BUSINESS PROCESS RE-ENGINEERING AS A DRIVER OF CUSTOMER SATISFACTION - A STUDY WITH REFERENCE TO SELECTED INDIAN NATIONALISED BANKS

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ABSTRACT

Complexity and uncertainty of present business environment demands an organization to outperform its competitors in satisfying the consumers. Any exercise in reengineering, particularly in banking industry affects the customer satisfaction level. The paper gives a brief about an exploratory study of how implementation of BPR mainly through IT tools has affected the customer satisfaction levels in public sector banks. The study has been undertaken on State Bank of India and five other public sector banks. From the study it is found that re-engineering of the business process for the nationalized banks has affected the level of customer satisfaction in a strong and positive manner. In the present environment of new type of banking operations, banking through ATM, e-banking, etc. in contrary to the erstwhile branch banking are going to occupy the centre stage.

In present business environment, organizational success depends on designing a superior supply chain and thereby outperforming competitors in satisfying consumers. The banking service of a country is an essential sector both for the country's economic growth and social security to the public at large. Also customer satisfaction is becoming an area of prime importance for organizations in this hyper competitive environment.

After the Government of India started its liberalization policy, a number of newly formed private banks realised the need for reengineering and redesigning their business process in banking operation in order to increase the customer satisfaction level whereas the nationalized banks kept working mostly in the old fashion of branch banking which generated huge number of dissatisfied and frustrated customers for them. But the nationalized banks have huge asset base at their disposal and the widest geographical coverage serving a diverse group of customers. In this respect the private players stand quite far away from them. The nationalized Indian banks have also realised this situation and are putting their efforts to redesign the business process for better customer satisfaction. So a comprehensive study of the situation

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would be very helpful in diagnosing solutions which will lead to better use of national property. The present work is an attempt only in that direction.

The study is carried out with the objectives of studying the factors or components of the banking processes which affect customer satisfaction level including their relative importance. Finally, to study how business process reengineering (BPR) affects customer satisfaction level, the research objectives of the study are designed as follows:

- To identify the factors in the business process of the banking industry which affect customer satisfaction level, and develop understanding about their implications and relative importance.

- To find out how BPR has affected the customer satisfaction level in the public sector banks and whether BPR can be considered as a driver of customer satisfaction.

II. Business Process Re-engineering and Customer Satisfaction

Reengineering of business process aims at transforming the way the business is conducted in an organization. This is the search for a new model of organizing work for the benefit of customers and all stakeholders.

However, in an endeavour to improve its competitive position and business opportunity, a firm must first focus on reengineering its generic business processes, which can be classified into three broad categories :

- Processes pertaining to development and delivery of products and / or services,

- Processes involving interfaces with customers, and

- Processes comprising management activities.

These necessarily foster a fast growing use of IT-initiatives by firms as coping mechanism. Indian banking in the millennium is going to be driven by customer satisfaction and information technology (IT). Thus, an IT-enabled reengineered business process helps in gaining strategic advantage over the competitors by way of

- Compression of time,

- Overcoming restrictions of geography and / or distance, and

- Restructuring of relationships.

IT-initiatives provide business values in three distinct areas :

(i) Efficiency by way of increased productivity,

(ii) Effectiveness by way of better management, and

(iii) Innovation by way of improved products and services.

All these can bring about a radical change in the quality of products and services thereby improving the competitiveness and customer satisfaction. Though, precise determination of customer satisfaction is difficult, because the response of customers is often a perceptual, evaluative and psychological process with respect to customer's 'overt response' vis-à-vis his 'expectation'. Understanding this process of customer response and their needs form the basis for formulation of strategy. Thus, 'customer satisfaction' is not an easy task for an organization. Nonetheless, the goal of 'customer satisfaction' must be achieved by every organization. Improving competitiveness, without further loosing time, is seen to be the essential move for Indian Nationalised Banks towards this end.

Core objectives of BPR:

¤ Fast cycle capability and competitiveness of the system, and

¤ Developing boundary-less companies which include customers, suppliers, etc. as part of an integrated fast cycle system.

Improvement on quality and cost follows improvement on thrust area of BPR.

