

BSC SOFTWARE TO EFFICIENCY AND PERFORMANCE

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ABSTRACT

Management processes directed primarily to the user and thus improve the efficiency and effectiveness of operations in exceeding user demands and expectations. So that organizations realize the benefits on all levels, as compared with external partners and business environment, as well as internally within the organization. But in practice, systems for managing corporate change often point to the shortcomings and lack of commitment at the level of corporate governance in order to improve the efficiency of the process. Taking into account the problems they face at the same company, Balanced Scorecard - BSC stands out as especially suitable tool for the management of corporate change. BSC translates mission and strategy of the organization in the comprehensive set of measures that provide a framework for the implementation of the strategy. But many senior managers recognize that no single measurement can provide enough information about the critical areas of the business. Therefore, a balanced set of measurements is needed. Organizations today use decentralized business units that focus on intangible knowledge, capabilities, and relationships created by employees. Some organizations understand that strategy must become a continual and participative process. The change from centralized command, and financial measures that come from past actions can no longer measure the objectives that need to be addressed. We must measure the strategy and the best tool to do this is balanced scorecard. BSC makes it possible to establish a model in the profit organization, so that the strategic aspects of the observed set relevant objectives and include features that will be measured. BSC aims to improve business processes for a streamlined process can improve product quality to customer satisfaction. So satisfied and loyal customer is a guarantee of higher profits. The balanced scorecard combines an effective measurement system that helps solidify a company's strategic objectives with a management system that can help drive change in key areas such as product, process, customer, and market development. The measures of the balanced scorecard helps focus a company's strategic vision, encourages thinking about current and future success and helps provide a balance between external and internal measures. This paper presents BSC modeling of key success factors represented in strategy map of profit organization and how it affects the organization's measurement system.

Key Words: BSC, modelling, processes, profit organization

1. Introduction

With the increasing complexity of the business environment in the 21st century, organizations have to be able to manage rapid change. It is necessary to develop managerial navigation and measurement tools that guide and assess organizational performance. With the increa-

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sing pressure to achieve performance improvement, the need to implement highly effective efficient and integrated management systems is continuously increasing. There has been an emphasis on understanding how performance is created within the firm. To understand what drives performance, managers must have in place performance measurement systems designed to capture information on all aspects of the business.

The company's success for tomorrow depends on its ability today of intangible assets such as customer relation, internal business process and employee learning. Measuring organizational success and implementing effective strategies for future success represent continuous challenges for managers, researchers and consultants. In recent years, traditional performance management techniques measure the organizational financial performance such as revenue, sales volume and profit are blamed for that they are one-dimensional and they are backward-looking in the record (Missroon, 1999). Financial measures describe only a small part of the firm performance. Traditional financial measures, like ROI and EPS, can give misleading signals. As a result, managers want a balanced presentation of both financial and new operational measures.

One performance measurement tool – the balanced scorecard (BSC) has broad appeal. The concept of balanced scorecard (BSC) was first introduced by Robert S. Kaplan and David P. Norton (1992) in Harvard Business Review article. The BSC helps determine what is important for existence and sustainability by addressing multiple layers of the firm. Approximately 50% of Fortune 1,000 companies in North American use a version of the BSC (Wang, 2006).

The Balanced Scorecard (BSC) is a performance measurement system as well as a strategic management tool introduced by Kaplan and Norton (Kaplan and Norton, 1992, 1993). The authors proposed that financial measures alone were not sufficient to measure performance. The BSC addresses shortcoming of traditional performance measurement systems that relied solely on financial measures. Other factors such as competence and knowledge, customer focus and operational efficiency and innovation were missing from traditional financial reporting. Kaplan and Norton introduced three additional measurement categories that cover non-financial aspects. The BSC puts strategy and vision at the center of the system. It establishes goals and assumes employees will adopt their behavior to achieve the goals. Management may know what the end should be, but they cannot tell employees how to achieve, because the environment is constantly changing.

Kaplan and Norton (1992) developed their balanced scorecard model for use by profit-maximizing organization. The first three dimensions translate into improved financial outcomes (Kaplan and Norton, 1996a). The traditional performance measures focus solely on financial metrics such as return on investment or net earnings (Lynch and Cross, 1991). The Balanced Scorecard (BSC) model requires corporations to evaluate their organizational performance from four different perspectives—financial, customers, internal businesses, and learning and growth. (Kaplan and Norton, 1992, 1993). The BSC has gained prominence in management accounting research as a way of integrating financial and non-financial performance measures. For certain firms, non-financial measures such as development copyright, or improving customer loyalty, are better indicators of future performance. The performance measures links to BSC give to the management a fast but comprehensive view of the business. The BSC model includes both financial and non-financial measures and managers can get information about the organizational vision and strategies, which integrate with organizational performance (Missroon, 1999). The performance measurement tools can help businesses to

evaluate their resource allocation process in order to determine how resources can be better managed and distributed to the appropriate channels.

