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BALANCED SCORECARD PERSPECTIVE'S IMPACT ON ORGANIZATIONAL PERFORMANCE

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ABSTRACT

Today, organizations are growing in turbulent and open environmentsit will become increasingly necessary for all the main businesses to evaluate and modify their performance measures to adapt to the rapidly changing and highly competitive business environment.A number of organizations may use the Balanced Scorecard to achieve its goals by observing multiple perspectives at the same time.The purpose of the study is to explore the relationship between balanced scorecard and organizational performance as well as this study sought to explore the Balanced Scorecard perspectives impact 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 inthe organization. This is for setting up a complete performance evaluation system and forming awhole set of performance indices to facilitate organizational changes in the present Indian business environment. A questionnaire was developed, and responseswere collected from organizations which were segregated on the basis of the public and privatesector and also manufacturing and service industry. Statistical tools such as Correlation and Structural Equation Modeling were applied to achieve the objectives. The results obtained indicated a positiverelationship between the balanced scorecard and organizational performance with performancedepending on the four perspectives. The researchers have concluded that the adoption of thebalanced scorecard by companies can be a means to improve organizational performance. Theadoption will assist the business organizations to formulate practical strategies to enhance theirperformance by focusing on the four perspectives of Balanced Scorecard.

I. INTRODUCTION

Today, companies are evolving in turbulent and equivocal environments (Drucker, 1993; Grove, 1999; Kelly, 1998). This requires Organization's to be alert and watchful so as to detect weaknesses(Ansoff, 1975) and discontinuities in regard to emerging threats and opportunities and to initiate further probing based on such detections (Glykas, 1999).Neely et al. (2000) defines performance measurement and performance measurement system. Performance measurement is the process of quantifying the efficiency and effectiveness of past action. A performance measurement system enables informed decisions to be made and actions to be taken because it quantifies the efficiency and effectiveness of past actions through the acquisition, collation, sorting, analysis and interpretation of appropriate data.The strategic role of performancemeasurement systems has been widely

stressed in managementliterature. These systems provide managers with useful tools tounderstand how well their organization is performing and to assistthem in deciding what they should do next (Neely, 1998; Glykas&Valiris, 1999).The balanced scorecard (BSC)is well recognized in the literatures that performance measurement should be incorporated in both of financial and non-financial measures;it captures not only a firm's current performance but also the drivers of its future performance (Banker &Datar, 1989; Dyson,2000).

II. LITERATURE REVIEW

Senge (1999) argues that, in today's complex business world, organizations must be able to learn how to cope with continuous change in order to be successful. In this changing environment, the need for adequate design, implementation and use of performance measurement systems, is greater than ever. Eccles (1991)claims that it will become increasingly necessary for all major businessesto evaluate and modify their performance measures in orderto adapt to the rapidly changing and highly competitive businessenvironment.According to Kennerley and Neely (2000), consideration is being given to what should be measured today, but little attention is being paid to the question of what should be measured tomorrow. They suggest that measurement systems should be dynamic and must be modified as circumstances change. A radical rethink of performance measurement is now necessary more than ever (Takikonda&Takikonda, 1998).

III. DEFINING BALANCED SCORECARD (BSC)

The balanced scorecard, first proposed in the January- February 1992 issue of HBR (―The Balanced Scorecard-Measures that Drive Performance‖), provides executives with a comprehensive framework that translates a company‘s strategic objectives into a coherent set of performance measures (Kaplan and Norton, 1993). During a year-long research venture with 12 companies at the leading edge of performance measurement, Kaplan and Norton (1992) devised a "balanced scorecard"- a set of measures that provide top managers a fast but comprehensive view of the business. Kaplan and Norton (1992) understood that as the business landscape changed from agricultural to industrial to informational; performance measures must adapt as well. The information age is characterized by the conversion of intangible (employee skills, customer satisfaction, and information technology) rather than intangible assets (property, plant, and inventory) into competitive advantage (Kaplan and Norton, 2000). BSC includes financial measures that tell the effects of actions already taken. And it complements thefinancial measures with operational measures on customer satisfaction, internal processes, and the organization'sinnovation and enhancement activities- operational measures that are the drivers of future financial performance (Kaplan and Norton, 1992).

The four perspectives of BSC are Financial Perspective, Customer Perspective, Internal Business Process Perspective and Learning and Growth Perspective.

