

## **BALANCED SCORECARD AS A TOOL TO INFLUENCE ORGANIZATIONAL PERFORMANCE: EVIDENCES FROM INDIAN COMPANIES**

Saira Khatoon\*, Ayesha Farooq\*\*

*The business world has recognized the Balanced Scorecard (BSC) as a promising tool for the performance measurement of an organization at the firm level. It helps organizations to reorganize strategy and vision with business activities and measures actual organizational performance against preset goals. The purpose of BSC is to replace traditional performance system by focusing on its perspectives to obtain more adequate and efficient performance evaluation model. This study sought to explore the influence on organizational performances. The constructs considered in the study include financial perspective, customer perspective, internal business process perspective and learning and growth perspective on performance in the organization. This is for setting up a complete performance evaluation system and forming a whole set of performance indices to assess strategies so that the vision and strategies of organizations could be achieved. The purpose of the study is to explore the extent to which balanced scorecard has been used in manufacturing and service industry vis –a – vis public and private sector in India and to explore the relationship between balanced scorecard and its constructs with organizational performance. A questionnaire was developed, and responses were collected from organizations which were segregated on the basis of the public and private sector and also manufacturing and service industry. Statistical tools such as t- test and Correlation were applied to achieve the objectives. The results obtained indicated a positive relationship between the balanced scorecard and organizational performance with performance depending on the four perspectives. The researchers have concluded that the adoption of the balanced scorecard by companies can be a means to improve organizational performance. The adoption will assist the business organizations to formulate practical strategies to enhance their performance by focusing on the four perspectives of Balanced Scorecard.*

**Keywords:** *Balanced Scorecard, Balanced Scorecard Perspectives, Organizational Performance, Organizational Change.*

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\* Research Scholar at Department of Business Administration, Aligarh Muslim University, Aligarh

## **INTRODUCTION**

Measuring organizational success and implementing effective strategies for future success represent continuous challenges for managers, researchers and consultants (Assisi et. al., 2006). The business world has recognized the Balanced Scorecard (BSC) as a promising tool for the performance measurement of an organization at the firm level (Seth and Oyugi, 2013). Neely *et. al.* (2002) defines performance measurement and performance measurement system. Performance measurement tools can help businesses in assessing their resource allocation practices to define how resources can be restored and distributed through the appropriate channels (Chen and Chen, 2006). Atkinson et.al. (1997) says that traditional accounting-based performance measurement systems are unfitted to modern organizations in which the relationships with customers, employees, stakeholders, and suppliers have changed. Performance measurement is the procedure for measuring the competence and effectiveness of past accomplishment. Performance measurement system allows conversant decisions to be made and activities to be taken because it enumerates the efficiency and effectiveness of past actions through the acquisition, collation, sorting, analysis and interpretation of suitable data. Through the years, the Balanced Scorecard firstly introduced by Kaplan and Norton (1992), as an instrument for applying strategies (Kaplan and Norton, 1996) and a structure for defining the alignment of organization capital, organization's human, and information with its strategy (Kaplan and Norton, 2004). The Balanced Scorecard is a customer-based formation and process improvement arrangement, with its primary focus on driving an organization's change process by identifying and evaluating relevant performance measures. Studies on Balanced Scorecard focused on many firms have found that the Balanced Scorecard is a useful tool for focusing and sustaining their continuous improvement efforts (Brewer, 2002; Gumbus and Lyron, 2002). Change is more likely to happen when a clear reason for it exists. Any change offers both short- and long-term impact on organizational performance (Farooq and Hussain, 2011).

The purpose of the study is to explore the relationship between the balanced scorecard and organizational performance and to find out the influence of balanced scorecard and its construct on organizational performance. To accomplish this objective, literature related to the balanced scorecard and organizational performance is considered. Studies are presenting the successful

implementation of Balanced Scorecard for valuable organizational performance. Through the literature review, hypotheses were formulated followed by research design and analysis. This paper also examines the implications for theory and managerial practice.