The organization can build their key strategic objectives through developing the four perspectives of BSC. The BSC can not only be used as an evaluation of the organization performance, but also to be used as a strategic management tool. The BSC can be used to focus attention on the most critical resources and induce consistency of decision making and resource allocation (Neely et al., 1995).

It also aligns the organization to the strategy by focusing employees on their role in accomplishing the company mission. The BSC drives measures from the organization's mission, thereby aligning goals to strategy.

The BSC has evolved and morphed from measurement tool to strategic change framework, and most recently to a tool to measure the readiness of intangible value drivers (Marr and Adams, 2004). The original BSC idea (Kaplan and Norton, 1992) was later described as a strategic management tool, capable of communication vision and strategy to all parts of the organization (Kaplan and Norton, 1993, 1996b). Increasing competition and globalization, organization integrated strategic management tools that link performance measurement to organizational management. The strategic vision for achieving the company's financial goals is articulated throughout the scorecard development process.

The BSC has had a considerable impact on organizations worldwide. (Frigo, 2002) A US survey estimates that 60% of Fortune 1000 firms have experimented with the concept (Silk, 1998).

The BSC has gained wide acceptance, particularly in the US. A survey of its members by the American Institute of Public Accountants and Maisel (2001) revealed that 43 percent were utilizing the technique. This is not only to its intrinsic value to businesses, but also because the concept has been aggressively marketed. There are only about 35 percent of the 5000 largest firms used the BSC (Marr B., 2005), which is lower than the 44 percent reported by Rigby (2001) and higher than the numbers reported by Speckbacher et al. (2003).

In order to understand how longer-term, non-financial objectives translate into value, Kaplan and Norton (2000, 2004) suggest visually mapping relationships between strategic objective and their measures into a strategy map. A strategy map contains outcome measures and performance drivers linked together in a cause-and-effect diagram. Speckbacher et al. (2003) found that about half of companies using a BSC also use causal maps. No longer do managers have to work their way through piles of statistics, but can focus on monitoring some 15-20 key indicators instead.

The BSC measures across four hierarchical perspectives and describes a series of causal relations between four perspectives that culminate in the achievement of financial objective. The lowest level in the hierarchy is the learning and growth perspective because actions taken there. Outcome measures of the learning and growth perspective become indicators of the outcomes of each of the three perspectives above it in the hierarchy. Employees with higher skills and knowledge are compensated with higher salaries and employee benefits (Milkovich and Newman, 2002). The employee skills could increase internal business process perspective (Bryant et al., 2004). Common outcome measures include employee satisfaction, employee retention, employee productivity and turnover (Niven, 2002; Kaplan and Norton, 2004; Huckestein and Duboff, 1999).

Internal Business Process Perspective encompasses the entire internal value, which includes innovation, customer management, operational, and regulatory (Kaplan and Norton, 2001). Other outcome measures are operating process quality, cycle time and inventory turnover (Niven, 2002; Wang, 2006).

The third level in the BSC is the customer perspective, which focuses organizations on the external environment and allows firms emphasize customer needs, which includes customer satisfaction and market share. Other outcome measures of the customer perspective are market share and sales growth (Bryant et al., 2004). The financial perspective is considered the highest-level perspective. Companies improve shareholder value through a revenue strategy and a productivity strategy. The outcome measurements are return of investment and profit. Kaplan and Norton (2001) suggest that cause-and-effect relations exist among perspectives. That is, an outcome measure of a lower-level perspective may be an indicator or predictor of an outcome measure of a higher-level perspective. There is a positive relation between non-financial outcome measures of the lower-level perspective and the outcome measures of the financial perspective. The employee skills could increase internal business process perspective (Bryant et al., 2004). Highly skilled and productive labors lead to great process quality and cycle time.

Operating profits are the result of managerial actions, such as upgrading employee skills or implementing program to improve customer satisfaction. The third level is the customer perspective, which focuses organizations on the external environment and allows firms to emphasize customer needs. The customer perspective identifies outcome measures that will facilitate the achievement of the financial objectives. Profits could increase indirectly through increased production, which could lead to increased market share and high revenues.

2. Strategic planning in the profit organization

Strategic planning is a continual process within an organization, the people responsible for the success of strategic planning outline the desired future, then devise a strategy for making it happen. Strategic planning by its very nature is adaptive and the deviser is always developing it to be relevant for the future. Key environmental factors are predicted and their influence on the organization looked at and then optimum measures are taken so the organization can benefit from these environmental factors.

The Composition of a Strategic Plan Strategic plans are generally made up of one or more interconnected elements; Vision, mission, Values, assessment, goals/objectives, strategy and outcomes.

Strategies for Management of Organizations Between the late seventies and early nineties strategic planning for IS was introduced in to organizations. This came about because executives within organization were looking at linking business objectives with systems (Galliers, 1994).

