

COMPARING THE INTERNAL BUSINESS PROCESS OF BALANCED SCORECARD WITHIN THE BANKING SECTOR IN INDIA

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Abstract:

The significance of the Bank's Balanced Scorecard, that is to express the Integrated Business Process Perspectives, is established in this research paper. The goal is to assess and compare the major developments in public and private sector performance in India. The sample size consists of 10 banks in the public sector and 10 private banks. The research period consists of 10 consecutive financial years from 2010-11 to 2019-20. For each measure selected, the data were acquired from secondary sources and analysed by non-parametric testing using SPSS 22 following performance measurement scale. The research showed a substantial difference between public sector banks and private sector banks when comparisons were conducted between inter-banks; when inter-sector bench comparisons were conducted, no significant difference was discovered between public sector banks and banks in the private sector. In order to improve banks' performance in the internal business sector, banks must endeavour, through improved rapid, timely, convenient, accurate and cost-effective operational capacities, improve employee productivity and strive to achieve operational excellent performance through cost efficiency, cross-selling efficiency, CRM capacity, improve distributional channel capacity. This will leads to improvement in customer experiences with the banks thus leads to profitability.

Key Words: Balanced Scorecard, Public Sector Banks, Private Sector Banks, Internal Business Process Perspective, Operational Efficiency, Operational Capabilities, Operational Excellence

INTRODUCTION:

Competition is ferocious, deposits are decreasing, margins are narrowing, regulations are continuously upgrading, consumer preferences are shifting and technology is impacting each area of banking business. All these factors are distressing banking sector on a wide scale. Banks are thus required to shift their focus from outdated business models to newly innovated digital and technology based business models while retaining the important traditional aspects so that they can anticipate customer preferences and expectations and innovate themselves on products and services, business processes, people and other operational & infrastructural capabilities. At the same time they are required to be vigilant enough while spending on all these. Banks are under pressure to operate within their budgets and are required to create strategies for improving operational efficiency through reducing expenditure on unnecessary areas and spend wisely on essential expenditures such as on technology and automation, advertisement & promotional activities and on other necessary capabilities. Improved efficiency in business processes encourages a faster pace of growth in revenue streams of banks.

To measure the performance of any organization on financial and non-financial strategic aspects, Balanced Scorecard tool of Kaplan and Norton (1992) is a widely accepted and fruitful tool that measures the performance of any organization on four key strategic areas such as Financial, Customer, Internal Business Process Perspective and Learning & Growth Perspective.

Internal Business Process Perspective of Balanced Scorecard: This perspective focuses on identifying the critical business processes and competencies at which company must excel at to meet the objectives on financial and customer perspectives. Kaplan and Norton recommended to define a complete value chain that starts with the identification of innovative processes in which company will identify the emerging needs of the customers and then it will create those products and provide those services which will comply with the needs of customers.

Internal Business Process Perspective of banks aims at identifying the operational activities of the bank that affects the customer satisfaction and ultimately to financial performance. Customers always demands for innovative products and services that meets their expectations.. With the increasing demands of customers in digitalised banking, banks are required to improve their operational efficiency in delivering services to its customers. They need to introduce innovative products and services, technological up gradations in processes and innovative apps etc. on time. Excellency in business operations through effective utilization of intellectual capital with other

resources, decreased operating cost, gaining high productivity of employees, expanding distribution channels in the form of increase in branches, ATM's , POS terminals, E-kiosk etc., are highly recommended for banks and are main strategic focus areas on this perspective. At the same time they should try to reduce their marketing cost, operating cost, employees cost etc. Improvement in internal business operations will lead to highly satisfied customers with their retention with the bank for long term and this in turn will lead to sustain the financial performance and higher profitability. A bank must excel at services provided by them to survive in the competitive market.

