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A study on impact of balanced scorecard perspectives on performance of it companies in Bengaluru City

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Abstract---Performance measurement through Balanced Scorecard is giving accurate information about strategies and goals of organizations that is linked with their overall performance. It is highly useful to assess the process of allocation of available and limited resources to decide ways to manage, distribute and utilize resources efficiently in different modes. The results reveal that significant difference exists amidst profile of employees and balanced scorecard perspectives in IT companies. Customer, financial, internal business process and learning and growth perspectives are impacting significantly and positively on performance of IT companies. So, IT companies should keep good employees with them and they must utilize their resources properly to improve their reputation and they should understand different customer segments clearly. Besides, they must support their customers in various ways and they should enhance success of business in multiple modes.

Keywords---Balanced Scorecard, Employees, IT Companies, Performance.

Introduction

The information technology companies are usually assessing their operational efficiency, profits and competitiveness through efficient methods. But, conventional methods are providing some information and accounting indicators to companies and they are not giving any directions for improvement of organizations in a holistic manner including all stakeholders. The conventional performance indicators are highly concentrating on financial aspects of business organizations namely variants of returns. Balanced Scorecard is discovered by

Kaplan and Norton in the year 1992, it maintains balance among financial and non financial aspects of all kind of companies and it is also helping to decide what things are very important for survival and also for future periods by means of considering all features of companies.

Balanced Scorecard is assessing performance in different standpoints and it is integrating both non financial and financial aspects in assessing organization's performance (Marr and Adams, 2004). Balanced Scorecard is also taking in to consideration of operational efficacy, innovation, customers, knowledge and competency of employees and companies. Performance assessment through Balanced Scorecard is giving complete picture of business operations and it is also linked with management of different resources of organizations and it transforms mission and strategies in to attainment of objectives and targets of companies.

Performance measurement through Balanced Scorecard is giving accurate information about strategies and goals of organizations that is linked with their overall performance. It is highly useful to assess the process of allocation of available and limited resources to decide ways to manage, distribute and utilize resources efficiently in different modes (Moller and Schaltegger, 2006). Balanced Scorecard is used effectively for strategic management and improving efficacy of various resources and it is improving decision making capacity of organizations in order to attain objectives in their business operations and inducing employees to move towards attaining their and organizational goals. (Speckbacher et al 2003).

The liberalization of economy in India creates a considerable shift in business atmosphere, operational cost and competition among business organizations and is leading to remarkable growth and adoption of modern technologies in the operations of companies. IT companies are forced to use modern accounting approaches to survive and get and sustain their competitive and relative advantages. In over the time periods, IT companies are experiencing drastic changes in their operations in the technology driven and complete business atmosphere and they are highly concentrating on their performance and continuous improvement over time horizons.

IT companies are contributing significantly to the growth of economy in India by means of employment creation, distribution of income and earnings through exports and they are holding exceptional potential to trigger the growth of economy in future also (Singh and Kaur, 2017). In order to attain and keep competitiveness, IT companies need to perform well continuously and it is the indicator of their profit, reputation and values. Most of IT companies are adopting Balanced Scorecard to assess their performance. Thus, it is important to study the impact of balanced scorecard perspectives on performance of IT companies.

Review of Related Literature

Etim and Agara (2011) found that balanced scorecard included non financial and financial aspects of organizations and it was used to attain strategies and objectives of business organizations and it acted as strategic management mechanism and four measures of balanced scorecard were significantly

influencing performance of organizations and it was also considered effective management and evaluation approach for organizations. Farooq and Hussain (2011) stated that balanced scorecard had integrated its four measures with business objectives of organizations. The business organizations were adopted balanced scorecard measures for measuring their performance and it was used by them for introducing changes and new methods in order to enhance their business operations and they were significantly and highly associated among them. Turskis and Zavadskas (2011) explicated that balanced scorecard had suitably applied in the area research and development of organizations and it had employed for assessing performance and administration of research and development division of organizations.

