The performance improvement process is a critical component of the strategic planning process. Call it by any name, the process is very vital, and it has always been practised by many companies worldwide for a long time. This process has been recently dubbed as the balanced scorecard.

The balanced scorecard is a system of combining financial and non-financial measures of performance in one single scorecard. It includes performance measures for four perspectives: financial, customer, internal business processes, and learning and growth (innovation). It need not be restricted to four perspectives; more may be added. The social responsibility and environmental concerns are two possible candidates. The balanced scorecard focuses on the link between business processes and decisions and results. It is considered as a device to guide strategy formulation, implementation, and communication. It also helps in tracking the performance and providing quick feedback for control and evaluation. A number of companies in the USA and a few companies in India have implemented the balanced scorecard.

The success of the balanced scorecard or a similar device will depend on the clear identification of non-financial and financial variables and their accurate and objective measurement and linking the performance to rewards and penalties. The proponents of the balanced scorecard claim that it aligns with strategy leading to better communication and motivation which causes better performance. This assumption could be the single most important reason for the popularity of the balanced scorecard. However, this may or may not be true in practice. This is an empirical question. There is a need to document the experiences of the balanced scorecard companies and establish the cause-effect relationship. There are several reasons for the use of the balanced scorecard by organizations:

- The balanced scorecard is a comprehensive tool to understand the target customers, their requirements, and the performance gaps.
- The balanced scorecard provides logic for focusing on creating intangible and intellectual capital which under the traditional financial performance systems was difficult to do.
- The balanced scorecard is able to articulate the strategy of growth with business excellence which requires greater focus on non-financial initiatives.
- The balanced scorecard enables employees to understand strategy and link strategic objectives to their day-to-day operations.
- The balanced scorecard facilitates performance review and feedback on a continuous basis.

The balanced scorecard, we strongly believe, will be useful to an organization when it is a part of the strategic planning process. A successful implementation of the balanced scorecard has the following other prerequisites:

- Top management commitment and support
- Determining the critical success factors (CSFs)
- Translating CSFs into measurable objectives (metrics)
- Linking performance measures to rewards
- Installing a simple tracking system
- Creating and linking the balanced scorecards at all levels of the organization
- Setting up a sound organizational communication system to harness advantages of the balanced scorecard
- Linking strategic planning, balanced scorecard, and budgeting process for better allocation of resources.

KEY WORDS
- Strategy
- Strategic Planning Process
- Balanced Scorecard
- Critical Success Factors
- Performance Metrics
It is a common practice to evaluate a company’s performance by the money it makes. It is true that, to survive, a company needs to generate profits on a continuous basis. In fact, the relative measures of profitability like profit margin, return on investment, return on equity, earnings per share, etc., are the ‘bottom-line’ results that are used to rate the performance of companies. However, the survival of a company does not depend on profitability alone; managers in practice have learnt the hard way that an unequalled focus on the financial health of the organization results in several irreparable adverse consequences. Managers of successful companies do recognize that the financial measures are ‘after-the-events’ or ‘lagging’ indicators of performance which depend on numerous events that would have occurred months or years before and over which they do not have any control at present.

The problem with financial measures is that they do not directly focus on the customers’ needs and satisfaction. Some decisions may result in higher profits in the short run but they might impair the long-term relationships with the customers which might cause a permanent damage to a company’s reputation, competency, and ultimately the market share. Cost cutting on R&D, employees’ training, brand building or after-sales services are examples which might conflict with the short-term profit objective and the long-term customer satisfaction.

A company must know how it did in the past; how it is performing currently; and how it will do in the future. Further, performance measurement and evaluation is multi-dimensional and continuous. A comprehensive performance measurement system requires the measurement of lagging, current, and leading indicators. Recently, the balanced scorecard has emerged as a system which is claimed to track a company’s financial and non-financial performance. In this paper, we discuss the reality and the myth of this system.

FIRST BALANCED SCORECARD: HOW DID IT EvOLVE AT ANALOG?

The first balanced scorecard in the world was created and implemented by Analog Device, Inc. (ADI), USA (Schneiderman, 1999). It had developed as an offshoot of the company’s strategic planning process (SPP) and its quality improvement initiatives. ADI’s SPP was driven by strategic objectives which related to its stakeholders—customers, suppliers, employees, society, etc. The focus of the strategic objectives was to create a ‘delight for the stakeholders.’ The five-year strategic plan provided the roadmap and the total management of quality (TMQ) was the main device to achieve the stakeholder delight.

In developing its five-year strategic plan, ADI examined its internal and external perspectives. Where was the company going? Was it going where it was intended to go? What should the company do to reach where it intended to reach? The SPP was a massive effort taking about 18 months and involving several hundreds of business and product line managers. To think through the SPP, the company created several cross-functional and functional teams and strategic planning councils, deployed strategy in both directions, top-down and bottom-up, and set five-year measurable goals to achieve business success. Both the internal and external perspectives led the company to realize that the non-financial goals were the drivers of business success.

ADI’s quest to develop measurable non-financial goals gave birth to the first balanced scorecard. Drawing from its strategy and strategic thinking, ADI developed the scorecard metrics; there was a clear link between the metrics and strategic objectives. Quite early, ADI realized that the only way to achieve its strategic objectives was through the improvement of its key business processes. The quality improvement process (QIP) was the TMQ framework used for this purpose. Figure 1 shows the relationship between the basic elements of ADI’s quality improvement strategy.

