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# Balanced Scorecard in Indian Companies

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## Executive Summary

There has been growing criticism of financial measures in performance evaluation system in post-reform India as they are historic in nature and lack futuristic outlook. Their relevance in the information age, when the companies are building internal assets and capabilities, is questioned. The situation may worsen when the firm is compelled to pursue short-term goals at the cost of the organization's long-term objectives.

Kaplan and Norton developed an innovative and multi-dimensional corporate performance scorecard known as the Balanced Scorecard. It compels the firm to align its performance measurement and controls from the customers' perspective, internal business processes, and learning and growth perspectives and investigate their impact on the financial indicators. There are arguments that the Balanced Scorecard should be 'unbalanced' based on the strategy followed by the firm. The corporate experiences with the implementation of the Balanced Scorecard suggest mixed results. In this article, the authors a) identify the extent of the usage of the Balanced Scorecard by corporate India; b) explore whether Indian firms use all the four perspectives, namely, customer, financial, internal business, and learning and growth in their performance scorecard; c) capture the management motivations for implementation of the Balanced Scorecard; d) identify the key performance indicators in different perspectives of the performance scorecard; and e) evaluate the performance of the Balanced Scorecard as a management tool.

The major findings of this study are as follows:

- The Balanced Scorecard adoption rate is 45.28 per cent in corporate India which compares favourably with 43.90 per cent in the US.
- The financial perspective has been found to be the most important perspective followed by customers' perspective, shareholders' perspective, internal business perspective, and learning and growth perspective. The environmental, social, and employees' perspectives also figure in it.
- The expense centre budgets, brand revenue/market share monitoring, profit centre, and transfer pricing mechanism are the other performance management tools used by the Indian companies.
- Corporate India monitors the indicators as per ISO 14000 norms in the environmental and social perspectives of the performance scorecard.
- The difficulty in assigning 'weightage' to the different perspectives and in 'establishing cause and effect relationship among these perspectives' has been found to be the most critical issue in the implementation of the Balanced Scorecard in corporate India.
- Most companies claimed that the implementation of the Balanced Scorecard has led to the identification of cost reduction opportunities in their organizations which, in turn, has resulted in improvement in the bottom line.

Insights from such an analysis can be useful to both management practitioners and management accounting academics. ✓

### KEY WORDS

Performance Evaluation

Balanced Scorecard

Performance Measures

Standard Costing

Management Accounting

The liberalization and globalization of the Indian economy in 1991 brought substantial changes in the levels of competition, production environment, and cost structure of firms and led to rapid development of advanced technologies. Corporate India was compelled to adopt contemporary management accounting techniques in order to ensure survival and maintain competitive advantage (Joshi, 2001). Performance evaluation is an integral part of management accounting (Emmanuel and Otley, 1995). While financial measures of industrial age environment continue to dominate in the corporate performance scorecard, there has been growing use of non-financial, forward-looking measures such as on-time delivery, customer satisfaction, and productivity in addition to financial measures for performance evaluation by corporate India in today's information age (Anderson and Lanen, 1999; Joshi, 2001).

The publication of Johnson and Kaplan's book titled *Relevance Lost* in 1987 brought revolution in the history of management accounting. There has been growing criticism of financial measures as they are historic in nature and lack futuristic outlook (Schoenfeld, 1986; Dearden, 1987; Emmanuel and Otley, 1995; Kaplan and Norton, 1996a). The top ten performance measures in Japan do not include any financial measure whereas Europe widely uses the cost indicators (Jeans and Morrow, 1990). The other criticism of financial measures is that they strive to quantify too many things and that too in a wrong way. Their relevance in the information age when the companies are building internal assets and capabilities is questioned (Elliott, 1992).

The traditional view of business performance measurement as a vehicle to control performance is immature. The use of performance measures as a means of control led to managing the measures rather than performance by the people whose performance is measured. A large number of similar examples are reported in the financial press. The situation may worsen when the firm is compelled to pursue short-term goals at the cost of the organization's long-term objectives. The management may reject a positive net present value project simply because it may have adverse impact on short-term return on investment due to depreciation and asset valuation policy (Dearden, 1969; Hopwood, 1972; Vancil, 1979; Kaplan, 1984; Demirag, 1998).

The financial measures alone in performance measurement and control system are inadequate tools for strategic decision-making as they are unable to ensure goal

congruence between management decisions and actions (Parker, 1979; Maciariello and Kirby, 1994). The lack of 'strategic focus' in its design and implementation led to a plummet in firm performance (Venkatraman and Ramanujam, 1986; Baldwin and Clark, 1992; Brancato, 1995). Chakravarthy (1986) found that classic financial measures (return on assets, return on sales, and return on capital employed) failed to distinguish between Peters and Waterman's (1982) 'excellent' and 'non-excellent' firms. The accounting measures of performance captured only the history of a firm. Thus, the performance management systems should have strategic focus and should include both financial and operating measures. Dale (1996) found that investment analysts who considered both financial and non-financial measures were more accurate in their earnings forecasts than those who considered only financial indicators.

