# EVALUATION OF STRUCTURE AND USE OF BALANCED SCORE CARD IN INDIAN COMPANIES

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#### **ABSTRACT**

Performance measurement is an integral part of any organizational performance management system. The need to remain competitive, productive and open to the challenges of the future in the face of organizational change and information age environment has compelled the corporate world to adopt comprehensive and integrated performance measurement tools. In this regard, the latest approach to the strategic performance management system is the Balanced Scorecard (BSC) which is a performance-based metric tool used extensively by various businesses across sectors to align activities to the vision or the overall goal of the organization. There are certain attributes relating to the structure and use of a Balanced Scorecard that make it unique from other frameworks and allow it to be used as a strategic tool to steer organizations towards sustained long-term profitability. Structure relates to the design of the scorecard with respect to its perspectives and their key measures and use relates to how the scorecard is employed to implement strategy and assess performance. Moreover, there are a number of factors which may contribute to the successful implementation of this strategic management tool, for example, determining critical performance measures, employees' involvement in the process of building Balanced Scorecard, linking performance measures to rewards, sound organizational communication system etc. The present study seeks to evaluate the Balanced Scorecard practices in those top Indian companies which are BSC users. Evaluation has been done on the basis of various parameters such as structure of Balanced Scorecard with respect to its perspectives and their key measures, adoption rate of Balanced Scorecard tool, employees' involvement in the Balanced Scorecard process etc. The study contains analysis based on primary data collected through a questionnaire. The study finds that in corporate India, 73(manufacturing-49 and service-24) of the 132 respondent companies (55.3%) have adopted Balanced Scorecard as a strategic tool. The study also reveals that the companies are using the scorecard at different levels. While some have managed to reach down to the level of departmental heads, others are keeping score only at the corporate level. It has also been found that companies have been involving their employees in the development of Balanced Scorecard to obtain active participation in the strategic planning process. However, only senior managerial-level employees are involved in Balanced Scorecard process significantly.

**Keywords**: Balanced Scorecard (BSC), Organizational Performance, Performance Evaluation Performance Measures, Key Performance Indicators.

## **INTRODUCTION**

The Balanced Scorecard is an innovative and integrated management tool to improve organizational performance management against strategic goals which is driven by Vision Strategy, Business Perspectives and Key Performance Indicators (KPI's). This concept was introduced by Dr. Robert Kaplan (Harvard Business School) and Dr. David Norton (a management consultant) in 1992. It combines both financial and non-financial performance measures of customer satisfaction, internal business process and learning-growth activities with multiple key performance indicators in a single scorecard.

## **OBJECTIVES OF THE STUDY**

The specific objectives of the study are as follows:

- 1. To determine the extent of adoption of Balanced Scorecard by corporate India.
- To assess the relevance of Balanced Scorecard for performance evaluation and strategy implementation of selected Indian companies.
- To ascertain the role of employees' involvement in the process of building balanced scorecard.

## LITERATURE REVIEW

From time to time, several research studies have been conducted to examine the Balanced Scorecard framework.

At International level , Speckbacher, Bischof and Pfeiffer<sup>i</sup> have surveyed 174 senior management executives from publicly traded firms in Germany; Austria and Switzerland on their usage of the Balanced Scorecard. The study finds that 26 percent of the firms use the Balanced Scorecard in a limited way at the business unit level or use its incomplete version. Malmi<sup>ii</sup> has investigated the state of the

Balanced Scorecard use among finnish organizations. The study is conducted on a sample of 17 Finnish companies through a series of semi-structured interviews. The study reveals that Balanced Scorecards are primarily applied at business unit level. Business unit refers to profit center, division, subsidiary, or the like, in contrast to corporate level on the one hand and to department, activity, team or individual level on the other. **Denton and White**iii too describe the design and implementation of a Balanced Scorecard at a hotel management company that at the time operated thirty-eight limited-service properties. The study reports that the performance measurement system's goal is to track, in addition to financial information, nonfinancial measures that are believed to be important for long-term growth and value creation.