## **LITERATURE REVIEW**

### **Conceptual Framework of Balanced Scorecard**

The Balanced Scorecard (BSC) was originally a one-year multi-company study (Kaplan and Norton, 1992). The study determined that in the increasingly complex business environment, dependence on only financial measures was no longer adequate for managing organizations, especially where intellectual capital and knowledge – based assets were critical for success. Kaplan and Norton initially conceived the basic concepts in the early 1990's culminating in their definitive book *The Balanced Scorecard: Translating Strategy into Action* (Harvard Business Press, 1996). Kaplan and Norton (1996) described Balanced Scorecard as a framework that helps organizations translates strategy into operational objectives that drive both behavior and performance. (Kaplan and Norton, 1992) Understood that as the business landscape changed from agricultural to industrial to informational; performance measures mustadjust as well. The evidence is characterized by the conversion of intangible (customer satisfaction, information technology and employee skills) rather than intangible assets ( plant, property and inventory) into economical advantage (Kaplan and Norton, 2000).

The Balanced Scorecard Strategic Management System is comprised of “ a core principles framework and processes that interpret an organization's mission and strategy into a comprehensive set of performance measures strategically aligned with creativities” (Inamdar et.al., 2002). A vital aspect of the BSC is the articulation of linkages between performance measure and strategic objective (Banker *et al.*, 2001). Once linkages are understood, strategic objectives can be further translated into actionable measures to help organizations improve performance (Kaplan and Norton,2000). Balanced Scorecard includes a financial perspective that communicate the effects of actions already taken. It supplements the financial measures with operational measures on customer satisfaction, internal business processes, and the learning and growth and enhancement activities- operational rules that are the drivers of future financial

performance (Kaplan and Norton, 1992). Cavalluzzo et.al. (2004) found that organizational factors such as top management commitment to the use of decision-making ability, performance information, and training in performance measurement techniques have a significant positive influence on measurement system development and use.

Performance measurement is an essential element of effective planning and control as well as decision-making. The analysis results reveal the effects of strategies and potential opportunities in an organization (Bhagwat and Sharma, 2007). The BSC is balanced in another dimension – not just a balance of measures of critical areas of the organizations, but also a balance of objectives versus accountability (Chavan, 2009). According to the study of Chen et.al. (2008), a DEA-based (Data Envelopment Analysis) assessment of performance measures an analogous view of the firm's well-being as does an analysis of financial tables; however, a Balanced Scorecard based assessment produces a different assessment. The balanced scorecard empowers a company to align its management processes and focuses the entire organization on implementing long-term strategy (Kaplan and Norton, 2007).

### **Balanced Scorecard Perspectives**

The balanced scorecard has four perspectives that help the manager to reorganize their vision and strategy with organizations activities and processes genuine for organizational performance against preset goals.

#### **Financial Perspective: *How do we look to shareholders?***

The financial perspective deals with those issues through which an organization can generate economic growth in shareholder value and calculates the profitability constituent of the strategy. It represents the long- term goal of the organizations to provide superior returns established on the capital endowed with the unit (Kaplan and Norton, 1996). Financial perspective has been the traditional method of analyzing organizational success and involves such elements as sales growth, profitability and revenue per sales visit. Suresh Chander *et. al.* (2002) state that every business exists in order to make profits financial perspective performance provides the ultimate definition of an organization's success. Thus the financial perspective, therefore, reflects an

organization's output criteria and should include both monetary measures and the idea of value creation.

**Customer Perspective:** *How do customers see us?*

Many organizations have a corporate mission that focuses on customers. Therefore, a company's performance from its customers' perspective has become a priority for top management (Kaplan and Norton, 1992). Typical measures of customer value outcomes are market share, customer acquisition, customer retention, customer profitability and customer satisfaction (Kaplan and Norton, 1996). Customer perspective describes the value proposal that the organization will apply to please customers and, therefore, generate more sales to the most desired customer groups. The measures selected for the perspective should measure both the value delivered to the customer and the assumptions that come as a result of the significance proposal (Jensen, 2001). Selecting measures for the Customer Perspective of the Balanced Scorecard depends on the type of customers preferred and the value that the organization provides to them (Niven, 2002). This will allow organizations to create strategies consistent with the kind of customers they want to attract.

**Internal Business Process Perspective:** *What must we excel at?*

This is the most critical perspective for the success of an organization. It includes internal business processes that ensure the highest quality of products and services (I.M.Pandy, 2005). This perspective focuses on all the activities, and key processes required for the organization to excel at providing the value projected by the customers both efficiently and productively (Jensen, 2001). It can include both short-term and long-term objectives (Kaplan and Norton, 1996). This perspective entails the procedures that an organization must develop and master to be popular. Some organizations will target on such elements as order processing, delivery, manufacturing, and product development as examples (Niven, 2002).

