

1 ICICI Bank: A Multivariate Analysis of Customers' Acceptability

2 Sangeeta Mohanty¹

3 ¹ Academy of Business Administration, Balasore

4 *Received: 21 July 2011 Accepted: 10 August 2011 Published: 25 August 2011*

5 **Abstract**

6 The explosive growth of the economy and the favorable demographic profile continue to drive
7 consumption demand. This will lead to a market for a wide range of financial products and
8 services for consumers. Many financial institutions have clearly embarked on the development
9 of technology driven strategies, which will be translated in terms of customer preferences, and
10 consequently, higher returns and market penetrations. New formats such as ATMs, telephone
11 banking, e-banking can encourage customers to carry out more transactions. This increased
12 usage can increase banks' customer. New technologies have been emerged in order to attract
13 the customer as well as there is deadly competition among the private and the public banks to
14 capture the market and the customer. Increasing competition is forcing the banks to pay
15 much more attention to satisfy the customers. The existence of the bank is dependant on the
16 customer's acceptability only. This paper is intended to study ICICI Bank-the largest private
17 bank in India and the second largest in the entire banking sector, on the ground of customer's
18 acceptability.

20

21 **Index terms**— ICICI Bank, Acceptability, Banking sector.

22 **1 INTRODUCTION**

23 The banking sector has witnessed a dramatic change during the last few years. The emergence of NPSBs, expansion
24 by the foreign banks, the changing business model transformed the ways banks in India. The government-owned
25 commercial banks today have a market share of around 75% (down from the earlier 95%), the private sector
26 banks about 20% and the foreign banks about 5%. In the wake of the liberalization policies, the traditional and
27 the conservative face of the Indian banking has undergone a virtual change. The Indian banking industry is
28 undergoing a paradigm shift in scope, context, structure, functions and governance. The information technology
29 revolution is radically changing the operational environment of the banks. Universal banking, virtual banking
30 and Merger & Acquisition are increasingly emerging as the order of the day. For the banks, technology has
31 emerged as a strategic resource for achieving higher efficiency, control of the operation, productivity and the
32 profitability. The Indian banking industry is on a major technology upgradation drive after having successfully
33 absorbed international standards in its operating norms. The country's financial markets are now characterized
34 by financial liberalization and technological advancement.

35 Author: Assistant Professor, Academy of Business Administration, Industrial Estate (S1/25) Angaragadia,
36 Balasore, Orissa (756001).

37 When companies invest in new technology for customers, its success should be evaluated not only according
38 to how efficiently it lowers the cost of operations, but also whether customers see it as delivering real benefits.
39 There is a growing understanding among banks that to survive in the future, they not only need to be organized
40 around information and knowledge but should also be customer-centric, market-driven, highly networked, on the
41 constant look out for global opportunities and flexible in their ability to deliver superior value to the customer.
42 Because of the converging pressure of the changing demographics, global politics, technology, the banks are forced
43 to know the business opportunities from the customers' point of view and also to redefine the facilities provided
44 by them accordingly.

45 **2 II.**

46 **3 BANKING SERVICES IN INDIA**

47 Banking in India has been dominated by the offices/branches of the public sector banks. However, with the
48 liberalization of the financial sector in the 1990's, the private-sector banks and the foreign banks have also set
49 up their shops all over the country. These newly set up commercial banks are offering aggressive and technology
50 -savvy competition to the public sector banks in the form of innovative products and services. With years, banks
51 are also adding services to their customers. The Indian banking industry is passing through a phase of customers
52 market. The customers have more choices in choosing their banks. A competition has been established within
53 the banks operating in India. With stiff competition and advancement of technology, the services provided by
54 banks have become more easy and convenient.

55 Traditionally, banking players relied extensively on their reach to effectively put emerging banks out of
56 competition. To describe the new potential scenario we must create a vision of what might constitute the
57 new potential business concept. If we start a new bank from scratch, independent of history and based on a
58 perception of the consequences of the rapid on-going change for the coming five years then we think of the
59 different service channels and their range of services. Any channel, at the choice of the customer is always
60 accepted. This forced new banks to develop strategies, that could help them reach out to end-customers cost
61 effectively. The solution came in the form of a delivery T E -mail : sangeeta_mohanty@rediffmail.com. channel
62 known as Automated Teller Machines or ATMs, mobile banking, e-banking system etc. This turned out to be
63 one of the biggest growth drivers for private banks in India. All these facts automatically encourage the banks
64 to expand in the field keeping in mind the acceptability of the customers'.