REVIEW OF LITERATURE

To identify the research gap, different articles, research papers, books, reports, thesis etc. have been gone through. Some of them are as follows:

Wu et al. (2009) evaluated the performance of banks based on Balanced Scorecard using A Fuzzy MCDM Approach and ranked the four BSC perspectives of Balanced Scorecard in the order of their relative importance i.e. Customer, Finance, learning & Growth and internal process using FAHP process. Customer satisfaction, return on assets, earning per share, customer retention rate and profit per customer were found as top five evaluation indexes. U bank, C Bank and S bank respectively were ranked on the basis of performance using MCDM analytical methods. The authors suggested that it is not necessary that one performance evaluation index fits to all so it should be tailored as per the organizations goals as well as individual goals and future research should include other analytical methods to investigate the causal relationship among performance evaluation indexes of the BSC.

Sanjeev Kumar (2011) examined the awareness level and opinion of the bank management on existing and new performance measurement systems in Indian Banking Sector. The study also tried to know extent of usage of Balanced Scorecard in performance measurement systems in the Indian Banking Sector and examined the impact of economic liberalization on their performance. The study on internal business perspective revealed that maximum number of bankers considered various measures like service time, confidentiality of customer data and e-banking viz., ATM's, RTGS, ECS, EFT etc., response time, core banking solutions, aggressive marketing, new & differentiated products introduction etc. as important indicators under this perspective.

Ombuna et al. (2013), studied the impact of Balanced Scorecard Usage on the Performance of Commercial Banks and concluded that BSC and its implementation is positively correlated with organizations' mission & strategy and involvement of employees. BSC provides feedback on the internal processes and external outcomes

in order to continuously improve strategic performance. The effectiveness of BSC usage depends on organization dynamics and adoption of the manner of execution and monitoring and evaluation procedures. They recommended that banks should develop those products and services that have a competitive advantage and are able to satisfy the needs of customers.

Rameesha Kalra (2015) evaluated the performance of public and private sector banks on tangible as well as intangible aspects so that a comprehensive picture of business operation from quantitative and qualitative terms can be known. Findings of the study revealed that Public sector banks were ranked the highest than private sector banks in terms of internal business process perspective. Business per employee, deposits per employee and advances per employee was the highest for public sector banks while profit per employee and wage bills to expenses ratio was the highest of private sector banks. Public sector banks were suggested to improve their service quality and conduct surveys to identify service quality and customer satisfaction at regular intervals.

Al-Dweikat and Nour (2018) in their study identified the critical success factors of Balanced Scorecard at Jordanian Commercial banks and evaluated their effect on financial performance of banks. The results concluded that top management, strategic intent, HR aspects and systems & techniques are the critical success factors of Balanced Scorecard which positively effect and helpful in obtaining better financial performance at Jordanian Commercial banks. These factors were considered reliable and valid to achieve excellency in financial performance in the long run.

Rashmi and Bhojanna (2020) in their study tries to understand how BSC is developed and applied in the assessment of Canara Bank 's success in Bangalore City. Using the Kaplan and Norton concepts, they measured the bank's performance between 2016-2019. The study endorsed the relationships between cause and effect between the non-financial and financial dimensions of the BSC. It also contributed to knowing how banks that use the BSC for their success and how they can turn the strategic vision into potential results due to lack of research work in this domain in the banking sector.

RESEARCH GAP

Above studies reveal that internal business process perspective is the driver to achieve success on customer and financial perspective of Balanced Scorecard. It has been found that no specific study on this particular perspective of Balanced Scorecard have been conducted in Indian context using the selected study years and selected sample size.

RESEARCH METHODOLOGY

This research paper intends

1. to highlight the significance of Internal Business Process Perspective of Balanced Scorecard.
2. to evaluate, ascertain and compare the significant difference in the performance of Public and Private Sector Banks on Internal Business Process Perspective.
3. to suggests for improvement in the performance of Internal Business Process Perspective of the Indian Banks.