Financial Perspective: It represents the long- term goal of the organizations- to provide superior re-turnsbased on the capital invested in the unit (Kaplan and Norton, 1996). Financial Measures, has been the

traditional method of analyzing organizational success and involves such elements asprofit-ability, sales growth, and revenue per sales visit. Although the BSC stresses the need to incorporate additional measures to determine success, the need for Financial Measures is still an extremely strong element to determine success (Niven, 2002).

Customer Perspective: Choosing measures for the Customer Perspective of the BSC depends on the type of customers desired and the value that the organization provides to them (Niven, 2002). The purpose of the Customer Perspective is to focus on the target customers. This will allow organizations to create strategies consistent with the type of customers they want to attract.

The Internal Process Perspective: It entails the procedures that an organization must develop and master to be successful. Many organizations will concentrate on such elements as order processing, delivery, manufacturing, and product development as examples (Niven, 2002). The focal point of this perspective is related to the Customer Perspective because to keep customers satisfied, an organization will need to focus on the components of the organization important to them. If target customers are dissatisfied when delivery is late, an organization must concentrate on the internal process ofdeveloping a more efficient delivery system or refining the system currently used. To accomplish this, managers are undertaking a rigorous internal analysis not only assessing the internal processes of the organization, but reviewing innovation since global competition has decreased the amount of time organizationscan bring their products to market to be successful (Bose & Thomas, 2007; Levy, 1998).

Learning and Growth Perspective: According to Kaplan and Norton (1996b), this perspective is the backbone to a successful scorecard because it involves employee skills and information systems. Learning and Growth can include such issues as employee satisfaction, alignment of employee skills with jobs, number of employee suggestions implemented, and hours of employee training. Depending on the actual employee skills and desired employee skills, some organizations change jobdescriptions, relocate employees to other departments, and/or implement incentive programs designed to motivate employees to provide suggestions, receive education or training, and/or gain tenure through continued employment (Niven, 2002).