III. Scenario of Indian Banking

The whole scenario of Indian Banking can be divided into four main eras as given below:

¤ The Indian Banking System before Independence,

¤ The era of Post-Independence and Pre-Nationalisation of banks,

¤ The era of nationalised banking, and

¤ The present era which started with the Liberalisation of the economy and return of Private Banking.

The process of nationalisation of Indian Banking started in 1955, with the nationalisation of State Bank of India and that of its subsidiaries in 1959. The major nationalisation process was carried out in 1969, by the then Prime Minister of India,

Mrs. Indira Gandhi, with the nationalisation of 14 major commercial banks. Finally, in 1980, seven more banks were nationalised and this brought 80% of the banking segment in India under Government ownership. However, nationalised banks in their enthusiasm for developmental banking, looked exclusively to branch opening, deposit accretion and social banking, thus neglecting prudential norms, profitability criteria and risk-management, and building adequate capital as a buffer to counter-balance the ever expanding risk-inherent assets held by them. In the early nineties after two decades of lop-sided policies, these banks paid heavily for their misdirected performance in place of pragmatic and balanced policies. Reforms in the financial and banking sectors and liberal recapitalisation of the ailing and weakened public sector banks followed. The economic and structural reforms in our country were undertaken from the early 1990s and heralded a new era in the economic history of our country. However, Government of India and RBI undertook measures by way of Financial and Banking Sector reforms as early in 1985 based on the report of an expert committee constituted by RBI. This is the Report of Sukhamoy Chakravarthi Committee (1985), which, in fact, initiated the process of financial sector reforms in our country. This was followed by the report of the working group headed by N. Vaghul (1987). This is in the form of a follow-up report of the earlier Sukhamoy Chakravarthi Committee Report. In 1991, with the advent of the Economic Reforms, the recommendations of the Committee on Financial System (popularly called the Narasimham Committee) provided the impetus for further initiatives. A second report was submitted by Mr. Narasimham in the year 1997 signaled the need for the second phase of financial and banking sector reforms. All these committees recommended strongly for the technological upgradation of the banking system along with all other changes and improvements with special thrust on NPA management. The Basel Committee, established by the Central Bank Governors of the group of ten countries brought out their consultative paper on new capital adequacy framework in June 1999 and second revision in January 2001 after an informed public debate. The Committee announced the establishment of an Accord Implementation Group whose primary objectives are : a) promotion of safety and soundness of the financial system, b) enhancement of competitive equality, and c) constitution of a more comprehensive approach to address risk.

IV. Research Methodology

This research work is an empirical study to find out the correlation between BPR and Customer Satisfaction. Before taking up the actual work, a survey of similar research

works was undertaken.

Literature survey

Cardozo (1965) was one of the first marketing academics to investigate into customer satisfaction. Cardozo's treatise borrowed heavily from social psychology. Cardozo speculated that dissonance would prevail in purchases of high involvement and substantial expanded effort.

The work of **John Howard and Jagadish Sheth (1969)** in their model of consumer behaviour laid important foundations for the process model of satisfaction, which was developing in parallel with their work on consumers' pre-purchase and post-purchase reconciliation of information and feedback. Satisfaction was a variable included in their earliest model.

Early satisfaction pieces are the works of **Richard Oliver** (1977, 1980, 1981), which initiated focus on the antecedents of satisfaction, particularly the expectancy-disconfirmation sequence.

Vavra (1997) has done considerable work in the measurement of Customer Satisfaction. Starting from the development of a model of Customer Satisfaction, a comprehensive work has been done on finding out the key issues on measurement of satisfaction, designing of questionnaire, the logistics of satisfaction, data collection and basic tools of CSM Analysis.

Ashish K. Sen (2001) points out that new Private Sector Banks (NPSBs) have done significant technological up-gradation, thus getting ahead in competition primarily in customer service, a concept that was almost forgotten by the giant Public Sector Banking System, which enjoyed monopoly in the banking industry of the country.

Gerstner (2003) carried out extensive reengineering for the technology giant IBM.