Sample Size: - The study has been conducted by taking a sample of 10 Public and 10 Private Sector Banks which have been selected on the basis of highest market capitalization in BSE Sensex. 10 Public Sector banks are: SBI, Bank of Baroda, Punjab National Bank, IDBI bank, Canara bank, Bank of India, Indian Bank, Central bank of India, Union Bank of India and Syndicate bank. 10 Private Sector Banks are HDFC Bank, ICICI Bank, Axis Bank, Indusind Bank, Yes Bank, Kotak Mahindra Bank, Federal Bank, City Union Bank, RBL Bank and Karur Vysya Bank.

Study Period: - Financial years from 2010-11 to 2019-20 have been taken as a period of the study.

Data Collection: Data for the study have been collected from secondary sources which primarily consists of annual reports of the sampled banks, Business responsibility reports, sustainability reports, various publications of RBI, different websites, journals, articles, reports etc.

Hypotheses of the Study: This research paper emphasis on evaluation and comparison of performance of banks on internal business process perspective so following null hypothesis have been framed:

Inter-Bank Hypothesis

H0-There is no significant difference in the performance on Internal Business Process Perspective among Public Sector Banks and among Private Sector Banks.

Inter-Sector Hypothesis

H0- There is no significant difference in the performance on Internal Business Process Perspective between Public and Private Sector Banks.

Data Analysis Procedure, Tools and Techniques:

To analyse and compare the performance of Public Sector Banks and Private Sector Banks on Internal Business Process Perspective. 8 measures under 4 strategic objectives related to internal business processes have been ascertained. Performance on each 8 measures for all the years has been compiled separately. Keeping in view the lowest and the highest values of performance, score scale has been finalised with a total score of 400 (Maximum score for each measure is 50 multiply by 8 measure) for Internal Business Process Perspective. Performance Score has been then assigned according to performance in each year. Total Score in each year has been considered for inter-bank comparison and average score has been used for inter-sector comparison. The study uses non-parametric methods for testing the hypothesis which primarily includes the Kruskal Wallis Test and Mann-Whitney U Test that have been applied using SPSS 22.

STRATEGIC OBJECTIVES AND MEASURES OF THE STUDY

Strategic Objectives

Measures

**Improving Operational Excellence
Improving Operational Capabilities**

Growth in Total Business
Business Per Employee
Profit Per Employee

Reducing Cost of Business Operations

Ratio of Wage Bills to Total Cost
Ratio of Intermediation cost to Total Assets
Advertisement Cost to Total Business Volume Ratio

Increasing Geographical reach for customers

Growth in ATM's
Growth in Branches

LIMITATIONS OF THE STUDY:

1. The study is purely based on secondary data. To measure the operational efficiency of banks primary data should have been incorporated into the study. It is being considered here that growth in total business is due to improvement in the operational efficiency.
2. Intra-bank comparison on Internal Business Process Perspective of each bank is excluded from this research study to avoid the excessive length of the paper.

DATA ANALYSIS AND INTERPRETATION

Inter-bank and Inter Sector Comparison of Public Sector Banks and Private Sector Banks on Internal Business Process Perspective

This section of the paper reveals the analysis of inter- bank comparison of Public Sector Banks and Private Sector Banks in India on Internal Process Perspective of Balanced Scorecard. For this, performance score of each bank on all selected measures of Internal Business Process Perspective has been calculated based on their performance in each year. Score has been summed up and used for statistical inferences. For inter- sector analysis and comparison, average score of each bank for last 10 years on Internal Business Process Perspective has been used for drawing statistical inferences.