Kaplan and Norton (1992) developed an innovative multi-dimensional corporate performance scorecard known as the Balanced Scorecard. It provides a framework for selecting multiple key performance indicators that supplement traditional financial measures with operating measures of customer satisfaction, internal business processes, and learning and growth activities. It is a step towards linking 'short-term operational controls' to the 'long-term vision and strategy' of the business. The focus is on the strategy and vision. It compels the firm to align its performance measurement and controls with the customers' internal business processes and learning and growth perspectives and investigate their impact on the financial indicators.

The Balanced Scorecard protects the managers from information overload by limiting the performance measures to only four perspectives, namely, customer, financial, internal business, and learning and growth. It also safeguards from sub-optimization in the decision-making process by forcing the managers to consider the four perspectives of business performance to have a complete picture. The implementation of the Balanced Scorecard is a process whereby the organization's strategy is translated into a set of key performance indicators (Kaplan and Norton, 1996a). Slater, Olson and Reddy (1997) argued that the Balanced Scorecard should be 'unbalanced' based on the strategy followed by the firm.

The corporate experiences with the implementation of the Balanced Scorecard suggest mixed results. However, these examples are confined only to Europe and North America. In the Indian context, Anderson and

Lanen (1999) have examined the extent to which a broad set of organizational performance measures are used and whether these measures represent internal and external perspectives as well as financial and quantitative perspectives. Joshi (2001) has examined the management accounting practices in a sample of 60 large and medium-sized manufacturing companies in India and compared the results with the study of Chenhall and Smith (1998). No study on the implementation process of the Balanced Scorecard in the Indian context appears to have been done.

The objectives of the present study are to:

- identify the extent of usage of the Balanced Scorecard by corporate India
- explore whether Indian firms use all the four perspectives in Kaplan and Norton's (1992) framework
- capture the management motivations for implementation of the Balanced Scorecard
- identify the key performance indicators in different perspectives of the performance scorecard
- evaluate the performance of the Balanced Scorecard as a management tool.

It is believed that the findings of the study will be of use to the industry in designing their performance scorecard and to the academia for developing new theories in the direction of establishing cause and effect relationship.

## PREVIOUS RESEARCH

### Management by Objectives and Balanced Scorecard

The management by objectives (MBO) philosophy of Drucker (1955) and the Balanced Scorecard approach of Kaplan and Norton (1992) are based on 'strategic measurements,' 'goal congruence,' and 'Theory Y' of McGregor (1960) as a means to improve the firm performance (Hoffecker and Goldenberg, 1994; Newing, 1995; Dinesh and Palmer, 1998). The Balanced Scorecard is based on 'rational goal model' and incorporates 'human relations model.' It is a motivation tool also since employee compensation is linked with different key performance indicators. The difference between the two approaches is that while MBO is more 'open-ended,' the Balanced Scorecard is 'more explicit and focused' as it incorporates the perspectives of customers, shareholders, internal business processes, learning and growth (Dinesh and Palmer, 1998).

The major motivations for the introduction of MBO in the 1960s and 1970s in 48 Irish organizations were 'to link evaluation to performance,' 'aid manager in planning,' 'motivate managers,' and 'to have two-way feedback' contrary to 'goal congruence' found by Reddin and Kehoe (1974). It failed because, in practice, it has been used only as a performance evaluation tool and a focus on 'goal congruence' and 'human element' has been missing (Landau and Stout, 1979; Poister and Streib, 1995; Bechtell, 1996). Dinesh and Palmer (1998) expressed similar concerns on the failure of the Balanced Scorecard in view of the turbulent business environment and the continuously changing need for an appropriate set of performance measures.

The Balanced Scorecard is an approach within the broader field of total quality management to effectively measure strategy rather than a vehicle to lay down the strategy (McAdam and O'Neill, 1999). Grint (1997) expresses his concerns over the means being emphasized more than the objectives in the implementation of the Balanced Scorecard and total quality management.

### Applications of Balanced Scorecard

The Balanced Scorecard has successful applications across diverse industries and within the public sector in the US management culture *vis-à-vis* the UK management culture. Hepworth (1998) questions its applications in the UK to achieve 'competitive advantage.'

Spechbacher *et al.* (2003) in their survey of 174 senior management executives from German-speaking countries, namely, Austria, Switzerland, and Germany found that 26 per cent of the firms use the Balanced Scorecard in a limited way at the business unit level or use its incomplete version. The cause-and-effect chains have been found in the scorecard of 50 per cent of the user firms. More than two-third of the Balanced Scorecard user firms have linked their compensation and incentive system to the Balanced Scorecard; one-third of them does not have learning and growth perspectives in their scorecard. The Balanced Scorecard that describes 'strategy by using cause-and-effect relationships and also implements strategy by defining objectives, action plans, results, and connecting incentives with BSC' has been found to be used amongst less than seven per cent of the respondent firms. There has been a significant association between BSC usage and firm size based on the number of employees. The Balanced Scorecard has been viewed as a concept for improved shareholder

value management by the respondent firms.