The prescriptive approach views the analysis, strategy development and implementation within the planning process as rational and linear. This fundamentally means that prescriptive strategy is one whose objective has been defined in advance and whose main elements have been developed before the strategy begins (Lynch, 1997). In relation to this an emergent strategy is fuzzier and it has been stated by theorists that the strategy evolves or emerges to adapt to human needs. Over the last ten years developments in strategic planning and management

have not emphasised heavily on planning and have concentrated more on adaptability and learning, an example of this is systems thinking (Senge, 1990) and chaos theory (Stacey, 1993).

Mintzberg (1990) identifies a number of major difficulties with the prescriptive strategic process, processes are invalidated when there are major changes in competitors and government.

„Simplified Strategic Planning provided us a straightforward process that helped our already successful organization set a much clearer direction for the future.“

Ed Engle, Jr., President, Rima Manufacturing Company

„A system that is very well honed. Important for those who are serious about planning but need to make every second count.“

Dean Arnold, V.P. of Public Operations, Kenco Group, Inc.

„As the chairman of [the strategic planning] effort your program has given me the tools I will need to clearly move our organization through the development and ultimate implementation of our strategic plan. I'm confident that I am now ready to lead this effort for our company.“

Kevin Lapanne, Executive Vice President, Dooley & Mack Constructors Incorporated, Sarasota, Florida

„Simplified Strategic Planning provides a logical and timeless framework for analyzing our industry, our company's place in it, and the goals we need to meet in order to achieve our strategic objectives. Using this process for three years, we have doubled our sales volume and have also doubled our operating profit percentages.“

G. Alex Bernhardt, Sr., Chairman and CEO, Bernhardt Furniture Company

„What we accomplished...was unprecedented in our company's history...we have defined a consensus among the top management as to what kind of a company we will be for the next five years. Establishing this shared vision and the means to achieve it would not have been possible without strategic planning. This process is extremely well organized and compelling while allowing the special human attributes of our organization to flourish.“

Harris C. Footer, President and CEO, Easy Day Manufacturing Company

Strategic planning is more than ensuring that profit organization will remain financially sound and be able to maintain its reserves—it's projecting where association expects to be in five, ten, or fifteen years—and how association will get there. It is a systematic planning process involving a number of steps that identify the current status of the association, including its mission, vision for the future, operating values, needs, goals, prioritized actions and strategies, action plans, and monitoring plans. Strategic planning is the cornerstone of every common-interest community. Without strategic planning, the community will never know where it is going—much less know if it ever got there. An important concept of strategic planning is an understanding that in order for the community to flourish, everyone needs to work to ensure the team's goals are met. Team members include all association homeowners, the board of directors, professional management—whether onsite or through a management company and various service professionals such as accountants and reserve professionals.

This team needs to work as a collective body to be successful. Part of the team concept is the establishment of roles for the team players. Teams usually perform poorly if everyone or no one is trying to be the quarterback. The process is strategic because it involves preparing the best way to respond to the circumstances of the profit organization's environment, whether or not its circumstances are known in advance; nonprofits often must respond to dynamic and even hostile environments. Being strategic, then, means being clear about the organization's objectives, being aware of the organization's resources, and incorporating both into being consciously responsive to a dynamic environment. The process is about planning because it involves intentionally setting goals (i.e., choosing a desired future) and developing an approach to achieving those goals. The process is disciplined in that it calls for a certain order and pattern to keep it focused and productive. The process raises a sequence of questions that helps planners examine experience, test assumptions, gather and incorporate information about the present, and anticipate the environment in which the organization will be working in the future. Finally, the process is about fundamental decisions and actions because choices must be made in order to answer the sequence of questions mentioned above. The plan is ultimately no more, and no less, than a set of decisions about what to do, why to do it, and how to do it. Because it is impossible to do everything that needs to be done in this world, strategic planning implies that some organizational decisions and actions are more important than others - and that much of the strategy lies in making the tough decisions about what is most important to achieving organizational success.

The point of strategic planning is to develop long-term strategies that use organizational strengths and take advantage of opportunities so that the organization can achieve its goals. Based upon the strategies, short-term operational plans are developed, consisting of measurable, time-limited objectives and the activities necessary to achieve them. Operational plans are normally developed by agency staff. The budget process allocates resources according to the priorities set by the Board of Directors. Strategies and operational plans are the most flexible element of strategic planning and may be adjusted throughout the period covered by the plan in order to respond to changing conditions. A key element of outcome-based planning is the identification of performance measures or indicators of success (benchmarks or standards to measure progress). Often, these can be difficult to define, particularly for social service organizations and programs aimed at prevention or social change. It is important, however, that consideration be given to measurement and evaluation throughout the planning process. Monitoring of performance is an important part of the Board's role and funders are increasingly requiring performance measures as a condition of funding. In the strategic planning process, performance measures are normally established by staff, sometimes with the assistance of experts in evaluation. There are as many processes for analyzing the organization's dynamic situation and determining its strategic direction as there are planning management books and consultants.