G.V. Chalam (2002) has studied the growth and trend of IT application in banking sector and made an assessment of its impact on banks' performance. He took into consideration the perception of customers on the quality and expectation from such IT-enabled services and the views of employees on such environment. Chalam inferred from his study that as a qualitative improvement in the customer service, internal housekeeping due to computerisation of the bank was truly reflected in quantitative terms of increase in deposits, advances and financial performance of the bank branch. His analysis of these items of pre- and post-computerisation periods also shows that the growth percentage was more attractive during the post-computerisation

period. He also concluded that a majority of the customers was satisfied with the improved service being offered by the computerised bank branch as well as the staff who are working in the branch. Further, the staff members are also quite happy to attend their work in the new work environment.

A very interesting study has been carried out by **V. Mehta (2003)** on the impact of IT on banks with productivity reference to J&K Bank Ltd.. Both qualitative and quantitative evaluation of Computer Based Information System (CBIS) was done to adjudge the efficacy of the new system. The study showed that the overall response towards the change was rather encouraging.

Peeru H. Mohamed (2005) carried out a study with six banks (HDFC Bank, ICICI Bank, Indian Overseas Bank, State Bank of India, Standard Chartered / ANZ Grindlays Bank and Citi Bank) from Chennai city to examine CRM in banking industry and to analyse the perception of the customers on such practices. Primary data for the study were collected by interacting with selected customers of the above banks. Mohamed finally made suggestions towards improving marketing productivity in the banks. According to him,

1. Banks should give more attention in communication with the customers and for this the bank officials should be trained suitably so that any personal enquiry should result into opening an account thereby having long standing relationship.

2. Banks should improve customer relationship and their satisfaction level so as to attract and retain customers.

In his research paper, Mohamed mentioned that in India systematic research was very limitedly available in the area of CRM as applicable to banking services.

Questionnaire

Questionnaires are designed to analyze the customers' psyche i.e., their needs and expectation. The questions are mainly close-ended ones, and designed in such a way that the respondents can give a clear indication about their experience on satisfaction. Initially, ten sets of questionnaires for the customers were used as a test running case with a branch of State Bank of India located at Jeevandeep Building, Kolkata.

Scaling technique

Likert-type scales have been used which consist of a number of statements that express either a favourable or unfavourable attitude towards the given objective to which the respondent is asked to react. The respondent indicated his agreement or

disagreement with each statement in the instrument. Each response is given a numerical score, indicating its favourableness or unfavourableness, and the scores are totaled to measure the respondent's attitude. In other words, the overall score represents the respondent's position on the continuum of favourableness-unfavourableness towards an issue.

Sampling

The study was planned to be carried out in nationalized banks located in Kolkata and its suburbs. This was done following the concept of convenience sampling method. First, the nineteen public sector commercial banks were alphabetically arranged but the final selection of the banks was done following the random sampling method. It was finally decided to study six public sector commercial banks (including State Bank of India) for the study.

State Bank of India has a total number of 210 branches in Kolkata and its suburb areas, and all other five banks together have a total of 560 branches in Kolkata and its suburbs areas. But only twenty branches, selected by random sampling method, were considered as a target for carrying out direct interview with the questionnaire. 20 customers per target branch were considered to give a total sample size of 400 but effectively 300 responses was found to be ultimately genuine and considered for analysis. The customers were identified at random following the judgmental method.

V. Research Findings

The research findings while dealing with analysis of the customer's psyche (i.e., their needs and expectation) are given point wise as below:

Breaking the customer's psyche: analysis of the consumer's mind, their perception about banking operation and their experiences

While analyzing customers' mind we found that:

- The customer gives the highest degree of importance to transaction time (both for withdrawal / deposit and opening an account).

- Flexibility in bank staffs' dealings with them, banking hours, innovative service delivery system, minimum balance criteria and availability of wide range of banking products / services are areas which have lesser degree of importance in customer's mind as compared to the above.

- The customer gives least importance to the bank's working environment.

The results of the answer to the questions on customers' perception on different attributes of products / services of public sector banks are shown in Table I with descending order of mean value and the test of mean is given in Table IA.

In another set of questions put before the customers asking them whether their satisfaction level has improved to a considerable degree after introduction of computerised teller facility, computerised updating of pass book facility and ATM facility, it was found that:

¤ Introduction of the ATM facility has enhanced the customer satisfaction to a very high level.

¤ Also customer satisfaction level has been enhanced by a very high degree with the introduction of computerised passbook updating facility and computerised teller facility.