1.1 Inter-Bank Comparison of Performance of Public Sector Banks on Internal Business Process Perspective

Table 1: Performance Score of Public Sector Banks on Internal Business Process Perspective

Name of the Bank	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
State Bank of India	210	240	230	250	260	250	270	270	280	290
Bank of Baroda	190	180	240	240	270	270	270	280	240	260
Punjab National Bank	200	220	220	260	260	250	250	250	250	260
IDBI Bank	270	270	280	260	270	250	240	240	220	200
Canara bank	180	220	220	240	230	230	270	280	260	250
Bank of India	220	230	220	230	230	260	280	240	240	250
Indian Bank	190	180	200	210	230	220	230	220	220	230
Central Bank of India	200	200	220	180	210	230	210	220	200	200
Union Bank	200	210	230	210	230	250	250	250	240	270
Syndicate Bank	190	200	190	190	220	240	240	250	220	210

Table 2: Mean ranks of Public Sector Banks

Bank	SBI	Bank of Baroda	Punjab National Bank	IDBI Bank	Canara Bank	Bank of India	Indian Bank	Central Bank of India	Union Bank	Syndicate Bank	Total
N	10	10	10	10	10	10	10	10	10	10	100
Mean Rank	72.15	62.8	60.05	67.75	55.3	56.4	27.95	21.3	50.6	30.7	-

Table 3: Results of Kruskal Wallis test for Public Sector Banks

	Chi-Square	Degree of freedom	p-value
Public Banks	33.882	9	0

MAJOR FINDINGS

Table 1 and 2 shows that

1. State Bank of India followed by IDBI and Bank of Baroda performed the best on Internal Business Process perspective as the mean ranks for SBI, IDBI and BOB is the highest among all public sector banks i.e. 72.15, 67.75 and 62.8 respectively (As shown in Table 2). This was primarily due to Banks's Excellency in business operations, good operational capabilities through improved productivity, their efficiency in reducing cost of business operations and enhanced reach to customers through expansion of ATM's and branches in multiple locations which enabled them to score high in almost all the years than other public sector banks as shown in Table 1.
2. Performance of Indian Bank and Central Bank of India was the poorest on Internal Business Process Perspective as the score gained by these bank were low than other public sector banks in almost each year (as shown in Table 1) so the mean rank was the lowest i.e. 27.95 and 21.3 respectively(as shown in Table 2). This was primarily due to poor operational efficiency of these banks which resulted in poor customer experiences and low growth in business, high cost of business operation particularly on employees and far reach to customers due to low number of ATM's and branches than competitive banks.
3. Table 3 shows that since p-value is 0.000, which is less than 0.05. This implies null hypothesis is rejected at 5 % level of significance. Hence, there is a significant difference in the performance of all the ten Public Banks over the mentioned financial years.

SUGGESTIONS

1. Public sector banks should try to improve their internal business operational efficiency through providing prompt, convenient and quality services.
2. Banks should try to improve and ensure the efficiency at front and backend at branch level so that operational capabilities and productivity of employees can be improved.

3. To attract new customers, banks should adapt new attractive advertisement and marketing activities for the promotion of their products and services.
4. Banks should expand their network in different locations through expansion of ATM's & Branches so that easy reach to customers can help in improving the business and profitability.

1.2 Inter-Bank Comparison of Performance of Private Sector Banks on Internal Business Process Perspective

Table 4: Performance Score of Private Sector Banks on Internal Business Process Perspective

Name of the Bank	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
HDFC Bank	130	150	170	170	170	190	240	240	250	270
ICICI Bank	220	220	210	230	250	250	280	300	290	270
Axis Bank	200	210	210	240	250	250	260	290	290	250
IndusInd Bank	210	180	200	210	210	220	200	200	220	210
Yes Bank	220	220	270	280	250	260	230	250	240	220
Kotak Mahindra Bank	110	90	160	130	140	170	150	150	190	180
Federal Bank	180	200	190	190	210	220	190	190	210	220
City Union Bank	200	200	180	190	190	200	180	180	200	190
RBL Bank	150	160	170	170	200	220	200	210	220	220
Karur Vysya Bank	190	180	210	200	210	200	180	190	180	190

Table 5: Mean ranks of Private Sector Banks

Bank	HDFC Bank	ICICI Bank	Axis Bank	IndusInd Bank	Yes Bank	Kotak Bank	Federal Bank	City Union	RBL Bank	Karur Vysya	Total
N	10	10	10	10	10	10	10	10	10	10	100
Mean Rank	52	82	76.75	51.9	80.25	9.65	44.3	33.05	39.45	35.65	-