At National level, Pradeep Pandyaiv surveyed several Indian companies on their usage of Balanced Scorecard and their experiences with this tool. The study shows that many big business houses have implemented the Balanced Scorecard tool in part or in full in an attempt to improve organizational performance. The study also reveals that there is broad consensus among the companies that the BSC is most effective when used to drive organizational change and focusing and sustaining revitalization and continuous improvement efforts. I.M.Pandey gives in-depth information about the concept starting from its actual evolution to practical problems faced by the organization. The study provides detailed analysis on all four perspectives of the Balanced Scorecard and suggests how to build successful BSC. The study has also covered the examples of Tata steel and Philips to document their experiences with the Balanced Scorecard and analyze the advantages of the concept. Roopali Batravi has conducted a study to gain an insight into the concept of Balanced Scorecard and its superiority over other traditional performance measures. The study also documents the experiences of big Indian companies, like Tata, Philips, Infosys etc. who have implemented the Balanced Scorecard successfully. The study concludes that still many Indian companies need to be convinced with the idea

of Balanced Scorecard implementation. The companies need to clearly understand and deploy the scorecard as a part of their strategic planning process for performance improvement.

## RESEARCH METHODOLOGY

Sample Selection - The study is based on a sample of 73 companies with 500 employees and above who have been found using the Balanced Scorecard. These companies consist of 63 private sector companies and 10 most valuable PSUs. These companies belong to 14 different industries (49 manufacturing companies) and (24 service sector companies). A questionnaire has been developed to solicit information from the officials (chief manager, chief financial officer etc.) of these companies about their perception on different issues relating to Balanced Scorecard to evaluate structure and use of Balanced Scorecard.

Statistical tools used for Analysis - The responses through questionnaire are put up in the SPSS data analysis tool in order to get the details of all the dimensions separately i.e., frequency distributions, mean values, t-test analysis, pie-chart and bardiagram presentations. Firstly, the responses for some questions are presented with the help of pie-chart and bar-diagram with their respective statistics using MS-office tools (Excel). Secondly, the mean value and standard deviation have been computed for questions which are asked on Likert's Scale ranging from 1to5 (from most important to unimportant). Thirdly, certain questions have been analyzed on the scale which vary from "to a very large extent" to a "small extent".

#### **EMPIRICAL RESULTS AND ANALYSIS**

The questionnaire is designed to seek information on extent of adoption of Balanced Scorecard, mode of communication, employees' participation in the Balanced Scorecard process etc. The empirical results and analysis have been presented as follows.

#### Adoption of Balanced Scorecard

Since the Balanced Scorecard was launched in early 1990s by Dr. Robert Kaplan and Dr. David Norton, it has been applied successfully worldwide in diverse organizations. In USA and UK many companies are implementing the tool and have shown impressive results to date. In India also, many organizations (both manufacturing and service) have adopted the Balanced Scorecard as a new performance measurement and management system. The survey conducted in this study revealed that seventy- three of the 132 respondent firms have adopted the Balanced Scorecard as a performance management tool. It means that 55.30 per cent of companies in India are incorporating the Balanced Scorecard strategy in their management structure. This present adoption rate of 55 per cent compares favorably well with 45.28 per cent of Anand and Saha's (2005)vii study and 40 per cent of Joshi's (2001) survey. The evidence of higher adoption rate of Balanced Scorecard supports the hypothesis that the level of Balanced Scorecard adoption in Indian companies is satisfactory.

Among the most renowned manufacturing companies in India that have adopted the Balanced Scorecard are: Tata group of companies, Godrej - GE Appliances Limited, Goodlass Nerolac Paints Limited, Philips Electronics, Castrol India Limited, Dabur India Limited, Larsen & Toubro Limited, Mahindra & Mahindra Limited, Moser Baer India Limited, Reliance Industries Limited, Lakshmi Machine Works, Suzlon Energy Limited etc. Among Tata group of companies who successfully implemented the BSC are Tata Chemicals Ltd., TCS Ltd., Tata Global Beverages Ltd., Tata Motors Ltd., Tata Power Co. Ltd., Tata Iron and Steel Ltd., and Voltas Ltd. Tata Motors is the first Indian company to introduce the Balanced Scorecard System in automotive sector in India. It is worth mentioning here that this company was awarded the Balanced Scorecard Collaborative's prestigious Hall of Fame in the year 2003, in recognition of its exemplary success with the model. Indian IT firms like Infosys Ltd., Infotech Enterprises Ltd. NIIT technologies Ltd., HCL Infosystems Ltd., Wipro Ltd., are also increasingly adopting the Balanced Scorecard tool. pharmaceuticals in India such as Ranbaxy Laboratories