Bentes et al (2012) made clear that balanced scorecard had used for evaluating and managing performance of organizations in effective manner and it was highly useful for modification of activities, making changes and programmes and making appropriate business decisions and it was impacting positively on performance of organizations. Wasaton (2012) mentioned that balanced scorecard consisted of different measures that were helpful for transforming strategies in to operations on par with objectives of organizations and it had improved communication, cooperation, learning and commitment among employees and it had positively connected with organization's performance. Kinya (2012) made clear that all types of banks had not adopted balanced scorecard approach for the execution of their strategies and evaluating their effectiveness, but, it had employed for assessing their performance and operations.

Ridwan et al (2013) made clear that balanced scorecard is the method of integrating strategies, policies and programmes of organizations in order to assess their performance in the most efficient way and it was largely useful to organizations and employees to attain their business objectives and improve their performance. Ombuna et al (2013) stated that aspects of balanced scorecard were having positive effect on bank's performance and it was used to increase dynamism, involvement, implementation and assessment of performance of banks and employees critically. Raphael and Man (2013) elucidated that banks had adopted balanced scorecard mechanism in order to ascertain their performance at various levels and it had significant influence on their performance and modification of strategies and operational efficiency for sustainability.

Khatoon and Farooq (2014) indicated that balanced scorecard was used for management and measurement of performance of organizations and it transformed strategies in to attainment of objectives by organizations and it included non financial and financial components of organizations and they were aligned with goals and operations of organizations. Singh and Sohani (2014) mentioned that balanced scorecard measure included non financial and financial dimensions of organizations and they were linked with strategies and visions of organizations and it led to successful implementation of strategies related to communication, motivation and productivity of organizations. Tariq et al (2014) elucidated that the successful execution of balanced scorecard approach gave significant outputs for banks and its perspectives had positive and significant effect on banks' performance and it transformed their strategies and mission in to operations and performance.

Lonbani et al (2015) showed that the balanced scorecard had adopted to review the organization's performance and it was a wholesome measure for small scale industrial units and they used it for enhancing their performance through efficient use of financial resources and it was also connected with strategic management measures of organizations. Visalakshi and Kasilingam (2015) stated that balanced scorecard was an integrated method for measuring performance of organizations and it was necessary for the success of banks in long term and it was highly useful to attain their objectives by effective adoption of strategies and programmes and it had improved adoption of innovation, values, relation with customers and strategies for retention of employees and consumes. Muriithi and Iravo (2015) elucidated that financial condition, effectiveness of strategies and policies, satisfaction of customers and productivity and profit of organizations were evaluating effectively by adoption of balanced scorecard method.

Sahiti et al (2016) made clear that balanced scorecard was an efficient management and performance assessment and integrated approach for organizations and it had enhanced performance, innovation, business operations and profit of organizations. Rillyan et al (2016) mentioned that all the perspectives of balanced scorecard were significantly and positively influencing bank's performance and it had improved innovativeness, communication, efficient use of resources and attainment of its business objectives and sustainable operations. Kia and Kia (2016) found that balanced scorecard had transformed business strategies of banks in to operation and success and it had helped them to increase their banking operations, attracting new customers and expanding banking business in new segments and reduce costs related with their various operations.

Al Dalayeen (2017) concluded that balanced scorecard was an efficient approach for measurement of performance of organization and it had improved services, financial stability, resource use, operations and profit of organizations and it was helpful to them for attainment of their objectives in their business. Utama and Utama (2017) stated that balanced scorecard method for measurement of performance of organizations included non financial and financial features and it had improved resource use, operations, innovation and productivity of employees and also profit of organizations. Juvekar and Pandey (2017) made clear that balanced scorecard approach had collected all information related to operation of companies and traced their efficiencies and it had helped companies to formulate and implement efficient strategies in order to achieve their targets and improved effectiveness of leadership and communication among all stakeholders of companies.

Al-Adwan (2018) revealed that companies were used balanced scorecard method for assessing their performance that included non financial and financial features and it was highly effective in terms of increasing innovation, profit and success of companies. Gupta et al (2018) mentioned that balanced scorecard method was effective for measurement of performance of bank and its components were positively and significantly affecting its productivity and it was largely useful to implement strategies, policies and programmes in order to increase their efficiency in its operation and profit. AL-Dweikat and Nour (2018) pointed out that the successful implementation balanced scorecard in banks was highly depending

on strategies, human resources, methods and system of operations and involvement of management in assessing banks' performance and success.

