

## IMPLEMENTATION OF BALANCED SCORECARD IN IT SECTOR: INTERNAL PROCESS PERSPECTIVE

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### ABSTRACT

*Balanced Scorecard is a comprehensive management tool which assesses how the organization is progressing towards achievement of its goals and objectives. Software Sector in the country is growing rapidly, more than 30%. The use of Balanced Scorecard has also increased as a development and performance measure tool in the IT sector. Balanced Scorecard has mainly four perspectives and in this paper the author conducts a study on the Internal Process Perspective using primary data.*

**KEYWORDS:** *Balanced Scorecard, Internal Process, IT Sector.*

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### Introduction

"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" (Kaplan and Norton, 1992).

The Indian software industry has become exceptional. It has developed in excess of 30% yearly for 20 years, with 2008 products projected at near \$60 billion. India trades software administrations to in excess of 60 nations, with 66% to the United States, including half of all Fortune 500. Software and technology development has brought opportunities for some nations. India, which is traditionally lingering behind developed nations in terms of financial growth, has unexpectedly ended up as a most needed area for altered software development.

The paper attempts to study the current state of the art in the subject of BSC application in technological industry, particularly in I.T. managing projects.

### Review of Literature

**Wilcox (1984)**<sup>1</sup> was among the early strides of estimating the exhibition of an organization through its worth. He showed a solid straight connection between price to book value (P/B) and return on equity (ROE). The paper proposes that steady income development doesn't really prompt greater costs, instalment of profits do matter in the cost of offers, and influence in the capital design can be either fortunate or unfortunate relying on the steadiness and measure of ROCE.

**Chow et al. (1997)**<sup>2</sup> we find a study oriented towards application of Balanced Scorecard to small industries. Chow et al studied the practices of electronics, ingredients, banking, and biotechnology companies. Chow et al, proposed that the "old individual based assignment situated administration" idea should be supplanted with a "group-based interaction arranged" management idea.

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1 Wilcox, J. W. (1984). The P/B-roe valuation model. *Financial Analysts Journal*, 40(1), 58-66.

2 Chow, C. W., Haddad, K. M., & Williamson, J. E. (1997). Applying the balanced scorecard to small companies. *Strategic Finance*, 79(2), 21.

**Martinsons et al. (1999)**<sup>1</sup> endeavored the utilization of balanced scorecard in helping specialty units. In this paper, Balanced Scorecard has been utilized to help the business capacities, association units and individual undertakings.

**Kaplan et al. (2001)**<sup>2</sup> in their paper observe that performance creates focus for the future. So, the Performance Measurement system is developed into a strategic management system using the Balanced Scorecard. Several organisations achieved breakthrough performance within 2 to 3 years of implementation.

**Banker et al. (2004)**<sup>3</sup> in their study titled “The Balanced Scorecard: Judgmental effect of performance Measures linked to Strategy” comment that study aimed to evaluate the judgmental effect of performance measures linked to strategies mostly evaluators depends on the strategies and suggested some improvements in scorecard-based assessment tools than the distinctive measures.

**Singh and Kumar (2007)**<sup>4</sup> as the economy of India moves on rapid pace, the number of corporates that uses BSC as their performance measurement tool for their organization got increased. Most of the big companies adopt BSC model like Taj Group, Infosys, Godrej, Nerolac, Philips, TCS, and Castrol.

**Darvish et al. (2012)**<sup>5</sup> made an attempt to study the impact of information of executive’s records on the headway of the four Balanced Scorecard points of view. It was discovered that item quality, consumer loyalty and staff fulfillment individually as three significant parts of information the board in the essential arrangement of the unit under study. Henceforth a positive relationship exists between the information the executive’s model and the four viewpoints of BSC.

### Objectives of the Study

After taking an extensive literature review, the gap was identified. Accordingly, the objectives were formulated to address the research gap. The objectives of this study are presented as follows:

- To explain & understand the conceptual & contextual overview of BSC as a tool to measure the performance of an organization
- To assess the Employee / Management view about the Internal Process Perspective of Balanced Scorecard.

### Hypotheses of the study

To test the aforementioned objectives, following hypotheses were formulated:

#### Hypothesis I

**H<sub>0</sub>:** There is no significant difference in the opinion of the employees’ working in various functional areas about the performance measurement system and reporting in the organization.