In his survey of 5,157 senior executives during the period 1993 to 1999 in 15 countries in North America, Europe, and South America, Rigby (2001) found that the corporate world has five dimensions in its performance scorecard. These are delivering financial results, building customer equity, strengthening core competencies, improving competitive positioning, and increasing the level of organizational integration. The four tools—strategic planning, mission and vision statement, benchmarking, and customer satisfaction measurement—are used globally. Nearly 44 per cent of the respondent firms reported that they are using the Balanced Scorecard. On a scale of 1 to 5, the Balanced Scorecard produced an average satisfaction score of 3.85 as against the average tool satisfaction score of 3.76. It has a low defection rate of 11.3 per cent indicating consistent usage. The ‘top-down support’ and ‘major initiative effort rather than limited effort’ are prerequisites for successful implementation of the Balanced Scorecard. The relationship between the use of management tool and the corporate financial performance, however, is not brought out in their research.

Silk (1998) found that 60 per cent of the Fortune 1000 companies in the USA have had experience with the Balanced Scorecard. Chenhall and Smith (1998) in their survey found 88 per cent adoption rate of the Balanced Scorecard in the Australian firms ( $n = 69$ ) and observed moderate benefits from its use. In his survey of 128 senior executives (response rate of 22.5%) of Finnish companies, Malmi (2000) found that the Balanced Scorecard is extremely popular. It is being used in two different ways—one close to MBO and the other as a management information system.

Documenting the cases of MC-Bauchemie Muller GmbH & Company (construction supply), Rexam Custom Europe (specialist coatings), and AT&T (telecommunications) on the design and implementation of the Balanced Scorecard, Letza (1996) found that there is a need to balance the ‘internal and external perspectives’ and the ‘short-term financial goals’ as against the ‘long-term growth opportunities.’

Olve, Roy and Wetter (1999) presented the cases of ABB, Halifax, Skandia, Electrolux, British Airways, Coca-Cola Beverages - Sweden, and SKF that used the Balanced Scorecard or any other model similar to performance scorecard to illustrate the process of its introduction in an organization. Most of these cases have begun with

the Kaplan and Norton framework discussing the issues of whether to have only four perspectives or more, choice of measures and their number, and how far this process of the Balanced Scorecard should percolate down in the organization.

Olson and Slater’s (2002) survey of 208 senior managers (23% response rate) studied the relationship between the product market competitive strategy adopted in the Miles and Snow (1976) framework and the emphasis placed on different perspectives of the Balanced Scorecard. They found that, as a group, prospector emphasized the innovation and growth perspective more than any other strategic group, namely, analysers, low cost defenders, and differentiated defenders. High-performing analysers placed greater emphasis on innovation and growth and financial perspective *vis-à-vis* low-performers. The high-performing and low-cost defenders placed greater emphasis on financial perspective and lower emphasis on both the customer and learning and growth perspectives. The high-performing differentiated defenders emphasized the customer perspective more. They argued for the adoption of multiple perspectives in the performance scorecard but questioned the argument of equal weightage to each perspective in the Balanced Scorecard irrespective of the product-market strategy adopted.

Kaplan and Norton (2001a) advocated the use of strategy scorecards in not-for-profit, government, and health organizations as their scorecards, at present, tend to be closer to key performance indicator scorecards. They developed a case study on the City of Charlotte, North Carolina by modifying the architecture of the Balanced Scorecard to suit the not-for-profit organizations. The donor perspective along with the recipient (customers) perspective should be on the top of the Balanced Scorecard. They should then identify internal processes that will deliver desired ‘value propositions’ to the customers. The learning and growth perspective will look at communication and leadership aspects to ensure that the entire organization works in a team towards the achievement of its mission.

The implementation of the Balanced Scorecard is an innovative way to create strategic awareness in the organization. It is a top-down communication which when embedded in ongoing management processes results in the replacement of formal communication programme. Kaplan and Norton (2001b) have documented the experiences of Mobil, Motorola, and Sears with the Balanced

Scorecard in communicating with their employees on the goals and mission of the company and, in turn, influencing this behaviour and performance.

Mendoza and Zrihen (2001) observed that the French management control tool called the 'tableau de bord'— best translated as performance scorecard — is identical to the Balanced Scorecard developed by Kaplan and Norton. The firms have used these contemporary performance management tools to overcome the limitations of traditional budget and planning system. They have documented the rich experience of implementing the Balanced Scorecard in a French affiliate of an English holding company most of whose shareholders are US pension fund beneficiaries.

### **Balanced Scorecard: A Critique\***

Though the Balanced Scorecard framework incorporates multiple performance measures, both financial and non-financial, it lacks a long-term perspective; the distinction between cause-and-effect is blurred; and it lacks empirical validation (Maltz, Shenhar and Reilly, 2003). The critics of the Balanced Scorecard approach argue that it is difficult to achieve balance between the financial and non-financial measures and that the firms do not adhere to this balancing act because of implementation problems.

The Balanced Scorecard of Kaplan and Norton (1996a and b) has been found to be inadequate on the ground that it neither has stakeholders' perspective nor a 'two-way evaluation process' (Atkinson, Waterhouse and Wells, 1997). It fails to highlight the employees,' suppliers,' and community's contribution in the achievement of organizational objectives. Smith (1998) noted that in the service sector, the role of motivated employees is critical to success and that the Balanced Scorecard fails to consider it. Norreklit (2000) termed the Kaplan and Norton (1996a and b) Balanced Scorecard as a 'hierarchical top-down model' lacking 'organizational rooting.' He challenged the basic assumptions of the Balanced Scorecard and questioned the causal relationship between different measures based on 'financial calculus' and 'finality relationship.' The Balanced Scorecard is based on 'empiricism' and there is a gap between the theory and empirical case studies developed on it. Strack and Willis (2002) found that the Balanced Scorecard

approach thrives to identify cause-and-effect relationship but the linkages established are mostly qualitative. The process of selection and prioritization of the key performance indicators in the Balanced Scorecard is not systematic as it does not lend itself to sensitivity analysis and scenario analysis.