Schneiderman (2004) summarizes the process followed in these words:

The starting point was the corporate objective, created by the vision of the CEO and tempered through the top-to-bottom consensus process. This statement of purpose was articulated in the voices of our five stakeholder groups. The Corporate QIP Council, serving as the interface between the stakeholders and the rest of the organization, was given the job of defining initiatives and metrics that would assure stakeholder delight in Analog. We gave these initiatives names like ‘Customer Service’ (for the order fulfillment process), ‘Manufacturing Excellence’ (for the manufacturing process), ‘Innovation’ (for the product/process generation process), ‘HR Excellence’ (for the many processes that assure recruitment and retention of the best people: e.g., recruiting process,
Many of our existing improvement efforts fit well into this framework. On-time delivery and lead time reduction, for example, were the most leveraged elements of improved customer service. Cycle time reduction and product quality and yield improvement were the key drivers for achieving manufacturing excellence. Time-to-market and automation (CAD or computer aided design) were obvious enablers of innovation. The last two categories, HR and MIS excellence, lacked specific initiatives at that time, but were recognized as essential for the achievement of our corporate objective.

Through this rigorous process, starting from the corporate objectives and involving people at all levels, ADI developed its QIP objectives and five-year non-financial goals (Table 1). The company used the half-life method to determine where they could be by the end of 1992 through the effective use of QIP’s incremental improvement tools and methods. The middle column is the assumed half-life or number of months required to close the gap between the current and the potential performance by 50 per cent. The QIP goals of ADI were made public by its CEO, Ray Stata, through the publication of an article in *Sloan Management Review* (Stata, 1989). According to Schneiderman: “This article sent a strong message from Analog’s CEO. To customers, it offered proof that they were committed to improving their satisfaction and were confident enough to make that commitment public by publishing data that heretofore was considered highly proprietary in the semiconductor industry. To Analog’s employees, it cemented their commitment to manage by fact and to use non-financial metrics as a major data source in that pursuit.”

ADI recognized the need to deploy the high-level goals to the lower levels of the organization where the

<table>
<thead>
<tr>
<th>Measurement</th>
<th>1987</th>
<th>Half-Life (Months)</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-time delivery</td>
<td>85%</td>
<td>9</td>
<td>&gt;99.8%</td>
</tr>
<tr>
<td>Outgoing defect level</td>
<td>500 ppm</td>
<td>9</td>
<td>&lt;10 ppm</td>
</tr>
<tr>
<td>Lead time</td>
<td>10 weeks</td>
<td>9</td>
<td>&lt;3 weeks</td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing cycle time</td>
<td>15 weeks</td>
<td>9</td>
<td>4-5 weeks</td>
</tr>
<tr>
<td>Process defect level</td>
<td>5000 ppm</td>
<td>6</td>
<td>&lt;10 ppm</td>
</tr>
<tr>
<td>Yield</td>
<td>20%</td>
<td>9</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>Time-to-market</td>
<td>36 months</td>
<td>24</td>
<td>6 months</td>
</tr>
</tbody>
</table>

actual improvements would occur. Once again it followed a rigorous process of determining goals at the lower levels of organization.

**STRATEGIC PLANNING PROCESS MATTERS**

Strategy and strategic objectives drive an organization. Strategic planning process is the management tool to achieve the strategic objectives. It is fundamental for the successful continuity of an organization. As we observed in the case of ADI, *the balanced scorecard is not a strategy; nor is it a strategic planning process; it is a component of the strategic planning process.*

Organizations survive when they create values for their stakeholders. Stakeholders have their own choices to make and choose from multiple options. There is fierce competition among organizations to win over these stakeholders. Strategic planning process helps an organization to identify and create opportunities to meet the needs of its various stakeholders by harnessing the organization’s current or potential capabilities.

An organization can deliver value to its stakeholders and wean them away from competitors by installing and managing appropriate internal processes. The organizational vision and missions specify the value proposition to its stakeholders and the organization’s success is measured by the value that it actually delivers to these stakeholders. In an environment of increasing complexity, unprecedented change, unpredictable technology, uncertainty, and non-availability of relevant data, it is a challenge to develop and implement a successful strategy. Customers are more knowledgeable now and have become very demanding. Employees also have more knowledge and have become knowledge workers; they would like to participate and contribute in the strategic planning process before they commit to implement the strategy. Suppliers of capital are looking for sustained performance and long-term success in the capital markets.

A typical strategic planning process includes the following steps for an organization:

1. **Stakeholders and strategic objectives**: The company should make efforts to choose the stakeholder segments it would like to cater to, make choice with regard to its customer segment/s, determine the types of employees it wants to hire, and decide about its suppliers and its responsibility towards the society.

2. **Stakeholders’ needs**: The company should collect information to identify the stakeholders’ needs. This is a significant step. It would be a folly to design a strategy without knowing the stakeholders’ requirements.

3. **Performance gap**: The company should find out the gaps between what the stakeholders need and what it is delivering.

4. **Performance improvement linked to internal processes**: The company should set priorities for improving the stakeholders’ performance and link it to the internal processes.

5. **Process improvement priorities**: The company should establish priorities for process improvement.

6. **Performance metrics**: The company should establish metrics for the performance improvement process. The metrics should be reliable and achievable.

7. **Communicate performance metrics**: The company should communicate the performance metrics throughout the organization.

8. **Critical process initiatives**: The company should set in motion the critical processes to achieve performance improvement metrics.

9. **Performance evaluation**: The company should measure and evaluate the actual performance with the targeted metrics.

10. **Feedback**: The company should use the evaluation feedback to re-examine the strategic planning process and to once again set in motion the performance improvement process.

From the above description, we may observe that steps 6-9 of the strategic planning process relate to performance measurement, communication, and evaluation. These steps are being dubbed as the balanced scorecard.

