Alternate Delivery Channels as Business Process Re-engineering Initiative in Public Sector Banks

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Abstract

Business process re-engineering has become an important implementation programme for banks and Indian banks have also been successfully riding on this initiative. Banks undertake this initiative through various channels but this paper has tried to focus on Alternate Delivery Channels alone. Alternate Delivery Channels are channels which facilitate the functioning of the branches through mobile banking, internet banking and Automated Teller Machine (ATM) Services etc. Therefore this study carries out an analysis of progress in the functioning of the Alternate Delivery Channels in the post business process re-engineering scenario for the State Bank of India group. The Alternate Delivery Channels included are Automated Teller Machine, Automated Cheque Deposit Machines, Green Channel Counter Machine, Cash Deposit Machines (CDMs) and Barcode Passbook Printers. Alternate Delivery Channels have been efficacious as channels of change. They have functioned as channels of progress for the operation of the banks, affecting customer satisfaction positively, reducing the time of the employees and customers and thus increasing efficiency and satisfaction.

Keywords: Alternate Delivery Channels, Banks, Business Process Re-engineering, Internet Banking, Mobile Banking, State Bank of India

1. Introduction

Banks in India have migrated to core banking platform thus seamlessly networking of the bank branches across cities, towns and suburban areas. Alternate delivery channels like ATM’s internet banking, phone banking, mobile banking, multifunctional kiosk, call centers, Point of sale, etc. provide customers with on the tip services. This has helped banks to provide enhanced services and new products to their customers in a more efficient manner. The banks require harnessing the emerging trends in global technology to their advantage. The increasing sophistication, flexibility and complexity of products and services makes effective use of technology critical for managing risks associated with the banking business. Additionally technology becomes the key factor in servicing almost all customer segments1. Therefore alternate delivery channels play an important role as part of business process re-engineering in banks.

This research study analyses Alternate Delivery Channels of State Bank of India, by analysing data on ATMs(Automated Teller Machines), Automated Cheque Deposit Machines, Cash Deposit Machines (CDMs) and Green Channel Counter Machines (GCCs) to infer the
trend of these alternate channels and foresees positive outcome for customers and banks of alternate delivery channel as part of business process re-engineering in State Bank of India.

2. Review of Literature

Review of literature has been divided into three parts as follows

2.1 Business Process Re-Engineering

Business Process Re-engineering (BPR) has been defined by Michael Hammer & Steven Stantion as the fundamental rethinking and radical redesign of business processes to bring about dramatic improvement in performance. There is a fundamental transformation occurring in business - in terms of its structure, processes, people, and technology. The Table 1 presents the changes that occur in the business under BPR according to Hellas Report. Alternative Delivery Channel is one of the ways for Business Process Re-engineering to be implemented as presented in Table 1.

2.2 Importance of Alternate Delivery Channels

Alternate Delivery Channels like ATM, mobile banking, internet banking, have ensured that banks are able to reach a wide consumer base effortlessly across cities, states and nations.

<table>
<thead>
<tr>
<th>Table 1. Conventional Vs BPR processes</th>
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<tbody>
<tr>
<td><strong>Changing decisive factors due to Business Process Re-Engineering</strong></td>
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<tr>
<td><strong>Conventional processes</strong></td>
</tr>
<tr>
<td>Functional departments</td>
</tr>
<tr>
<td>Simple tasks (division of labor)</td>
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<tr>
<td>Controlled people (by management)</td>
</tr>
<tr>
<td>Training of employees</td>
</tr>
<tr>
<td>Compensation for skill and time spent</td>
</tr>
<tr>
<td>Pay raises based on promotions and seniority</td>
</tr>
<tr>
<td>Advancement based on ability</td>
</tr>
<tr>
<td>Protective organizational culture</td>
</tr>
<tr>
<td>Managers supervise and control</td>
</tr>
<tr>
<td>Hierarchical organizational structure</td>
</tr>
<tr>
<td>Executives as scorekeepers</td>
</tr>
<tr>
<td>Separation of duties and functions</td>
</tr>
<tr>
<td>Linear and sequential processes</td>
</tr>
<tr>
<td>Mass production</td>
</tr>
</tbody>
</table>

Source: Hammer and Champy, 1993
before coming to a decision. Moreover for wealth management sales are high from branch banking. A study by Kumbhar has shown significant overall customer satisfaction in alternative banking.