Again from the above facts we can clearly draw conclusion that business process reengineering is a key driver for enhancement of customer satisfaction.

The results of the answer to the questions on customers' experiences of banking services i.e., their satisfaction level on certain attributes of products / services of public sector banks as reflected over their responses to questions are given in Table II in descending order of mean value and the test of mean is given in Table IIA.

The result reflects that:

¤ The present satisfaction level of the customers for their banking operations with public sector banks is just average.

¤ They are more satisfied with the bank staffs' dealings in the present banking environment and are less satisfied for transaction time (both for opening an account and withdrawal / deposit).

¤ Innovative service delivery system is an area where the customers are least satisfied.

In answer to questions regarding customers' perception about business process reengineering for their higher satisfaction level, it was found that:

¤ The customers strongly recommended the banks to have more ATM facility, in case they have already started it, otherwise ATM facility was urged to be introduced in order to improve their satisfaction level.

⌐ Customers also strongly emphasized and recommended to introduce reengineered operational system so that the transaction time for opening a bank account and for withdrawal / deposit is reduced.

⌐ Customers are looking for fast cycle capability and competitiveness of the banking system, which is the core objective of BPR.

⌐ Customers are suggesting for a holistic approach to BPR through overall restructuring of the banking organisation.

⌐ The customers also strongly recommended improvements on the HR aspect of business process reengineering in terms of bank employees' skill up-gradation.

⌐ The customers are also expecting, though in a lesser degree of importance that banks should deliver the services in flexi-working hours through all the 7 days in a week.

The result of the customers' perception about business process re-engineering for their higher satisfaction level as found in response to their question is given in Table III in descending order of mean value and the test of mean is given in Table IIIA.

It was also observed that there is a gap between the expected service and the perceived service, which is known as 'customer gap' [as conceptualised by Yi, Youjae (1989) in the famous 'Gaps model of service quality']. The observations are shown in Table IV.

Customers' Profile

68.10% of the customers considered under the study area were associated with a particular bank for more than 10 years and 49.74% were service holders.

Measures of association - Correlation Analysis

Observation 1:

The correlation analysis between the satisfaction scores of question no. 8 and question no. 16 (for questionnaire, vide Annexure I) is shown in Table V and test of correlation is given in Table VA.

Observation 2:

Similarly, the correlation analysis between the satisfaction scores of question no. 11 and question no. 16 (for questionnaire, vide Annexure I) is shown in Table VI and test of correlation is given in Table VIA.

Observation 3 :

The correlation analysis between the satisfaction scores of question no. 14 and question no. 16 (for questionnaire, vide Annexure I) is shown in Table VII and test of correlation is given in Table VIIA.

Observation 4 :

The correlation between the satisfaction scores of question no. 18 and question no. 19 is given in Table VIII. Finally, Table VIIIA gives a *s*ummary of tests of correlation coefficient between the Satisfaction Scores on Certain Attributes of Products / Services and General Satisfaction Level of the Customers.

From these statistical analyses, we could conclude that Business Process Re-Engineering is a major driver of customer satisfaction particularly for the banking industry.

VI. Conclusion

From the study, we find that reengineering of the business process for the nationalised banks has affected the level of customer satisfaction in a strong and positive manner. Hence, the following suggestions and recommendations may be considered by the nationalised banks in order to take a leadership position under the present competitive banking environment:

¤ In order to generate a competitive advantage, banks should make more application of Information Technology & Telecommunication (ICT) systems,

¤ They should also make their branches fully computerised and IT-enabled.

¤ They should also develop a wide network of ATM facilities.

¤ It will be necessary to re-skill the staff members of the banks, not only in the technical aspects of banking operation but also for developing the soft skills.

The study was exploratory in nature but suffered from the following constraints and limitations:

¤ The study has a geographic limitation i.e., only Kolkata city and its suburb.

¤ The business process reengineering was taken in a limited sense, neglecting the HR aspect of the reengineering process.

¤ The e-banking or tele-banking aspect of BPR was also not considered.

Nevertheless, the above study leaves an immense scope for carrying out further research in the following areas:

¤ To establish a more definite correlation between business process reengineering and customer satisfaction on different sectors of financial services

¤ To carry out studies in other geographic areas i.e., in other metros and in the rural areas to find out whether there is any significant difference in the behaviour of the banking customers who are geographically separated.