**WHAT IS A BALANCED SCORECARD?**

An organization cannot be successful without a strategy and a strategic planning process. When an organization includes both financial and non-financial indicators together in a sheet, it is called a balanced scorecard. One could call it by a different name. The logic behind the new found balanced scorecard is not new. In fact, it has...
been the practice of many companies for a very long period of time to determine the multiple financial and non-financial goals for performance evaluation. For example, General Electric Company’s Measurements Project in 1960s included eight financial and non-financial objectives and required the divisional managers to take a long-term perspective of the financial performance. Balanced scorecard is not a strategy; it is a management tool focusing on both financial and non-financial goals of an organization; it is useful for communicating strategic objectives and the business units’ goals at all levels of an organization; the continuous review process implied by the balanced scorecard provides feedback for improving the internal processes. Financial goals tell the managers what happened; they are ‘lagging indicators.’ The managers need to know if the business will succeed in the future; the future success depends on the non-financial goals—the ‘leading indicators.’

**Strategic Context of the Balanced Scorecard**

Let us emphasize, even at the cost of repetition, that the balanced scorecard does not substitute strategy formulation and strategic planning process. A balanced scorecard should be developed and implemented within the framework of the strategic planning process. It would become yet another measurement and control system of not much consequence if it is not tied to the strategy. A company should clearly define its strategy and strategic objectives; it should specify the measures of strategy, strategic objectives, and actions. To achieve business success, a company needs strategic planning process and strategic thinking independent of a balanced scorecard.

The emergence and popularity of the balanced scorecard is attributed to Robert Kaplan (Harvard Business School) and David Norton (IT consultant) who published a number of articles between 1992 and 1996 (Kaplan and Norton, 1992, 1993, 1996a, 1996b, 1996c). They originally designed the balanced scorecard as a diagnostic and control system incorporating financial indicators with non-financial indicators. However, the companies implementing the balanced scorecard started using it to understand, communicate, and implement strategy at all levels of the organization. Thus, the balanced scorecard came to be known as a management system for translating strategy into action and strategy implementation. When implemented at all levels of the organization, it also became a tool for communicating and educating a large number of managers about strategy and its implementation. Thus, the balanced scorecard was seen facilitating the following functions:

- translating strategy and strategy objectives into actionable goals and initiatives
- communicating strategy and strategic objectives throughout the organization
- setting achievable targets and initiating processes to achieve those targets
- reviewing performance and feedback to executives about the status of strategy implementation and business success.

**Beyond Financial Performance: Multiple Performance Perspectives**

It is generally alleged that financial measures such as return on investment encourage managers to short-sighted decision-making for maximizing short-term return and thus, sacrificing the long-term prospects and sustainability of the firm. Financial measures fail to link current actions with long-term strategy. These accounting-based measures fail to recognize certain expenditures as investments. For example, they treat competency building costs as training expenses in the current period. The traditional financial measures also discourage managers from investing in strategies that help to build organizational quality, flexibility, resilience, and adaptability. They also disdain expenditures for strengthening the corporate social responsibility and environment protection. The balanced scorecard is said to take a long-term, strategic view and considers all those non-financial actions and variables that are necessary for the sustainability and excellence of an organization. It provides a finer blending of financial and non-financial measures of performance. It considers financial performance measures as results of the non-financial variables—the leading variables. According to Kaplan and Norton (1996a):

The balanced scorecard retains traditional financial measures. But, financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers,
suppliers, employees, processes, technology, and innovation.

The current model of the balanced scorecard, as conceived by Kaplan and Norton, looks at organizational performance from four perspectives and requires developing appropriate measures for all these perspectives (Kaplan and Norton, 1996a):

**Customer Perspective**
Each organization must know: How do our customers see us? How should we appear to them? A large, satisfied customer base means more revenues, which, other things remaining the same, should lead to improved financial outcome. The customer perspective requires an organization to know how it should create value for its customers if it is to succeed. Organizations have learnt the importance of customer focus and customer satisfaction in a sustained financial performance. Poor performance in terms of customer satisfaction is a leading indicator of the future decline in spite of a good current financial performance. The key overall performance indicators under this perspective are: customer satisfaction, customer retention, market share, and customer profitability. An organization should determine metrics for the processes underlying these broad strategic objectives: delivery time, defect rates, number of returns, warranty claims or customer satisfaction ratings.

**Learning and Growth Perspective**
This perspective focuses on innovation, creativity, competence, and capability. Are we innovative and creative enough to continuously create value for our customers? It also focuses on people—their attitude, culture, knowledge, development, etc., and their ability to learn and grow for managing and sustaining change and improvement. Are our employees capable of sustaining continuous change and improvement? In any organization, and particularly, a knowledge-based organization, human resource is the most critical resource. In the current environment of rapid technological changes, employees need to continuously learn. The learning and growth perspective, thus, emphasizes employee training and building a corporate culture that facilitates individual self-improvement and corporate development and growth. An organization must provide funds for the training and development of employees and managers should ensure that they pay adequate attention to employees’ learning and development.

It is important to recognize that ‘learning’ is more than ‘training.’ Managers should act as coaches, continuously guiding and mentoring the employees. The organizational communication system should allow for easy interaction to learn from and get help from each other in understanding and solving problems. The technological tools like the intranet should also form a part of the learning and growth perspective. The key performance indicators are: employee satisfaction, employee retention, and employee productivity.

**Internal Process Perspective**
This is the most critical perspective for the success of an organization. It includes internal business processes which ensure highest quality of products and services. Are our businesses processes excellent? What are the areas that need improvement? The managers should ensure that their businesses, based on internal processes, are running well and that the firm’s products and services are meeting the customers’ requirements and creating value for them. This perspective helps the firm to determine its competencies and the processes where it must excel to create customer delight. The key objectives are: process improvement and suppliers’ relations. The processes for determining metrics are cycle time, quality performance, productivity, and after-sales service.

**Financial Perspective**
The balanced scorecard gives equal importance to the financial perspective which helps to answer the question: How should we appear to shareholders? The financial measures provide a common language for analysing and comparing companies. Note that the financial measures alone are not sufficient to guide performance in creating value; they depend on non-financial measures for providing the bottom-line score. The key financial performance indicators include: growth, profit margin, return on investment, economic value added, and shareholder market value. As we have observed earlier, financial measures are backward-looking, ‘lagging’ indicators; yet they are needed to determine whether process improvements ultimately translate into financial success.