Core banking solutions facilitate banks to extend to customers the complete benefit of ATM, tele-banking, mobile banking, internet banking, card banking and other multiple delivery channels and allows banks to offer a multitude of customer-centric services from a single location according to Chakrabarty (2007) To improve the internal processes as well as facilities and services for enhancing customers’ satisfaction, technology is being used.

2.3 Alternate Delivery Channels in Indian Banks

The banks in India are using Information Technology (IT) not only to improve their own internal processes but also to increase facilities and services for their customers. Particularly, in the banking sector ICT (Information and Communication Technology) is one of the most important tools, because it provides many suitable alternative banking channels to the customers. It brings connivance, customer centricity, enhance service quality and cost effectiveness in the banking services. Even now, customers are evaluating their banks based on availability of high-tech services. Therefore, implementation of ICT in the banking business continues to improve the banking service.

In India there are various means of alternate banking i.e. Core banking Solution (CBS), ATM, POS (Point of Sale) Terminals, Mobile Banking, Internet Banking, Credit Cards, Debit Cards, EFT (Electronic Fund Transfer), RTGS (Real Time Gross Settlement), MICR (Magnetic Ink Character Recognition Technology) clearing etc. When banks adopted core banking systems in India, the result was networking of branches as well as spread of the ATMs across the country. ATM network has spread fast and in 2012 it crossed 100,000 mark. Not surprisingly Indian banks are investing heavily in core banking, tele-banking, mobile banking (M-banking), internet banking, automated teller machine (ATM s), branch automation and computerization, data warehousing etc.

According to the director general, State Bank of India banks need to move to technology driven products with multiple features and easy tracking for example Mobi Cash Easy Wallets. The new technology at State Bank of India, has resulted in setting up of a full-fledged New Business Development Department and also setting up of a Business Process Re-engineering Department.

3. Objective of the Study

- To examine the Alternate Delivery Channels available at State Bank Group
- To examine and evaluate the post BPR scenario in State Bank Group with regards to Alternate Delivery Channels

4. Research Design

The Alternate Delivery Channels presently operational at SBI have been explained. Research is based on secondary data concerning alternate delivery channels from four branches of State Bank of India in Delhi. The data has been segregated into pre-BPR and post-BPR phases, in some cases. The annual time series data has been statistically analysed and has been presented in the form of Figures.

5. Alternate Delivery Channels at State Bank of India

Alternate delivery channels like mobile banking, ATMs, Drop Box, Call Centers etc are important because they greatly increase customer convenience, reduces the cost to serve customers and eliminates the service disadvantage that SBI has vis-à-vis competitors.

- ATMs
- Automated Cheque Deposit Machines
- Green Channel Counter Machines(GCCs)
- Cash Deposit Machines (CDMs)
- Barcode Passbook Printers

5.1 ATM Organisation

Project based ATM organization has been set up at all Circles and Corporate Centers. A ‘strategy’ group and ‘operations and a project management’ group has also been created. The strategy group is responsible for density and locational decisions, migration strategies, vendor tie-ups and performance monitoring of ATMs.
For the Bank, migrating customers to ATMs results in reduced transaction costs and free time for staff to pursue value added activities, the core theme under BPR. To achieve this, ensuring fail safe functioning of ATMs is a prerequisite.

5.2 Automated Cheque Deposit Machines
Cheques and related credit vouchers are deposited at these machines by inserting these in the slot for the purpose and in turn customers get a printed receipt of the deposited voucher and cheque on the image of these deposited instruments. It helps faster deposit of clearing/other cheques without any manual intervention and also frees up staff to carry out other more useful functions.

5.3 Green Channel Counter Machines (GCCMs)
These are swipe card type networked machines installed SWOs counters which render cash deposit/ withdrawal and transfer transactions through and ATM card/ Green Remit Card (GRC), eliminating any use of paper voucher. It enables faster and environmentally friendly, secure transactions up to a given amount. TAT (Turn Around Time) per transaction reduces to a great degree and also transaction authentication is user driven.

5.4 Cash Deposit Machines (CDMs)
Cash Deposit Machines are increasingly being installed at branches having adequate space in the ATM lobby. Amounts up to Rs. 40,000 can be deposited per day by a customer. A CDM is installed at the Vijay Nagar branch alongside ATM. A CDM helps in de-crowding of banking hall, particularly by shifting non-home branch customers to it. It also impounds fake notes and hence is highly efficient.