Fawzy (2019) indicated balanced scorecard was used by organizations for tracking of their progress and it was useful for successful execution of their strategies in order to increase productivity and it had increased adoption of innovation and productivity of employees. Kefe (2019) stated that balanced scorecard was highly used for making decision by organizations and it had strong relation with strategies and objectives of organizations and it evaluated organizations in terms of non financial and financial aspects. Budiono (2019) pointed out that balanced scorecard had significant effect on innovation, learning, financial condition, process, expenses, revenues, operational efficiency of universities and it had improved communication, performance and development of students.

Hegazy et al (2020) clarified that balanced scorecard had increased productivity of firms and its components were significantly influencing their performance and it had enhanced operations, competitiveness and profit of firms. Rafiq et al (2020) mentioned that balanced scorecard was positively and significantly impacting performance and growth of business organizations and it was essential for their sustainability and competitiveness. Zorek (2020) elucidated that balanced scorecard had transformed business strategies of companies in to operation by utilizing available resources efficiently for achieving their objectives and targets.

Putri et al (2021) found that balanced scorecard had adopted to evaluate performance of bank and to attain its objectives and it was largely helpful to bank to enhance its operations, relation with customers, growth, business processes and sustainability. Camiller (2021) stated that balanced scorecard method was adapted to measure the higher educational institutions' performance and it had increased quality of teaching and learning, research activities and financial outcomes of higher educational institutions. Rafiq et al (2021) elucidated that perspectives of balanced scorecard had significant influence on development of organization in sustainable manner and regulatory and political mechanism of organizations.

Research Methodology

Bengaluru city is chosen for conducting this study. Employees working in IT companies are randomly selected. Information is gathered from 250 employees working in various IT companies by using questionnaire. Profile of employees is understood by using percentage analysis and balanced scorecard perspectives in IT companies are examined by using mean (M) and standard deviation (SD). Difference amidst profile of employees and balanced scorecard perspectives in IT companies is examined by applying t and ANOVA tests. Regression analysis is employed to evaluate impact of balanced scorecard perspectives on performance of IT companies.

Results

Profile of Employees in IT Companies

The profile of employees in IT companies is shown in Table-1. The results indicate that 51.60% of them are in male category, while, 48.40% of them are in female category and 36.00% of them are in age category of 31 – 35 years, while, 15.60% of them are in age category of 21 – 25 years. Besides, 40.80% of them are B.E. holders, while, 27.20 per cent of them are B.Tech. holders, 38.00% of them are having 5 – 8 years of working experience, while, 17.20% of them are having more than 12 years of working experience and 34.40% of them are earning monthly salary of Rs.40,001 – Rs.50,000, while, 14.80% of them are earning monthly salary of above Rs.50,000.

Table-1
Profile of Employees

Profile	Frequency	%
Gender		
Male	129	51.60
Female	121	48.40
Age		
21 – 25 Years	39	15.60
26– 30 Years	72	28.80
31 – 35 Years	90	36.00
36 – 40 Years	49	19.60
Education		
B.E.	102	40.80
B.Tech.	68	27.20
M.C.A.	80	32.00
Working Experience		
Less than 4 Years	47	18.80
5 – 8 Years	95	38.00
9 – 12 Years	65	26.00
More than 12 Years	43	17.20
Monthly Salary		
Below Rs.30,000	45	18.00
Rs.30,001 – Rs.40,000	82	32.80
Rs.40,001 – Rs.50,000	86	34.40
Above Rs.50,000	37	14.80

Balanced scorecard perspectives in IT companies

The balanced scorecard perspectives in IT companies are studied and shown as below.

Learning and Growth

The learning and growth from employees' view in IT companies is shown in Table-2.

Table-2
Learning and Growth

Learning and Growth	M	SD
My company recognizes exceptional performance of employees	3.86	0.99
My company provides required information to employees for carrying out their jobs	3.82	0.75
My company motivates employees for their innovativeness	3.88	0.85
My company gives correct information to employees	3.80	0.93
My company always keeps good employees with it	3.32	1.08

The employees working in IT companies are agreed with their company recognizes exceptional performance of employees, their company provides required information to employees for carrying out their jobs, their company motivates employees for their innovativeness and their company gives correct information to employees, while, they are neutral with their company always keeps good employees with it.

