



**ASSESSING THE USAGE AND IMPACT OF BALANCED SCORECARD  
AS A PERFORMANCE MEASUREMENT SYSTEM IN THE LIFE  
INSURANCE SECTOR**

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**Article History:**

**Received :** 2026-02-27

**Revised :** 2026-04-02

**Accepted :** 2026-04-12

**Published :** 2026-04-20

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**Abstract:**

**Purpose:** *The contemporary business world is experiencing a rapid change, in the competitive and dynamic, performance management tools are necessary in assessment of the strategic performance of the insurance industry. Conventionally, performance measurement was centered mostly on financial measures that do not apply in the current competitive and strategic world but the trend is moving in the direction of non financial measures of performance measurement. BSC framework has been formulated as a broad based measurement instrument inclusive of both financial and non- financial metrics and respond to the concerns of the modern business set up. The recent study also meant to examine the level of use and the influence of the BSC on the performance of organizations in the public and the private life insurance companies.*

**Design/methodology/approach** – *to gather the necessary data, a sample of 300 administrative officers who had been working in life insurance companies in Punjab at the branch level was used to administer structured questionnaire. The sample was a balanced 150 respondents of each gender in the public sector and the chosen companies in private sector in the life insurance industry. MannWhitney U test indicated the differences in adoption of Balanced Scorecard among the public and the private life insurance companies, and the structural model, which were studied through the SmartPLS, showed the existence of significant linkage between the 4 perspectives of the BSC and both performance outcomes.*

**Findings** – *Results demonstrate how important the performance outcomes are in the implementation of the BSC perspectives, which suggests that the BSC is effective in offering a evaluation of the performance in an organization.*

**Research Implications:** *The study strengthens the literature on strategic performance measurement by empirically demonstrating the Balanced Scorecard's effectiveness in the life insurance sector and establishing a foundation for future cross-sectoral and longitudinal research.*

**Practical implications** – *Life insurance companies can leverage the Balanced Scorecard to strengthen their competitive positioning by focussing key result areas (KRA's) to meet stakeholder expectations. Furthermore, the insights and outcomes derived from this hold potential applicability for general insurance companies.*

**Social Implications:** *The BSC encourages improved service quality, customer satisfaction, and organisational transparency by coordinating strategic objectives with employee- and customer-focused performance metrics, boosting public faith in insurance companies.*

**Originality/value** – *The contribute to the existing literature by providing empirical evidence on the effectiveness and outcomes of Balanced Scorecard implementation in life insurance companies highlighting its effectiveness as a strategic performance management tool.*

**Keywords:**

*Balanced scorecard, Performance measurement system, financial and non-financial outcomes, Strategy.*

## 1. Introduction

The BSC, introduced by Robert Kaplan and David Norton in 1992, represents one of the most widely adopted and contemporary framework. The traditional measures of performance measurement that rely solely on financial measures, have been criticized as shortsighted, uncontrollable, lacking strategic alignment (Perrin, 1996) whereas BSC incorporates financial and non-financial measures hence provides comprehensive and integrative view of company's performance (Kaplan et al., 1992; Ghalayini et al., 1996). The BSC is a strategic management and performance measurement tool that has been widely used both in manufacturing and service industries. It integrates multiple dimensions of performance by categorizing strategic indicators into outcome and driver measures, financial and non-financial metrics, as well as internal and external perspectives (Gautreau et al., 2001). Through this multidimensional approach, the BSC evaluates organizational performance across four key perspectives— financial, customer, internal business processes, and learning and growth thereby offering a comprehensive picture of company performance (Kaplan et al., 1996). It facilitates the organizations to interpret strategy into action (R. S. Kaplan & Norton, 1996; Kumar et al., 2024).

The BSC approach conceptualizes organizational performance in four perspectives, which are interrelated:

1. Financial Perspective
2. Customer Perspective
3. Internal Business Process Perspective
4. Learning and Growth Perspective

The four perspectives collectively encompass the organization’s key stakeholders—shareholders, customers, and employees—thereby promoting a holistic and stakeholder-oriented approach to performance measurement and management.