Each perspective of the balanced scorecard includes objectives, measures of those objectives (metrics), target values of those measures, and initiatives needed to achieve targets.

- **Objectives:** The company specifies major objectives to be achieved under each perspective. For example,
under the financial perspective, it may specify profitable growth as the major objective.

- **Measures**: Measures are the indicators that measure progress towards reaching the objective. For example, the financial objective of profitable growth might be measured by growth in revenues and growth in profits or economic value added.

- **Targets**: Targets are the values for the measures. For example, the company may determine that in the five-year planning period, revenue should grow at 10 per cent per annum and economic value added at 15 per cent. These goals may be further divided division-wise.

- **Initiatives**: Initiatives are the actions needed to be performed to achieve objectives and targets. For example, a 10 per cent revenue growth may be achieved by, say, spending specified money on aggressive advertising and introducing new products. For causing sales growth, employees may get bonus for every specified percentage increase in sales. The detailed plans will indicate the methods of sales promotions, personnel deployment, etc.

### HOW TO BUILD A BALANCED SCORECARD?

#### Example of a Large Public Sector Bank

This example is based on a simulated exercise where the senior managers of a large public sector bank attending a management education programme developed a balanced scorecard model for their bank (let us call it ABC Bank) with the help and guidance of the author. ABC Bank is a very old bank and has deposits of more than Rs. 7,000 billion, advances of Rs. 3,000 billion, net worth of Rs. 500 billion, and a fee-based income of about 5 per cent. In comparison to its peers, ABC Bank may be rated as number four or five on different financial dimensions. It has a track record of continuous profit; it has substantial international presence; it has a committed staff; it has launched many innovative products; it is perceived as a bank for the common man.

### Strategic Analysis

To begin with, the group of managers developing a balanced scorecard for ABC Bank conducted a SWOT analysis and reflected on the bank’s current strategy and performance. The group thought that the Bank has the following strengths: a large branch network with adequate presence in the semi-urban and rural areas; high network in the economically more developed Western India; largest international presence amongst the Indian banks; profitable since inception; sound financial condition and healthy operations free from any scam; and a forward-looking leadership. The group identified several concerns: lack of marketing focus; not being techno savvy; ageing workforce, particularly the managerial staff; low digital literacy; knowledge gap; compartmentalized mind-set; internally focused organization; slow in decision-making due to multi-tier sanction process; inadequate empowerment to decision-makers; non-productive work processes; not keeping pace with the market changes in introducing innovative products; low cross-selling of products; inadequate use of IT for decision-making; inadequate delivery channel; shrinking market share and slow business growth; and customer loyalty under stress.

The group deliberated on the Bank’s mission: “To be a top ranking national bank of international standards committed to augmenting stakeholders’ value through concern, care, and competence.” They agreed that the mission clearly focused on creating value for all stakeholders and thus provided a clear strategic direction. Through a brainstorming session, the group arrived at several strategic themes. One theme that all managers in the group agreed upon and considered as top priority was: retaining and attracting high-value delighted customers.

#### Strategic Mapping

The group carried out a detailed strategic mapping of the strategic theme. Strategy mapping is a pictorial description of the strategy and its elements. The map also shows the linkages and interaction between various variables. It is believed that when strategy is shown systematically in a map, it increases the chances of its success (Norton and Kaplan, 2001). Strategic mapping helps in integrating and linking all elements and variables with each other and with the organization’s overall objectives. The strategic mapping carried out by the managers of ABC Bank is shown in Figure 2. This figure depicts the different elements of strategy under four perspectives and very clearly brings out the linkages between these elements. It is also noticeable that the variables that the group thought would influence the achievement of the strategic theme are largely non-financial in nature. Most of the suggested non-financial
Figure 2: Strategic Map Linking for Strategic Theme: Retaining and Attracting High-Value Delighted Customers

<table>
<thead>
<tr>
<th>Financial</th>
<th>Customer</th>
<th>Internal Processes</th>
<th>Learning and Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue growth: At least 20% fee-based income</td>
<td>Add high value customers, specially focusing on young customers and retaining high value existing customers</td>
<td>Maximize service/product quality, delivery, and reliability</td>
<td>Attract and retain key people</td>
</tr>
<tr>
<td></td>
<td>Convert low value customers to high value customers</td>
<td>Develop IT-driven superior service capability</td>
<td>Develop technical skills and IT orientation</td>
</tr>
<tr>
<td></td>
<td>Attract new customers</td>
<td>Manage erosion of customer base</td>
<td>Recruit skilled staff and do succession planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintain leadership in existing products; add new features</td>
<td>Develop culture of innovation and customer orientation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthen treasury products</td>
<td>Empower employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>De-emphasize control and vigilance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Improve general competency and build KM</td>
</tr>
<tr>
<td></td>
<td>Customer Delight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essentials</td>
<td>Distinctions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Quick service</td>
<td>• Multiple products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Safety</td>
<td>• Quality service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pleasure</td>
<td>• Distinct features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cost effectiveness</td>
<td>• Ease of use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reliability</td>
<td>• Multiple delivery channels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
variables relate to the internal processes of the bank. This example shows that the achievement of strategic objectives is mostly driven by internal process improvement and the non-financial variables far exceed the financial variables which, in turn, are the results of non-financial variables.