Ltd., Dr. Reddy's Laboratories are also making use of BSC. Balanced Scorecard is gaining popularity in public sector companies also like Bharat Electronics Ltd. (BHEL), Bharat Petroleum Corpn. Ltd., Mecon Ltd., NTPC Ltd., ONGC Corpn. Ltd., and Steel Authority of India Ltd. (SAIL) etc.

## Staff Level Participation in the Development of Balanced Scorecard Framework

One of the critical success factors for a successful Balanced Scorecard implementation is the involvement of staff in the process of building the scorecard. The approach ensures that the Balanced Scorecard is understood and agreed to by all levels of staff viz., senior management, middle management (supervisory staff) and operative staff so that their day-to-day activities are aligned with the company's strategic objectives. Both the creation and implementation of the Balanced Scorecard need to be driven top down and bottom up to strike a balance. The following figure 1 shows the staff level participation in the development of Balanced Scorecard framework.

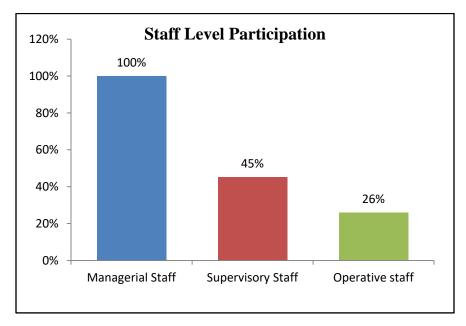


Figure 1: Staff Level Participation

Figure 1 discloses that 73 companies (100%) agreed that senior management is always involved in the development of company's BSC system. The reason is that strategy formulation is a senior management responsibility. Therefore it seems logical that they would want to be involved in developing the Balanced Scorecard performance measurement system with respect to that strategy. 33 companies (45%) indicated that they have the participation of supervisory staff in the BSC development. Only 19 companies (26%) reported about the involvement of

operative staff in the development and design of Balanced Scorecard framework.

 Level of Organizational Implementation of Balanced Scorecard (Corporate and Business Unit Level)

Balanced Scorecard tends to be implemented on various organizational levels – corporate, business unit/ team, and individual personal level. The figure 2 shows the level of implementation of Balanced Scorecard at different organizational levels for all 73 responding firms.

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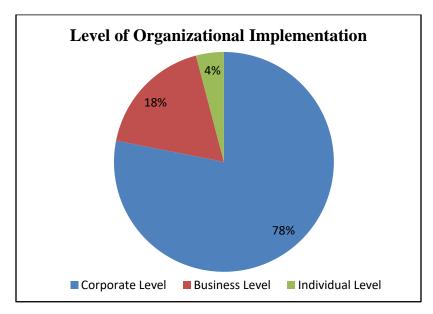


Figure 2: Level of Organizational Implementation

Figure 2 states that out of 73 companies, 57 companies (78.1%) implement the Balanced Scorecard at the corporate level, 13 companies (17.8%) at business units/ team level and only 3 companies (4.1%) at individual personal level. This study does not support Kaplan and Norton's (1996 a) view that scorecards should be primarily applied at business unit level, since it is usually at the level of the business unit where competitive strategies become crucial.

#### Use of Balanced Scorecard Software

It is important to recognize that the Balanced Scorecard is not a software product. It is a strategic management concept. However, there may be a software system which can be employed to deploy the Balanced Scorecard tool. Until recently, there were little or no programs available to systematically implement a Balanced Scorecard. But now because of the increasing popularity of the Balanced Scorecard, software companies like Gentia Software Inc, Peoplesoft Inc, etc. have developed programs to assist in linking strategies to performance measures. There are currently over 100 vendors of software to support data collection, reporting and analysis. Many firms

start this process using standard office software (such as spreadsheets, word processors, presentation software etc.).