Table 6: Results of Kruskal Wallis test for Private Sector Banks

	Chi-Square	Degree of freedom	p-value
Private Banks	59.086	9	0

MAJOR FINDINGS

Table 4 and 5 shows that

1. ICICI Bank followed by Yes Bank and Axis Bank performed the best on Internal Business Process Perspective of Balanced Scorecard as the score of these banks was higher than other private sector banks in almost each year (as shown in Table 4) and the mean rank is the highest i.e. 82, 80.25 and 76.25 respectively (as shown in Table 5) for these three banks. This was primarily due to better operational efficiency, high productivity and operational capabilities, better connectivity in all locations through multiple ATM's and branches of these banks.
2. Kotak Mahindra Bank and City Union Bank were the poor performers among private sector banks on Internal Business Process Perspective as the mean rank is the lowest i.e. 9.65 and 33.05 respectively. Poor operational efficiency, low productivity of employees, high cost of business operations are the primary reasons for their poor performance due to their low score on this perspective in each year as compared to other private sector banks(as shown in Table 4)
3. Table 6 shows that since p-value is 0.000, which is significantly less than 0.05. This implies null hypothesis is rejected at 5 % level of significance. Hence, there is a significant difference in the performance of all the ten Private sector Bank over the mentioned financial years.

SUGGESTIONS

1. Private Sector Banks should control the cost of their business operations and other infrastructural costs so that the profit margin can be improved.
2. Although private sector banks are more inclined towards adopting technological up gradations fast but at the same time they should ensure that employees are trained enough to serve customers so that operational efficiency and capabilities can be improved.

1.3 Inter-Sector Comparison between Public Sector Banks and Private Sector Banks on Internal Business Process Perspective

Table 7: Average Performance Score of Banks on Internal Business Process Perspective

Public Sector Banks	Average Score	Private Sector Banks	Average Score
State Bank of India	255	HDFC Bank	219
Bank of Baroda	244	ICICI Bank	252
Punjab National Bank	242	Axis Bank	245
IDBI Bank	250	Indusind Bank	206
Canara bank	238	Yes Bank	244
Bank of India	240	Kotak Mahindra Bank	147
Indian Bank	213	Federal Bank	200
Central Bank of India	207	City Union Bank	191
Union Bank	234	RBL Bank	192
Syndicate Bank	215	Karur Vysya Bank	193

Table 8: Sector Mean Ranks

Sector	Private	Public	Total
N	10	10	20
Mean	8.25	12.75	-

Table 9: Results of Mann-Whitney U test

	Mann-Whitney U	Z-score	p-value
Score	27.5	-1.701	0.089

MAJOR FINDINGS

1. Table 8 shows the mean rank of Public Sector Banks is the highest i.e. 12.75 than Private Sector Banks which shows the best performance on internal business process perspective. This is primarily due to more convenient geographical reach to customers of public sector banks through availability of ATM's and branches in all the locations and low operational cost of business operations.
2. Table 9 shows that since p-value is 0.089, which is greater than 0.05. This implies that null hypothesis is accepted at 5% level of significance. Hence there is no significant difference in the performance of both public and private sector banks over the mentioned financial years based on Internal Business perspective.

CONCLUSION AND RECOMMENDATIONS

Internal Business Process Perspective of Balanced Scorecard helps in identifying the operational efficiency, operational capabilities and operational excellence of any bank. Performance on this perspective directly affects the performance on customer and financial perspective. Better performance on this perspective directly leads to highly satisfied customers which are retained by the banks for the long term thus leads to improved business growth and financial performance. Outstanding operational efficiency through improved speed, timely, prompt, convenient, accurate and cost efficient services, achieving proficiency in operational capabilities through improved productivity of employees, achieving operational excellence through cost efficiency, cross sell efficiency, CRM capacity, improved distributional channel capacity are the key strategic drivers for any bank which leads to improvement in customer experiences with the banks thus leads to profitability.