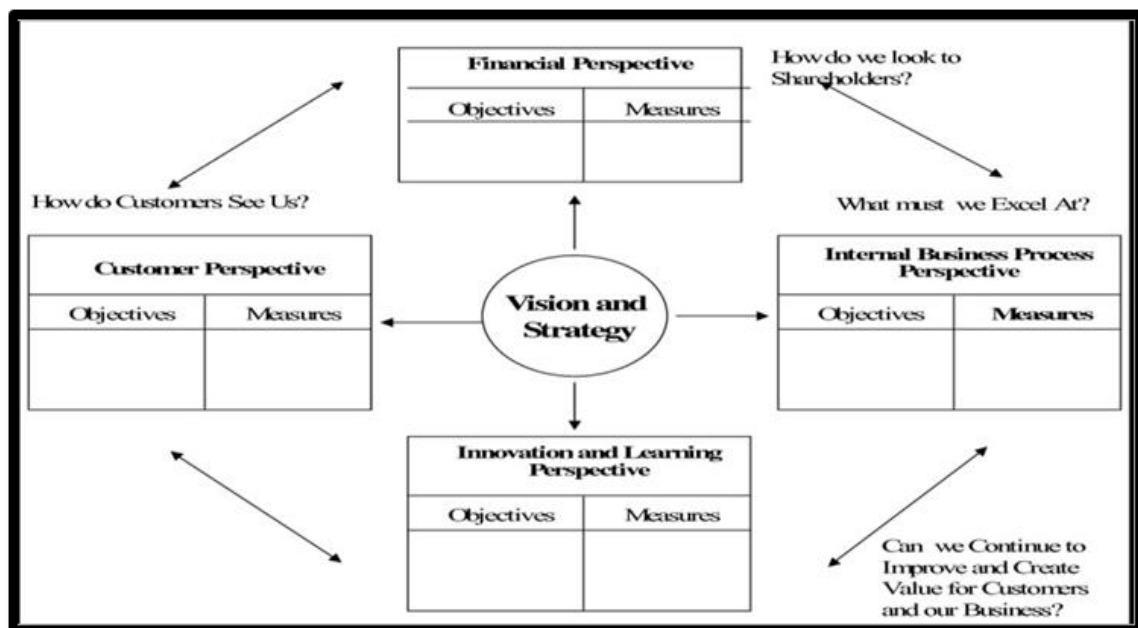
## 2. Literature Review: Theoretical background

Performance measurement systems serve as critical tools for evaluating how effectively an organization translates its strategic objectives into measurable outcomes (Kaplan & Norton, 2001). Contemporary studies on organizational performance increasingly emphasize the integration of both financial and non-financial indicators, reflecting a shift towards more comprehensive and strategically aligned evaluation networks (Ling Sim et al., 2001; Banker, R. D et al., 2004).

Traditionally, management accountants have emphasized financial indicators such as profitability, economic value added, return on capital employed, market share and cash flow effectively capture shareholder value but they provide limited insight to major key stakeholders i.e., customers and employees (Perkins, M. et al., 2014; Hegazy, M et al., 2022). Traditional performance measurement based on financial metrics suffers limitations i.e., historic, uncontrollable, quantitative, incomplete, narrow in focus and were of short term (Ghalayini et al., 1996; Perrin, 1996).

The Balanced Scorecard (BSC) provides an integrated framework for linking strategic objectives with measurable outcomes across four dimensions—financial, customer, internal business processes, and learning and growth (Harvey et al., 2018). Its effectiveness depends on the careful selection and weighting of indicators and the rigor of implementation, as weak execution can diminish its strategic impact and limit organizational learning. (Kaplan, R. S., & Norton, D. P. 1992; Micheli et al., 2014; Kumar et al., 2024).

Before delving into the individual perspectives, it is essential to understand that the Balanced Scorecard operates as an integrated framework, linking strategic objectives across multiple dimensions to ensure balanced and sustainable performance outcomes.



**Figure. I. Sources: The Balanced Scorecard [Kaplan and Norton, (1996A)] Balanced scorecard has following four perspectives ensures and incorporates both financial and non-financial drivers of performance are systematically evaluated:**

**2.1 Financial perspective:** Financial performance indicators articulate the long-term strategic objectives of a business unit and serve as key benchmarks for evaluating overall success (Kaplan & Norton, 1992). Within the Financial Perspective of the Balanced Scorecard, the focus is on evaluating the organization's financial viability, productivity, profitability, and operational efficiency—critical indicators of long-term sustainability and stakeholder value. (Kaplan & Norton, 1996; Butler et al., 1997; Biazzo, S., & Garengo, P. 2012). Key result areas were explored through in-depth interview with administrative officers in life insurance sector are profitability, risk management, operational efficiency, liquidity, solvency and productivity (employee and branch productivity) sets the foundation for long-term value creation within the company.