### Perspectives used in Balanced Scorecard

The Balanced Scorecard retains traditional financial measures with perfect balance of non financial measures. It considers financial measures as achievement of short term goals and non financial measures as achievement of long term goals. The current model of the Balanced Scorecard as conceived by Kaplan and Norton looks at organizational performance from four perspectives namely financial, customer, internal business and learning and growth perspective and requires to developing measures for all these perspectives. But apart from original four perspectives, expert and consultants have developed few other perspectives namely shareholders, competitors, environmentsociety, supplier, employees perspectives etc. to make Balanced Scorecard a comprehensive performance measurement system. The Table 1 reveals the use of various perspectives by the respondent companies.

Table 1: Perspectives of the Balanced Scorecard

Perspectives	No. of respondents	Percentage (%)
Financial Perspective	73	100%
Customer Perspective	73	100%
Learning and growth Perspective	73	100%
Internal Business Process Perspective	73	100%
Employees' Perspective	38	52.1%
Suppliers' Perspective	19	26%
Shareholders' Perspective	10	13.7%
Competitive Perspective	14	19.2%
Environmental Perspective	31	42.5%
Corporate Social responsibility Perspective	39	53.4%

The above Table 1 indicates that the basic perspectives namely financial perspective, customer perspective, internal business perspective and learning and growth are used by all the 73 companies, so the percentage of firms using these two perspectives is 100. This result is partially consistent with Speckbacher's et al<sup>x</sup> and Zuriekat'<sup>xi</sup> study which found that the BSC users focused highly on three perspectives including financial, customer and internal business process in UK and German speaking countries respectively. On the other hand, few companies have given positive response for

newly developed perspectives also. Environment and corporate social responsibility perspectives are used by 42.5% and 53.4% companies respectively. 52.1% of the companies are using employees perspectives, competitive perspective and supplier perspective are used by 19.2% and 26% companies. However, the shareholders' perspective has the minimum use by 13.7% companies only. Thus, it can be concluded that the basic four perspectives are more famous than others. The use of various perspectives of Balanced Scorecard is also depicted in the following figure 3.

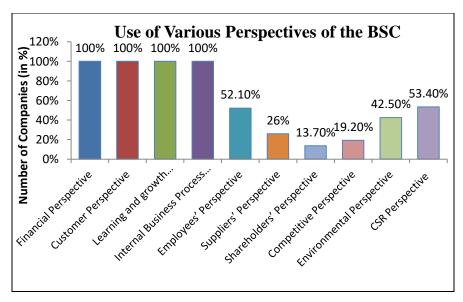


Figure 3: Use of Various Perspectives of the BSC

The above figure 3 reveals the same that the basic four perspectives are used by 100 percent of the companies. However, companies are adding their own perspectives apart from these four perspectives, in which corporate social responsibility perspective is more successful as 53.40 percent of companies are using it.

#### Linkage with Vision & Strategy

Using strategy as the basis for developing measures reflect a carefully considered thought process in the design of an effective performance measurement system. Kaplan and Norton (1996, 2001a, 2004)<sup>xii</sup> state that linking the scorecard's dimensions and measures with the organization's strategy is a key characteristic of the Balanced Scorecard. organization's strategy should be apparent by looking at its Balanced Scorecard. If the measures are not derived from the organization's strategy, then the performance measurement system cannot be called a Balanced Scorecard. As such, the Balanced Scorecard is supposed to represent an organization's shared vision. Therefore, managers must understand the linkages between performance measures and business unit vision and strategy in order to benefit from the adoption of the BSC. The study reveals that of the 73 respondents, 36 companies (49.3%) reported that their Balanced Scorecard is linked with the vision and strategy of the company to 'a very large extent'. 24 companies (32.9%) answered 'to a large extent' and the remaining 13 companies indicated 'fairly good extent'. Thus, a greater percentage of companies link their Balanced Scorecard with their vision and strategy.