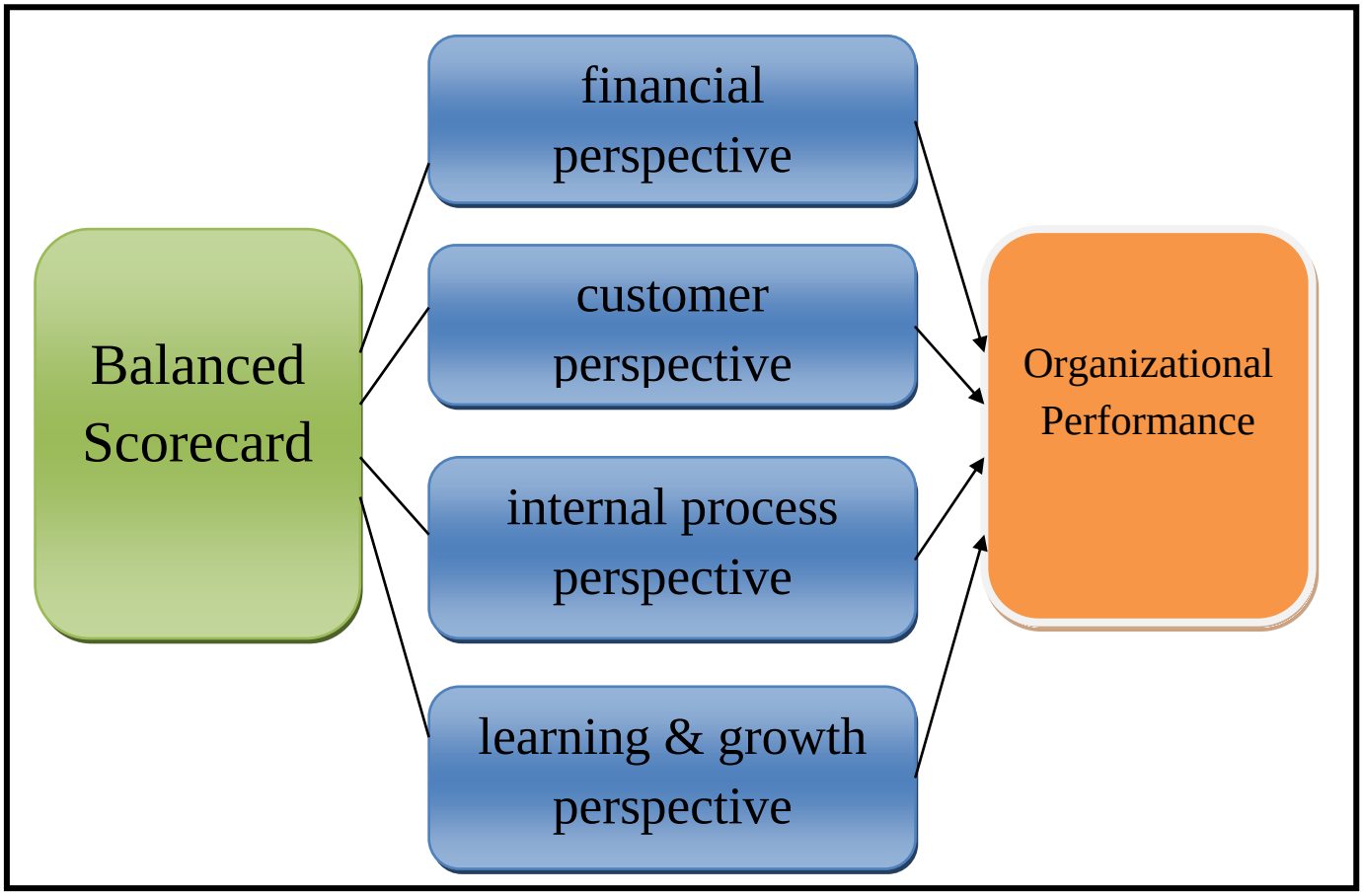
IV.BALANCED SCORECARD AND ORGANIZATIONAL PERFORMANCE

Kaplan and Norton (1996a) introduced the Balanced Scorecard to assist companies in cultivating their performance by assessing and evaluating their strategies. A number of organizations may use the Balanced Scorecard to achieve its goals by observing multiple perspectives at the same time. The BSC approach has recently been used by many companies to monitor their regulatory compliance (Stevens, 2006; Huang, 2007; Garcıa Valderrama et. al., 2008; Pedersen and Neergaard, 2008; Osmundsen et. al., 2008). It has also been employed as an alternative option to existing total quality management systems such as those proposed by the International Standard Organization (ISO) (Watkins and Arrington, 2007; Wagner, 2007). Additionally many governments and administrations have used the BSC for monitoring various regulatory issues or for evaluating

their overall performance (Phillips and Phillips, 2007; Ramos et. al., 2007; Farneti and Guthrie, 2008; Lee, 2008).

The balanced scorecard can provide structure and focus which will help to maintain the pace of change. It, therefore, demonstrates that the introduction of a performance management system can be complementary to the process of strategic transformation (MacBryde et. al., 2012). BSC is a modern performance management tool and worldwide organizations are adopting this tool (Kennerley and Neely, 2002, Pandey, 2005, Kaplan and Norton, 1992; Kaplan and Norton, 1996). Xionget. al., (2008) examine the results of a survey that found that most Chinese firms have used non- financial performance measures to maintain a competitive advantage. BSC includes financial measures that tell the effects of actions already taken and it complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and enhancement activities- operational measures that are the drivers of future financial performance (Kaplan and Norton, 1992).

V. PROPOSED MODEL OF RESEARCH



Sources: Developed by the Researcher

VI. RESEARCH DESIGN

Need for the study

It has been observed after review of literature that balanced scorecard is used in order to rejuvenate organizations. This tool has also proved to be an effective tool resulting in better performing organizations. However, there has been no empirical study so far to show the relation between balanced scorecard and organizational performance, and their perspectives impact on organizational performance. Therefore, it was felt that there is need to explore the relation between balanced scorecard and organizational performance and how these affect performance of any organization.