¤ To carry out more detailed study considering the overall reengineering process, i.e., HR aspect and also the e-banking and tele-banking aspect.

Table I: Customers' perception on different attributes of products / services

Attributes of products or service	Mean
Time taken for withdrawal/deposit	4.89
Time taken for opening an Account	4.84
Bank staffs' dealing	4.14
Flexibility in banking hours	4.13
Minimum balance criteria	4.06
Innovative service delivery system	4.02
Availability of wide range of banking products/services	4.02
Banks' working environment	3.90

From the results, we can clearly infer that customers are looking for a fast cycle capability and competitiveness of the banking system, which is the core objective of BPR.

Table IA: Test of mean: Customer's expectation on banking services

The null hypothesis is, (H_0) : mean score of the degree of importance attached by the customer on certain attributes on banking products / services = 2.5; H_0 :   = $_{H0}$ = 2.5 and H_a :   > 2.5

$\overline{X}$	p	n	Value of test statistic (z)	z for 5% level of significance	H_0	H_a	Mean Score Value
4.25	0.387	8	12.77	1.645	rejected	accepted	significant at 5% level

Table II: Customer's satisfaction level on certain attributes of banking products / services

Attributes of products or service	Mean
Bank staffs' dealing	3.57
Bank's working environment	3.55
Minimum balance criteria	3.51
Time taken for opening an Account	3.44
Time taken for withdrawal/deposit	3.42
Flexibility in banking hours	3.36
Availability of wide range of banking products/services	3.23
Innovative service delivery system	3.19

Table IIA: Test of mean: Customer's satisfaction level on certain attributes of banking products / services

The null hypothesis is, (H_0): mean score of the customer's idea that re-engineering enhances their satisfaction = 2.5; $H_0 : \quad = \quad_{H0} = 2.5$ and $H_{a :} \quad > 2.5$

$\overline{X}$	p	n	Value of test statistic (z)	z for 5% level of significance	H_0	H_a	Mean score Value
3.40	0.141	8	18.00	1.645	rejected	accepted	significant at 5% level

Table III: Customer's idea that re-engineering enhances their satisfaction

Question	Mean
Bank should have more number of ATM outlets	4.89
Bank should introduce ATM facility to improve customer satisfaction.	4.83
Withdrawal /deposit should be more simplified and less time-taking	4.83
Account opening system should be more simplified and less time-taking	4.82
Bank should (invariably) send a monthly Statement of Account to every account holder to his residence ?	4.82
Skills of the banks' employees need to be upgraded for better customer satisfaction?	4.66
Banks organisation needs restructuring for better customer satisfaction.	4.64
Bank operation should be fully computerised?	4.21
Bank should offer flexi-working hour	4.18
Bank should have all the 7- days working	4.08

Table IIIA: Test of mean: Customer's idea that re-engineering enhances their satisfaction

The null hypothesis (H_0): Mean score of the customer's idea that re-engineering enhances their satisfaction = 2.5; H_0: = $_{H0}$ = 2.5 and $H_{a:}$ > 2.5

$\overline{X}$	p	n	Value of test statistic (z)	z for 5% level of significance	H_0	H_a	Mean score Value
4.59	0.314	10	21.11	1.645	rejected	accepted	significant at 5%level

Table IV: Customers' expectation vs. customers' experience (on a 5-point scale)

Expectation		Experience	
Question	Mean	Question	Mean
Time taken for opening an Account	4.84	Time taken for opening an Account	3.44
Time taken for withdrawal/ deposit	4.89	Time taken for withdrawal /deposit	3.42
Flexibility in banking hours	4.13	Flexibility in banking hours	3.36
Bank staffs' dealing with customers	4.14	Bank staffs' dealing with customers	3.57
Banks' working environment	3.90	Banks' working environment	3.55
Minimum balance criteria	4.06	Minimum balance criteria	3.51
Availability of wide range of banking products/services	4.02	Availability of wide range of banking products/services	3.23
Innovative service delivery system	4.02	Innovative service delivery system	3.19

Table V: Correlation between the satisfaction scores of question no. 8 and question no. 16