**2.2 Customer perspective:** The customer perspective evaluates an organization's ability to deliver quality products and services effectively, thereby ensuring customer satisfaction and loyalty (Kaplan & Norton, 1996). This perspective encompasses factors such as price, quality, availability, functionality, service, partnerships, and brand value, all of which influence customer acquisition and retention. Customer concerns generally relate to time, quality, performance, service, and cost (Chenhall et al., 2007). The in-depth interview with administrative officers i.e., customer portfolio management, customer acquisition, customer profitability, customer relationship management, customer satisfaction, were the key result areas that have been explored. Customer retention is important to the success of a company.

**2.3 Internal business processes perspective:** In an effort to realize the organizational objectives and the requirements of the customers, organizations must develop the key business processes within which they must be the best so as to produce satisfactory outcomes. The internal processes perspective reports on the efficiency of internal processes and procedures (Tibbs, C. Y et al., 2016). The premise behind this perspective is that customer-based measures are important, but they must be translated into measures of what the organization must do internally to meet its customers' expectations (Kaplan & Norton, 1992). In life insurance sector, key result areas were explored through in- depth interview with administrative officers i.e., service quality, strategy implementation, digital transformation, efficient distribution channel, regulatory compliance, efficient claim management system to make internal system more robust and customer centric.

**2.4 Learning and growth perspective:**

Learning and growth perspective assesses the ability of an organization to accomplish its goals by developing employee competencies, efficiency of information systems and organizational culture and alignment. It encompasses factors such as employee skills and training, information system quality, leadership, and teamwork, all of which collectively enhance strategic performance (Kaplan & Norton, 1992; Kaplan & Norton, 1996; Ling Sim et al., 2001). Key result was explored through in-depth interview with administrative officers i.e., knowledge management, improved information system, work culture, employee engagement, employee satisfaction and employee retention.

**2.5 Objective of the study:**

- 1) To investigate the level of the use of a balanced scorecard by both the public and the private life insurance companies.
- 1) To analyse the performance outcomes of the BSC model as a performance measurement system in public and private life insurance companies.

### 3. Research Methodology

On the basis of gross total premium, the research included one government and four privately-run life insurance companies in Punjab, at the branch level. Public sector sample included the Life Insurance Corporation of India (LIC), while the private sector sample consisted of HDFC, SBI Life Insurance, ICICI Prudential Life Insurance, and Bajaj Allianz Life Insurance. Primary data were collected using a structured questionnaire administered to administrative personnel, including administrative officers, assistant administrative officers, branch managers, deputy branch managers, finance officers, and sales managers—directly involved in formulating organizational missions, visions, and strategies. A total of 400 administrative officers were surveyed, but clear 304 respondents were selected from public and private sector companies with equal representation from both sectors.

Variations in the level of BSC application between the public and the private life insurance companies were analysed using the MannWhitney U test further, the structural model, analysed using SmartPLS, confirmed significant relation among the four BSC perspectives and their associated financial and non-financial performance outcomes.

#### 3.1 Reliability and validity analysis- CFA approach

The KRA's of the insurance companies are examined with the help of Cronbach alpha and the CFA approach. The minimum expected value of Cronbach alpha is 0.7, where the CFA approach examines the criteria satisfying the conditions of convergent and discriminant validity of the scale.

#### 3.2 Questionnaire Development:

The design of a structured questionnaire was the primary method of data collection of this study. The instrument was designed to measure key variables by incorporating items derived from prior research and theoretical frameworks. 24 Key result areas were explored through in-depth interview with administrative officers and grouped 6 each into four factors through EFA and CFA analysis i.e., financial, internal business process, customer and learning and growth.. In case of financial perspective; Profitability (Solanki 2016); Operational Efficiency (Liu et al. 2022); Solvency (Shiu 2005); Risk Management (Hu and Yu 2014); Liquidity (Dey et al. 2015); Productivity (Majid et al., 2017). In customer perspective six key result areas identified as Customer Portfolio Management (Matiş et al., 2014); Customer Acquisition (Isson, J.P. 2018); Customer Profitability (Cermak 2015); Customer Relationship Management (Abrol, D. 2017); Customer Satisfaction (Vyas 2021); Customer Retention (Singh et al., 2020). In internal business process six key result areas identified are i.e., Strategy Implementation (Siddiqui M. H. et al., 2010); Efficient Distribution Channel (Kibicho 2015); Digital Transformation (Satuluri et al., 2021); Regulatory Compliance (Ratnawat 2025); Efficient Claim Management Process (Ashturkar 2015). Knowledge Management (Lee et al. 2007); Improved Information System (Kaigorodova, et al., 2018); Work Culture (Dokhale 2024); Employee Engagement

(Twalib 2021); Employee Satisfaction (Bençe & Bençe 2015); Employee Retention (Yue 2021).