Objectives of the Study

- To study the concepts of balanced scorecard.
- To assess the relationship between balance scorecard, and organizational performance.
- To study the impact of financial perspective on organizational performance
- To study the impact of customer perspective on organizational performance
- To study the impact of internal process perspective on organizational performance
- To study the impact of learning & growth perspective on organizational performance

Research Hypotheses

- *There is significant positive relationship between balance scorecard and organizational performance.*
- *There is significant positive impact of financial perspective on organizational performance.*
- *There is significant positive impact of customer perspective on organizational performance*
- *There is significant positive impact of internal process perspective on organizational performance.*
- *There is significant positive impact of learning & growth perspective on organizational performance*

VII. RESEARCH DESIGN

Balanced scorecard is latent independent variables leading to organizational performance, which is dependent variable. Five constructs are identified for BSC namely: financial, customer, internal process, and learning and growth perspectives. In order to collect data on various dimensions of the study, a research instrument was designed based on extensive literature review. The instrument was based on five- point likert scale with choices, strongly agree, agree‘, neither agree nor disagree, disagree and strongly disagree. The organizations chosen for the re-search fall under fortune 500 companies. Initially the questionnaire had 52 statements. The questionnaire was reviewed by experts 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 its impact on performance in the organization. The questionnaire was sent to 75 potential respondents, out of which only 50 responses were received. The reliablityand validity of the instrument was determined with the help of factor analysis and computing Cronbach alpha. The value of Chronbach alpha for the entire instrument as well as for each construct was more than 0.600. Those variables with low factor loadings(less than 0.400) were deleted and

the questionnaire was refined. As a result, 24 statements remained in the final questionnaire. After final data collection 105 responses turned out to be valid and considered for the analysis

Table 1: Descriptive statistics and Cronbach's Alpha Item Statistics

Dimensions	Items	Means	Std.Deviation	Cronbach's Alpha	AVE	CR
Financial perspective	FIP1	2.87	1.235	.848	.644	.750
	FIP2	2.52	1.189			
	FIP3	2.68	1.198			
	FIP4	2.78	1.066			
Customer perspective	CUP5	2.21	.866	.787	.544	.608
	CUP	2.35	.960			
	CUP7	2.46	1.056			
Internal business process perspective	IPP8	2.61	1.050	.771	.514	.808
	IPP9	2.47	1.030			
	IPP10	2.19	.940			
	IPP11	2.26	.976			
	IPP12	2.21	.978			
	1PP13	2.17	.937			
Learning & growth perspective	LGP14	2.37	.977	.778	.531	.745
	LGP15	2.43	.927			
	LGP16	2.51	.905			
	LGP17	2.54	1.304			
	LGP18	2.62	1.071			
	LGP19	2.37	.977			
Organizational performance	OP20	2.04	.941	.772	.500	.767
	OP21	2.74	1.116			
	OP22	2.38	1.062			
	OP23	2.16	.906			
	OP24	2.37	1.005			

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Table 2: Correlations among BSC and Organizational Performance

		FIP	CUP	IPP	LGP	OP	BSC
FIP	Pearson Correlation	1					
CUP	Pearson Correlation	.293**	1				
IPP	Pearson Correlation	.040	.360**	1			
LGP	Pearson Correlation	.028	.390**	.742**	1		
OP	Pearson Correlation	.233**	.333**	.716**	.695**	1	
BSC	Pearson Correlation	.617**	.724**	.696**	.706**	.680**	1

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

N=223

The results of correlation exhibit significant relationship between balanced scorecard and organizational performance. Thus, hypothesis 1 is accepted. This implies that balanced scorecard and its perspectives positively impact the performance of the organizations. If balanced scorecard is used properly, leading to effective high performance.

VIII. PATH ANALYSIS THROUGH STRUCTURAL EQUATION MODELING (SEM)

Hair et. al., (2010, p. 616) have advocated that SEM examines "the structure of interrelationships expressed in a series of equations." The Exhibit: 1 shows that the impact of BSC perspectives (FIP, CUP, IPP & LGP) on organizational performance (OP).

Exhibit: 1 It shows the impact of BSC perspectives (FIP, CUP, IPP & LGP) on organizational performance (OP). The values of goodness- of-fit indices obtained were chi- square to degree of freedom ratio= 2.09, GFI= 0.846, AGFI= 0.809, RMSEA= 0.069, NFI=0.853, CFI= 0.859. *In the light of recomme4nded values, the structural model obtained is desirable.*

The goodness-of-fit indices of both **Balanced Scorecard and Organizational Change** obtained for structural model are given in Table: 3

Table 3: Fit Indices of Structural Models

Fit Indicators	Standard Value	Balanced Scorecard
Chi-square /Degrees of Freedom	**<3.0**	2.049
Goodness of Fit Index **(GFI)**	**>=0.90**	.846
Adjusted Goodness of Fit Index **(AGFI)**	**>0.90**	.809
Root Mean Square Error of Approximation **(RMSEA)**	**<0.07**	.069
Normed Fit Index **(NFI)**	**>0.90**	.853
Comparative Fit Index **(CFI)**	**>0.90**	.859

The standardized path coefficients of the structural model as estimated by AMOS-22 are given in the Exhibit: 1.