65 **4 III.**

66 **5 ICICI BANK IN INDIA**

67 ICICI Bank India is the largest private bank in India and the second largest in the entire banking sector. Only
68 State Bank of India (SBI), controlled entirely by the Government of India has a bigger business than ICICI
69 Bank. ICICI Bank, founded in 1955 as Industrial Credit and Investment Corporation of India, ICICI Limited
70 was established by the Government of India in the 1960s as a Financial Institution like Industrial Development
71 Bank of India (IDBI) to finance large industrial projects. ICICI then, was not a bank and hence could not
72 take retail deposits and was not required to comply with Indian banking requirements for liquid reserves. ICICI
73 borrowed funds from various agencies like the World Bank, often at concessional rates. These funds were deployed
74 in large corporate loans. However, the scenario changed drastically in 1990s when ICICI founded a separate legal
75 entity and named it "ICICI Bank". ICICI Bank, as the name would suggest, undertook normal banking operations
76 like accepting deposits, issuing credit cards, providing car loans etc. The experiment was so successful that ICICI
77 merged into ICICI Bank and this "reverse merger" happened in 2002. In 2001, ICICI bank acquired Bank of
78 Madura Limited. ICICI Bank set up its international banking group in fiscal 2002 to cater to the cross border
79 needs of clients and leverage on its domestic banking strengths to offer products internationally. ICICI Bank
80 currently has subsidiaries in the United Kingdom, Canada and Russia, branches in Singapore and Bahrain and
81 representative offices in the United States, China, United Arab Emirates, Bangladesh and South Africa. Today,
82 ICICI Bank offers a wide range of banking products and financial services to corporate and retail customers
83 through a variety of delivery channels and through its specialized subsidiaries and affiliates in the areas of
84 investment banking, life and non-life insurance, venture capital and asset management.

85 IV.

86 **6 FRAMEWORK OF ANALYSIS**

87 If a bank already has a reputation for technical innovation, its customers are more likely to feel comfortable with
88 more technology. Bank marketing managers need to continuously assess the customer's decisions-making process
89 as well as the formation of attitudes, preferences and satisfaction of the different delivery channels. The banking
90 industry has tried to take advantage of the productivity and customers service gains associated with technology
91 by provisions of ATMs, mobile banking, Credit card payment and Debit card payment system etc. However, while
92 these new technologies may offer significant advantages to the consumers, many are unwilling to adopt them. It is
93 very important to understand the customer's preferences, attitudes and adaptations of these services to properly
94 use them as marketing tools to attract new clients and retain the existing clients. As ICICI Bank India is the
95 largest private bank in India and the second largest in the entire banking sector, we need to know the customers
96 acceptability of the said bank.

97 V.

98 **7 OBJECTIVE OF THE STUDY**

99 The study is aimed at evaluating and appraising customer's priorities in regard to access the ICICI bank. In
100 order to examine these, this paper has the following objectives before it: VI.

101 **8 COLLECTION OF DATA**

102 In order to achieve the identified objective pertaining to the priorities and preferences and views, a sample
103 of 125 investors was taken randomly from Sahid Nagar, Acharya Vihar, Vanivihar, Ram Mandir in the city
104 Bhubaneswar, Balasore. A pre-tested questionnaire was administered to the ICICI bank customers. The data
105 have been collected by personal interviews with the help of the pre-defined interview schedule. A structured
106 questionnaire was used as a data collection tool, and the statistical random sampling was used for the purpose
107 of the study. The survey was conducted during August, September 2010, among 125 geographically dispersed
108 ICICI bank customers spread over the city.

109 **9 VII.**

110 **10 TOOLS AND TECHNIQUES USED**

111 Tables' bar diagram and structures are used in explanations to bring out the point more clearly. Tabulation
112 of the primary data was done. On the basis of these tables, trends came out more visibly. Other statistical
113 techniques those used are,

- 114 ? Percentage method -it shows the trend of the variable.
- 115 ? Chi-square -it is used to test the independence of the attributes.