Kaplan and Norton (2000) emphasized that employees' understanding of strategy is critical to the success of the Balanced Scorecard. A better understanding of the firm strategy by the employees would lead to the right choice of strategically linked performance measures for guiding their decisions and actions. They are reluctant to link employees' compensation with the Balanced Scorecard until the firms are certain about the right choice of measures in their performance scorecard based on their experience with it for several months (Colabro, 2001).

Meyer (2002) argued against the Balanced Scorecard on the ground that it makes non-financial performance indicators difficult to measure. The financial measures dominate as far as employee compensation is concerned. According to Meyer, it did not provide guidance on how to combine the dissimilar measures into an overall appraisal of performance. He suggested activity-based customer profitability analysis approach as an alternative.

### **Performance Scorecard Practices of Indian Companies**

The reported studies on the performance scorecard practices in the Indian context are by Anderson and Lanen (1999) and Joshi (2001).

In their study of management accounting practices of 14 Indian firms, Anderson and Lanen (1999) found that information on customer expectations and satisfaction, competitors' performance, and internal information on process variations (e.g., quality measures, on-time delivery, unit product cost, and product quality failure) has assumed greater significance for strategy formulation in the post-reform India. The organizational performance models of the Indian firms not only have more external perspectives but are also equally important as traditional measures for increasing productivity.

A survey of 60 large and medium-sized Indian manufacturing firms by Joshi (2001) found an extensive use of financial measures such as 'return on investment,' 'variance analysis,' and 'budgetary control' in performance evaluation. It also found a moderate use of on-going

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\* See Pandey, I M (2005). "The Balanced Scorecard: Myth and Reality," *Vikalpa*, 30(1), January-March, 51-66.

suppliers' evaluation and customer satisfaction surveys and a minimal use of non-financial measures in performance evaluation.

### Literature Review: A Summary

The Balanced Scorecard approach to performance management is an attempt to achieve different kinds of balance between short and long run, between different perspectives of the scorecard, between measuring change and the present position, and between market image and internal focus. It is useful for both strategic and operational purposes. To implement it successfully, it must enjoy widespread support from the company. The history of the Balanced Scorecard is short with mixed experiences. On the one hand, while it is widely accepted as a management tool, critics have challenged its basic assumption of cause and effect relationship and the right choice of measures. In the Indian context, there have been limited studies on the Balanced Scorecard.

## RESEARCH METHODOLOGY

### Research Design

We conducted a nationwide questionnaire-based survey to capture the issues in the design and applications of the performance scorecard. The universe of companies selected for this study consisted of the bt-500 private sector companies and 75 most valuable PSUs which is a fair representation of corporate India. The subsidiaries of multinational corporations (MNCs) form a major constituent of the Indian corporate sector. Based on value judgment, four such companies from the automobile, engineering, and software sectors were included in the sample.

We developed the draft questionnaire based on the review of literature and circulated it to a group of prominent academicians and chief financial officers (CFOs) for feedback as a part of the pilot study. Based on their suggestions, we revised the questionnaire. The final questionnaire on performance scorecard contained seven questions with 106 sub-parts. The survey asked the CFOs to respond on a Likert scale of 0 to 5 (where 0 means 'not used,' 1 means 'unimportant,' and 5 means 'most important').

### Response

We sent the questionnaire to the CFOs of 579 companies in batches during the week from October 30, 2002 to

November 7, 2002. We also sent two reminders (one in December, 2002 and the second in February, 2003) for follow-up in order to maximize the response rate. We had indicated to the CFOs that the identity of the respondent companies and the respondents would be kept strictly confidential and only aggregate generalizations would be published.

Fifty-three completed questionnaires were received by June 9, 2003. All the four MNCs responded. In addition, 49 out of the remaining 575 with a response rate of 8.52 per cent\* returned the duly filled questionnaires. These 53 companies constitute the sample for deriving inferences for the present study.

### Data

The financial statistics of the respondent companies were collected from the Centre for Monitoring Indian Economy's PROWESS database. The industry composition of the sample is given in Table 1. The respondent firms range from medium (46.51% of the sample companies have sales less than or equal to Rs. 5 billion; 51.72% have market capitalization less than or equal to Rs. 5 billion and 41.86% have total assets less than or equal to Rs. 5 billion) to large (16.28% of the sample companies have sales greater than Rs. 25 billion; 20.69 have market capitalization greater than Rs. 25 billion; and 18.60% have total assets greater than Rs. 25 billion).

\* This response rate is low as compared to Malmi's (2000) 22.5% in a survey mailed to 570 Finnish companies and Joshi's (2001) 24.4% in a survey mailed to 246 CMIE list of 500 Indian companies but much higher as compared to Rigby's (2001) only 1.8% in a survey mailed to North American executives.