Bank name	xy	x	y	x^2	y^2	n	r
UBI	1112	267	247	1203	1049	60	0.587
SBI	1351	272	293	1268	1457	59	0.042
UCO Bank	813	178	182	802	840	40	0.286
IOB	1224	261	280	1149	1322	60	0.415
Allahabad bank	746	191	156	919	620	40	0.122
Canara bank	1201	281	252	1333	1084	60	0.998

Table VA: Test of correlation between the satisfaction scores of question no. 8 and question no. 16

For each bank, the null hypothesis is, H_0: there is no correlation between the satisfaction scores of question no. 8 and question no. 16. The alternative hypothesis is, H_1 : there is significant correlation between the satisfaction scores of question no. 8 and question no. 16.

We use "t" test for testing simple correlation coefficient at 5% level of significance (one-tailed test with (n-2) degrees of freedom.)

Bank	n	n-2	Value of test statistic (t)	Remarks
UBI	60	58	5.456	Significant at 5% level
SBI	59	57	0.3173	Not significant at 5% level*
UCO Bank	40	38	2.469	Significant at 5% level
IOB	60	58	3.474	Significant at 5% level
Allahabad Bank	40	38	0.758	Not significant at 5% level*
Canara Bank	60	58	120.2	Significant at 5% level

* These banks may have behaved differently which can be taken as exceptional cases.

Table VI: Test of correlation between the satisfaction scores of question no. 11 and question no. 16

Bank name	xy	x	y	x^2	y^2	n	r
UBI	1094	262	247	1158	1049	60	0.725
SBI	1356	273	293	1277	1457	59	0.048
UCO Bank	843	184	182	856	840	40	0.552
IOB	1249	267	280	1203	1322	60	0.200
Allahabad bank	749	192	156	928	620	40	0.023
Canara bank	1201	281	252	1333	1084	60	0.998

Table VIA: Test of correlation between the satisfaction scores of question no. 11 and question no. 16

For each bank, the null hypothesis is, H_0 : there is no correlation between the satisfaction scores of question no. 11 and question no. 16. The alternative hypothesis is, H_1 : there is significant correlation between the satisfaction scores of question no. 11 and question no.16.

We use "t" test for testing simple correlation coefficient at 5% level of significance. This is one-tailed test with (n-2) degrees of freedom.

Bank	n	n-2	Value of test statistic (t)	Remarks
UBI	60	58	8.016	Significant at 5% level
SBI	59	57	0.3628	Not significant at 5% level*
UCO Bank	40	38	4.08	Significant at 5% level
IOB	60	58	1.55	Not significant at 5% level*
Allahabad Bank	40	38	0.141	Not significant at 5% level*
Canara Bank	60	58	120.2	Significant at 5% level

* These banks may have behaved differently which can be taken as an exceptional case.

Table VII: Test of correlation between the satisfaction scores of question no. 14 and question no. 16

Bank name	xy	x	y	x^2	y^2	n	r
UBI	1110	266	247	1194	1049	60	0.687
SBI	1446	291	293	1439	1457	59	0.353
UCO Bank	826	179	170	871	792	37	0.482
IOB	819	176	171	876	799	37	0.304

Table VIIA: Test of correlation between the satisfaction scores of question no. 14 and question no. 16

For each bank, the null hypothesis is, H_0 : there is no correlation between the satisfaction scores of question no. 14 and question no.16. The alternative hypothesis is, H_1 : there is significant correlation between the satisfaction scores of question no. 14 and question no.16.

We use "t" test for testing simple correlation coefficient at 5% level of significance. This is one-tailed test with (n-2) degrees of freedom.

Bank	n	n-2	Value of test statistic (t)	Remarks
UBI	60	58	7.2	Significant at 5% level
SBI	59	57	2.848	Significant at 5% level
UCO Bank	40	38	3.254	Significant at 5% level
IOB	60	58	1.888	Not significant at 5% level*

* These banks may have behaved differently which can be taken as an exceptional case.