Balanced scorecard helped organization to achieve both performance outcomes. Statements were selected from the reputed international high impact journals. Under construct development of financial performance outcomes, statements were obtained i.e., It is helpful in achieving long-term growth & profitability (Lucianetti, L. et al., 2019);, it has enhanced the

overall operational efficiency (Butler et al. 1997); it helped the company in increasing its market share (Afande (2015); It has resulted in enhancing performance & productivity Batra (2006); where as in statements were selected of non-financial performance outcomes i.e., it aligns mission, objectives & strategy of organization (Das 2019); It has helped in enhancing customer satisfaction (Singh et al., 2020); has improved organization system and competencies (Nivan, P 2006); it has improved employee satisfaction (Campbell et al. 2002); It has pinpointed performance gaps and areas for development (Neely, A. et al., 2005).

### 3.2 Scale Used:

The items selected for measuring various variables in this study are primarily based on the Likert scale, originally developed by Rensis Likert in 1932. As a result, a five-point Likert scale has been employed, where 5 represents “large extent.” and 1 represents “least extent”. This format allows for a balanced range of responses, facilitating the quantification of subjective attitudes and perceptions.

### 4. Analysis and Discussion:

This part talks about the level of use and the perception of the management of the life insurance companies towards the BSC as a performance measuring system. The respondents were requested to give their answer against the degree of use of BSC in assessing the performance of the insurance firms in relation to their level of satisfaction The descriptive analysis is done on the collected responses. The answers were noted in the scale of 1 to 5 where 1 means very small extent and 5 very large extent. All the selected insurers have been calculated in terms of the weighted average scores with weights of 5, 4, 3, 2 and 1 respective to very large extent, large extent, moderate extent, small extent and very small extent respectively.

Following hypothesis were framed and tested using descriptive analysis.

Hypothesis H1 “The usage of the balance scorecard for performance measurement of life insurance companies are different between the public and private sector companies”

The result of the descriptive analysis (Mann -Whitney U test) is reported below in Table 1:

**Table 1: Mann Whitney U-test (Test of difference: importance of management wrt use of balanced scorecard vs insurance companies**

Balanced scorecard	Public Sector Bank		Private Sector Bank				Total	WAS	p-values
	LIC	TOTAL	HDFC	SBI	ICICI	BAJAJ ALIANZ			
Financial	4.66	4.66	4.75	4.48	4.77	4.60	4.65	4.66	0.403 No sig diff found
Customer	4.62	4.62	4.80	4.48	4.63	4.63	4.63	4.63	0.403 No sig diff found

Internal Business Process	3.73	3.73	3.80	3.68	3.83	3.86	3.79	3.76	0.200	No sig diff found
Learning and growth	4.25	4.25	4.58	4.05	4.03	4.74	4.35	4.30	0.800	No sig diff found

The result failed to support the hypothesis that “The usage of the balance scorecard for performance measurement of life insurance companies are different between the public and private sector companies”. In all the four perspectives, the p -values are found to be more than the critical value at 5% level of significance. Thus, it can be concluded that the public and private sector life insurance companies are similar wrt the usage of the BSC for performance measurement. The respondents were found to have agreed at higher level wrt to extent of usage with four parameters namely financial perspective (weighted average score = 4.66); Customer” (Weighted average score = 4.63); learning and growth (weighted average score = 4.30) and internal business process (weighted average score= 3.76). The satisfaction of the respondents towards the use of parameters are found to be moderately higher.