5.5 Barcode Passbook Printers
Barcode on each passbook is becoming a reality at SB branches. ‘SWAYAM’ Passbooks barcode reading machines in the coming financial year will be seen in almost all branches. This will do away with the inconvenience to customers and wastage of their time as a staff prints the transaction details for each customer in a long queue. The intervention of the bank staff will be done away with and self printing by customers is possible with the help of barcode on each pass book. This will also save staff workload and cut on costs.

6. Analysing Alternate Delivery Channels at SBI
Analysis of Alternate Delivery Channels has been undertaken to analyse the results in the post BPR scenario have made an impact on banks time, financially and through customer satisfaction.

6.1 ATM Availability
ATM availability means the number of hours the machine is functioning and is not in need of repair or is dysfunctional for any other reason like running out of cash etc. Though the problems faced are numerous like Cash Handler Faults, Reject Bin Full, Other Hardware faults, Supply out, Cash Out, Communication problems, Power Failure and Supervisory mode etc, there is a marked improvement in ATM availability.

6.1.1 ATM Availability in the Post BPR Phase
Post BPR phase has seen a rise in the number of ATM's available and this is very clear from Table 2 and Figure 1.

6.1.2 ATM Cards Issued in the Post BPR Phase
There has been a marked rise in the number ATM cards issued in the Post BPR phase and this is presented in Figure 1.
6.1.3 ATM Hits (Transactions) in the Post BPR Phase

More and more persons have been becoming ATM savvy as presented in Figure 2 and as a result making use of the convenience of ATM machines for various transactions including withdrawals, cash transfer mini statements etc. Overall ATM cards issued and annual transactions at ATM machines at SBI have been increasing recently as seen from the Figure 1 and 2 and maintenance of ATM’S has also been improving.

6.1.4 Growth in Internet Banking (INB) Users and Transactions Post BPR

Internet banking is also catching up with customers of SBI. In Figure 3 it can be seen that the number of internet banking users have increased in all the branches surveyed.

6.1.5 Increasing Use of Green Channel Counter Machine (GCC) in the Post BPR Phase

The Figure 4 presents the increase in use of Green Channel Counter Machine and it is very marked as seen in Figure 4.

6.1.6 Mobile Banking - Growth Over the Past Few Years in the Post BPR Phase

There has been a striking increase in mobile banking in SBI branches as presented in Figure 5. The trend seen above is also quite prominent in terms of increase in mobile banking.

7. Changing Face of Alternate Delivery Channels due to Business Process Re-engineering in Public Sector Banks

7.1 ATM

Automated Teller Machines have played a pivotal role in the BPR project of SBI on account of not only

Table 2. ATM availability as percentage of time out of 24x7 hours

<table>
<thead>
<tr>
<th>Name of the branch</th>
<th>Availability in 2011</th>
<th>Availability in 2012</th>
<th>Availability in 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Town</td>
<td>89.89%</td>
<td>95.07%</td>
<td>99.65%</td>
</tr>
<tr>
<td>Vijay Nagar</td>
<td>89.75%</td>
<td>95.04%</td>
<td>99.31%</td>
</tr>
<tr>
<td>G. T. Karnal Road</td>
<td>87.66%</td>
<td>94.09%</td>
<td>98.76%</td>
</tr>
<tr>
<td>Nirankari Colony</td>
<td>86.85%</td>
<td>93.29%</td>
<td>97.02%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>88.54%</td>
<td>94.37%</td>
<td>98.69%</td>
</tr>
</tbody>
</table>

Figure 2. Annual transactions at ATM machines SBI branches.

Figure 3. Growth in internet banking users is SBI.
de-crowding the branches but also by significantly reducing the cost of banking operations. With more and more functions being added on ATMs, viz., Card-to-Card Transfer, Online Ticketing, Donations, Mobile Phone recharge, etc., ATMs have assumed a role of a mini-banking kiosk instead of being perceived as merely a cash dispenser.

For assessing the effectiveness of the ATMs as part of BPR initiative Key performance parameters, viz., Availability (Uptime=24 hours minus the machine remains dysfunctional on account of faults, etc.), ATM Card issued data and ATM transactions data over past few years were analysed which presented a bright picture. Increasing number of ATM cards issued, Transactions indicate growing use of the ATM and acceptance among public as also bank management sensitivity about increasing the Machine Uptime (availability) and thus its usage which directly impacts the de-crowding of banking hall and cost reduction.

Machine uptime is increasing over the years for all the 4 branches covered from year 2011 to year 2013 from as low as 86.85% for Nirankari Colony in 2011 to as high as 99.65% for Model Town branch in 2013, which shows growing importance of ATMs. Overall average ATM availability also increased from 86.85% to 97.02% over the three year period 2011-2013 signifying a major jump.