**Table 1: Industry Composition of the Sample**

Industry	Sample Size	Sample Proportion
Consumer durable, personal care, and food products	7	13.21
Engineering and capital goods	6	11.32
Chemicals and pharmaceuticals	4	7.55
Power generation and transmission	4	7.55
Tractors	4	7.55
Automobiles and auto ancillary	4	7.54
Construction, cement, and building material	3	5.66
Information technology—software	3	5.66
Oil&Gas and petrochemicals	3	5.66
Telecom and electronics equipment	2	3.77
Tyres	2	3.77
Diversified	1	1.89
Iron ore and non-ferrous metals	1	1.89
Textiles	1	1.89
Others (logistics, banking, telecom services, consultancy, airline services, trade services, etc)	8	15.09
<b>Total</b>	<b>53</b>	

The median return on capital employed (ROCE) is 16.83 per cent. Nearly 42 per cent of the respondents have ROCE greater than 20 per cent and 14.63 per cent have negative ROCE. The median return on net worth (RONW) is 12.01 per cent and 18.75 per cent have negative RONW. The median debt-to-equity ratio of respondent firms is 0.43 with maximum of 13.33 and minimum zero debt. The average debt-to-equity ratio of the respondent firms is 1.17. The average beta of the respondent firms is 0.64 with maximum of 1.46 and minimum of 0.17.

Out of the 53 responses, 24 have been found using the Balanced Scorecard. For the analysis, the firms have been classified on the basis of the Balanced Scorecard adoption along with activity-based cost systems (ABCM) adoption and manufacturing sector/service sector. The sectoral classification of the Balanced Scorecard user firms based on ABCM adoption is given in Table 2.

The independent sample student t-test has been used to investigate whether management's motivations and decision choices differ across firms' cost management systems, performance measurement, and control systems and sector.

### Limitations of the Methodology

In any such survey, it is likely that the firm that does not respond on time may have a non-response bias. Whatever the respondents say is believed to be true and, hence, no statistical test is performed to study the non-response bias and consistency of the individual responses. Another limitation of the survey methodology is that it measures belief and not necessarily actions.

## SURVEY FINDINGS

### Standard Costing

The standard costing technique has been widely used by corporate India as a part of performance management. Approximately 77.36 per cent of the 53 respondents under study have used it *vis-à-vis* 53 per cent in the *Business Today* (1999) survey of 113 large-sized companies. The Indian practice is in agreement with that of

the US (Waldron and Everett, 2002). The use of standard costing is popular worldwide. More than 75 per cent of the firms use it in the US, the UK, Ireland, and Sweden (Drury, 1993; Clarke and Brislane, 2000) while in Japan, the usage is 65 per cent (Scarborough, Nanni and Sakurai, 1991).

The sales volume and selling price variances had been given the highest level of importance. This had been followed by the material price and material usage variance (70.7% and 70.8% respectively). This practice is in agreement with the finding of Drury's (1993) study of management accounting practices in the context of manufacturing companies of the UK. On an aggregate basis, material variances have been given more importance over the overhead variances. When the sample is discriminated on the basis of activity-based costing (ABC) adoption, it has been found that ABC-user firms assign more importance to overhead variance *vis-à-vis* non-ABC user firms.

The other performance measurement and control tools used by the respondents from corporate India for the study are expense centre budgets (69.3%), brand revenue/market share monitoring (37.7%), and profit centre and transfer pricing mechanism (34.7%).

### Objectives of Performance Management System

The respondent firms want to balance profit, growth, and control through their present performance measurement and control systems and the Balanced Scorecard user firms plan to balance performance expectations of different stakeholders as is evident from Table 3. The other objectives of performance management systems are: balancing short-term results against long-term capabilities and growth opportunities, balancing opportunities and management attention, and balancing the motives of human behaviour. The service sector firms are more likely to balance short-term results against long-term capabilities and growth opportunities *vis-à-vis* the manufacturing sector firms. This may be due to the predominance of the problem of revenue recognition and asset amortization in the service sector. The respondent firms carry out performance review more than once in a year.

### Adoption of Balanced Scorecard

Twenty-four of the 53 respondent firms have adopted the Balanced Scorecard as a performance management tool. The present adoption rate of 45.28 per cent compares favourably with 43.9 per cent of Rigby's (2001)

**Table 2: Sectoral Classification of the Sample based on ABCM Adoption**

N = 24	ABCM User Firms	Non-ABCM User Firms	Total
Manufacturing sector	12	4	16
Service sector	7	1	8
<b>Total</b>	<b>19</b>	<b>5</b>	<b>24</b>

survey and 40 per cent of Joshi's (2001) survey.

Initiating the change process in the organization (50%), broadening of the performance measures (45.8%), and facilitating the integration of business plans with the financial plans (45.8%) are the major motivations for the implementation of the Balanced Scorecard amongst the different sectors in corporate India as is evident from Table 4. The other management motivations include translating corporate vision and strategy into integrated set of objectives and measures, benchmarking, and

making visible trade-off between long-term growth and short-term improvements.

The service sector firms assign more importance to making visible the trade-off between long-term growth and short-term improvements *vis-à-vis* the manufacturing sector firms while implementing the Balanced Scorecard in their organization.