Table VIII: Correlation between the satisfaction scores of question no. 18 and question no. 19

Q. No.	Question	Q. No.	Question	Correlation coefficient
	Satisfaction score on certain attributes of products/services:			
18a	Time taken for opening an Account		Satisfaction scores of the question:	0.47
18b	Time taken for withdrawal/ deposit		In general how would you express your satisfaction	
18c	Flexibility in banking hours	19	level with the bank?	0.44
18d	Bank staffs' dealing with customers		▪ Highly satisfied	0.32
18e	Bank's working environment		▪ Satisfied	0.31
18f	Minimum balance criteria		▪ Neither satisfied / nor	
18g	Availability of wide range of banking products/services		dissatisfied	0.34
			▪ Dissatisfied	0.18
18h	Innovative service delivery system		▪ Highly dissatisfied	0.55
				0.57

Table VIIIA: Summary of Tests of Correlation Coefficient between the Satisfaction Scores on Certain Attributes of Products / Services and General Satisfaction Level of the Customers

Satisfaction score on certain attributes of products/services		Satisfaction score on general satisfaction level of the customers	Correlation coefficient	Value of test statistic ('t')	Remarks
Time taken for opening an Account	3.44		0.47	9.48	Significant at 5% level
Time taken for withdrawal/deposit	3.42		0.44	8.72	Significant at 5% level
Flexibility in banking hours	3.36		0.32	6.01	Significant at 5% level
Bank staffs' dealing with customers	3.57	3.30	0.31	5.80	Significant at 5% level
Bank's working environment	3.55		0.34	6.43	Significant at 5% level
Minimum balance criteria	3.51		0.18	3.25	Significant at 5% level
Availability of wide range of banking products/services	3.23		0.55	11.72	Significant at 5% level
Innovative service delivery system	3.19		0.57	12.35	Significant at 5% level

Annexure-I

CUSTOMER'S QUESTIONNAIRE

We are conducting a study on financial services, particularly on Banking Services in the area of Business Process Re-engineering. Your opinions in this respect will be highly valued by us and would help us in a big way to complete this study. This is purely an academic study and will not be used for any commercial purpose.

May we request your cooperation in sparing a little time to answer the following questions.

A. ABOUT THE PRODUCTS/SERVICES OFFERED BY THE BANK

1. Please specify for how long you are associated with the bank(Tick one only).

   ❑   0 -- 1 year

   ❑   Above 1 upto 5 years

   ❑   Above 5 upto 10 years

    ❑ Above 10 years

2. How often do you visit the bank?

    ❑ More than once a week

    ❑ About once a week

    ❑ 2 3 times a month

    ❑ About once a month

    ❑ About once in a quarter

    ❑ 2 3 times a year

    ❑ About once a year

    ❑ Less than once a year

3. Which of the following services you are availing from the bank at present?

1. Savings A/c.	2. Current A/c
3. Term Deposit / Fixed Deposit A/c	4. Recurring Deposit A/c
5. Demat. A/c	6. Credit Card
7. Demand Draft	8. Pay order
9. Gift Cheques	10. Travellers' Cheque
11.Car loan	12. Home loan
13. Personal loan	14. Educational loan
15. Any other	

4. Would you like to have any other services from your bank ? Please specify.

    1.

    2.

    3.

    4.

    5.

    6.

B. **BANKING OPERATION OR SERVICE PROCESSES**

5. What are the methods of operation of the major products offered by your bank?

    ❑ Branch banking

    ❑ Telebanking

    ❑ Internet banking

    ❑ Home delivery

    ❑ Any combination of the above (please specify)

❑ Any other (please specify)

6. Does your bank have computerized Teller operation?

   Yes …………….No ………………

7. If 'Yes', has your bank started Computerised Teller Operation after opening of your account?

   Yes …………….No ………………

8. "After introduction of the Computerised Teller facility my satisfaction level in my bank operation has improved very much" Express your feeling as under.

   ❑ Strongly agree

   ❑ Agree

   ❑ Neither agree / nor disagree

   ❑ Disagree

   ❑ Strongly disagree.

9. Does your bank have Computerised Updating of Passbook facility?

   Yes …………….No ………………

10. If, 'Yes', has your bank started Computerised Updating of Pass book after opening of your account?

Yes …………….No ………………

11. "After introduction of the Computerised Updating of Passbook facility, my satisfaction   level in my bank operation has improved very much" Express your feeling as under.