It is finally concluded here that a significant difference has been found among public sector banks and among private sector banks when an inter-bank comparison has been drawn and no significant difference has been found between public sector banks and private sector banks when an inter-sector comparison has been drawn. To improve the performance of banks on internal business process perspective following suggestions are being given below:

- Banks should ensure that the delivery of their products and services is done with a greater accuracy with quality and diversified portfolio using the upgraded technology and automations with trained and updated and trained manpower so that operational efficiency can be enhanced.
- Investment in technology and automations, expansion of branches, ATM's, e-kiosks and on other operational & infrastructural activities should be done keeping in view the cost involved so that cost efficiency is achieved and profitability is not affected to a great extent.
- Banks should ensure the effectiveness of the expenses done for the promotion and advertisement of bank's product and services.

- To improve the internal operational efficiency and for effective customer experiences, banks should increase the adoption of artificial intelligence enabled digital transformation at front and backend for smooth customer identification and their authentications, simulating live employees through chatbots, voice assistants etc., deepening relationship with customers and for providing personalized insights and recommendations.
- Banks should focus on realignment of their business through leaving business lines with low margins and move on into cost effective business lines which requires minimum resources and provide opportunities to differentiate them from competitors.
- Banks should try to minimize the process cost through reducing unit cost to value ratio of each transaction and activity such as cost of opening any account of handling of any type of transaction. This will require banks to continuously monitoring, analysing, mapping, benchmarking and rethinking the back - office processes for process improvement.
- To improve operational capabilities, banks should try to improve employee productivity with automation tools which will enabled bank to handle more activities and more transactions in minimum time with less no. of employees. To improve the employee's productivity banks should create performance management techniques like defining the expectations from a particular employee or create scorecards for their performance. They should improve the reward and incentives system to motivate them and provide better training facilities and supervision.
- In a current scenario, to improve the operational efficiency, adopting new technology and automation in banking sector is the need of the hour. For this banks are required to have applications which customer can use on its own and obtain information without involving staff efforts, to use technologies which reduce time for obtaining and providing information by employees and have automated business processes to work more quickly and efficiently.

REFERENCES

1. Al-Dweikat, Moh. I. N. and Nour, Moh. I. (2018), Balanced Scorecard Critical Success Factors of Jordanian Commercial Banks and its effect on Financial Performance. *Accounting and Finance research*. 7(3). 146-153.
2. Arunmozhi, M. (2019) An easy guide to understand Research Methodology, A simplified approach of Research Methods and Techniques, Institute of Management Development and Research.
3. Kalra, R. (2015). A study on the Performance Evaluation of Selected Public and Private Sector Banks in India using Balanced Scorecard Approach". *A Doctoral thesis submitted to Banasthali University, Banasthali under the supervision of Dr. Harsh Dwivedi*.
4. Kaplan, R.S. & Norton, D.P. (1992). The Balanced Scorecard – Measures that Drive Performance. *Harvard Business Review*. 70(1). 71- 79.
5. Kumar, S. (2010), Performance Measurement Systems in Indian Banking Sector, A Doctoral thesis submitted to Punjabi University, Patiala, under the supervision of Dr. Manjit Singh.
6. Ombuna, D. S., Omido, K., Garashi, H. M., Odera, O. & Okaka, O. (2013). Impact of Balanced Scorecard Usage on the Performance of Commercial Banks. *International Journal of Information Technology and Business Management*. 10(1). 40-48.
7. Rashmi Akshay Yadav., & Bhojanna, U. (2020). Evaluation Methods for Bank Performance Using Balanced Scorecard – A Qualitative Study In Bangalore City. *Aut Aut Research Journal* . 11(9). 173-186
8. Wu, H.Y., Tzeng, G. H. & Chen, Y.H. (2009). A Fuzzy MCDM Approach for Evaluating Banking Performance Based on Balanced Scorecard. *Expert Systems with Applications*. 36(6). 10135-10147.