## > Communication of Balanced Scorecard

Balanced Scorecard is a communication device. It is meant to be shared and used across the entire organization - this is the only way that it can play its role in facilitating an integrated approach to business performance management and in facilitating dynamic strategy management. Many organizations make the mistake of using the Balanced Scorecard results at the senior executive level only. Successful organizations communicate their Balanced Scorecard widely to a broad range of internal and external audiences. The study discloses that as per the respondents' view, there are 31.5 percent of respondent companies in which Balanced Scorecard is communicated widely to a 'very large extent'. 41.1 percent of companies communicate to a 'large extent'. In 19.2 percent of respondent companies the Balanced Scorecard is communicated to all levels of the organization to a 'fairly good extent'. Only 8.2 percent of companies openly communicate the Balanced Scorecard either to 'some extent' or to a 'very small extent'. It implies that in corporate India, many organizations communicate the Balanced Scorecard throughout the organization to a large extent which may be crucial to implementing strategy successfully.

#### Mode of Communication

There may be different modes of communicating the Balanced Scorecard throughout the organization such as mass distribution e-mails, large group meetings, management presentation and even face to face discussion. Whatever is the mode, it should be an effective and precise mode of communication to harness the benefits of the Balanced Scorecard. The figure 4 as presented below gives the details on respondents' preferences on mode of communication of Balanced Scorecard.

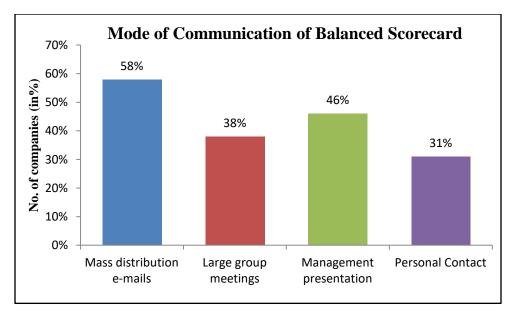


Figure 4: Mode of Communication of Balanced Scorecard

Figure 4 shows that 58 % of companies have institutionalized communication through mass distribution e-mails, 38% of companies have adopted large group meetings as a communication system. 46% of companies make use of management retreat /presentation mode of communication and 31% of companies use personal contact to communicate the Balanced Scorecard. Not surprisingly, e-mail is the most popular mode of communication now days.

## Employees Participation in Developing the Balanced Scorecard

Effective Balanced Scorecard system requires creative strategic thinking, sharing and informing decisions by various people throughout an organization. Broad and cross-functional employees participation in the creation of an organization's Balanced Scorecard will result in a higher quality product and will help build greater employee buy for strategy implementation and management using the resulting Balanced Scorecard. It is found from the study that there are 21.9 percent of respondent companies who have involved their employees in the process of building Balanced Scorecard to a 'very large extent'. The 38.4 percent of respondents allows participation of employees to a 'large extent'. 26 percent of companies have involved employees to a 'fairly good extent' and

only 13.7 percent of companies have employees involvement either to 'some extent' or to a 'very small extent'. It is observed from the above results that the Balanced Scorecard is not a secret document. In fact. most of the Indian companies involve their employees to a large extent in the process of developing their Balanced Scorecard. In some companies, for example, Tata Steel and Philips, individual employee scorecard is also implemented. These companies follow a systematic process of involving employees and unions in its drive for quality and cost reduction to gain a superior competitive advantage. Tata Steel is able to create an atmosphere of trust, urgency, innovation, sharing and learning by involving its employees in strategic planning process. The company started 'Knowledge management' initiatives in the late nineties. Starting with a small group, a 'Knowledge repository' was created followed by 'Knowledge communities'.

## REASONS FOR EMPLOYEES INVOLVEMENT

There are a number of reasons to involve employees in the development of Balanced Scorecard such as culture and policy of the company to include staff while framing the company's vision and strategy or to

obtain active participation of employees in the strategic planning process. The responses on various reasons, to involve employees in the Balanced Scorecard process, are listed in the following Table 2

on the scale ranges from 'strongly agree' to 'strongly disagree'. To find out the most influential reasons for the participation of employees, the mean score and ranks of the variables are also given in Table 2.

