



BUSINESS PROCESS REENGINEERING IN COMMERCIAL BANKS A CASE STUDY OF ANDHRA BANK

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ABSTRACT

Competition, globalization and information technology gave rise to serious transformation in the world of business and the important factors of transformation are the customers' needs, choices, preferences and awareness. Business Process Reengineering (BPR) is a "transformation" as opposed to 'change' that alters the basic rhythm and character of the organization. In the banking sector, High – technology banking via information technology is revolutionizing relationship between customers and financial institutions emphasizing re-engineering. The purpose of this paper is to examine the role and impact of BPR for which Two structured Questionnaires are designed. The data was analysed basing on results developed by SPSS software. The findings are (1) the prime objective of BPR in Andhra Bank was to reduce the process time in business operations and to strengthen the bank, (2) the customers and employees favoured implementation of BPR. It can be concluded that BPR as it is practiced is understood in narrow sense as a mere up gradation of technology. Any change in technology should be accompanied by change in human attitude and values as BPR is not a one-time solution rather it is a continuous process of screening and re-engineering to bring about excellence in the service delivery to stakeholders.

Introduction

“The old order changeth, yielding place to new. The only certainty in the world is that there will be change”

Business Process Reengineering (BPR) concerns the fundamental rethinking and radical redesign of a business process to obtain dramatic and sustained improvements in quality, cost, service, lead time, flexibility and innovation. BPR focuses on the whole process starting from product conceptual stage to final product design. It provides the opportunity to reengineer the process or to reduce radically the number of activities it takes to carry out a process with the help of advanced Information Technology (IT). In a way BPR is a "transformation" as opposed to 'change' that alters the basic rhythm and character of the organization.

In the world of business the changes to a large extent are caused by economic recession and market forces of demand and supply. In addition, Competition, globalization and information technology gave rise to serious transformation in the world of business and most importantly the customers' needs, choices, preferences and awareness has become an important factor in process of change as the market has changed from sellers' market to buyers' market. Similarly the business arena in the service delivery industry like banking sector local or global is replete with banks that have undergone dramatic changes in recent times. The environment which engulfs



the banking sector on one side provides the resources, opportunities for its existence and on the other hand imposes determinants what a bank can or cannot do. If a bank is to survive, grow and remain prosperous, it must adapt itself to the demands of the changing environment. All of these changes have made it imperative for the banking sector to begin to rethink new, better and more effective ways of doing business for a prosperous existence. With this perspective now the emphasis is laid on Business Process Re-engineering by the banks to improve organizational performance with High-technology banking via information technology to revolutionize relationship between customers and financial institutions and also to respond to the challenges like globalised business, spread clientele, reposition itself to meet and exceed customer needs of fast funds movement across the globe. The BPR is not a one-time solution rather it is a continuous process of screening and re-engineering to bring about excellence in the service delivery to stakeholders. The Andhra Bank has started re-engineering from the early stages in accordance with the changes in banking sector in India. It re-engineered its operations in order to survive and remain competitive in the industry.

Objectives of the Study:

The objectives of the present study are as follows:

1. To examine the role of BPR in Andhra Bank.
2. To Study the impact of BPR on financial performance of Andhra Bank.
3. To find out the Impact of BPR on Employees of Andhra Bank.
4. To Evaluate the Impact of BPR on Customer satisfaction in Andhra Bank.

Research Methodology:

Primary data is collected from sample customers and employees from sample branches of Andhra Bank of Visakhapatnam based on stratified sampling technique. Data has been collected using two different sets of structured questionnaires for employees and customers in order to study the impact of Business Process reengineering in their banks. BPR is implemented in Andhra Bank in the year 2000-2001, a comparative study between the Pre BPR period (1992-2001) and Post BPR period (2001-2011) is taken up. The total study period is 20 years. The sample 35 branches were selected in and around Visakhapatnam district which consisted of varying number of employees. The senior employees in interviews gave detailed information regarding changes that occurred due to implementation of BPR at Andhra Bank. On an average 125 sample employees and 250 sample customers filled the questionnaires. The tools used for analysis of the study can be broadly classified as descriptive and inferential. In descriptive analysis growth performance of the bank for pre and post re-engineering periods are calculated by using Simple statistical techniques like count, percentages, mean, weighted averages etc. An inferential analysis for the study has been carried out by using ratios and paired T-test. Statistical package for Social Sciences (SPSS) is used to generate necessary statistical tests.