   ❑ Strongly agree

   ❑ Agree

   ❑ Neither agree / nor disagree

   ❑ Disagree

   ❑ Strongly disagree

12. Does your bank have ATM facility?

   Yes …………….No ………………

13. If, 'Yes', has your bank started ATM facility after opening of your account?

   Yes …………….No ………………

"After introduction of the ATM facility, my satisfaction level in my bank operation

has improved very much" Express your feeling as under.

- ❑ Strongly agree
- ❑ Agree
- ❑ Neither agree / nor disagree
- ❑ Disagree
- ❑ Strongly disagree

14. How do you rate the overall quality of service you receive from the bank?

- ❑ Very good
- ❑ Good
- ❑ Neither good / nor bad
- ❑ Poor
- ❑ Very poor

15. During the past year would you say the quality of the service of this bank has

- ❑ Improved a lot
- ❑ Improved a little
- ❑ Not really changed
- ❑ Become worse
- ❑ Become worst

(Interviewer please probe the respondents)

C. ABOUT YOUR PERCEPTION OF BANK SERVICES

16. Please specify the degree of importance attached by you on certain attributes of products/services

(a) Time taken for opening an Account

- ❑ Very important
- ❑ Important
- ❑ Neither important / nor unimportant
- ❑ Unimportant
- ❑ Not at all important

(b) Time taken for withdrawal/deposit

- ❑ Very important
- ❑ Important
- ❑ Neither important / nor unimportant
- ❑ Unimportant

❑ Not at all important

(c) Flexibility in banking hours

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

(d) Bank staffs' dealing with customers

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

(e) Banks' working environment

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

(f) Minimum balance criteria

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

(g) Availability of wide range of banking   products/services

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

(h) Innovative service delivery system (like home delivery, telebanking, etc.)

❑ Very important

❑ Important

❑ Neither important / nor unimportant

❑ Unimportant

❑ Not at all important

17. Please specify your satisfaction level on certain attributes of products/services

(a) Time taken for opening an Account

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(b) Time taken for withdrawal/deposit

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(c) Flexibility in banking hours

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(d) Bank staffs' dealing with customers

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(e) Banks' working environment

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(f) Minimum balance criteria

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(g) Availability of wide range of banking products/services

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

(h) Innovative service delivery system (like home delivery, telebanking etc.)

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

18. In general how would you express your satisfaction level with the bank?

❑ Highly satisfied

❑ Satisfied

❑ Neither satisfied / nor dissatisfied

❑ Dissatisfied

❑ Highly dissatisfied

D. ABOUT YOUR IDEA ON PROCESS REENGINEERING FOR BETTER CUSTOMER SATISFACTION

19. You expect that the banks' account opening system should be more simplified and less time taking

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

20. You expect that the withdrawal/deposit should be more simplified and less time taking.

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

21. You expect that bank should (invariably) send a monthly Statement of Account to every account holder to his residence?

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

22. You expect that the bank operation should be fully computerized?

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

23. In case your bank has ATM facility, you expect that your bank should have more number of ATM outlets?

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

24. Incase your bank does not have ATM facility, you expect that your bank should introduce ATM facility to improve customer satisfaction.

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

25. You expect that your bank should offer flexi-working hour (if not already introduced)

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

26. You expect that your bank should have all the7- days working

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

27. Do you feel that the skills of the banks' employees need to be upgraded for better customer satisfaction?

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

28. In your opinion, do you feel that the banks organization needs restructuring for better customer satisfaction.

❑ Strongly agree

❑ Agree

❑ Neither agree / nor disagree

❑ Disagree

❑ Strongly disagree

E. **ABOUT THE RESPONDENT**

29. Which of the following describes you? (Tick one)

- ❑ Service holder (excluding Sr. Executives)
- ❑ Sr. Executives
- ❑ Retired persons/ pensioners
- ❑ Small and medium traders
- ❑ HNI (High Net worth Income) groups or individuals
- ❑ Others (please specify) ……………………………..

30. Your age

- ❑ Less than 20 years
- ❑ 20 40 years
- ❑ Above 40 upto 60 years
- ❑ Above 60 years

31. You are

- ❑ Male
- ❑ Female

32. Your average annual income

- ❑ Upto 2 lakhs
- ❑ More than 2 lakhs but upto 5 lakhs
- ❑ Above 5 lakhs

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