**H<sub>1</sub>:** There is significant difference in the opinion of the employees’ working in various functional areas about the performance measurement system and reporting in the organization.

#### Hypothesis II

**H<sub>0</sub>:** There is no significant relationship between the longevity of organization and its innovative practices for overall growth.

**H<sub>1</sub>:** There is significant relationship between the longevity of organization and its innovative practices for overall growth.

1 Martinsons, M., Davison, R., &Tse, D. (1999). The balanced scorecard: a foundation for the strategic management of information systems. *Decision support systems*, 25(1), 71-88.

2 Kaplan, R. S., Robert, N. P. D. K. S., Kaplan, R. S., & Norton, D. P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business Press.

3 Banker, R. D., Chang, H., &Pizzini, M. J. (2004). The balanced scorecard: Judgmental effects of performance measures linked to strategy. *The Accounting Review*, 79(1), 1-23.

4 Singh, M., & Kumar, S. (2007). Balanced scorecard implementations global and Indian experiences. *Indian Management Studies Journal*, 11, 21-39.

5 Darvish, H., Mohammadi, M., &Afsharpoor, P. (2012). Studying the Knowledge Management-Effect of Promoting the Four Balanced Scorecard Perspectives: a Case Study at SAIPA Automobile Manufacturing. *Economic Insights-Trends & Challenges*, 64(1).

### Research Methodology

This study is based on primary data collected through a questionnaire circulated among employees of software enterprises. Assessments from the clients of the organisations are acquired towards the Customer Perspective and from the representatives of the companies towards "Learning & Growth and Internal Process Perspectives". Responses of 279 employees were obtained on a five-point Likert scale which was then awarded points, with 1 being Strongly Agree and 5 being Strongly Disagree. Thereafter analysed using tools of Chi-square test, Correlation Analysis, Regression Analysis and Anova Test were used.

### Data Analysis and Interpretation

The aforementioned hypotheses were tested to find the extent of implementation of Balanced Scorecard on the IT Sector in respect of the selected companies. For the first hypothesis, the p-value was not significant which led to acceptance of null hypothesis pointing that there is no difference in the opinion of employees working in the various functional areas about the performance measurement system in the organisation. The employees believe that the system adequately reports on various and relevant fronts and parameters and contributes to value addition.

**Table 1: Chi-square Test**

	Value	Df	P-Value
Pearson Chi-Square	31.62788	24	0.136492
Likelihood Ratio	29.50976	24	0.201534
N of Valid Cases	279		

At 5% Level of Significance

To test the second hypothesis, correlation analysis was applied on the selected factors. Further regression analysis was also used to establish relationship between working years and innovative practices used in the organisations. The results show no significant relationship between age of the organisation and practices and policies undertaken for growth of the organisation. Their technology is up to date, trends show innovation and alternative strategies are analysed and best ones are implemented. Continuous administering of environment and trends practiced in the industry, policies and measures adopted by the competitors.

**Table 2: Regression Analysis**

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	-0.006522296	4.25403E-05	-0.003567414	4.25403E-05	0.011784178	9.14E-01

At 5% Level of Significance

**Table 3: ANOVA**

	Df	Sum of Squares	Mean Square	F	Sig.
Regression	1	0.012751126	0.012751126	0.011784178	9.14E-01
Residual	277	299.7291844	1.082054817		
Total	278	299.7419355			

**Table 4: Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	Beta	Std. Error	Beta		
Constant	2.855368715	0.260080809		10.97877511	1.61E-23
mean Col	-0.013374302	0.123203054	-0.006522296	-0.108554953	9.14E-01

### Conclusion and Suggestions

The Balanced Scorecard is a structured representation in which financial performance is the primary aim but other aspects too contributes significantly to make this as "balanced approach" in which non-financial objectives are given equal weight. Managers must have performance measurement tools in place to record data on all aspects of the organisation, not just financial results, in order to determine value drivers. According to the extensive literature review, the BSC objectives and metrics are generated in general from the company's values, goal, and strategy.

**References**

1. Wilcox, J. W. (1984). The P/B-roe valuation model. *Financial Analysts Journal*, 40(1), 58-66.
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