**Measurement of Objectives**

The strategic mapping and linking of the variables helped the group to spell out the objectives, the drivers, and the relevant metrics for the objectives. For each perspective, a set of objectives was developed. For example, the financial objective included revenue by each product/service. This objective could include product/service revenue for each category of customer groups. Another financial objective is the total number and percentage of active, high-value customers. Note that ABC Bank does not have control over revenue. It can manage those variables that influence revenues—new products/services, improved quality of existing products/services, new delivery channels, etc. Similarly, the measurable objectives have been determined for other perspectives (Table 2). A scorecard should cover two other aspects of each perspective. For each metric, there should be a target and specific initiatives to be taken to achieve the target. These two aspects are not covered in Table 2.

**Balanced Scorecard at Philips Electronics**

Philips Electronics is a large, multinational company with several divisions and vast product diversity. The company used the balanced scorecard to streamline its complex processes and structure. Philips followed a top-down policy in building the scorecard.

It started from the Board in Europe down to all divisions and companies the world over. Through the balanced scorecard, the company aimed at aligning its vision at all levels, making the employees aware of the company strategy and vision, educating them about the

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2 This section draws from Gumbus and Lyons (2002).
drivers of business success and their role and relationship with vision and strategy. Philips identified the following four critical success factors (CSFs) underlying value creation (Table 3):

- Competence — knowledge, technology, leadership, and teamwork
- Processes — drivers for performance
- Customers — value propositions
- Financial — value, growth, and productivity.

The company first determined the top-level scorecard criteria which were used to drive the scorecard criteria at the lower levels of the organization. The focus was on value creation by converting the relationship between customer satisfaction and product sales into CSFs. The customer and financial CSFs were first determined and then followed by process CSFs. Competence CSFs are the drivers of other CSFs. The management team established a measurement system that links the short-term actions with long-term strategy. This enables employees to see the link between their day-to-day activities and the company’s strategic objectives.

The company’s balanced scorecard was used to set up operational goals and targets for divisions worldwide and linking them with business strategy through CSFs. Each division should consider competition in developing its CSFs and measurement metrics. Targets are based on the current performance gap and are set for the current year plus two and four years in the future. The factors that drive targeting include market size, customer base, brand equity, innovation capability, and world-class performance. Philips also implements individual employee scorecard. Thus, it has a three-tier balanced scorecard:

- strategic review card
- operation review card
- individual employee review card.

Philips uses three criteria for metrics linking to the entire company:

- Inclusion: The lower-level CSFs must address the top-level CSFs to achieve top-level metric goals.
- Continuity: CSFs must be connected at all levels and lower-level measurements should not have longer cycle times than the higher-level measurements.
- Robustness: Meeting lower-level CSF goals must assure that higher-level CSF goals will be met or surpassed.

The balanced scorecard is not a secret document at Philips; it is shared with the employees. The company uses traffic-light reporting to indicate the achievement of the target. Green means that the target has been met, yellow means in-line performance, and red implies under-performance. A metric in the red can be quickly fixed by drawing on the experiences of those who have faced similar problems.

In Philips’ experience of implementing the balanced scorecard, all units faced six common key indicators:

- profitable revenue growth
- customer delight
- employee satisfaction
- drive to operationalize excellence
- organizational development
- IT support.

**Tata Steel’s Strategy for Business Excellence and the Balanced Scorecard**

Tata Steel (popularly known as Tisco) was established in 1907; it is Asia’s first and India’s largest integrated private sector company. According to World Steel Dynamics (WSD), Tata Steel “is India’s only world-class steel maker and one of the few steel companies in the world with such a standing.” In 2001, WSD ranked the company as number one amongst 12 of the world’s best steel companies. It has been ranked among the top four world class steel companies by WSD for the past four years. It was the first Tata company to win the JRD Quality Value Award under the Tata Business Excellence Model. It was also awarded Asia’s Most Admired Knowledge Enterprise Award 2003 by Teleos, an

**Table 3: Philips Electronics Balanced Scorecard**

<table>
<thead>
<tr>
<th>Financial</th>
<th>Processes</th>
<th>Customers</th>
<th>Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic profit–realized</td>
<td>Percentage reduction in process cycle time</td>
<td>Rank in customer survey</td>
<td>Leadership competence</td>
</tr>
<tr>
<td>Income from operations</td>
<td>Number of engineering changes</td>
<td>Repeat order rate</td>
<td>Percentage of patent-</td>
</tr>
<tr>
<td>Working capital</td>
<td>Capacity utilization</td>
<td>Complaints</td>
<td>protected turnover</td>
</tr>
<tr>
<td>Operational cash flows</td>
<td>Process capability</td>
<td>Brand index</td>
<td>Training days per employee</td>
</tr>
<tr>
<td>Inventory turns</td>
<td></td>
<td></td>
<td>Quality improvement team participation</td>
</tr>
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</table>

Source: Gumbus and Lyons, 2002.
independent Knowledge Management (KM) company of South Korea.

How did Tata Steel achieve business excellence? It achieved business excellence and the status of the lowest cost producer through several strategic initiatives over a period of time. According to Irani (2003) (earlier Tata Steel’s MD): “Every battle in the war to make Tata Steel a global leader in steel was the result of careful formulation of a strategy followed by effective communication and implementation.” Until early eighties, quality was a major issue for the company. It operated in a protected and non-competitive environment and periods of steel shortages. In mid-eighties, it became clear that the economy would witness economic reforms and deregulation which will cause competition to intensify. Around 1987, Tata Steel started the quality movement with 11 improvement projects. The major initiatives for quality and cost savings included value engineering followed by Quality Circles (QC), ISO 9000, benchmarking, ISO 14000, QS 9000, and Six Sigma. Today, all departments of the company are certified to ISO 9001 systems. In 1995, Tata Steel started the JRD Quality Value Total Quality Award and won this award in 2000. Tata Steel faced many challenges in achieving the business excellence. The major problem was to change the mind-set of employees including managers to create a culture of quality. The company followed a systematic process of involving employees and unions in its drive for quality and cost reduction to gain a superior competitive advantage. The company was able to right-size its workforce. The number of employees fell from 72,621 in 1995-96 to 43,277 in 2002-03—about 40 per cent reduction in seven years. Despite reduction in the workforce, production of saleable steel increased from 2.45 million tonnes to 3.96 million tonnes during the same period. This amounted to tremendous increase in labour productivity. Tata Steel was able to create an atmosphere of trust, urgency, innovation, sharing, and learning. The company started KM initiatives in the late nineties. Starting with a small group, a ‘knowledge repository’ was created followed by ‘knowledge communities.’ The company created a ‘KM Index’ in 2001 to review the performance of individual employees in the KM initiative.