116 **11 IX September**

117 1. To find out the most preferable type of the bank account. 2. To find out the Period of association of the
118 people with the bank. 3. To know the relationship between the frequency of visits and Income level, occupation,
119 Education level.

120 To ascertain the relationship between the preferred choice of banking services and the educational level. 4.
121 To find out the factors influencing the opening of a bank account among the respondents. 5. To find out the
122 relationship between the rank and the factors influencing the opening of a bank account among the respondents.
123 6. To find out the relation of tracking transaction, credit card payment and demat services with the frequency
124 of visits.

- 125 ? Anova-it is used to test the variability of the different groups.
- 126 ? Ranking method-its basic property is to arrange a number of attributes in a particular order.
- 127 ? Kolmogorov-Smirnov test -It is used to test the relationship between the rank and the factors influencing
128 the attributes.
- 129 ? Multiple Regression technique -This statistical technique explores linear relationships between the predictor
130 and criterion variable VIII.

131 **12 ANALYSIS AND INTERPRETATION a) Type of the Bank 132 Account**

133 The nature of the respondents' transactions was analyzed according to the type of account they had with the
134 bank. For the purpose of this analysis the accounts were classified as current account, saving account, term
135 deposits and demand deposits. The differences are analyzed statistically using one-way ANOVA.

136 **13 Null Hypothesis:**

137 H 0 : There is no significant difference in service pattern of the different accounts .
138 Anova Interpretation: It is inferred that there are significant differences between various account services. We
139 proceed further to know which account usage is preferable one.
140 Graph.1
141 ? It is observed that 44% of the people have the current account services followed by the saving account i.e.
142 26%

143 **14 b) Period of Association with the bank**

144 The Period of Association with the bank is measured as the number of months that the respondents had been
145 operating the bank account with the service provider. For convenient analysis, respondents' are divided into four
146 groups such as, the respondents having an account for less than six months (new users), between six to twelve
147 months, between twelve to eighteen months and more than eighteen months. Adoption of the different services
148 is analyzed statistically using one-way ANOVA.

149 **15 Null Hypothesis:**

150 H 0 : There is no difference in service pattern of the different accounts with respect to age (period of association
151 with the bank).
152 Anova Interpretation : It is inferred that there are significant differences between various account services in
153 terms of the period of association with the bank.

21 D) THE RELATIONSHIP BETWEEN THE PREFERRED CHOICE OF BANKING SERVICES AND THE EDUCATIONAL LEVEL

154 c) The Relationship between the frequency of visits and income level, occupation, educational level.
155 The relationship is tested by using two-way ANOVA (i) The Relationship between the frequency of visits and
156 income level

157 To test the relationship between the income of the respondents and the frequency of the visits to the bank,
158 the respondents' are divided into four groups according to their income level such as (>15,000), (15,000-
159 25,000), (25,000-35,000), (35,000 and more). The data have been collected about the frequency of visits weekly or
160 fortnightly or monthly or quarterly.

161 The following hypotheses have been formulated to analyze the data using two-way ANOVA.

162 16 Null Hypothesis:

163 H 01 : There is no significant difference in the income levels.

164 H 02 : The respondents' do not differ much with respect to the frequency of visits to the bank.

165 Anova Interpretation: It is inferred that, the people have a wide difference with respect to the income level
166 and also the frequency of visiting the bank. We proceed further to know which income group people visit the
167 bank most.

168 17 Graph. 2

169 ? It is observed that the people of higher income group visit the bank the most.

170 (ii) The Relationship between the frequency of visits and occupation

171 For the convenience of the analysis of the relationship between the occupation of the respondents and the
172 frequency of the visits to the bank, the respondents' are divided into four groups such as government servant,
173 professionals, private sector employees and the business men. The data have been collected about the frequency
174 of visits weekly or fortnightly or monthly or quarterly.

175 The following hypotheses have been formulated to analyze the data using two-way ANOVA

176 18 Null Hypothesis:

177 H 01 : There is no significant difference in the occupation.

178 H 02 : The respondents' do not differ much with respect to the frequency of visits to the bank.

179 Anova Finding out the critical differences and comparing these with each other, we find insignificant difference
180 among the treatments A 1, B 1, C 1, D 1 , E 1 (column wise).