In order to achieve BSC goals, most profit organisations need to redesign and/or continuously improve key business processes. This includes the structuring, training and deployment of cross functional business process reengineering (BPR) teams for iterative process improvement or more comprehensive process redesign. Considering the limited resources of most companies, a key strategic issue is which processes to focus on first. The focus should be on those processes that are most importantly related to the company's business strategy. Comparisons of future process performance targets with what the company has previously achieved

ved will reveal the degree of improvement that is required. The company should periodically report and analyse performance results, as well as make adjustments to their strategy based on that analysis. The BSC methodology creates an infrastructure in which top management can easily track and analyse their company's performance. This is easier if the company uses a BSC software solution. Most companies update their BSC's on an annual basis. However, as the business environment changes and BSC learning accumulates, companies tend to change some of their performance objectives, measures and targets. A fundamental aspect of the BSC methodology is making such adjustments in a timely manner to ensure the success of strategy execution.

3. Key Benefits of using BSC in the profit organization

In today's strong competitive environments, firms should be agile and flexible. Therefore, availability of the right information at the right time based on performance evaluation has become critical (Banker D. R., et al., 2004). It is essential to improve managing and planning firms' service based on performance evaluation (Abran and Buglione, 2001). The traditional financial performance measures worked well for the industrial area, but they are out of step with the skills and competencies companies are trying to master today. In other words, no single measure about finance can provide a clear performance target or focus attention on the critical areas of the business (Kaplan and Norton., 1992). Therefore it enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they would need for future growth (Kaplan and Norton., 1996a). It is intended to link short-term operational control to the long-term vision and strategy of the business. In this way a company focuses on a few critical key ratios in meaningful target areas (Olive and Wetter, 1999). Managers consider that all performance measures are important at the same level. In fact, some of the measures critically influence the strategic accomplishment, while the other measures do not have a direct effect. So, considering the relative weight for consolidating the normalized value is needed.

Key benefits of the BSC in profit organization are [2,9,10,11,20,23,26] :

- **Consensus on the strategy at executive level.**

Building a BSC requires brain-storming at Board/Higher Level where discussions are held on Organization's Vision and it's Core Values. This helps in every-one getting aligned about these basics and helps executives look for growth strategies clearly. BSC discussions sets the priorities for the organization and senior executives can visualize the future more clearly.

- **Communicates strategy to the organization.**

BSC clearly defines the steps the organization would take to achieve it's goals through well thought-of strategy. The working of the strategy, setting priorities in line with various internal and external constraints helps the leadership appreciate the chosen strategy and it's need.

- **Translates strategy into meaningful goals.**

Building a BSC requires determination of specific goals and targets. The organization now has clear vision of what is to be done to achieve it's goals. With the priorities and the game plan clearly defined, every one now focuses to achieve the goals.

- **Employees identify themselves with goals.**

Employees working to achieve the goals identified in the BSC can clearly identify themselves with how they are helping the organization to achieve its growth. It is very important that Employees are explained the BSC at each possible opportunity to help them understand the way their achievements are paving path for the organization's future. Employees then feel proud to be involved in the efforts they put-in on day-to-day basis. This further helps employees getting aligned to Company's Vision and Mission.

- **Personal targets linked to strategy.**

Achieving goals identified in the BSC requires involvement of various employees and Process Owners on a continuous basis. Most of the time these would be stretch assignments for the employees. Goals with defined timeline require that the targets be met within schedules. These therefore establish a suitable measurement tool for senior Leadership's achievements and can help in appropriate and justified Rewards and Recognition program of the organization.

- **Processes focus to achieve strategic goals.**

Having established a BSC forces various process owners to modify the key processes of the organization to achieve identified goals. Since these processes directly effect the organization's performance, they are likely to be the Key processes. With focus concentrated on key processes, the organization meets the customer's expectations more efficiently and helps make the organization more competitive.

- **Periodic reporting of status of strategic goals.**

BSC forms the key part of management system and therefore is discussed periodically. This helps keeping every-one in the organization aligned and achieve growth through BSC Drives investment / budget decisions. BSC forces the leadership to visualize the future/growth of the company and use appropriate resources and manpower to achieve the Strategic Goals. With wide agreement on BSC among the senior leadership, it is easy to manage the Budget provisions and invest wisely, rather than on a historical basis!

Once the company mission, strategy and measures have been defined and agreed upon, the next step is to understand fully the drivers (causes) behind movement (up and down) of balanced scorecard. Without the specific knowledge of what drivers will affect your scorecard, profit organization just might spend much time, money and effort and achieve very little.