**Learning and Growth Perspective:** *Can we continue to improve and create value?*

Kaplan and Norton (1992) advocate that organizations are required to introduce continual improvements to their existing products and processes and gain the ability to set up the entirely new product with expanded capabilities. As the foundation of any strategy, this perspective is

concerned with the intangible assets of an organization, mainly with the internal skills and capabilities that are required to support the value-creating internal processes (Jensen, 2001). The primary focus of this perspective was laid on investing for future such as new equipments and product research and development (Kaplan and Norton, 1996). Niven (2002) suggested that depending on the desired employee skills and actual employee skills, some of the organizations altered their job descriptions, transfer employees to other divisions, and/or implement incentive databases, planned to motivate employees to deliver suggestions, obtain education or training, and/or gain tenure through constant employment.

### **Balanced Scorecard and Organizational Performance**

Kaplan and Norton (2001) defined BSC as a framework that helps organizations translate strategy into active objectives that drive both behavior and performance. The four perspectives of Balanced Scorecard encircle the activities essential for business organizations (Husain and Farooq, 2013). The balanced scorecard was introduced in 1992 to provide a framework for selecting multiple performance measures focused on critical aspects of the business. An essential aspect of the BSC is the articulation of linkages between performance measures and strategic objectives (Banker et al. 2004). Ittner (2008) delivers an overview of the numerical evidence on the performance values of intangible asset dimension. There are some evidences that is non-financial performance measures are positively associated with performance (Ittner and Larcker, 1995; 1997; Abernethy and Lillis, 1995; Chenhall, 1997; Perera et.al., 1997; Ittner *et al.*, 2003; Kaynak, 2003; Said et al., 2003; Davis and Al-bright, 2004). They suggested that organizations adopting performance measurement system would improve their profitability and corporate performance by identifying the pivotal relationships between actions and performance (Buhaovac and Slapnicar, 2007). Xiong *et. al.*( 2008) examines the results of a survey that found that most Chinese firms have used non- financial performance measures to maintain a competitive advantage. According to the study of Braam et.al. (2004), Balanced Scorecard practice will not automatically improve organization performance, but that the manner of its use matters: Balanced Scorecard use that complements corporate strategy positively influences organizations performance, while Balanced Scorecard use that is not associated with the approach may decrease it. Thompson and Mathys (2008) advocate the use of an Aligned

Balanced Scorecard as a means to enhance the scorecard approach to improve leadership effectiveness as a tool for developing high-performance management systems. Some surveys conclude that many companies have found the balanced scorecard a useful tool for focusing and sustaining their continuous improvement efforts (Gumbus and Lyron, 2002).