Quality movement and, specially, the QCs have been highly successful in Tata Steel in transforming the mind-set of all employees and making them ‘quality-conscious.’ A number of quality practitioners became quality trainers. QCs were started in 1992-93; by 2001, every employee was a member of at least one QC. According to Irani (2003), the single most significant reason for the success of the quality movement was that it was led and continuously monitored by the CEO. The numbers of QCs increased from 845 in 1995-96 to 6,188 in 2002.

Where did the balanced scorecard fit into Tata Steel’s business excellence strategy? What was its significance? The company found the balanced scorecard a good tool to translate strategies into measurable goals (metrics) and communicate metrics and strategic actions to the lower levels of the organization. Irani (2003) states: “The company uses the Balanced Scorecard—a performance management and strategy deployment methodology—to break down strategy into its component elements and track performance from the top to the bottom.” The company extended the balanced scorecard’s review process to monitor the performance of individual employee, divisions, and organization in the KM initiatives as well.

It is significant to note that Tata Steel’s business excellence model was based on a well-thought out strategy which focused on quality and its implementation through strategic QIP. The balanced scorecard acted as a component of the quality improvement strategy and

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<tr>
<td>Quality circles (No.)</td>
<td>845 1</td>
<td>996 1</td>
<td>1,082</td>
<td>1,192</td>
<td>1,681</td>
<td>5,245</td>
<td>6,188</td>
<td>-</td>
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<td>ISO 9001 certified depts.</td>
<td>-</td>
<td>26 1</td>
<td>45 1</td>
<td>71 1</td>
<td>85 1</td>
<td>95 1</td>
<td>95 1</td>
<td>95 1</td>
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<tr>
<td>Employees (No.)</td>
<td>72,621</td>
<td>68,352</td>
<td>64,975</td>
<td>60,000</td>
<td>52,167</td>
<td>48,800</td>
<td>47,032</td>
<td>43,277</td>
</tr>
<tr>
<td>Refractory cost (Rs. million)</td>
<td>20.6 1</td>
<td>18.5 1</td>
<td>15.8 1</td>
<td>14.2 1</td>
<td>11.6 1</td>
<td>9.7 1</td>
<td>8.2 1</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of professionals</td>
<td>NA NA</td>
<td>54 1</td>
<td>57 1</td>
<td>61 1</td>
<td>63 1</td>
<td>65 1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Raw material consumption (T/T of saleable steel)</td>
<td>4.26</td>
<td>4.33</td>
<td>4.06</td>
<td>4.01</td>
<td>3.93</td>
<td>3.68</td>
<td>3.56</td>
<td>3.19</td>
</tr>
<tr>
<td>Labour productivity (TCM/man year)</td>
<td>107 1</td>
<td>119 1</td>
<td>133 1</td>
<td>152 1</td>
<td>179 1</td>
<td>196 1</td>
<td>218 1</td>
<td>245 1</td>
</tr>
<tr>
<td>Saleable steel (mn. tonnes)</td>
<td>2.70</td>
<td>2.82</td>
<td>3.01</td>
<td>3.1 1</td>
<td>3.29</td>
<td>3.43</td>
<td>3.64</td>
<td>3.96</td>
</tr>
<tr>
<td>Share price (Rs.)</td>
<td>198.0</td>
<td>160.0</td>
<td>149.2</td>
<td>103.7</td>
<td>115.9</td>
<td>122.4</td>
<td>97.7</td>
<td>134.0</td>
</tr>
</tbody>
</table>

Source: (i) Tata Steel Annual Reports; (ii) Irani, 2003.
performance tracking. The strategic initiatives of quality improvement taken by Tata Steel paid-off well. The company was able to reduce its workforce, achieve ISO 9001 certification of all its departments, involve all employees in QC and increase the number of QC's over years, significantly improve the ratio of professionals in the total workforce, reduce consumption of raw materials used in steel making, reduce consumption of refractories, and increase the quantity of saleable steel (Table 4). In terms of non-financial variables, the reduction in the number of workers, increase in QC's, and increase in professionals led to significant improvement in productivity. These non-financial variables also caused reduction in costs and increase in the production of saleable steel.

SHOULD A BALANCED SCORECARD ALWAYS BALANCE?

There are three different ways of looking at the balanced scorecard. The accountant looks at the balanced scorecard basically as a diagnostic and control device — a better device than the conventional financial control system. An IT person sees in the balanced scorecard the opportunity for developing new IT system and applications. The person committed to the process improvement deems the balanced scorecard as a tool for identifying, communicating, and tracking the most critical processes which are pivotal for the success of an organization (Schneiderman, 2004). These three different and biased views may be combined. We strongly believe that, to be an effective management system, the balanced scorecard must be implemented as a performance improvement process; it will not serve its purpose if it is used just as an IT-driven control system. The balanced scorecard is a critical component of the strategic planning process which involves creative thinking, communicating, sharing, informing, analysing, understanding, etc.

