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## Banking Customer Satisfaction in Nanded District- A comparison with NBFCs

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### ABSTRACT

The study of customer satisfaction is vital to understand the overall feedback about the product attributes and customer experiences. This study is done to comprehend the comparative customer satisfaction of Banks and NBFCs. The customer satisfaction is measured with the help of logistic regression method. The Statistical Package for Social Sciences (SPSS) is used to apply logistic regression. This logistic regression method analyzes the customer satisfaction in dichotomous way. For this research, researcher has taken the sample size of 186 customers, 35 managers and 70 employees of banks and NBFCs resp. With the help of tabulation, Classification tables and Omnibus Tests of Model Coefficient, the logistic regression is used for making accuracy in the predictions. The findings, conclusions and suggestions are drawn at the end of research paper.

**Keywords:** Customer Satisfaction, Logistic Regression, Omnibus test and Model Coefficients.

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**Introduction**

**Customer satisfaction**

Organizations (producer/ seller) can create the customers by Identifying customer needs, designing goods and services that meet those needs than communicating information about those goods and services to prospective buyers Making the goods or services available at times and places that meet customers’ needs Pricing goods and services to reflect costs, competition, and customers’ ability to buy and finally providing for the necessary service and follow-up to ensure customer satisfaction after the purchase .

**Customer satisfaction** depends on a product’s perceived performance in Delivering value relative to a buyer’s expectations. If performance exceeds expectations, the buyer is delighted (certainly a worthy goal of the marketing company).

- 1). Smart companies aim to delight customers by promising only what they can deliver, then delivering more than they promise.
- 2) The aim of successful companies today is total customer satisfaction.
- 3) Customer delight creates an emotional affinity for a product or service, not just a rational preference, and this creates high customer loyalty.
- 4). Quality has a direct impact on product or service performance. Quality is defined in terms of customer satisfaction.

**Objectives of the Research Study:-**

The researcher has to study the following objectives as

- 1) To understand the overall customer satisfaction level of Bank and NBFC respondents in Nanded district.
- 2) To analyze the accuracy in prediction of customer satisfaction level of Bank and NBFC respondents in Nanded district.

**Hypothesis of the Study:**

Null Hypothesis:

H<sub>01</sub>: **There is no significant difference in the customer satisfaction level of Bank and NBFC respondents in Nanded district.**

**c) Research Design**

Sr.No.	Parameter	Description
1	Type of Research	Ex Post Facto Descriptive Research
2	Nature of Research	Quantitative
3	Research Instrument	Structured questionnaire, observation and interview
4	Dependent Variable	Type of Financial Companies
5	Independent Variables	7Ps of Marketing, CRM, ServQual and Customer Satisfaction
6	Control over Variables	No Control- Ex Post Facto

**Research Methodology Used**

**This research methodology deals with sample size and research design**

**i) Determination of sample Size**

Using Formulas to Calculate a Sample Size although tables can provide a useful guide for determining the sample size, you may need to calculate the necessary sample size for a different combination of levels of precision, confidence, and variability. The fourth approach to determining sample size is the application of one of several formulas. Formula For Calculating A Sample For Proportions. For populations that are large, Cochran (1963:75) developed the Equation 1 to yield a representative sample for

$$N_0 = \frac{Z^2 pq}{e^2}$$

- a) Which is valid where n<sub>0</sub> is the sample size, Z<sub>2</sub> is the abscissa of the normal curve that cuts off an area α at the tails (1 – α equals the desired confidence level, e.g., 95%)1, e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is 1-p. The value for Z is found in statistical tables which contain the area under the normal curve.
- b) To illustrate, suppose we wish to evaluate a state-wide Extension program in which farmers were encouraged to adopt a new practice. Assume there is a large population but that we do not know the variability in the proportion that will adopt the practice; therefore, assume p=.5 (maximum variability). Furthermore, suppose we desire a 95% confidence level and ±5% precision. The resulting sample size is demonstrated below.

$$\begin{aligned}
 N_0 &= \frac{Z^2 pq}{e^2} \\
 &= (1.96)^2 (.5) (.5)/(.05)^2 \\
 &= 385 \text{ Respondents}
 \end{aligned}$$