These drivers fall into four categories :

- Environmental - those factors outside the influence of organization, such as governmental regulations, the economic cycle, local, national and global politics, etc.
- Organizational - systems inside the organization such as company strategy, human resource systems, policies, procedures, organizational structure, pay, etc.
- Group or departmental - work processes, group relationships, work responsibilities, work assignments
- Individual - personality, management style, skills, behaviors.

It is important to note that maintaining the scorecards is critically important after a BSC system is established. Most companies update their BSC's on an annual basis, usually during the last quarter of the year, just after or during their budgeting process. If there are significant changes in market, business, or internal conditions, BSC's should be adjusted in a more timely manner, rather than waiting for annual review. Launching a BSC initiative requires

senior management's support and involvement. The CEO or leader of a profit centre should be appointed as the BSC champion. It responsibility is to analyze and reach agreement on the company's business strategy, as well as approve company and departmental goals. The project team's responsibility is to coordinate implementation activities and monitor progress of the BSC project.

This team usually consists of representatives from HR, IT, and other key departments. In larger companies, an HR manager or professional is sometimes appointed as the project team leader (or coordinator). The BSC project team should consider linking the BSC performance management system to competency development. This enables employees to focus not only on their BSC goals, but also on competencies that may be critical for strategy execution, such as teamwork and communication. A company's core competencies (including management competencies) should be selected based on the company's business strategy, core values and culture. The BSC system should be linked to variable pay in order to motivate all employees to work together to achieve the company's strategic goals. When designing the variable pay component, it is important to consider the relative importance and priority of objectives in each perspective and at each level of the organisational structure. The decisions made about relative importance and priorities communicate clear messages to all managers and employees.

4. Modeling goals on BSC perspectives in profit organization

The company must take the investment and the decisions of financing on a basis of continuation. To take the wise optimum and the decision, a clear arrangement of the objectives is a need. The objectives are employed in the direction of a criterion of goal or decision for the decision implied in financial management. The economists [20,23,26] believe that the maximum benefit of income is the single goal of any organization of businesses, because that will also lead to the optimum allocation of resources. Actions which increase the benefit of companies are undertaken and those which decrease the benefit are avoided. Thus, of the prospect for the economic theory, the maximization of benefit is simple a criterion of economic efficiency. There is also an extensive agreement which under the perfect competition, where all the prices reflect true values exactly and consume them are quite informed, benefit maximizing the behavior by companies leads to the effective allocation of resources and the maximum good social being.

A business firm is a profit seeking organization. Profit is a test of economic efficiency. It is assumed to lead to efficient allocation of resources. It ensure maximum social welfare limitation of profit maximization objectives. A system based on the private property and the maximization of benefit could be effective, but it carries out it leads to the serious inequality of the income and the richness among various groups. Naturally, the contrary argument is that the company as a whole is clearly easier because it leads to the optimum allowance of the resources of the company.

Business is started to earn profits as it is essential for the survival and growth of business enterprises. Profit earning should be regarded as the main objective of business unit. The need of profit in business is left to cover the cost of production and also create a surplus for undertaking expansion and diversification work. The survival of the business will be a day-dreaming affair in the absence of profit. Earning of profit should be the objective of business units. However, the business should not have the objective of maximization of profit because it

leads to exploitation of the consumers. The primary motive of the business is to earn profit because it provides stimulus to human efforts in undertaking business activities. Because of this reason the earning of profit occupies uppermost position in the minds of the businessmen.

Profit making should be the primary objective of the business because of the following reasons :

- Profit is essential for the growth of business enterprise. Profit is regarded as the main source of growth for business enterprise because it provides finance for expansion and diversification. The business can be continued when there is a fair profit.
- Profit is essential for the survival of the business enterprise because the existence of business unit can not be seen in the absence of profit. The presence of profit enables to meet various expenditures and face during the stage of recession.
- Profit is required to meet the individual as well as the social requirements of the trader.
- Profit helps in fulfilling various social goals because a business is expected to serve various sections of the society like the consumers and the labourers.
- Profit is regarded as a good measure of efficiency of the organisation because the performances of a business unit is judged from the angles of profit. Due to this reason, it has been rightly observed that profit is the acid test of the business unit. It is regarded as an index of business success.
- Profit is essential at the time of attracting additional capital for undertaking expansion and modernization measures.
- Profit is needed because it serves as a provision of risk bearing. The primary task of business is to provide adequately for the cost of staying in business.
- Profit earning is essential for the survival and growth of business enterprises. maximization of profit is not desirable because it leads to exploitation.

According to the literature review and many other real examples strategy map of the profit organization is shown at the figure 1.

