to 82% financial measures for those not using the Balanced Scorecard. In other words, the Balanced Scorecard is a name only; it has not fundamentally changed the organizations measurement systems. In order for a scorecard to be “balanced”, the authors claim that the Financial Measures should make up about 22% of the Scorecard (as should the Customer Perspective and the Learning & Growth Perspective, with the final 34% allocated to Internal Processes measures). Further, an independent study of best practices researched 22 organizations that had “successfully implemented the Balanced Scorecard” and found a break-down as follows:

- Financial 20%
- Customer 24%
- Internal Process 37%
- Learning and Growth 18%

Fundamentally, the story suggests that Balanced Scorecards reflect the understanding that internal processes drive the financials, and that 80% of any scorecard must be non-financial.

4.5.2 The Dilemma of Strategy Execution

Nine out of ten organizations fail to execute strategy successfully. Recent statistics provided by the Harvard Business Review help explain the problem:

- Only 5% of the workforce understands their company’s strategy
- Only 15% of executive teams spend more than one hour per month discussing strategy
- Only 25% of managers have incentives linked to strategy
- Only 40% of organizations link budgets to strategy

4.5.3 The BSCs are not linked to the Enterprises’ Strategic Directions

There seems to be a prevailing and ultimately dangerous view that the Balanced Scorecard is “another measurement system”. This belief continually manifests itself when an organization harvests all of its Key Performance Indicators (KPIs), both the existing and the desired, and “dumps” them into a new framework that represents “perspectives” beyond the merely financial view. Although the effort to identify a more complete set of performance drivers beyond the traditional financial architecture is to be applauded, we need to be sure that this is not merely a process of taking another “metrics inventory” or an accumulation of the measurable targets articulated in the annual salary/performance plan and representing them in a new model. Often this so called new balanced measurement model is no more that a representation of the voices of the organization’s critical constituents usually identified as customers, shareholders and employees. In any case, the Balanced Scorecard can only have value if it is linked to the organizations strategic direction. The missing link is the strategic link. The goal of all this work is to raise the visibility of the important things that are happening in the organization, now and in the future.

4.5.4 The Scorecards are not institutionalized within Organizations

Many organizations treat the balanced scorecard as a report that must be completed on a periodic basis. In some instances these reports will be posted in the organization's common areas or e-mailed. The problem is that these reports are snapshots in-time and do not reflect the current measure status and may not even reflect the current scorecard structure. It will be impossible for the organization to become strategy focused if the scorecard is not communicated and institutionalized.

4.5.5 The Strategy-Focused Organization

The idea of the scorecard is to provide an on-going, living, sustainable framework which is communicated to the organization on-demand or even pushed at employees. This is accomplished in two ways:

- The scorecard needs to be sustainable and easy to roll-out. Scorecards should leverage technology to provide automated links to measure, text, and initiative management data.

- The scorecard must become part of the organization's culture and employee's work experience. We've found that an easy to deploy and embrace web based system will allow for rapid institutionalization of the scorecard.

These tasks are quite difficult to achieve, and the process is long too, and by the time the cultural transformation takes place, it is possible that the metrics have changed owing to the internal and external changes. This is a shortcoming and difficulty of the BSC which makes strategy translation hard.

They do so for one of several unfortunate, but predictable reasons:

1. Lack of strong executive leadership. There is simply no easy way to say this, but if the top person in the organization is not fully committed to the effort, it will very likely fail. If it is not important enough to the top dog to be personally involved, the message is loud, clear, and easily understood.

2. Making it too complex. The key is to make the Balanced Scorecard as simple as possible. No matter how complex the organization itself might be, the key is to watch the eyes of the business partners. If they glaze over, simplify, simplify, simplify!
3. Taking too long to get it out. By their very nature, professionals are detailed, orderly, and precise. Unfortunately, these positive attributes undermine a sense of urgency. When initiating a Balanced Scorecard project it is crucial to get it out as quickly as possible. It is important, therefore, not to get caught up in details. Good enough is acceptable.

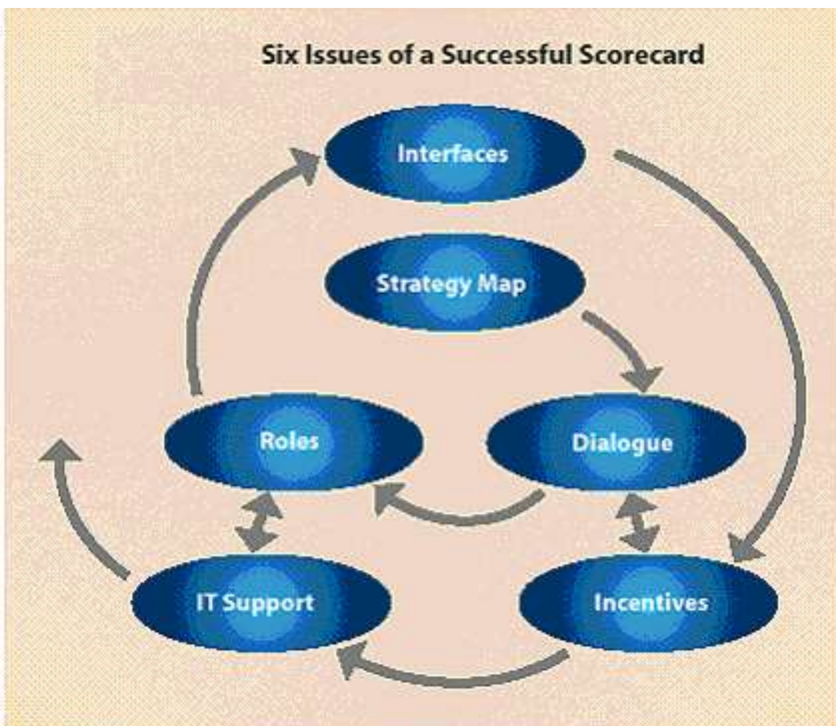
4. Expecting too much. The Balanced Scorecard is a tool, not a panacea. By itself it is nothing more than a display of measurements. But if it is integrated into an executive's leadership system and consistently used, it can help bridge the credibility gap. It is the personal responsibility of the IT executive to set and adjust expectations.