Role of BPR at Andhra Bank

Banking industry in India is passing through a metamorphosis. In 2000-2001 large scale induction of technology, liberalization, deregulation, etc., have widened the horizons of banking industry. BPR aimed at value enhancement and redefining the way how banking is transacted. The BPR at Andhra Bank started in the year 2000-2001 to stay tuned to the changing times. The prime objective of BPR in Andhra Bank was to reduce the process time in business operations and to strengthen Bank's ability to acquire new customers, increase customer satisfaction through world class service quality by Reducing the layers of decision making, Empowering staff at all levels to take Customer focused decisions near the customer locations and minimize the response time across the counter, Stepping up operational efficiency to increase business volumes, productivity and profitability. Thus quality in all its pursuits with enhancement of stakeholders' value.

The re-engineering process started with voluntary retirement scheme in Andhra Bank. Under review the bank restructured its controlling offices through a process of merging contiguous offices which was done in tune with suggestions made in the study report of the National Institute of Bank Management and also by a Management consultant from the Administrative Staff College of India.

The Board and Management of the bank gave considerable importance to improve the ability to identify, measure, monitor and control the overall level of risks undertaken to realize the corporate objective of providing excellent customer service with an ultimate goal of "Customer Delight", the following important measures have been initiated. Installation of a toll free telephone at Head Office. Extended hours of business and Sunday banking in selected branches. "Anywhere Banking" through intra city connectivity among selected branches. "Lobby Banking", "Corporate Terminals" and other IT based services at important centers.

The bank has a carefully formulated scheme of delegation of powers for various functional layers by reviewing the internal control systems on an 'on-going' basis which endeavours to attune to the changing needs. Credit risk management committee to handle credit risk management process which is articulated in the Bank's Loan Policy. A credit committee is set up at corporate level and at zonal offices to frame the credit sanction framework for reporting and evaluating the quality of credit decisions of functional authorities. Bank has a comprehensive and structured risk scoring/ rating system to measure the Credit risk. Loan Review mechanism is an effective tool for constantly evaluating the quality of loan book and to bring about qualitative improvements in credit administration. Asset-Liability Management Committee is a top operational unit for managing the balance sheet with the performance/ risk parameters laid down by the board.

In light of the market dynamics, the bank initiated separate 'Profit Centre' to handle its credit card business. Facilities to card holders have been taken which include issuance of Electronic Card, Revolving Credit Facility, Online billing. For out sourcing in line with market trends the existing electronic data capture (EDC)



terminals is substituted with Electronic Point of Sale (EPOS). Major challenges like Expansion of quality loan assets in the aggressive and competitive loan market, are met with different strategies. Empowerment of officials with delegated powers, focused training in credit management, skill development in appraisal and post disbursement follow up and above all totally motivated commitment across all management tiers will work for expansion of credit and quality loan assets.

Customers have become computer savvy. Banks which can provide IT based services are being preferred by customers. The adaptation of technology in banking extended the 'reach' and also enabled the banks to maneuver the constraints of time and venue in extending banking services. Bank introduced 'Electronic Funds Transfer (EFT) which helps in reducing the process time in business operations. 'Anywhere Banking' through technology up gradation and linkage of large number of branches would be the main thrust area.

The process of globalization and liberalization accelerated the pace of growth of technology and competitive environment, where mobilization of resources, retaining and expanding customer base has become a major challenge and stupendous task. Computerization of branches, Satellite Networking through VSAT and leased lines for cluster approach to build effective management information system (MIS) and Decision support system which will speed up decision making process, effective monitoring and better customer service. Looking to the challenges ahead the bank has taken steps to provide advanced training to its executives at various levels, including Branch incumbents to improve the professional skill in technology usage. Thus the bank in the implementation years has concentrated on internalization of out-growth strategy with particular reference to empowerment of staff.

Impact of BPR on Financial Performance of Andhra Bank.