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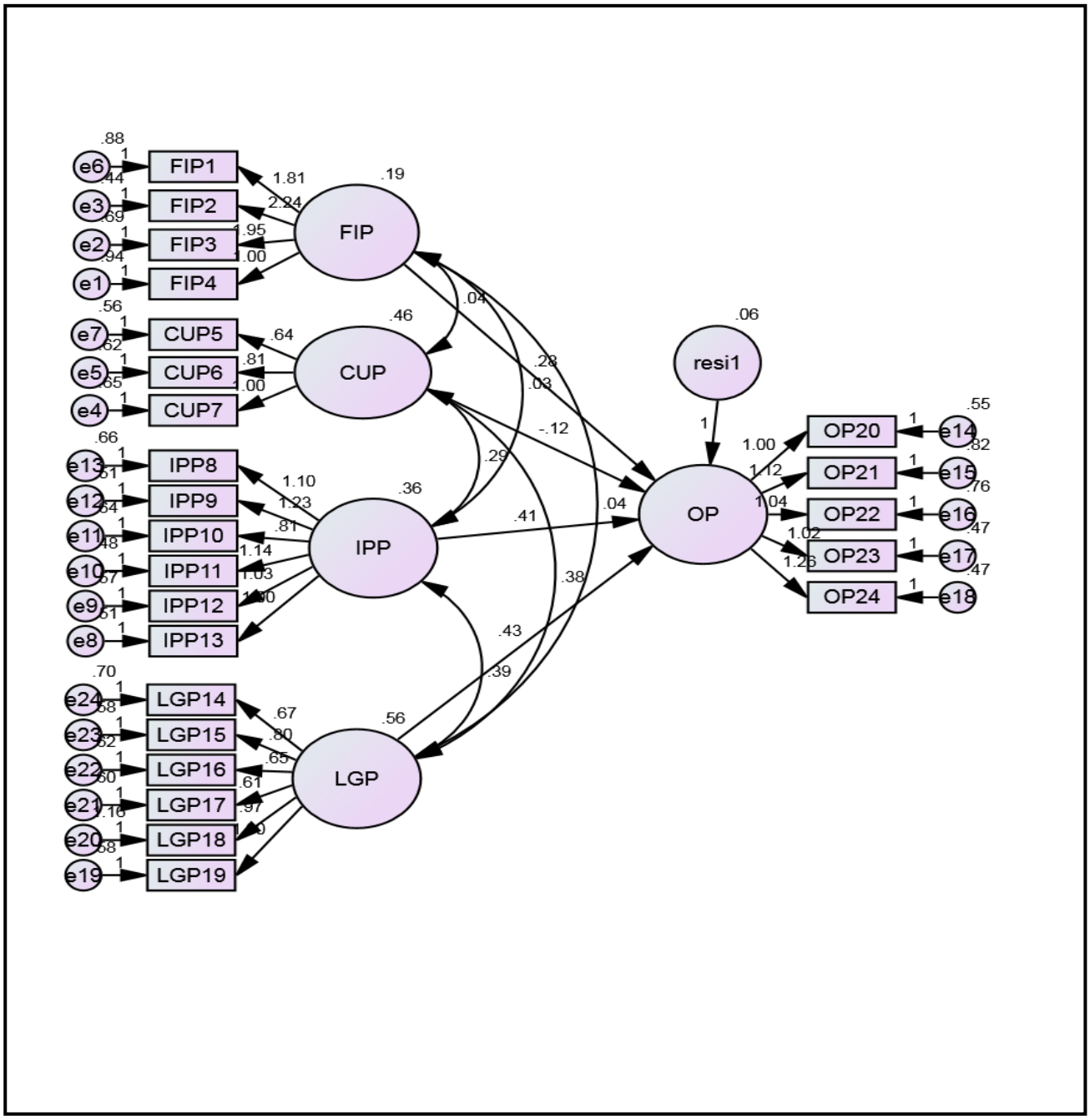
Exhibit: 1 Structural Model Impact of BSC Perspectives on OP



FIP-Financial Perspective, CUP- Customer Perspective, IPP- Internal Business Process Perspective, LGP-Learning & Growth Perspective, OP- Organizational Performance.