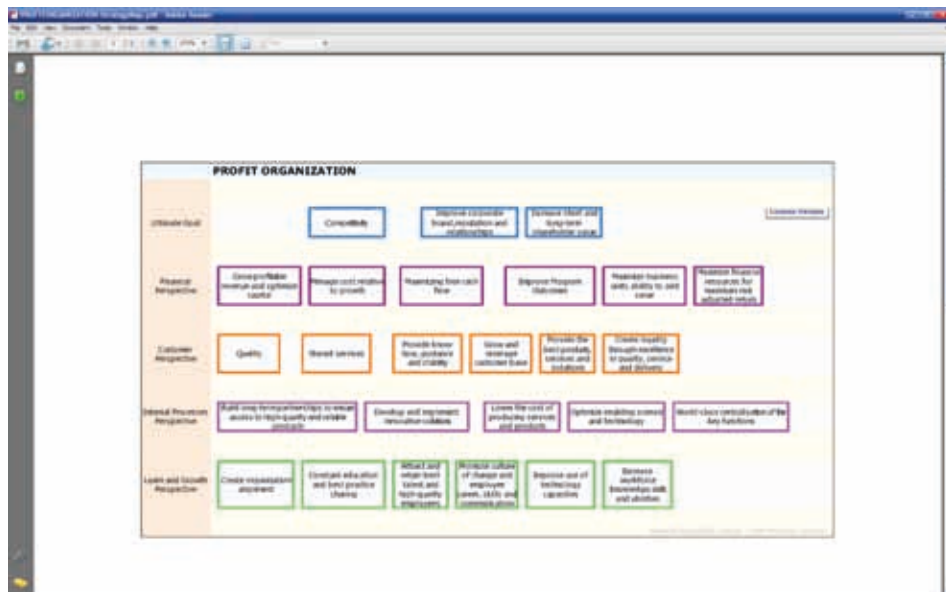


Figure 1. Strategy map of the profit organization

Figure 1. can help us to chose goals from each perspective of the profit organization and see theirs performance in BSC software and measures as results (outputs) from that software, but the choice of goals has to be random. So, the choice of the goals can be seen at the figure 1.; also in this paper BSC modified goals will be shown. Next, is to put these goals in BSC software. Results are shown at the figure 2. and 3. In table 1. are presented measures for improved and modified BSC goals as reasult of software.