## **RATIONALE OF THE STUDY**

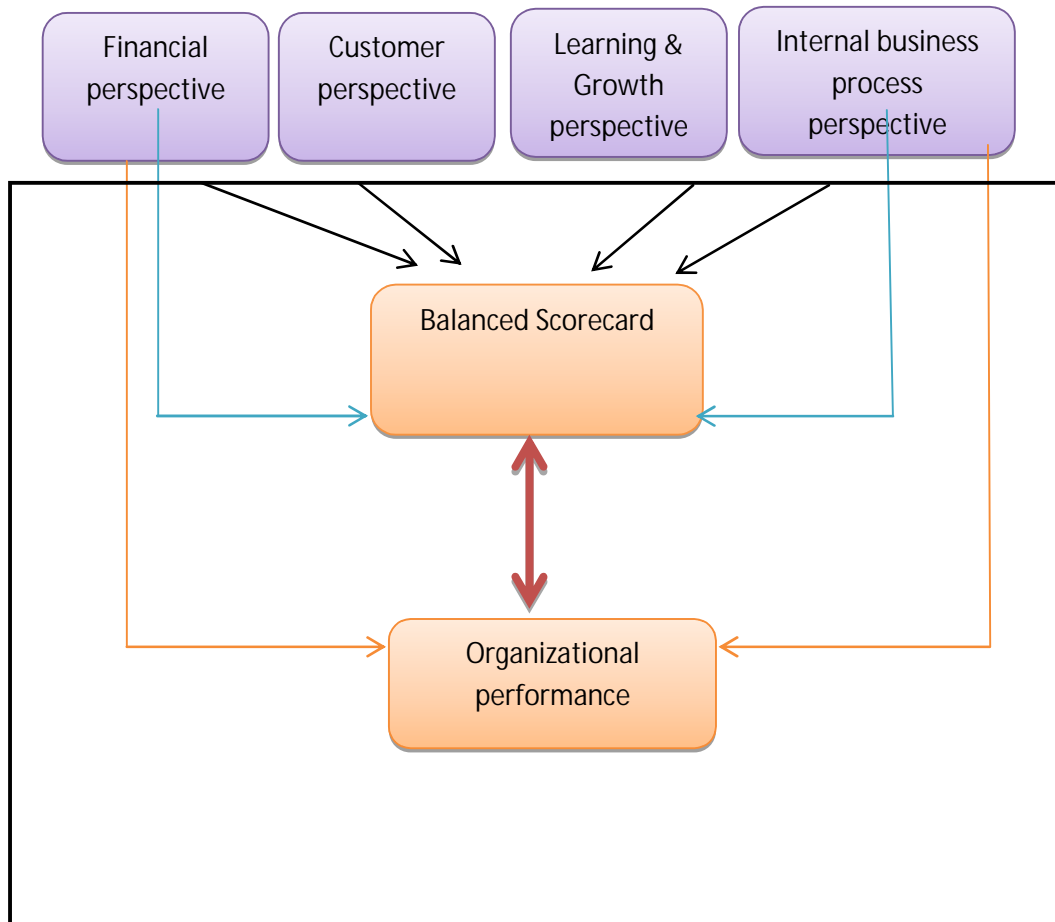
An extensive literature review shows that the balanced scorecard proved to be a useful tool resulting in better performing organizations and is used to replace traditional performance system by focusing on its perspectives to obtain more adequate and efficient performance evaluation model. However, there has been no empirical study so far to show the extent to which Balanced Scorecard has been used in manufacturing and service industry as well as in public and private Sector organization in India and the relationship between balanced scorecard and its constructed on organizational performance. Hence, it was required to explore the extent to which Balanced Scorecard has been used in manufacturing and service industry vis-a- vis in public and private Sector organization in India and to explore the relationship between balanced scorecard and its construct on organizational performance.

## **OBJECTIVES**

- To explore the extent to which balanced scorecard has been used in manufacturing and service industry in India.
- To explore the extent to which balanced scorecard has been used in public and private Sector organization in India.
- To explore the relationship between a balanced scorecard and its construct on organizational performance.

## RESEARCH METHODOLOGY

### Conceptual Model of Research



*\*Source:by Researcher*

**Figure1:** Conceptual Model of Research

## HYPOTHESIS

H<sub>1</sub>: There is no significant difference on mean scores of Balanced Scorecard on the basis of manufacturing and service industry.

H<sub>2</sub>: There is no significant difference on mean scores of organizational performance on the basis of manufacturing and service industry.



H<sub>3</sub>: There is no significant difference on mean scores of Balanced Scorecard on the basis of the public and private sector.

H<sub>4</sub>: There is no significant difference on mean scores of organizational performance on the basis of the public and private sector.

H<sub>5</sub>: There is significant relationship between Balanced Scorecard and Organizational Performance.

H<sub>6</sub>: There is significant relationship between Balanced Scorecard's constructs on Organizational Performance

### **Research Design**

Research constructs and items to dependent and independent variables were identified for the study. Independent variables were measures of Balanced Scorecard and Measures of Balanced Scorecard comprises of the financial perspective, customer perspective, internal business process, learning and growth perspectives. Organizational performance is the dependent variable which is influenced by measures of Balanced Scorecard. The research instrument was designed after comprehensive literature review being used to measure the research variables of interest. The instrument was based on five- point Likert scale with choices strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The organizations were chosen for the research fall under Fortune 250 companies. Initially, the questionnaire had 80 statements. Experts reviewed the questionnaire for their feedback. After necessary modifications, senior managers were contacted for their responses since they are more aware of the application of balanced scorecard and changes occurring in the organization. The questionnaire was sent to 150 potential respondents, out of which only 76 responses were received which was turned out to be valid and considered for the analysis.