Chapter 5

5.1 Conclusion

According to the BSC community, scorecards can clarify business models, heighten awareness of strategy within the organization, make execution more effective and, consequently, improve financial performance. But, all too often these benefits do not seem to materialize. Venkatraman and Gering suggested that organizations need to focus on four areas in order to implement the scorecard concept successfully, and I agree with them. These are:

1. Make the strategy explicit.
2. Choose the measures.
3. Define and refine.
4. Deal with people.



They have identified six BSC issues to be addressed in the order illustrated by the spiral, and this is a good mechanism. The process should start at the centre, and build bridges and interdependencies between the inner and outer loops.

A successful roll-out should allow people to think differently, better achieve a cultural transition and get the larger group to move in the same direction. Success can be achieved by using the Balanced Scorecard as a Strategic Navigational Chart which will balance the Scorecards, link the Scorecards to the enterprises' strategic directions, and institutionalize the scorecards within the organizations.

The seeming simplicity of the scorecard concept makes people underestimate the difficulties of putting it in place-and the research in the organizations are similar. A scorecard is a format for describing an organization's intentions and achievements. To become useful and actionable, a number of critical choices need to be made about its use. Organizations have applied scorecards in different ways and for different purposes, but these are rarely a consequence of conscious choice. Rather, it seems that each organization sees the scorecard as the answer to its own particular problems. It is not surprising that BSC projects fail when there is no agreement on its scope or aims.

5.2 Recommendations:

To deliver maximum value, a balanced scorecard solution must:

- Be built using guidance from experts in developing balanced, leading, and strategy-focused metrics and initiatives.
- Reflect and communicate organization's unique business strategies, objectives, and measurements, and provide a way to manage the details.
- Provide a way to automate the collection and summarization of all the data that is fed into the balanced scorecard solution.
- Work within existing operational, analytical, and communication tools.
- Integrate with other technologies and enterprise systems.

To summarize, it is evident from the discussion that BSC provides a systematic approach towards performance management and strategy translation; however, it requires a major effort with top management support and an idea champion with IT integration throughout the organization with a clear and explicit strategy.

This thesis has come to the conclusion that the different aspects of strategy are handled to a large degree in the IT adjusted Balanced Scorecards, but in many cases not as sufficiently as desired. Since strategies vary in degree of granularity and scope depending on organizational level applied in, findings in this study suggests that the IT adjusted Balanced Scorecards must be equally adjusted to fit that organizational level.

Despite the shortcomings, the proposed BSC scorecards are useful and comprehensive with many suggestions of actual measures for operational activities. The chosen perspectives are similar between the proposed scorecards and have been applied in various environments and tested empirically by researchers during the late 1990s and early 2000s. Once management is successful in establishing cause-effect relationships through a clear strategy, it becomes easier to revise them with time and lessen the impediments in the implementation process.

Annexure

The Management and Appraisal System

IDENTIFICATION NO		NAME		Appraisal Group.
DESIGNATION		LEVEL		DEPARTMENT
BEGIN DATE		ENDING DATE		LENGTH OF REVIEW

Performance Dimensions

E	**Exceptional**	G	Good	NS	Not
VG	Very Good	S	Satisfactory	N/A	Not

BEHAVIORAL COMPETENCIES FOR MANAGERS	PERFORMANCE HIGHLIGHTS / RES
Management Process dimensions	
Effort & resource Utilization	
Problem solving & innovation Skills	
Leadership, teambuilding and developing people	
Cross Functional Responsibilities	
Communications and Interpersonal Skills	
OVERALL MANAGEMENT RATING	

Developmental Dimensions

IDENTIFICATION NO		NAME		Appraisal Group.	
DESIGNATION		LEVEL		DEPARTMENT	
BEGIN DATE		ENDING DATE		LENGTH OF REVIEW	

Developmental attributes Assessment	ACTIONS AND
Management Process dimensions	
Effort & resource Utilization	
Problem solving & innovation Skills	
Leadership, teambuilding and developing people	
Cross Functional Responsibilities	
Communications and Interpersonal Skills	
OVERALL MANAGEMENT RATING	

PERFORMANCE DEVELOPMENT PLAN / TRAINING

SUMMARY OF DEMONSTRATED STRENGTHS:

SUMMARY OF DEVELOPMENT NEEDS:

SUMMARY OF DEVELOPMENT ACTIONS PLAN / TRAINIG NEEDS

SUPERVISOR COMMENTS:

NAME & SIGNATURE OF SUPERVISOR: Date:

Overall result of t the 360degree back

NAME OF SENIOR MANAGER & SIGNATURE: Date:

EMPLOYEE COMMENTS:

❖ This evaluation was discussed with me on: (Date)

EMPLOYEE SIGNATURE: Date:

HUMAN RESOURCES COMMENTS:

NAME & SIGNATURE OF HUMAN RESOURCES OFFICER: Date:

Upon completion, please forward Evaluation Form to Recruitment Services & Performance Management Unit / Human Resources Department

Use additional sheets if required

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