Is it necessary for the balanced scorecard to balance if it is intended to be a tool of strategic improvement process? Should financial and non-financial metrics of the balanced scorecard be linked and balanced? As stated earlier, the non-financial variables prospectively lead to change and growth. The non-financial metrics are actionable and they drive the success of an organization. The financial measures depend on non-financial measures; they are, in fact, their results. For example, increase in profit depends on revenue growth and cost reduction. Revenue growth results from non-financial variables like the quality of products, new products, after-sales service, and aggressive marketing, etc. Similarly, cost reduction depends on non-financial variables like material acquisition and handling, power usage, labour productivity, cycle time, maintenance, and defects, etc. Profit is not directly controllable; the controllable non-financial variables causing changes in profits are manageable. Managers have control over the processes that have direct bearing on financial variables. In terms of financial metrics, therefore, the balanced scorecard should include the measures of the processes of the financial variables.

While interacting with external stakeholders (particularly with the capital market participants), organizations require financial metrics such as economic value added, return on investment, profit margins, etc. These metrics may become a part of the top management or the CEO's balanced scorecard. At other levels of management, financial metrics should include the measures of the processes of the financial variables. There is a tendency on the part of certain organizations to attempt to link financial and non-financial measures by financially quantifying the consequences of non-financial measures. It is not just possible to do it for all non-financial variables and strike a balance all the time, in all situations. Unfortunately, the principle of value-additivity does not entirely apply to an organization; it is not the sum of its various actions. There is the problem of time lag and the parts of an organization interact with themselves and the environment and create collective impact. A part or an action may not create independent value but its interaction with other parts of the organization may create tremendous value, and it may not be possible to quantify it immediately; it may manifest after considerable time lag. Such is the nature and impact of non-financial variables.

A cause-effect relation is expected between financial and non-financial variables. Normally, there should be a positive relationship between the financial success and the achievement of non-financial goals. This may not be true, at least, in the short- or medium-term. It is reported in the case of ADI that a negative correlation between the delivery performance and stock prices was found. ADI's delivery performance worsened after 1993 and the stock price continued to rise (Schneiderman, 1999). One possible explanation was the lag of more than five years between delivery and stock price.
We find a similar situation in the case of Tata Steel. Table 4 reports the significant non-financial achievements of the company consequent upon its quality improvement strategy. The last row in Table 4 gives the company’s share price which shows erratic behaviour. As explained earlier, the quality improvement strategy of the company resulted in a rationalized workforce, improved productivity, and cost reduction. However, the business excellence of Tata Steel does not reflect in the financial success measured by the market value of the share. For example, for illustrative purpose, we find a strong positive correlation between refractory cost and share price implying that reduction in cost reduces share price. The correlation between labour productivity and share price is negative suggesting that improvement in labour productivity causes share price to fall. Similarly, the correlation between raw material consumption and saleable steel, on the one hand, and share price, on the other hand, is negative. We have no intention to prove a cause-effect relationship; our purpose is to highlight the fact that financial and non-financial variables may not balance. The external constituents of the company, and particularly, the current and prospective shareholders, may take time to absorb the improvements led by the internal process changes. They may wait to see the consistency and permanency of the changes and improvements. It is quite painful and frustrating to the management of an operationally excellent company to find a sub-standard financial performance. It needs to have patience and faith in the necessity of non-financial variables. It should, however, be clear to an organization that ultimately, perhaps with some time lag, the non-financial achievements must translate into financial success; otherwise, the company will not be able to survive and sustain itself. From a practical point of view, each organization must determine the time-lag between non-financial achievements and financial success.

IMPLEMENTING A BALANCED SCORECARD THAT SUCCEEDS

We have stated earlier that strategic planning process includes determining multiple strategic objectives for stakeholders, measuring them, setting targets, reviewing the performance, and using feedback for improvement in real time. The balanced scorecard is a simple device to perform these performance management aspects of the strategic planning process. A large number of companies in the USA and a few companies in India have implemented the balanced scorecard. The experiences of these companies show that the following conditions are necessary for the successful implementation of the balanced scorecard:

- **Top management commitment and support:** The top and senior management must be committed to the balanced scorecard to drive it down through the organization. It is essential that the top and senior management fully understand the concept and the process of the balanced scorecard. They should be educated through seminars and workshops. The role of the CEO is much more critical in the success of the balanced scorecard. He/she should take lead in introducing and implementing the balanced scorecard. A number of organizations started the balanced scorecard by first creating it for the top management and the CEO and then cascading it down to other levels of the organization.

- **Determine the critical success factors (CSFs):** This is the most critical aspect of the balanced scorecard implementation. For a number of Indian companies that are just coming out of the protected environment and have started facing competition, it is not very difficult to realize that the driving force for survival is customer satisfaction. Hence, the CSFs are superior quality, low cycle time, faster inventory turns, minimum defects, high customer response, after-sales service, employees competency, etc. But for those organizations which have already reached high levels of customer satisfaction through superior quality and other measures, the areas of improvements are not very obvious. The challenge is to identify the most fundamental CSFs. The problem is compounded because of the requirements of multiple stakeholders including government and society. The balanced scorecard will have to consider the requirements of all stakeholders which at times will conflict. It does not need to restrict to four perspectives; more may be added. The social responsibility and environmental concerns are two possible candidates. The entire organization should be involved in identifying CSFs. The organization must assign priorities to the stakeholders’ requirements and rate them in terms of their impact.

- **Translate CSFs into measurable objectives (metrics):**
The identified objectives will not lead the organizations anywhere unless the CSFs are converted into good measures or metrics. There are several measures of financial variables and over the years they have been refined. For example, the economic value added is a useful aggregated financial measure which links with value creations for shareholders. It is a real challenge to develop metrics for non-financial measures as a number of them could be unique to an organization for which no standards exist. The proponents of the balanced scorecard claim that it is a device to link performance measures to strategy and performance outcomes. These measures should be precise and consistent surrogate for achieving the desired objective (for example, customer satisfaction); they should be based on objective facts and information; they should be verifiable and accessible to all interested persons in the organization; they should be simple to grasp and should be actionable; and they should be amenable to review and further improvement. There should not be any possibility of these measures being manipulated. The targets of these measures should be challenging but achievable. It is important that the number of measures may be kept to a level which can be easily managed.