IX. HYPOTHESES TESTING THROUGH PATH ANALYSIS

Investigating the impact of Balanced Scorecard Perspectives on Organizational performance.

In this study, Balanced Scorecard has been taken as an independent variable. The impact of BSC on OP has been estimated by Structural Equation Modeling (SEM). Proper hypotheses has been developed and validated accordingly.

$H_0$2 There is a significant positive impactof financial perspective on Organizational performance.

Comment: In order to study the impact of FIP on OP, Structural Equation Modeling (SEM) is applied. The results show the positive impact of FIP on OP (Estimate = .194). Further, this impact of FIP on OP is statistically significant **(p = 0.004, <.05).** Therefore, the Hypotheses **$H_0$2** is supported.

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. Kim and Davidson (2004) use the BSC framework to assess the business performance of IT technology (IT) expenditures in the Korean banking industry.

$H_0$3 There is a significant positive impact of customer perspective on Organizational performance.

Comment: In order to study the impact of CUP on OP, Structural Equation Modeling (SEM) is applied. The results show the negative impact of CUP on OP (Estimate = .456). Further, this impact of CUP on OP is statistically not significant **(p = 0.354, >.05).** Therefore, the Hypotheses **$H_0$3**is not supported.

The above study is not supported by the study of (Amir and Lev, 1996; Ittner and Larcker, 1998; Banker, Potter and Srinivasan, 2000) several empirical studies find that none- financial measures such as customer satisfaction are positively related to organizational performance. Some studies have identified a significant relationship between customer satisfaction and performance, including Banker et. al., (2000), Ittner and Larcker (1998). Ittner and Larcker (1998) studied the relationship between customer satisfaction and financial performance by using various data sorted by company, business, and customer.

$H_0$4 There is a significant positive impactof internal business process perspective on Organizational performance.

Comment: In order to study the impact of IPP on OP, Structural Equation Modeling (SEM) is applied. The results show the positive impact of IPP on OP (Estimate = .360). Further, this impact of IPP on OP is statistically significant **(p = 0.024, <.05).** Therefore, the Hypotheses **$H_0$4**is supported.

The study supported with the study of Kaplan and Norton (1992) thatcreated a scorecard which enables the managers to immediately gain an insight into the company's performance with a balanced view. The internal business process perspective is a means to evaluate corporate performance.

$H_0$5 There is a significant positive impactof learning and growth perspective on Organizational performance.

Comment: In order to study the impact of LGP on OP, Structural Equation Modeling (SEM) is applied. The results show the positive impact of LGP on OP (Estimate = .563). Further, this impact of LGP on OP is statistically significant **(p = 0.014, <.05).** Therefore, the Hypotheses **$H_0$5**is supported.

This study is supported by the study of Wanga, Chun-Hsien; Lu, Yuan-Yuan; and Chen, Chin-Bein (2010) that the relationship reflects the interplay and interdependencies among financial and non-financial measures. While specific high-tech firms employed the learning and growth perspective to develop new processes and technologies to reduce costs and increase efficiencies in the internal business processes perspective.

The summary results of hypotheses testing through SEM path analysis are presented in Table 4.

Table 4. Results of Hypotheses Testing through SEM

Hypotheses	Relationship	Estimate	p-value	Results
$H_0$2	**FIP→OP**	.194	.004	Significant
$H_0$3	**CUP→OP**	.456	.354	In-significant
$H_0$4	**IPP→OP**	.360	.024	Significant
$H_0$5	**LGP→OP**	.563	.014	Significant

Source: *Developed by the Researcher*

X. CONCLUSION

Performance measurement had become part of the culture of the organization due to the visibility of the balanced scorecard.BSC is a modern performance management tool and worldwide organizations are adopting this tool and it provides a visual framework that integrates the organization's strategic objectives across these four perspectives. The results of the study show that Indian organizations have incorporated the dimensions of BSC as a performance measurement tools and use it to create change and improve performance. BSC and performance are highly correlated to each other thus substantiating the argument that performance is affected by Balanced Scorecard perspectives.

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