7	<b>Survey Period</b>	November 2010 to December 2012
8	<b>Type of Products</b>	Financial Products
9	<b>Methods of Data Collection</b>	Sample Survey Method through Interrogation
10	<b>Universe</b>	Nanded District Financial Companies
11	<b>Population</b>	All organized financial service providers, manager, employees and Customers Nanded District
12	<b>Sampling Frame</b>	Banking Companies and NBFCs equally
13	<b>Sample Elements</b>	Customers, Managers and Employees
14	<b>Sample Size Determination</b>	Using Mean and Proportionate Sampling Formula
15	<b>Calculated Sample Size</b>	386 Customers,70 Managers and 140 Employees
16	<b>Net Responses</b>	376 Customers, 67 Managers and 136 Employees
17	<b>Response Rate</b>	97.40% for Customers, 95.71 % for Managers and 97.14% for Employees
18	<b>Rejection Rate</b>	2.60% for Customers, 4.29 % for Managers and 2.86% for Employees
19	<b>Sampling Method</b>	Multilevel Non Probability Convenient Sampling and Proportionate Stratified Sampling
20	<b>Sources of Data Collection</b>	Primary and Secondary sources
21	<b>Primary Sources</b>	Structured questionnaire, observation, interview and field survey
22	<b>Secondary sources</b>	Journals, Articles, Magazines, Digital library, e resource database ebSCO, pro-quest, open j gate, emerald, science-direct, Harvard Business Review case study, articles and and many other published data
23	<b>Measurement Scales used</b>	Nominal, ordinal and interval scale
24	<b>Questions Types</b>	Dichotomous, open ended, multiple responses, ranking and differential scales
25	<b>Rating Scales Used</b>	Likert Scale
26	<b>Data Interpretation</b>	Through graphs, descriptive statistics and inferential statistics
27	<b>Statistical Tools</b>	Z test, chi square, ANOVA, factor analysis and multiple regression and descriptive statistical tools and parametric and non parametric statistical tests
28	<b>Statistical Software Package</b>	Ms Excel 2010 and SPSS 20

**3) Data Analysis and Interpretation**

The customer satisfaction is measured through the dichotomous questions yes or no. The customer

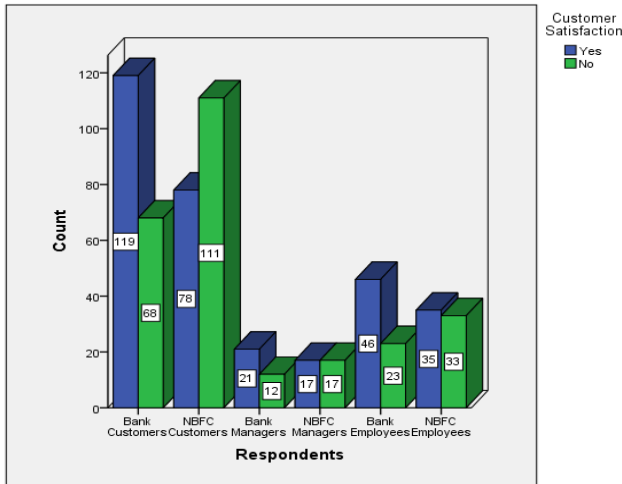
satisfaction is noted through the cross tabulation of customer satisfaction and type of respondents as below

**Table No. 01 Overall Customer Satisfaction**

	Customer Satisfaction				Total	
	Yes		No		Count	% within Respondents
	Count	% within Respondents	Count	% within Respondents		
<b>Bank Customers</b>	119	63.6%	68	36.4%	187	100.0%
<b>NBFC Customers</b>	78	41.3%	111	58.7%	189	100.0%
<b>Bank Managers</b>	21	63.6%	12	36.4%	33	100.0%
<b>NBFC Managers</b>	17	50.0%	17	50.0%	34	100.0%
<b>Bank Employees</b>	46	66.7%	23	33.3%	69	100.0%
<b>NBFC Employees</b>	35	51.5%	33	48.5%	68	100.0%
<b>Total</b>	316	54.5%	264	45.5%	580	100.0%

Source: Field Survey and SPSS output

Graph 01 Overall Customer Satisfaction



From the above table no. 01 and Graph 01, it is observed that the 54.5% customers are satisfied in general including banking and non banking financial companies. In comparison of banking and NBFCs, the customers’ opinion is that satisfaction is higher in banks (63.6%) as compared to NBFCs (41.3%) where as the opinion of managers about the satisfaction level of customers is that managers of banks (63.6%) agree that their customers are satisfied more as compared to the customers of NBFCs (50%). In the case of employees, (66.7%) bank employees agree that their customers are satisfied more as compared to the customers of NBFCs counting the opinions of (51.5%) NBFC employees.