• **Link performance measures to rewards:** The success of any performance management system depends on its link to rewards. A reward system that is easily understood and is prompt in rewarding employees motivates them to attain the targets.

• **Install a simple tracking system:** The performance metrics and targets are of no value if they are not tracked quickly, feedback not provided, and lessons not learnt. An organization should follow a simple and fast tracking system which everyone can easily understand.

• **Create and link the balanced scorecards at all levels of the organization:** An organization will better serve its purpose of providing delight to all its stakeholders if it develops scorecards at corporate, divisional, and even at the individual levels. There should be a link between these scorecards; the divisional scorecards should follow from the corporate scorecard and the individual employees’ scorecards from the divisional cards. The achievement of the targets of the scorecards at a lower level must ensure that targets of higher scorecards are met. The scorecard measures, particularly relating to strategic objectives, must be disaggregated so that every one understands them and are able to relate to his/her actions to strategy.

• **Communication:** The balanced scorecard is a communication device—a device to communicate strategy and its components to all levels of the organization. It provides a common language. But, this does not happen automatically. An organization should also develop an effective organizational communication system to make all employees understand the common language of the balanced scorecard.

• **Link strategic planning, balanced scorecard, and budgeting process:** The strategic initiatives to meet the targets require funds. The strategic planning process that builds a balanced scorecard should be linked to the budgeting process to set priorities and allocate resources to strategic initiatives.

**WHY FOCUS ON THE BALANCED SCORECARD?**

The concept and logic of the balanced scorecard is not new; what is new is its easy-to-understand design and a more formalized process of performance management and linking strategy with performance measures and outcomes. A large number of companies are motivated to implement the balanced scorecard for the following reasons.

• **Increase in customer focus:** More and more companies, due to the recent developments leading to heightened competition and customer activism, are becoming customer-focused. They are discovering the balanced scorecard as a comprehensive tool to understand their target customers, their requirements, the performance gaps, and determine the value propositions that they should offer to create delight for their target customers.

• **Focus on creating intangible and intellectual capital:** Most companies realize that future competition will be fought on the strength of intangible assets and human competency. Hence, they are investing in competency building, technology, branding, R&D, IT, marketing systems, etc. The traditional financial performance systems have an in-built bias against
these initiatives. They are not seen as long-term investments but as expenditures to be expensed when incurred. Thus, they are seen as depressing the current profitability. The balanced scorecard provides a logic for these initiatives in terms of leading variables influencing the future profitability of an organization.

- **Business excellence and growth:** Pursuing a growth strategy with business excellence requires non-financial initiatives. In this article, we explained Tata Steel’s and ADI’s focus on quality to become excellent and growth-oriented companies. Financial measures with their short-term orientation fail to appreciate such strategy and allocate funds. The balanced scorecard is able to articulate such strategy and communicate downwards to all levels of an organization.

- **Align strategy to operations at all levels of the organization:** The balanced scorecard enables employees to understand strategy and link strategic objectives to their day-to-day operations. They realize exactly what their actions and tasks should be to help achieve their objectives and influence the overall corporate results. Hence, there is a pre-requisite. Employees should have full access to the balanced scorecards and metrics at all levels must be shared with all. In a number of organizations, and particularly, the service organizations, staff members directly interact with consumers. They must deal with the customers very carefully and implement the customer-focused strategy of the company. The balanced scorecard is used to facilitate this alignment. We have discussed earlier that Philips uses traffic-light reporting to signal the difference between the target and actual performance. Green denotes meeting target, yellow signifies in-line performance, and red implies below target performance.

- **Real-time review:** The operational part of a balanced scorecard is a result-tracking device. Organizations create simple information system (for a large number of companies, the Excel spreadsheets may be useful) linked to the scorecard for built-in review and feedback in real-time. The data are continuously transferred from reporting system to the on-line balanced scorecard. An employee can easily access to see the results and managers can take actions when warranted.

**CONCLUSION**

The balanced scorecard is a system of combining financial and non-financial measures of performance in one single scorecard. The popular form of this card includes performance measures from four perspectives: financial, customer, internal business processes, and learning and growth (innovation). It focuses on the link between business processes and decisions and results. Hence, the proponents of the balanced scorecard claim that it is a device to guide strategy formulation, implementation, and communication (Kaplan and Norton, 1996a). It also helps in tracking the performance and providing quick feedback for control and evaluation. A number of companies in the USA and a few companies in India have implemented the balanced scorecard.

We have argued in this article that the performance improvement process is a critical component of the strategic planning process. Call it by any name, the process is more vital and it has always been practised by many companies worldwide for a long time. This process has been recently dubbed as the balanced scorecard. A good aspect of the balanced scorecard is that it is a simple, systematic, and easy-to-understand approach for performance measurement, review, and evaluation. It is also a convenient mechanism to communicate strategy and strategic objectives to all levels of management. The success of the balanced scorecard or a similar device will depend on the clear identification of non-financial and financial variables and their accurate and objective measurement and linking the performance to rewards and penalties.

The proponents of the balanced scorecard assume (perhaps implicitly) that it aligns with strategy leading to better communication and motivation which causes better performance. This assumption could be the single most important reason for the popularity of the balanced scorecard. But, this may or may not be true. This is an empirical question. There is a need to document the experiences of the balanced scorecard companies and establish the cause-effect relationship.
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There is a tide in the affairs of men, 
Which, taken at the flood, leads on to fortune; 
Omitted, all the voyage of their life 
Is bound in shallows and in miseries. 
On such a full sea are we now afloat; 
And we must take the current when it serves, 
Or lose our ventures.

William Shakespeare – Julius Caesar