The financial performance factors such as Growth, Productivity, Quality of Assets and Profitability of Andhra bank showed significant difference between the pre and post BPR periods. From the Paired T-Test computed the t-statistics and the probability value (p-value), it is observed that there is significant difference between the pre and post re-engineering periods for all the performance factors, all the p-values is below the paired t-test value 0.05. Except for Capital adequacy ratio and Net Interest Income as a percentage of Total Assets in Andhra Bank, with the p-value 0.264 and 0.304 respectively, which are above the paired t-test value 0.05 implying that there is no impact of BPR.



Table 1 Financial Performance Of Andhra Bank.

| | Avg. growth rate in Pre-BPR | Avg. growth rate in Post-BPR | P-value |
|--|-----------------------------|------------------------------|--------------|
| Growth of Andhra Bank | | | |
| No. of offices | 0.69 | 4.35 | 0.000 |
| Number of employees | -0.63 | 0.99 | 0.005 |
| Employees per branch | 15 | 10 | 0.000 |
| Net profit in crores | -157.25 | 23.22 | 0.000 |
| Deposits in crores | 17.22 | 17.36 | 0.000 |
| Advances in crores | 15.29 | 22.55 | 0.001 |
| Business in crores | 16.66 | 19.82 | 0.001 |
| Productivity in Andhra Bank | | | |
| Business per employee | 14.5 | 18.42 | 0.000 |
| Profit per employee | -148.65 | 22.06 | 0.000 |
| Deposit per employee | 19.20 | 14.60 | 0.000 |
| Advances per employee | 18.00 | 21.36 | 0.001 |
| Business per branch | 15.70 | 12.70 | 0.000 |
| Deposits per branch | 16.50 | 12.20 | 0.000 |
| Advances per branch | 16.10 | 17.35 | 0.000 |
| Quality of Assets | | | |
| Gross NPA's as percentage to Advances | -9.60 | -9.56 | 0.000 |
| Gross NPA's as percentage to Total Assets | -9.45 | -16.38 | 0.000 |
| Net NPA's as percentage to Advances | 1.37 | -6.20 | 0.000 |
| Net NPA's as percentage to Total Assets | -2.20 | -3.71 | 0.000 |
| Profitability Of Andhra Bank | | | |
| Capital adequacy ratio | 25.15 | 1.86 | 0.264 |
| Operating expenses as a percentage to Total Assets | -5.67 | -2.71 | 0.000 |
| Interest income as percentage of Total Assets | -0.20 | -2.07 | 0.003 |
| Interest expended as percentage to Total Assets | -0.23 | -2.82 | 0.000 |
| Net interest income as percentage to Total Assets | 2.95 | 1.32 | 0.304 |
| Gross profit/loss as percentage of Total Assets | -9.72 | 3.57 | 0.006 |
| Net profit/loss as percentage of Total Assets | -164.14 | 4.00 | 0.013 |



Impact Of BPR On Employees and Customers Of Andhra Bank

Perception of employees: From the Table 2, the employees perceived “Speedy operations” as prime objective of the bank followed by cost reduction in operations, accuracy of transactions etc., which shows that employees are doing the job mechanically and they have shown this by ranking customer service as eight. The customer also responded that the over the counter services at the bank is poor as the employee are busy in clearing jobs than responding to customers.

Table 2 Objectives of BPR – employee’s perceptions

| S No | Particulars | Weighted Score | Average Score | Rank |
|------|-------------------------------|----------------|---------------|------|
| 1. | Cost reduction in operations | 958 | 7.7 | 2 |
| 2. | Accuracy of transactions | 953 | 7.6 | 3 |
| 3. | Speedy operations | 1020 | 8.2 | 1 |
| 4. | Better customer services | 719 | 5.8 | 8 |
| 5. | Adoption of latest technology | 908 | 7.3 | 4 |
| 6. | Reducing cost of employees | 651 | 5.2 | 9 |
| 7. | Reduction of staff | 475 | 3.8 | 11 |
| 8. | Easy rectification of errors | 592 | 4.7 | 10 |
| 9. | To satisfy existing customers | 746 | 6.0 | 6 |
| 10. | To create new customers | 841 | 6.7 | 5 |
| 11. | To win over competitors | 738 | 5.9 | 7 |

Source: Primary data

Employee Problems with BPR: From the table 3, the prime problem of BPR is lack of trained personnel (8.48), indicating that the banks need to have no focused training programmes for the personnel to increase their efficiency so as to adopt themselves with the BPR initiatives.