### Perspectives of Performance Scorecard

The respondents were asked to rank the different per-

**Table 3: Objectives of Performance Measurement and Control System**

Objectives (N = 53)	Most Important/ Important (%)	Mean Score				
		Aggregate	Manufacturing Sector	Service Sector	Non-BSC User	BSC User
Balancing profit, growth, and control	65.20	3.52	3.46	3.73	3.45	3.61
Balancing short-term results against long-term capabilities and growth opportunities	46.10	2.77	2.44	4.00***	2.45	3.17
Balancing performance expectations of different stakeholders	36.50	2.60	2.49	3.00	2.21	3.09*
Balancing opportunities and management attention	34.60	2.46	2.49	2.36	2.28	2.70
Balancing the motives of human behaviour	20.90	2.13	2.20	1.91	1.97	2.35

\* Significant at 10% level.

\*\*\* Significant at 1% level.

**Table 4: Management Motivations for Implementation of Balanced Scorecard**

Motivations (N = 24)	Most Important/ Important (%)	Mean Score				
		Aggregate	Manufacturing Sector	Service Sector	Non-ABCM User	ABCM User
Initiating change in the organization	50.00	2.54	2.56	2.50	2.80	2.47
Broadening performance measures	45.80	2.75	2.75	2.75	2.40	2.84
Facilitating integration of business plans with financial plans	45.80	2.79	2.75	2.88	3.00	2.74
Translating corporate vision and strategy into integrated set of objectives and measures	41.60	2.54	2.31	3.00	3.40	2.32
Benchmarking	41.60	2.79	2.63	3.13	2.60	2.84
Making trade-off between long-term growth and short-term improvement visible	33.30	2.29	1.75	3.38*	2.80	2.16

\* Significant at 10% level.

**Table 5: Perspectives Considered in Balanced Scorecard**

Perspectives (N = 24)	Most Important/ Important (%)	Mean Score				
		Aggregate	Manufacturing Sector	Service Sector	Non-ABCM User	ABCM User
Financial perspective	87.50	4.29	4.19	4.50	4.40	4.26
Customers' perspective	66.60	3.67	3.58	3.88	3.60	3.68
Shareholders' perspective	62.50	3.72	3.38	2.75	4.60	2.79***
Internal business perspective	54.20	3.25	3.06	3.63	3.20	3.26
Learning and growth perspective	54.20	3.04	3.00	3.13	3.60	2.89
Environmental and social perspective	41.70	2.33	2.88	1.25*	3.80	1.95***
Employees' perspective	41.60	2.63	2.38	3.13	4.40	2.16***
Competitive perspective	29.20	2.13	2.00	2.38	4.00	1.63
Suppliers' perspective	15.00	1.83	1.88	1.75	3.80	1.32***

\* Significant at 10% level.

\*\*\* Significant at 1% level.

spectives in their performance scorecard in terms of their importance. From Table 5, the financial perspective emerges as the most important (87.5%), followed by customers' perspective (66.6%), shareholders' perspective (62.5%), internal business perspective (54.2%), and learning and growth perspective (54.2%).

Apart from the above five perspectives, environmental and social perspective (41.7%) and employees' perspective (41.6%) are also considered in the Balanced Scorecard. There is no significant difference in the importance assigned to different perspectives across sector classification of the respondents except the environmental and social perspective which has been given more importance by the manufacturing sector. Surprisingly, the suppliers' perspective could not find its due place in the Balanced Scorecard.

### Key Performance Indicators under Different Perspectives of the Performance Scorecard

**Customers' perspective:** Table 6a finds customers' satisfaction in terms of quality (83.4%), delivery schedule (83.3%), and service (66.7%) as important key performance indicators (KPIs). The other KPIs are corporate image reputation and brand, percentage of sales from new products, responsive after-sales service, and the number of customer suggestions.

**Table 6a: KPIs under Customers' Perspective**

Measures (N = 24)	Most Important/ Important(%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Customer satisfaction in terms of quality	83.40	3.88	4.00	3.63
On-time delivery	83.30	3.79	3.94	3.50
Customer satisfaction in terms of service	66.70	3.29	3.19	3.50
Image, reputation, and brand	58.30	2.79	2.875	2.625
Percentage of sales from new products (as a percentage of total sales)	45.90	2.46	2.38	2.63
Responsive after-sales service	41.70	2.33	2.75	1.50
Number of customer suggestions	37.50	2.33	2.38	2.25

**Table 6b: KPIs under Internal Business Perspective**

Measures (N = 24)	Most Important/ Important(%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Unit cost	75.00	3.50	3.75	3.00
Number of defects per million	41.70	2.25	2.56	1.63
Cycle time	37.50	2.13	2.31	1.75
Wastage and scrap as a percentage of sales	37.50	2.08	2.31	1.63
Distribution reach	37.50	2.04	1.94	2.25
New product introduction interval	33.30	1.88	2.06	1.50
Number of training hours	25.00	1.71	2.13	0.88
Stock-out percentage	20.90	1.25	1.44	0.88
Percentage of components outsourced	16.70	1.21	1.31	1.00
Ratio of number of skilled employees to total employees	16.60	1.21	0.94	1.75

**Internal business perspective:** Table 6b finds unit cost as the most important KPI (75% of the respondents assign a weight of 4 to 5). The other KPIs considered by corporate India are the number of defects per million, stock-out percentage, new products introduction interval, distribution reach, and cycle time. No significant difference has been observed in the choice of KPIs across the sector classification of the respondent firms.