### **Reliability**

The reliability and validity of the instrument was determined with the help of factor analysis and computing Cronbach's alpha. The value of Cronbach's alpha for the entire instrument is 0.870. Reliability is measured in relations of the ratio of true score variance to observed score variance.

(Hair et al., 1998). Cronbach's alpha inclines to be high if the scale items are extremely correlated. Bowling (1997) proposes that an alpha of 0.50 or above is a suggestion of decent internal consistency. According to a rule of thumb, in social sciences, Cronbach's alpha should be at least 0.70 for the scale to be believed of as reliable. The Cronbach's alpha of various items in each category of the research instrument was computed leading to data reduction where 80 statements were reduced to 42. This scale has five perspectives and Cronbach's alpha value for each dimension after deleting the items are given in the Table 1

## **DATA ANALYSIS AND HYPOTHESIS TEST RESULTS**

Manufacturing and service independent sample- t- test presents (Table 2) the t- value and significance difference on mean scores of the balanced scorecard and organizational performance on the basis of manufacturing and service industry. There is significant difference on mean scores of balanced scorecard concerning service and manufacturing industry.

Significant difference ( $p=.001$ ) are found on the mean scores of financial perspective and learning & growth perspective on the basis of manufacturing and service industry. The mean value of financial perspective and learning & growth perspective with respect to manufacturing and service industry comes out to be 1.73 and 2.59, 1.85 and 2.59

Significant difference ( $p=.048$ ), ( $p=.034$ ), ( $p=.003$ ) are found on the mean scores of customer perspective, internal business process perspective and performance with respect to manufacturing and service industry comes out to be 2.10 and 2.57, 2.17 and 2.46, 1.67 and 2.45.

There is significant difference on mean scores of balanced scorecard and organizational performance with respect to the nature of the industry. The above analysis shows that hypothesis 1, stating that there is no significant difference on mean scores of Balanced Scorecard on the basis of manufacturing and service industry, is rejected. Also hypothesis 2, stating that there is no significant difference on mean scores of organizational performance on the basis of manufacturing and service industry is rejected.

Public and private independent sample-t- test presents (Table 3) the t- value and significant difference on mean scores of balanced scorecard and organizational performance on the basis of

public and private sector. There is significant difference on mean scores of balanced scorecard with regard to public and private sector.

Significant difference ( $p=.001$ ) are found on the mean scores of customer and internal business process perspective on the basis of public and private sector. The mean value of customer and internal business process perspective with respect to public and private sector comes out to be 2.08 and 2.62, 2.17 and 2.49

Significant difference ( $p=.000$ ) are found on the mean scores of financial perspective, learning & growth perspective and performance with respect to public and private sector comes out to be 1.85 and 2.65, 1.94 and 2.64, 1.80 and 2.50

There is significant difference on mean scores of balanced scorecard and organizational performance with respect to public and private sector. The above analysis shows that hypothesis **3**, stating that there is no significant difference on mean scores of Balanced Scorecard on the basis of public and private sector, is rejected. Also hypothesis 4, stating that there is no significant difference on mean scores of organizational performance on the basis of public and private sector, is rejected.

The results of correlation show significant relationship between balanced scorecard and organizational performance (Table 4). Thus, hypothesis 5 is accepted. Hypothesis 6, stating that there is significant relationship between balanced scorecard and its construct on organizational performance, is accepted. This implies that balanced scorecard and its construct positively impact the performance of the organization.

## **DISCUSSION AND IMPLICATION**

Balanced Scorecard is an effective tool to influence organizational performance. It will facilitate organizations in monitoring the success rate of various programs and activities associated with dimensions of Balanced Scorecard. Performance is an essential element of effective planning and control as well as decision-making. The results of Manufacturing and service independent sample- t- test shows that there is significant difference on mean scores of balanced scorecard

and organizational performance with respect to the nature of the industry. It implies that manufacturing and service industry have a different perspective of BSC. The extent to which BSC is adopted in these organizations differs. The present study found that service sector organizations are using it more than manufacturing organization. The study validates Farooq and Hussain (2011) study arguing that manufacturing industry is using BSC more than service industries.

The results of the Public and private, independent sample-t- test shows that there is significant difference on mean scores of balanced scorecard and organizational performance with respect to the sector of the industry. It implies that public and private sector have a different perspective of BSC. The extent to which BSC is adopted in these organizations also differs. The present study found that private sector organizations are using it more than manufacturing organization. Here it differs from Farooq and Hussain (2011) study concluding that public sector organizations in India are using BSC more than private sectors.