Table 3 Problems of BPR

| S no | Particulars | W.S | A.S | Rank |
|-------|-----------------------------------|------|------|------|
| 1. | Lack of trained personnel | 1061 | 8.48 | 1 |
| 2. | Loss of brain power | 798 | 6.38 | 4 |
| 3. | Security concern problems | 845 | 6.76 | 2 |
| 4. | Machine failures | 749 | 5.99 | 5 |
| 5. | Data integrity problems | 821 | 6.56 | 3 |
| 6. | Threat to the status of employees | 730 | 5.84 | 7 |
| 7. | Threat to ego for employees | 626 | 5.00 | 9 |
| 8. | Threat to security for employees | 666 | 5.32 | 8 |
| 9. | Electricity disturbances | 749 | 5.99 | 5 |
| Total | | | 6.26 | |

Source: Primary data WS = weighted score AS = average score R= rank

Objectives of BPR – Customer Perception: From the table 4, the customers gave top rank to “Anywhere anytime Banking”(12.4%) as the prime objective of BPR



followed by faster and efficient customer service and reducing transaction costs showing that Customers have become computer savvy and prefer IT based services.

Table 4 Objectives of BPR – Customer Perception

| S no | Particulars | Percentage | Rank |
|-------|--|------------|------|
| 1. | Anywhere anytime Banking(ATM) | 12.4 | 1 |
| 2. | Faster and efficient customer service | 10.8 | 2 |
| 3. | Reducing the operational expenses | 8.8 | 5 |
| 4. | Reducing transaction costs | 9.2 | 3 |
| 5. | To enhance operational efficiency | 8.6 | 6 |
| 6. | To meet the heightened expectations of customers | 5.4 | 10 |
| 7. | To focus on the market | 5.1 | 11 |
| 8. | To focus on cross selling of products | 4.3 | 12 |
| 9. | Offering multiple business delivery channels | 6.2 | 9 |
| 10. | Centralizing the bank end processes | 6.7 | 8 |
| 11. | To enhance quality standards of customer service | 6.7 | 8 |
| 12. | Speedy operations | 8.9 | 4 |
| 13. | To create new customers | 6.9 | 7 |
| Total | | 100.0 | |

Source: Primary data

Customer Problems with BPR: From the table 5, the prime problem faced by the customers is "inconvenience due to machine failures (5.93)" followed by lack of computer knowledge (4.48), showing an obstacle to the bank for spreading clientele and reposition itself to meet customer needs of fast funds movement across the globe.

Table 5 Problems of BPR in Banks

| S no | Particulars | WS | AS | Rank |
|------|--|------|------|------|
| 1. | Security | 938 | 3.75 | 6 |
| 2. | Inconvenience due to machine failures | 1483 | 5.93 | 1 |
| 3. | Lack of computer knowledge | 1121 | 4.48 | 2 |
| 4. | Imposing service charges | 1068 | 4.27 | 3 |
| 5. | Loosing personal contact with Bank staff | 944 | 3.77 | 5 |
| 6. | Electricity disturbances | 745 | 2.98 | 7 |
| 7. | Absence of guidance on special issues | 955 | 3.82 | 4 |

Source: Primary data WS =Weighted score AS=Average score R=Rank

Average time taken for banking transactions before and after BPR: From the Table 6, the BPR has resulted in saving time in all the services rendered by the bank. The paired sample test showed a strong positive correlation. The descriptive statistics for pre and post BPR periods - the significance (2-tailed) value (0.000) is less than



0.05 in all the transactions, proving that there is a significant difference between pre- and post-test scores showing the achievement of prime objectives-speedy operations, faster and efficient customer service.