Table 2:	Mean and Ranks of	Variables to Involve Employ	vees in Balanced Scorecard Process
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Variables	Percentage distribution of responses				Mean	Std.	Rank	
	SA	Α	ı	D	SD		Dev.	
To obtain active participation of employees in the strategic planning process	63.0	34.2	0.4	1.4	1.0	4.589	0.597	1
Company believes that its success is tied directly to the satisfaction of its employees	34.2	49.3	13.1	2.0	1.4	4.150	0.775	2
This is the culture and policy of the company to include staff while framing the company's vision and strategy	28.8	47.9	19.2	2.7	1.4	4.000	0.849	3
To involve employees for the sake of formality	1.4	2.7	12.3	58.9	24.7	1.972	0.781	4

- 1. Responses were obtained through questionnaire on Likert's Scale on order of five from strongly agree to strongly disagree. Where, SA= Strongly Agree, A= Agree, I= indifferent, D= Disagree and SD= Strongly Disagree
- 2. The weight of responses are SD=1, D=2, I=3, A=4 and SA=5.
- 3. Various factors have been ranked on the basis of mean scores.

Table 2 explains the reasons to involve employees in the Balanced Scorecard process at the preference scale from 'strongly agree' to 'strongly disagree' of respondents. There are 63 percent of respondent companies who 'strongly agree' to involve employees in the development of Balanced Scorecard 'to obtain active participation of employees in the strategic planning process'. More employee participation results in higher levels of productivity and better corporate performance. Only 1.4 percent of respondents 'strongly agree' to 'involve employees for the sake of formality (as passive participants)' and 2.7 percent agree with the same. About the reason 'this is the culture and policy of the company to include staff while framing the company's vision and strategy' 28.8 percent companies 'strongly agree' and only 1.4 percent 'strongly disagree'. The 11.4 percent of respondent companies 'strongly disagree' on the reason 'company believes that its success is tied directly to the satisfaction of its employees', however 34.2 percent respondents 'strongly agree' for the same.

Table 2 also explains the mean, standard deviation and rank value of the corporate responses on the variables accounted to involve employees in the Balanced Scorecard process. The highest mean and rank value is of the variable 'to obtain active participation of employees in the strategic planning process' as 4.589 and 1 respectively. The second important variable to involve employees is 'company believes that its success is tied directly to the satisfaction of its employees' with mean score 4.150 and rank 2. The standard deviation of the variable 'company culture' is 0.849 which shows that corporate responses are not very much scattered from the mean value and do not have different opinions on this variable. The variable 'to involve

employees for the sake of formality' has least importance in the involvement of employees in the development of Balanced Scorecard.

#### CONCLUSION

The above discussion leads us to conclude that the BSC is both a performance measurement and management system that enables the organization to clarify their vision and strategy and translate them into action. While retaining financial measures of past performance, the BSC introduces the drivers of future financial performance. The drivers, encompassing customer, internal-business process, and learning and growth perspectives, are derived from an explicit and rigorous translation of the organization's strategy into tangible objectives and measures.

The Balanced Scorecard has been found to be very popular in foreign companies and has given excellent results in so many companies. Even in India now business units (both manufacturing and service) have initiated the use of the BSC. The Balanced Scorecard adoption rate is 55.3% in corporate India which is comparable favorably with 43.90 percent in the US. So many giants of Indian corporate both in public and private sectors, have tasted the success with the help of BSC such as Tata Motors, Godrej, Infosys, Steel authority of India (SAIL), Mahindra & Mahindra, Reliance industries, Dabur India, Tata Chemicals, Dr. Reddy Labs, RPG group, Castrol India Ltd, BHEL and so on. Thus ,contrary to previous scant evidence suggesting limited adoption of BSC by Indian companies, our findings clearly suggest a much higher rate of adoption among larger companies.

Many foreign as well as Indian software companies are providing software to implement the BSC in any organization. At the same time so many consulting groups like SAS, Cedar and Peoplesoft etc. are developing Balanced Scorecard for companies on the basis of the main four perspectives already mentioned. The Scorecard can be used at different levels: throughout the total organization in a subunit or even at the individual employee level as a "personal scorecard". In Indian corporate, Balanced

Scorecards are mainly implemented at the corporate level.

There is broad consensus among Indian corporate that the BSC can be worthwhile simply for its ability to better communicate strategy and objectives to employees. It is most effective when performance measures are linked to rewards and Balanced Scorecard is properly cascaded from top to bottom in the organization. Thus, it can be concluded that BSC is a tool by which business units can keep pace with the environment and it has surely a bright future for overseas as well as Indian companies.

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