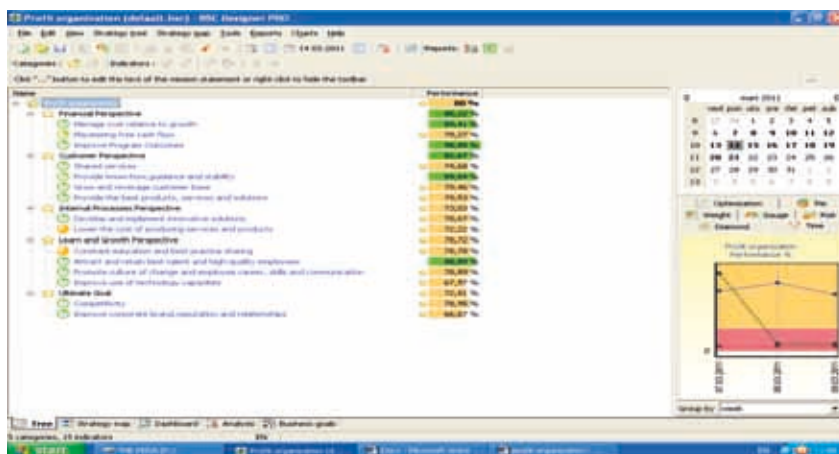


Figure 2. BSC goals of the profit organization

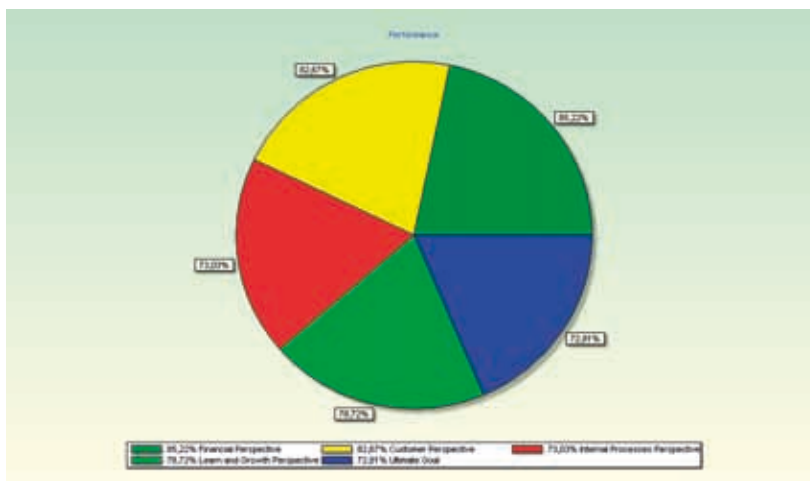


Figure 3. BSC goals of the profit organization

Objectives	Measures		
Constant education and best practice sharing	Number of new ideas from internal and external sources	Presentation and communication, skills, tools, forums	Number of propositions for internal trainings per employee
Attract and retain best talent and high-quality employees	Top quality of talent pool	Percent of employees with access to and knowledge of advanced modeling tools	Employee culture survey for innovation and change
Promote culture of change and employee career, skills and communication	Employee satisfaction and retention	Provide leadership support	Number of suggestions for products and capabilities
Improve use of technology capacities	Number of projects delivered on time	Percent of projects advancing from stage to stage	Peer review of current scientific and technological capabilities
Develop and implement innovative solutions	Percent of time available for productions	Cycle and process time	Process efficiency
Lower the cost of producing services and products	Number of solutions evaluated	Marketing Performance	Technology gap analysis score
Shared services	Number of incidents of warranty and field service repairs	Number of hours spent with customers	Rewards program
Provide know-how, guidance and stability	Customer loyalty program	Number of services available to customers	Market share
Grow and leverage customer base	On-time delivery percentage	Lead times, from order to delivery	Number and frequency of customer

Provide the best products, services and solutions	Quality ratings from premium customers	Service error rate	Global strategic understanding of sourcing
Manage cost relative to growth	Initial warranty and field service costs	Internal rate of return	Number and quality of new investments
Maximizing free cash flow	Royalty and licensing income from patents	Return on spending on technology	Net excess from portfolio sales
Improve Program Outcomes	Revenue and margins from new customers with new products	Revenue from markets and segments	Number of safety incidents from new products
Competitiveness	Activity-based cost of key operating processes	Marketing, selling, distribution and administrative as percent of total cost	Number of environmental incidents from new products
Improve corporate brand, reputation and relationships	Net asset value growth	Number of new business opportunity identifications	Manufacturing process yield for new products

Table 1. Measures for improved and modified BSC goals of the profit organization

Companies worldwide continue to adopt the BSC approach because it is indeed one of the few methodologies that is not only sound from a theoretical perspective, but meets the criteria of practitioners – it delivers results. The hard work designing and implementing scorecards is typically repaid in financial performance, customer satisfaction, operational efficiency and employee growth. These rewards correspond directly with the perspectives a company commits itself to in implementing the BSC. Kaplan and Norton defined the BSC as a multi-dimensional framework for describing, implementing and managing strategy at all levels of an enterprise by linking objectives, initiatives and measures to an organization's strategy. The scorecard provides an *enterprise* view of an organization's overall performance by integrating financial measures with other key performance indicators around customer perspectives and internal business processes, and around organizational growth, learning and innovation. The BSC is not a static list of measures, but rather a framework for implementing and aligning complex programs of change, and indeed, for managing strategy-focused organizations.

Effective enterprise-wide BSC must allow for the participants to effortlessly move from big-picture analyses to organization-level details to facilitate proactive decision-making. Multi-enterprise BSC gains must optimize performance at every level of the enterprise. The enterprise will accomplish better decision making through consistent and visual business performance management. In order to manage the complexities involved - a high-performance, web-enabled software enabler may need to be considered.

Conclusion

The BSC has become a popular concept for performance measurement. It focuses attention of management on only a few performance measures and bridges different functional

areas as it includes both financial and non-financial measure. The bridging to be performed can be both hierarchical and horizontal. The BSC model improves performance efficiency and effectiveness, depending on the level of perceived value and acceptance. The BSC can be adapted for use in public-sector organizations simply by rearranging the scorecard to place customers or constituents at the top of the hierarchy.

The BSC model presents a tool for translating an organization's mission into more tangible measurable goals, actions and performance measures. The BSC approach involves identifying key components of operations, setting goals for them, and finding ways to measure progress towards their achievement. One of the strengths of BSC is that it forces management teams to explore the belief and assumption underpinning their strategy. Another of the strengths is that its appearance is so agreeably simple. It suggests that with only a few well-balanced numbers one can monitor the performance of an entire company. It also can serve as a bridge between different field, both financial and non-financial ones.

The BSC represent not a way of measuring the success of an organization but go future in that they offer managers a "road-map" by which they can manage. At the beginning, when managers develop the scorecard they have to establish the organizational "vision". Then managers determine strategies basing on the vision. The third, managers plan some activities which can approach the strategies. Finally, managers measure the performance and indicate. The BSC is a hierarchical model in which financial performance forms the primary goal to which the other dimensions contribute rather than a truly "balanced" model affording equal status to non-financial objectives.

To understand value drivers, managers must have in place performance measurement systems designed to capture information on all aspects of the business, not just the financial results. When managers are faced with multiple tasks, their behavior will differ depending on whether the performance measurement system adopts a financial measure or includes mixed measures. If the goal of the company is to increase shareholder wealth but managers focus on short-term profit without regard for customer satisfaction. Customer satisfaction is a leading indicator of profitability, due to increased costs required to achieve a high level of customer satisfaction. Multiple measures provide better information on changes in the economy and competition.