Table 6 Paired Sample Test for banking transactions

| S no | Transaction | Before BPR (min) | After BPR (min) | Time saved (min) | Corr | mean | Std. dev | T | Sig(2-tailed) |
|------|--------------------------------------|------------------|-----------------|------------------|------|------|----------|-------|---------------|
| 1. | Cash withdrawal | 24 | 12 | 12 | 0.5 | 0.9 | 0.6 | 23.14 | 0.000 |
| 2. | Withdrawal through cheques | 24 | 14 | 10 | 0.5 | 0.9 | 0.6 | 23.14 | 0.000 |
| 3. | Deposit of cash | 23 | 15 | 8 | 0.4 | 0.9 | 0.7 | 20.69 | 0.000 |
| 4. | Time spent in opening a new account | 30 | 19 | 11 | 0.5 | 0.8 | 0.7 | 19.71 | 0.000 |
| 5. | Obtaining demand draft or pay order | 28 | 19 | 9 | 0.4 | 0.9 | 0.8 | 19.08 | 0.000 |
| 6. | Time spent on updating the pass book | 27 | 15 | 12 | 0.3 | 1.0 | 0.8 | 19.26 | 0.000 |
| 7. | Clearance of local cheques | 4days | 2days | 2days | 0.4 | 0.1 | 0.7 | 26.36 | 0.000 |
| 8. | Clearance of outstation cheques | 13days | 7days | 6days | 0.3 | 1.4 | 0.7 | 32.24 | 0.000 |

Source: Primary data

Impact of BPR: From the table 7, the impact of BPR is high on bank performance as indicated by both financial and operation indicators and also by the employees and customers.

Table 7 Impact of BPR

| S no | Particulars | Employees Average Score | Employees Rank | Customers Average Score | Customers Rank |
|------------------|---------------------|-------------------------|----------------|-------------------------|----------------|
| 1. | On customers | 4.35 | 2 | 4.16 | 3 |
| 2. | On employees | 3.70 | 3 | 4.32 | 2 |
| 3. | On bank performance | 4.58 | 1 | 4.49 | 1 |
| Weighted Average | | 4.21 | | 4.32 | |

Source: Primary data

Customer Orientation: 79 percent of customers responded that the BPR initiatives were customer oriented showing that Bank acquired customer satisfaction through service quality. 21 percent of negative responses shows that bank has to strengthen quality services by overcoming problems faced by the customers.

**Table 8 Customer Orientation**

| S.No. | Particulars | Classification | Total | |
|-------|----------------------|----------------|-----------|------------|
| | | | Frequency | percentage |
| 1. | Customer orientation | Yes | 197 | 78.8 |
| 2. | | No | 53 | 21.2 |
| | Total | | 250 | 100.0 |

Source: Primary data

Findings:

Banking industry in India is passing through a metamorphosis. The process of globalization and liberalization accelerated the pace of growth of technology and competitive environment, where mobilization of resources, retaining and expanding customer base has become a major challenge and stupendous task. BPR aimed at value enhancement and redefining the way how banking is transacted. The BPR at Andhra Bank started in the year 2000-2001 to stay tuned to the changing times. The prime objective of BPR in Andhra Bank was to reduce the process time in business operations and to strengthen Bank's ability to acquire new customers, increase customer satisfaction through world class service quality. The re-engineering process started with voluntary retirement scheme in Andhra Bank. The bank in the implementation years has concentrated on internalization of out-growth strategy.

Employee's perceived the prime objective of the bank as "Speedy operations" and Customers perceived "Anywhere anytime Banking" as the primary objective of BPR. The reduction in transaction time in all the services rendered by the bank. The paired sample test showed a strong positive correlation. The descriptive statistics for pre and post BPR periods - the significance (2-tailed) value (0.000) is less than 0.05 in all the transactions, proving that there is a significant difference between pre- and post-test scores showing the achievement of prime objectives- speedy operations, faster and efficient customer service.

The impact of BPR is high on bank performance as indicated by both financial and operation indicators and also by the employees and customers. The responses of the customers and employees were in favour of implementation of BPR to be customer oriented.

Conclusion:

No doubt BPR is highly successful but it is needed to be further strengthened for its long time survival. BPR is not a one-time solution rather it is a continuous process of screening and re-engineering to bring about excellence in the service delivery to stakeholders. BPR as it is practiced is understood in narrow sense as a mere up gradation of technology and any change in technology should be accompanied by change in human attitude and values whether the employees or customers which brings about a cultural change. The success of BPR depends on commitment of top management which should adopt a top-down approach in communicating its goals and objectives to the lower staff so that on one hand it should



address the fears of employees like downsizing and restructuring and on the other it should promote a healthy working atmosphere. A well satisfied employee is an asset to the bank who is a perfect middle man between bank and customers who represents bank on one side and reports the needs of customers to the bank on the other side.

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