Internal Business Process

The internal business process from employees' view in IT companies is shown in Table-3.

Table-3
Internal Business Process

Internal Business Process	M	SD
My company predicts future requirements of customers	3.73	0.97
My company focuses on development of advanced products	3.85	0.71
My company utilizes resources for improving its reputation	3.34	1.17
My company solves the problems of customers efficiently	3.92	0.74
My company understands different customer segments clearly	3.29	1.19

The employees working in IT companies are agreed with their company predicts future requirements of customers, their company focuses on development of advanced products and their company solves the problems of customers efficiently, while, they are neutral with their company utilizes resources for improving its reputation and their company understands different customer segments clearly.

Customer

The customer from employees' view in IT companies is shown in Table-4.

Table-4
Customer

Customer	M	SD
My company values customers highly	3.91	0.92
My company listen new customers	3.84	0.72
My company communicates value to customers effectively	3.95	0.85
My company maintains better relation with all customers	3.97	0.83
My company supports customers in various ways	3.38	1.06

The employees working in IT companies are agreed with their company values customers highly, their company listen new customers, their company communicates value to customers effectively and their company maintains better relation with all customers, while, they are neutral with their company supports customers in various ways.

Financial

The financial from employees' view in IT companies is shown in Table-5.

Table-5
Financial

Financial	M	SD
My company decreases cost related to employees	3.76	0.99
My company diminishes cost associated with facilities	3.71	1.04
My company discovers new markets	3.78	0.96
My company assess return on investment	3.96	0.94
My company enhances success of business in multiple modes	3.27	0.75

The employees working in IT companies are agreed with their company decreases cost related to employees, their company diminishes cost associated with facilities, their company discovers new markets and their company assess return on investment, while, they are neutral with their company enhances success of business in multiple modes.

Profile of employees and balanced scorecard perspectives in it companies

By using ANOVA and t-tests, the difference amidst profile of employees and balanced scorecard perspectives in IT companies is found and the results are shown in Table-6.

Table-6
Profile of Employees and Balanced Scorecard Perspectives in IT Companies

Particulars	t / F-Value	Sig.
Gender and Balanced Scorecard Perspectives	4.386 (t)	.000
Age and Balanced Scorecard Perspectives	5.712 (F)	.000
Education and Balanced Scorecard Perspectives	5.468 (F)	.000
Working Experience and Balanced Scorecard Perspectives	5.870 (F)	.000
Monthly Salary and Balanced Scorecard Perspectives	5.534 (F)	.000

Significant difference is found in perspectives of balanced scorecard amidst profile of employees in IT companies since t and F values are significant in 1% level.

Impact of balanced scorecard perspectives on performance of it companies

To evaluate impact of balanced scorecard perspectives on performance of IT companies, regression analysis is employed and the result is shown in Table-7. R^2 is 0.55 and adjusted R^2 is 0.53 and these measures reveal that the model has good fit. F-value is 21.725 and it implies that the model is significant in 1% level.

Table-7
Impact of Balanced Scorecard Perspectives on Performance of IT Companies

Perspectives	Regression Coefficients	t-Value	Significance
Constant	5.671	11.950	.000
Learning and Growth Perspective (X_1)	.294	4.276	.000
Internal Business Process Perspective (X_2)	.342	5.345	.000
Customer Perspective (X_3)	.456	6.838	.000
Financial Perspective (X_4)	.438	6.124	.000

Customer, financial, internal business process and learning and growth perspectives are impacting significantly and positively on performance of IT companies in 1% level.

Conclusion

The above analysis reveals that significant difference exists amidst profile of employees and balanced scorecard perspectives in IT companies. Customer, financial, internal business process and learning and growth perspectives are impacting significantly and positively on performance of IT companies. So, IT companies should keep good employees with them and they must utilize their resources properly to improve their reputation and they should understand different customer segments clearly. Besides, they must support their customers in various ways and they should enhance success of business in multiple modes.

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