It is clear from the above cross tabulation that the Banking respondents are more satisfied as compared to the NBFCs. The relationship between these two can be studied through regression called **logistic regression** as dependent variable customer satisfaction is dichotomous and independent variable is categorical. This logistic regression is used to correctly predict the observations. This includes two steps i.e. step 0 and step 1, the classification table beginning (Step 0) and Omnibus test of Model Coefficients (step 1) and Classification Table Enter (step 1) as follows

Table No.02 Classification Table for Logistic Regression

	Observed	Predicted			
		Customer Satisfaction		Percentage Correct	
		Yes	No		
Step 0	Customer Satisfaction	Yes	316	0	100.0
		No	264	0	.0
	Overall Percentage				54.5

a. Constant is included in the model.  
b. The cut value is .500

Source: Field Survey and SPSS output

The logistic regression gives the classification table as shown in table no. 02 in step 0 as there are 316 customers satisfied giving 100% customer satisfaction and Negative customer satisfaction is represented by 264 respondents

giving 0% correct prediction before applying step 1 or entering data in logistic regression.

The following table shows Omnibus Tests of Model Coefficients indicating increase or decrease in deviation in prediction.

Table No. 03 Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	25.570	5	.000
	Block	25.570	5	.000
	Model	25.570	5	.000

Source: Field Survey and SPSS output

From the above table no.03, Omnibus Tests of Model Coefficients gives the value of chi square, degree of freedom and associated significance level. The value of chi square (25.57) is positive indicating decrease in deviation in prediction of customer satisfaction. Therefore this model is better fit as compared to the base model. The following classification table indicates the overall model representing correct prediction as below

Table No. 04 Classification Table

	Observed	Predicted			
		Customer Satisfaction		Percentage Correct	
		Yes	No		
Step 1	Customer Satisfaction	Yes	301	15	95.25
		No	14	250	94.69
	Overall Percentage				94.97

a. The cut value is .500

Source: Field Survey and SPSS output

From the above table, it is clear that positive customer satisfaction shows correctness in prediction about 95.25%. it means that the previous classification table as it shows that satisfied customers are 316. Here in step 1, out of these 316 satisfied customers, 301 customers are satisfied and 15 customers are not satisfied. And in the case of negative customer satisfaction counting 264, in step 1 it shows 250 customers are not satisfied and 14 customers are satisfied even in not satisfied customers. Hence in general accuracy in prediction is having 94.97% correctness.

4) Findings, Conclusions and Suggestions

The findings and conclusions of this research study is summarized as follows

- i) It is found that the bank customers are satisfied 63.6% as compared to NBFC customer’s count 41.3%.
- ii) It is again found that the Bank managers observed that the customers are satisfied with 63.6% where as NBFC managers found that the customers are satisfied with 50.00%
- iii) It is observed that Bank employees found that the bank customers are satisfied with 66.7% and NBFC employees found that the NBFC customers are satisfied with 51.5%.

- iv) It is concluded from above findings that the Bank customers are more satisfied as compared to NBFC customers in Nanded district.
- v) The accuracy in predicting this customer satisfaction is about 94.97% as proved by logistic regression method using SPSS.

The suggestions for this customer satisfaction is as follows

- i) The customer satisfaction level of banks should be increased with the need identification of customers about financial services
- ii) The financial requirement of the customers should be understood first and then accordingly product must be designed.
- iii) The NBFC should do the competitors analysis and analyze the focus areas where they are lacking.
- iv) The NBFC should develop customer oriented products with many attributes. They should provide the services as fast as possible.

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