#### 4.2 Performance Outcomes: Financial vs non-financial

The performance outcomes of implementing the balance scorecard measures in the life insurance companies are divided into two categories namely financial vs non-financial outcome. The financial outcomes are measured with the help of four statements and non- financial outcomes are measured with the help of five statements included in the questionnaire. The result of weighted average score is reported below in table no II:

**Table II.: Descriptive analysis- Financial vs non-financial outcomes**

Financial and non -financial outcomes	Very large Extent	Large Extent	Moderate Extent	Small Extent	Very Small Extent	WAS
<b>Financial outcomes</b>						
It is helpful in achieving long-term growth & profitability	95 (31.25)	91 (29.93)	73 (24.01)	34 (11.18)	11 (3.62)	3.74
It has enhanced the overall operational efficiency.	72 (23.68)	101 (33.22)	85 (27.96)	40 (13.16)	6 (1.97)	3.63
It has helped the company in increasing its market share.	67 (22.04)	116 (38.16)	65 (21.38)	51 (16.78)	5 (1.64)	3.62
It has resulted in enhancing performance & productivity.	67 (22.04)	97 (31.91)	93 (30.59)	38 (12.50)	9 (2.96)	3.58
<b>Non -financial Outcomes</b>						
It aligns mission, objectives & strategy	57	91	108	39	9	3.49

of organization	(18.75)	(22.93)	(35.53)	(12.83)	(2.96)	
It has helped in enhancing customer satisfaction.	62 (20.39)	107 (35.20)	94 (30.92)	35 (11.51)	6 (1.97)	3.61
It has improved organization system and Competencies	82 (26.97)	93 (30.59)	80 (26.32)	42 (13.82)	7 (2.30)	3.66
It has improved employee satisfaction.	70 (23.03)	106 (34.87)	78 (25.66)	42 (13.82)	8 (2.63)	3.62
It has pinpointed performance gaps and areas for development.	58 (19.08)	124 (40.79)	86 (28.29)	29 (9.54)	7 (2.30)	3.65

Resulted impact of use of BSC on the performance measurement was analyzed that with the use of BSC to check these four statements i.e., “It is helpful in achieving long-term growth & profitability” “It has enhanced the overall operational efficiency” “It has helped the company in increasing its market share” and “It has resulted in enhancing performance & productivity”. it is observed that under the financial outcomes it is helpful in achieving long-term growth & profitability with highest mean score (3.74) and least in helping company in increasing its market share with mean score (3.62). The impact of the BSC on performance measurement was assessed by analysing a set of five non-financial outcome statements. i.e., “It aligns mission, objectives & strategy of organization” “It has helped in enhancing customer satisfaction”. “It has improved organization system and competencies” “It has improved employee satisfaction” and “It has pinpointed performance gaps and areas for development”. It has pinpoint performance gaps and areas for development with highest mean score (3.65) and least in aligns mission, objectives & strategy of organization with mean score of (3.49) suggesting comparatively lower but still positive alignment with strategic integration.

#### **4.3 Influence of the use of balanced scorecard on the performance of life insurance business.**

The attitude of the respondents is then examined on the effects of the uses of the diverse perspective (financial and non-financial) of the balance scorecard on performance of the life insurance companies.<sup>24</sup> Key Result Areas (KRA's) are identified under four perspectives of the balance scorecard (Six each in every perspective) are included in the study namely customer perspective, financial perspective, internal business process and learning and growth. The performance of the life insurance companies is measured by two dimensions namely financial perspective and non-financial perspective.

The structural model is developed in the study to examine the relationship between the four perspectives of the life insurance companies and outcome measured in terms of financial and non-financial dimensions. The structural model is examined with the help of SEM analysis using SmartPLS software. Following hypothesis were framed and tested using SEM analysis:

H2a: “The financial perspective significantly influences performance outcomes of life insurance companies”

H2b: “Customer Perspective significantly influences the performance outcomes of life insurance companies”

H2c: “Internal business process perspective significantly influences the performance outcome of life insurance companies”

H2d: “Learning and growth perspective significantly influences the performance outcome of life insurance companies”

The result of the hypothesis testing using SEM is reported in following table III:

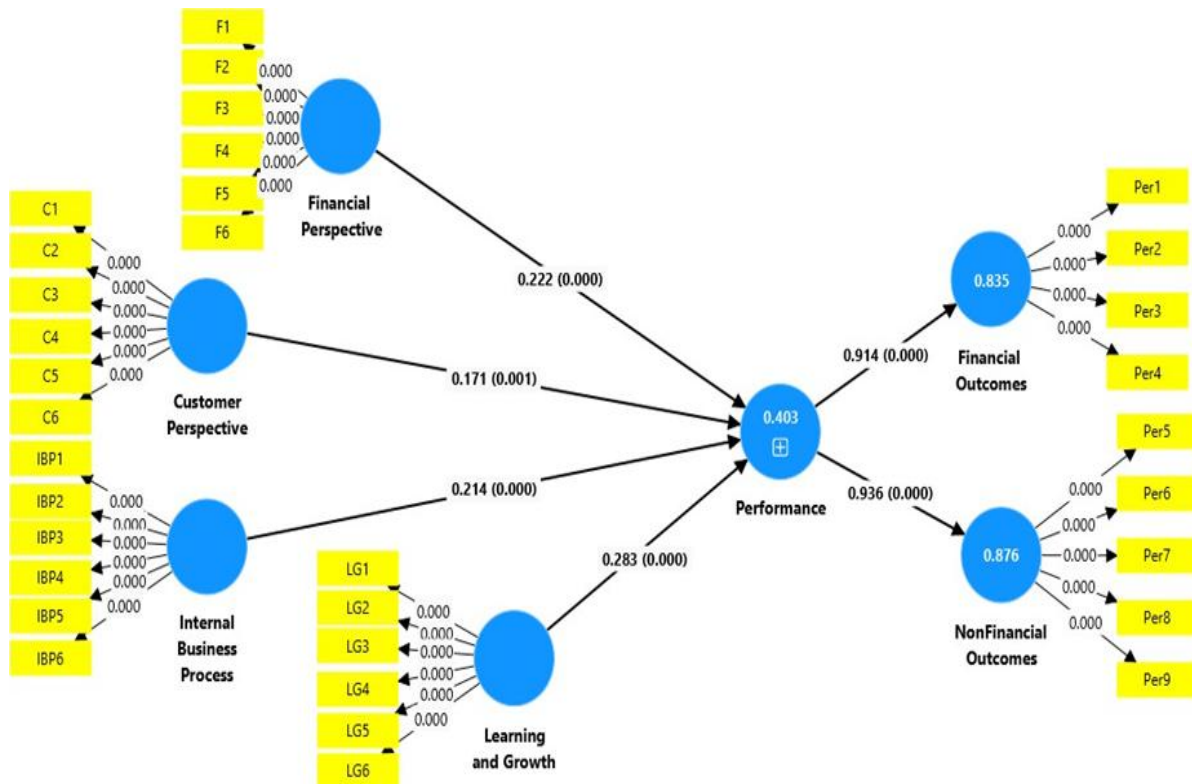


Table III: The result of SEM analysis:

Hypothesis	Path Coefficient	Standard Error	T stats	P values	R Square	Remark
Customer Perspective → Performance	0.173	0.051	3.360	0.001	40.3%	Supported
Financial Perspective → Performance	0.225	0.050	4.440	0.000		Supported
IBM → Performance	0.215	0.058	3.716	0.000		Supported
Learning and Growth → Performance	0.282	0.050	5.703	0.000		Supported

The SEM analysis supported all four hypotheses under Objective 2. The results show that the most positive and significant influence on the is produced by the learning and growth perspective. performance of life insurance companies ( $\beta = 0.282$ ,  $t = 5.703$ ), followed by the financial perspective ( $\beta = 0.225$ ,  $t = 4.440$ ). A major impact is also on the internal business process perspective (both have a significant impact: 0.215,  $t = 3.716$ ), but the customer perspective, although with the least impact, is also significant (0.173,  $t = 3.360$ ).

Overall, all Balanced Scorecard perspectives significantly influence both financial and non-financial performance, ensuring alignment with organizational objectives. The model's  $R^2$  value of 40.03% suggests a moderate explanatory power of the structural model.

**5. Conclusion:** It has concluded that public & private sector life insurance companies are similar wrt the usage of the balance scorecard perspectives for performance measurement.

Almost all life insurance companies exhibit similar degree of agreement regarding the usage of balanced scorecard's perspectives. Furthermore, it is observed that under the financial outcomes, it is helpful in achieving long-term growth & profitability and less in company increasing its market share. Under the non-financial outcomes, it is helpful in It has pinpoint performance gaps and areas for development with highest weighted average score) and least in aligns mission, objectives & strategy of organization. It is advisable to life insurance companies to focus on operational efficiency, improve digitalization, personalized plan, keep employees satisfied, motivated and retained. So balanced scorecard has emerged strategic tool of measurement, management of company's performance. The results of this study can also be applied to general insurance firms with minimal adjustments.

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