**Innovation and growth perspective:** The market share (79.2%) and growth in market share (54.2%) are the most important KPIs as is evident from Table 6c. The other important measures are percentage of sales from new products, percentage of sales to new customers, developing raw material substitutes, number of employee suggestions, vendor development, reduction in cycle time, and growth rate in knowledge assets. Service sector places more emphasis on growth rate in knowledge assets as a KPI *vis-à-vis* the manufacturing sector.

**Financial perspective:** With 62.5 per cent usage, return on investment (ROI) and days' working capital (DWC) form the most important KPIs followed by cash flow ROI (50%) and economic value added (EVA) (50%) (Table 6d). The other measures are current ratio and growth rate in tangible assets.

**Shareholders' perspective:** The choice of EVA (58.3%) as

a measure of shareholders' perspective in the Balanced Scorecard predominates over market value added (25%), cash value added (25%), and dividend per share (16.7%) (Table 6e). The choice of KPIs has been found to be similar across sectoral classification.

**Suppliers' perspective:** The inbound logistics cost as a percentage of sales, average payment period to the creditors, and the suppliers' performance in terms of reduction in variance in time and quality are the most important KPIs in the manufacturing sector as is evident from Table 6f.

**Employees' perspective:** The most important KPIs are employee cost as a percentage of sales (50%), sales per employee (50%), and attrition rate (45.9%), as is evident from Table 6g.

**Competitive perspective:** The market share has been found to be the most important measure with 50 per cent

usage. The other important measures are firm cost *vis-à-vis* industry average, new product development, and number of brands *vis-à-vis* total brands in the market as reported in Table 6h.

**Environmental and social perspective:** Under this perspective, corporate India monitors the ISO 14000 norms as is evident from Table 6i.

### Role of Balanced Scorecard in the Choice of KPIs

The choice of KPIs in each perspective is critical to the success of the Balanced Scorecard as a performance management tool. Hence, it has to provide means to validate the right choice of performance measures at the design stage. As shown in Table 7, 54.2 per cent of the respondents agree that the initial choice of KPIs at the design stage of the Balanced Scorecard has been substantially validated at the review stage.

**Table 6c: KPIs under Innovation and Growth Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Market share	79.20	3.54	3.25	4.13
Growth in market share	54.20	2.96	2.81	3.25
Percentage of sales from new products	41.70	2.13	2.82	2.00
Percentage of sales from new customers	37.50	2.17	2.19	2.13
Raw material substitutes	33.30	1.42	1.25	1.75
Number of employee suggestions	29.20	2.13	2.44	1.50
Vendor development	29.10	1.54	1.50	1.63
Reduction in cycle time	25.00	1.75	1.69	1.88
Growth rate in knowledge assets	25.00	1.71	1.13	1.88*

\* Significant at 10% level.

**Table 6d: KPIs under Financial Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Return on investment	62.50	3.50	3.25	4.00
Day's working capital	62.50	3.13	3.25	2.88
Cash flow return on investment (CFROI)	50.00	2.50	2.75	2.00
EVA	50.00	2.54	2.56	2.50
Current ratio	37.50	2.38	2.38	2.38
Growth rate in tangible assets	20.80	1.38	1.13	1.88

**Table 6e: KPIs under Shareholders' Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
EVA	58.30	2.75	2.69	2.88
Market value added (MVA)	25.00	1.67	1.63	1.75
Cash value added (CVA)	25.00	1.42	1.63	1.00
Dividend per share	16.70	0.96	1.00	0.88
Real asset value enhancer (RAVE)	8.40	0.75	0.63	1.00

**Table 6f: KPIs under Suppliers' Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Inbound logistics cost as a percentage of sales	37.50	1.79	2.13	1.13
Average payment period to suppliers	33.30	1.71	2.25	0.63**
Supplier performance in terms of time and quality	29.10	1.63	2.125	0.625*
Fill rate	20.90	1.33	1.63	0.75
Number of suppliers	20.90	1.57	2.07	0.63*
Number of duplicated functions minimized	20.90	1.42	1.50	1.25
Number of product improvements with supplier partnerships	20.80	1.33	1.69	0.63
Supplier performance in terms of reduction in variance in time and quality	20.80	1.29	1.625	0.625
Inventory carried (in terms of number of days and amount) by the supplier	16.60	1.13	1.44	0.50

\* Significant at 10% level.

\*\* Significant at 5% level.