Future research is recommended in order to determine whether the proposed perspectives and measures are necessary and sufficient set. Nevertheless, the framework does represent a strategic evaluation tool that can be used to monitor and guide organizational performance improvement efforts. The value of the balanced scorecard rises if it is used to evaluate effective organizational performance on a daily routine basis to coordinate a wide range of business operations simultaneously. The management of companies is likely to benefit at all decision levels from a systematic framework based on goals and measures that are agreed upon in advance.

## **CONCLUSION**

Many companies adopted balanced scorecard to improve their organizational performance with the help of their perspectives (Financial, Customer, Internal Business Process, and Learning and Growth). It provides a visual structure for managing the application of strategy while also approving the strategy itself to develop in response to changes in the company's competitive, market, and the technological environment across these four perspectives. The results of the study indicate that Indian organizations have integrated the dimension of Balanced Scorecard (BSC) as a Tool to Influence Organizational Performance. There is significant difference in the

use of BSC between manufacturing and service as well as public and private sector organizations in India. There is a positive relationship between Balanced Scorecard and its construct on organizational performance.

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## ANNEXURE

**Table 1: Item Statistics and Cronbach's Alpha Statistics**

<b>Dimension</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>	<b>Cronbach's Alpha</b>
<b>Financial</b>	2.54	.555	76	.609
<b>Customer</b>	2.54	.519	76	.640
<b>Internal business process</b>	2.44	.301	76	.663
<b>Learning &amp; Growth</b>	2.54	.500	76	.730
<b>Performance</b>	2.40	.572	76	.715

**Table 2: Manufacturing and Service Independent Sample T-Test**

<b>Nature of industry</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>	<b>t</b>	<b>Sig.(2-tailed)</b>	<b>Hypothesis results</b>
<b>Financial Perspective 1</b>	5	1.73	.279	.125	3.601	.001	<b>Rejected</b>
<b>2</b>	71	2.59	.525	.062			
<b>Customer Perspective 1</b>	5	2.10	.285	.127	2.013	.048	<b>Rejected</b>
<b>2</b>	71	2.57	.519	.062			
<b>Internal Business Process 1</b>	5	2.17	.176	.079	2.158	.034	<b>Rejected</b>
<b>2</b>	71	2.46	.299	.036			
<b>Learning and Growth 1</b>	5	1.85	.458	.205	2.433	.001	<b>Rejected</b>
<b>2</b>	71	2.59	.468	.056			
<b>Organizational Performance 1</b>	5	1.67	.264	.118	3.120	.003	<b>Rejected</b>
<b>2</b>	71	2.45	.553	.066			

**Table 3: Public and Private Independent Sample T-Test**

Nature of sector	N	Mean	Std. Deviation	Std. Error Mean	t	Sig.(2-tailed)	Hypothesis Results
<b>Financial Perspective</b>	<b>1</b>	11	1.85	.411			
<b>2</b>	65	2.65	.489	.061	5.136	.000	<b>Rejected</b>
<b>Customer Perspective</b>	<b>1</b>	11	2.08	.308			
<b>2</b>	65	2.62	.508	.063	3.421	.001	<b>Rejected</b>
<b>Internal Business Process</b>	<b>1</b>	11	2.17	.274			
<b>2</b>	65	2.49	.282	.035	3.446	.001	<b>Rejected</b>
<b>Learning and growth</b>	<b>1</b>	11	1.94	.419			
<b>2</b>	65	2.64	.441	.055	4.882	.000	<b>Rejected</b>
<b>Organizational Performance</b>	<b>1</b>	11	1.80	.340			
<b>2</b>	65	2.50	.543	.067	4.095	.000	<b>Rejected</b>

**Table 4: Correlations Among BSC and Performance**

	Financial	Customer	Internal process perspective	Learning & growth perspective	Performance	BSC
Financial	1					
customer	.814**	1				
Internal process perspective	.501**	.488**	1			
Learning & growth perspective	.579**	.591**	.445**	1		
Performance	.551**	.570**	.560**	.622**	1	
BSC	.863**	.866**	.685**	.806**	.823**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

N= 76