Similarly, number of ATM cards issued by all the 4 branches have also increased considerably over previous years from 2011 to year 2014 as shown in Figure 6. In 2011 the numbers of cards issued were 29,017 cards, while in 2014 the total issue of ATM cards by these four branches had jumped to 55,417 cards in the four branches studied. Increase in number of ATM cards indicates
substantial migration of customer from manual to alternate channels thereby imparting benefit to both customers and bank in terms of ease of transaction and cost reduction, apart from de-crowding the branches. The sharply increasing number of ATM transactions, indicates a trend of shifting customers to alternate channels. In 2011 the total transaction of these four branches was 32,062 hits and in 2014 it had increased to 46,794 hits. Therefore presently un-personalised ATM cards are issued by branches at the time of account opening.

7.2 Internet Banking
INB transactions increased from 5,299 transactions in March 2013 to 6,790 transactions in Feb. 2014 for the four aforesaid branches, indicating the growing volume of INB transactions and number of fresh registrations made during the year at these branches as seen in the Figure 7. Internet banking has been on the rise in the post BPR phase and in recent years it has shown a INB offers a wide variety of functions and transactions over net, viz., funds transfer, cheque book request, remittances request, funds transfer through NEFT between banks, payment of utility bills, travel reservations, tax payments, donations/ Academic Institutions/ Recruitment Boards fee payment through SBI Collect, issue of fixed deposits and printing of account statement, etc. Hence, the INB channel is also becoming extremely popular amount retail as well as corporate customers.

7.3 Green Channel Counter (GCC) Machine
Installing GCC machines which are installed at the Single Window counters in the banking hall is part of Eco-friendly initiative taken by the bank. Through these machines, a customer can deposit or withdraw up to Rs. 50,000/- by swiping his ATM card at these counters without having to fill paper vouchers and can transfer a higher amount to any other account in the bank. Green Remit Cards (GRCs) can also be used at these counters for cash deposit up to Rs. 40,000/-. The channel imparts great time efficiency and also saves paper as also obviates paper record storage which is a move towards environmental sustainability. Figure 8 presents the increase in GCC machine transactions. The percentage of GCC transactions out of eligible transactions has risen over a small span of time for all the branches covered, by almost as much as 10 folds during period 2012 to 2014. GCC transactions as percentage of eligible GCC transactions rose to as high as 41.48 % for the month April, 2014, from a mere 3.31 % for April, 2012, indicating the Green Channel’s growing popularity.

7.4 Mobile Banking
The mobile banking channel offers great use of convenience to the users and is becoming extremely popular among bank customers. Mobile banking offers all the functions of internet banking over mobile phone.
Figure 9 represents the increasing trend of users of mobile banking between 2012-2014. Mobile banking users increased from a meagre 1,507 persons in 2012 to 4,687 persons in 2014 in the four branches analysed, while the persons using mobile banking increased by greater numbers as the number of registrations were 5,053 persons in 2014 from 1,670 persons in 2012 in these four branches. This has been presented in Figure 8.

8. Conclusion

BPR initiatives appear to be increasing automation of bank services and decreasing human touch in the banking transactions. Hence, in the present scenario, the importance of human factor in the banking transactions cannot be overemphasized. It should be ensured by the bank personnel that all functions should be processed procedurally as well as intuitively where necessary and a customer must be given a human touch in all banking transactions, irrespective of the degree of automation. Indian Bank has brought 1,000 branches under core banking solutions.

9. Suggestions and Recommendations

The trend in usage of Alternate Banking Channels has been increasing over the last few years at an impressive rate and it shows the acceptance of these channels by the consumers. The bank must continue to implement future innovations to remain competitive and ensure constant review of performance of various initiatives to periodically upgrade these and arrange for replacing the redundant measures.

The IAMAI and The Boston Consulting Group (BCG) report that India is headed towards an Internet economy worth $200 billion by 2020. Therefore the number of people accessing the Internet in India will jump from 190 million as of June 2014 to over 550 million in 2018. Aadhar linked mobile banking and payments will also accelerate spread of banking across India which will increase new urban and rural people making use of avenues due to Alternate Delivery Channel availability. This will lead to financial inclusion of the poor and disadvantaged groups in India.

Indian banks should take advantage of the jump in internet users in the coming years and make banking efficacious for customers, while at the same time saving on their funds through decrease in turnaround time for transactions.

10. References