**Table 6g: KPIs under Employees' Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Sales per employee	50.00	2.58	2.75	2.25
Employee cost as a percentage of sales	50.00	2.46	2.38	2.62
Attrition rate	45.90	2.46	2.19	3.00
Value added per employee	25.00	1.88	1.88	1.88

**Table 6h: KPIs under Competitive Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Market share	50.00	2.21	2.19	2.25
Company cost <i>vis-à-vis</i> industry average	33.40	1.96	1.81	2.25
New product development	33.40	1.88	2.07	1.50
Number of brands <i>vis-à-vis</i> total brands in the market	25.00	1.21	1.25	1.13
Availability/development of raw material substitutes	16.70	1.93	1.25	0.88

**Table 6i: KPIs under Environmental and Social Perspective**

Measures (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Efficiency in material and energy use	37.50	2.04	2.19	1.75
Water/Air quality monitoring	33.40	1.88	2.31	1.00
Number of environmental incidents/accidents	33.30	1.75	2.19	0.88
Eco-performance of products	29.20	1.54	1.81	1.00
Green procurement	29.20	1.67	1.81	1.38
Investment in environment protection	25.00	1.46	1.81	0.75
Waste produced per quantity of finished product	20.80	1.33	1.69	0.63
Specific pollutant quantities, e.g., Nox, Sox, CO, Pb, CFCs	16.70	1.13	1.50	0.38*
Percentage of waste recycled	8.30	0.96	1.19	0.50

\* Significant at 10% level.

**Table 7: Balanced Scorecard as a Means to Validate the Choice of KPIs**

Statement	Percentage of Respondents Who Agree
Does not validate at all	-
Validates to a limited extent	4.20
Validates partly	8.30
Validates substantially	54.20
Validates fully	4.20

### Problems in the Implementation of Balanced Scorecard

The difficulty in assigning weightage to the different perspectives and establishing cause and effect relationship among them has been found to be the most critical issues in the implementation of the Balanced Scorecard in corporate India (Table 8). The other difficulties include assigning weightage to different measures within the perspective and quantifying them and lack of clarity arising from a large number of perspectives.

### Performance of Balanced Scorecard

This study finds that the implementation of the Balanced Scorecard as a performance management tool has led to the identification of cost reduction opportunities in the organization, which, in turn, has resulted in the improvement in the bottom line.

The performance of the Balanced Scorecard as a management tool in terms of identifying the areas for further improvement has not been found to be significantly different in ABCM and non-ABCM systems

(Table 9). Similarly, no change has been observed across sectoral classification.

## CONCLUSIONS

In this study, we have analysed the current practice of the organizational performance management system with a focus on the Balanced Scorecard. We believe that some practitioners will find it useful to observe how other firms operate and perhaps change their own practice. It may also be useful to the management accounting academics to consider the practice for re-examining the theory.

The difficulty in assigning weightage to the different perspectives and in establishing cause and effect relationship among these perspectives has been found to be the most critical issue in the implementation of the Balanced Scorecard in corporate India. Most respondents cited that the implementation of the Balanced Scorecard has led to the identification of cost reduction opportunities in their organizations which, in turn, has resulted in the improvement in the bottom line.

What does the future hold? There is likely to be greater acceptance of the Balanced Scorecard as a strategic management and performance management tool. Due to the limited scope of the present study, a large number of research issues have not been attempted but are identified in the course of the study. The role of Indian/corporate culture in the successful implementation of the Balanced Scorecard and the relationship between the Balanced Scorecard adoption and financial performance of a firm are some such potential issues for future research.

**Table 8: Problems Faced during the Implementation of Balanced Scorecard**

Types of Problems (N = 24)	Most Important/ Important (%)	Mean Score		
		Aggregate	Manufacturing Sector	Service Sector
Difficulty in assigning weightage to different perspectives	45.80	0.46	0.56	0.25
Difficulty in establishing cause and effect relationship amongst different perspectives	41.70	0.42	0.50	0.25
Difficulty in assigning weightage to measures within each perspective	29.20	0.29	0.31	0.25
Difficulty in quantifying measures for various perspectives	25.00	0.25	0.38	0.00***
Lack of clarity arising from large number of perspectives	25.00	0.25	0.31	1.25
Lack of clarity arising from large number of measures within each perspective	12.50	0.13	0.19	0.00*
Lack of employee and middle management support	12.50	0.13	0.06	0.25
Lack of resources both time and finances	8.30	0.08	0.06	0.13

\* Significant at 10% level.

\*\* Significant at 1% level.

**Table 9: Impact of Balanced Scorecard on Different Areas**

Areas (N = 24)	Most Important/ Important(%)	Mean Success Score				
		Aggregate	Manufacturing Sector	Service Sector	Non-ABCM User	ABCM User
Cost reduction opportunities	60.90	2.78	2.47	3.38	1.25	3.11
Profits after tax (PAT)	45.90	2.13	1.50	3.38*	2.00	2.16
On-time delivery	45.80	2.08	2.31	1.63	1.00	2.37
Responsive service	41.70	1.92	1.88	2.00	0.80	2.21
Number of defects	37.50	1.83	1.94	1.63	1.00	2.05
Free cash flows to firm (FCFF)	37.50	1.96	1.69	2.50	2.00	1.95
Day's working capital	29.30	1.58	1.69	1.38	1.00	1.74
Wastage and scrap	29.20	1.50	1.81	0.88	1.00	1.63
Logistics cost	25.00	1.54	1.69	1.25	0.80	1.74
Attrition rate	20.80	1.33	1.00	2.00	1.60	1.26
Cycle time	16.70	1.04	1.06	1.00	0.80	1.11
Fill rate	16.70	0.92	0.81	1.13	0.80	0.95

\* Significant at 10% level.

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