The BSC concept helpful to arrive at a list of financial and non-financial performance measures, which managers saw as the most important ones. However, they were uncertain if they were really the right measures to monitor. The BSC model is useful but does not represent a holistic approach to managing service based organizations. The BSC is a long-term change strategy. To be successful, the BSC must be driven from the top of the organization and dependent on a well-developed organizational structure, an understanding of the role of the customer, and ownership by top and middle management.

References

- [1] Bryant, L., Jones, D. and Widener, S., 2004, Managing Value Creation within the Firm: An Examination of Multiple Performance Measures, *Journal of Management Accounting Research*, Vol. 16, 107-131.
- [2] Frigo, M., 2002, Strategy and the Balance Scorecard, *Strategic Finance*, 84(5), 6-9.
- [3] Galliers R.D (1994) *Strategic Information Management*, Butterworth Heinemann.

- [4] Huckestein, D. and Duboff, R., 1999, Hilton Hotel: a comprehensive approach to delivering value for all stakeholders, *Cornell Hotel and Restaurant Administration Quarterly*, August, 28-38.
- [5] Kaplan, R. S., & Norton, D. P. (1992), The Balanced Scorecard—Measures that drive performance. *Harvard Business Review*, 70(1), 71-79.
- [6] Kaplan, R. S., & Norton, D. P. (1993), Putting the balanced scorecard to work, *Harvard Business Review*, 71(5), 134-147.
- [7] Kaplan, R. S., & Norton, D. P. (1996a), Linking the Balanced Scorecard to Strategy, *California Management Review*, 39, 1: 53-79.
- [8] Kaplan, R. S., & Norton, D. P. (1996b), *The Balanced Scorecard – Translating strategy into Action*, Harvard Business School Press, Boston, U. S.
- [9] Kaplan, R. S. & Norton, D. P., 2000, Having trouble with your strategy? The map it. *Harvard Business Review*, 78(5):167-176.
- [10] Kaplan, R. S. & Norton, D. P., 2001, *The Strategy Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment*, Harvard Business School Press, Boston, U. S.
- [11] Kaplan, R. S., & Norton, D. P. (2004), *Strategy Maps: Converting Intangible Assets into Tangible Outcome*, Harvard Business school Press, Boston, MA.
- [12] Lynch, R. L., and K. F. Cross, 1991, *Measure up* London, U. K.; Blackwell Publishers.
- [13] Maisel, L.S., 2001, *Performance Measurement practices Survey*, American Institute of Public Accountants, New York, NY.
- [14] Marr, B. and Adams, C., 2004, The balanced scorecard and intangible assets: similar idea,unaligned concepts, *Measuring Business Excellence*, Vol.8 No. 3, 18-27.
- [15] Marr B., 2005, Business performance measurement: an overview of the current state of use in the USA, *Measuring Business Excellence*, Vol. 9, No. 3, 56-62.
- [16] Milkovich, G. T., and J. M. Newman, 2002, *Compensation*, New York, NY, McGraw-Hill.
- [17] Missroon, A. M.(1999), Demystifying the balanced scorecard, *DM Review*, Retrieved May 12,2004
- [18] Mintzberg, H. (1990) The Design School: reconsidering the basic premises of strategic management,*Strategic Management Journal*, 11, pp. 176-95.
- [19] Neely A, Gregory M and Platts K, 1995, Performance measurement system design: A literature review and research agenda, *International Journal of Operations and production Management*, 14, 80-116.
- [20] Niven, P. R. 2002, *Balanced Scorecard Step by Step: Maximizing Performance and Maintaining Results*, New York, NY: John Wiley and Sons, Inc.
- [21] Lynch, R. (1997) *Corporate Strategy*, Pitman Publishing.
- [22] Silk, S., 1998, Automating the balanced scorecard, *Management Accounting*, Vol. 11 No. 17, 38-44.
- [23] Speckbacher, G., Bischof, J. and Pfeiffer, T., 2003, A descriptive analysis on the implementation of balanced scorecards in German-speaking countries, *Management Accounting Research*, Vol. 14 No. 4, 364-387.
- [24] Senge, P. M. (1990) *The Fifth Discipline*, Century Business.
- [25] Stacey, R. D. (1993) *Strategic Management and Organizational Dynamics*, Pitman Publishing.
- [26] Wang J. C., 2006, Corporate Performance Efficiency Investigated by Data Envelopment Analysis and Balanced Scorecard, *Journal of American Academy of Business*, Cambridge, Sep 2006, 9,2, 312-318.
- [27] Abran, A. & Buglion, L., “A multidimensional performance model for consolidating Balanced Scorecards”, *Advances in Engineering Software*, Volume 34, Issue 6, 339-349, June 2003
- [28] Banker, R. D., Janakiraman, H. C. & Konstans, C., “A balanced scorecard analysis of performance metrics”, *European Journal of Operational Research*, Volume 154, Issue 2, 423-436,16 April 2004
- [29] Olve, N., Roy, J., & Wetter, M., “Performance Drivers”, Biddles Ltd, 1999