181 ? There exists insignificant differences among the people of the different occupation but, the mean score of
182 the businessmen and the monthly visits to the bank are the maximum. So, business men visit the bank the most
183 and the people visit the bank mostly quarterly.

184 19 c) The Relationship between the frequency of visits and 185 educational qualification

186 The people assessing to ICICI bank are spread on a cross-section of the different education groups from under
187 graduate to professional degree. A majority of the respondents are graduates and professional. This basic
188 objective of the analysis is to find out whether there is an association among the people of different educational
189 levels as well as the frequency of visits to the bank.

190 The following hypotheses have been formulated to analyze the data using two-way ANOVA

191 20 Null Hypothesis:

192 H 01 : There is no significant difference in the occupation.

193 Anova Table ?? ??——H 02 is accepted.

194 Interpretation : It is inferred that, the people have a wide difference with respect to the frequency of visiting
195 the bank and there exists insignificant differences among the people of the different levels education.

196 21 d) The Relationship between the preferred choice of banking 197 services and the educational level

198 The association between the variables is tested by using chi-square test. Null hypothesis H 0 : There is no
199 significant association between the education level and the preferred choice of banking.

200 Statistical test : Chi square test is the most appropriate test for this purpose.

201 Level of significance : Desired level of significance is $5\% = 0.05$ Degrees of freedom : $(4-1) (4-1) = 9$ Test
202 statistic :

203 Chi-Square Tests H 0 is rejected and H 1 is accepted Interpretation : So, H 0 is rejected and H 1 is accepted.

204 In other words, there is an association between the education level and the preferred choice of banking.

205 Phi coefficient : It is used to test the strength of association between two variables i.e. education level and
206 the preferred choice of banking. $? = ? (x^2 / N) = 0.145$

207 The value ? is nearer to zero. It indicates that the association between two variables is not so strong.

208 We proceed further to know the most popular choice of the banking services.

209 **22 Graph . 3**

210 ? It is observed that the people prefer to the ATM card services the most.

211 e) The relationship between the rank and the factors influencing the opening of a bank account among the
212 respondents Satisfaction is an important element to create demand for any banking services. When a consumer
213 gets satisfaction from the services, he becomes the ambassador for that. It is therefore necessary to assess the
214 relationship between the rank and the factors influencing the opening of a bank account among the respondents.
215 The data have been collected on 5-point likert type scale in all five attributes. The statements were measurable
216 on a Likert scale of 1-5; where 5 indicates strongly disagree and 1 indicates strongly agree. From the above
217 analysis we observed that two attributes Convenient ATM location and the convenient bank location have the
218 lowest rank sum. So, we conclude that the Convenient ATM location and the Convenient bank location are the
219 more influencing Let us test the relationship between the rank and the factors influencing the opening of the
220 bank account among the respondents by using Kolmogorov-Smirnov test.

221 **23 Graph of Preferred choice of Banking**

222 Null hypothesis H 0 : There is no relationship between the rank and the factors influencing the opening of a
223 bank account among the respondents. Interpretation : As H 0 is rejected and H 1 is accepted, there exists a
224 relationship between the rank and the factors influencing the opening of a bank account among the respondents.

225 f) The effect of tracking transaction, credit card payment and demat services on the frequency of visits.

226 The frequency of visits of the customer to the bank is correlated with tracking transaction, credit card payment
227 and demats services. Here the basic interest is to find out the weightage of the independent variables (tracking
228 transaction, credit card payment and demat services) on the predictor, frequency of visits by using the Multiple
229 Regression technique.

230 Let Y be the dependent variable = frequency of visits B = the coefficient of determinant (a constant value) X
231 1 = tracking transaction Adjusted R Square value tells us that our model accounts for 97.8% of variance in the
232 frequency of visits and it signifies that it is a very good model. This table gives details of the correlation between
233 each pair of variables. There is a very good correlation between the criterion and the predictor variables. The
234 values here are acceptable. a Dependent Variable : YX 2 = credit card payment X 3 = demat services Y = B 0
235 + B 1 X 1 + B 2 X 2 + B 3 X 3 Step-by-Step Multiple Regression

236 The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large
237 value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and
238 Sig (p) values give a rough indication of the impact of each predictor variable -a big absolute t value and small
239 p value suggests that a predictor variables having a large impact on the criterion variable.

240 Tracking transaction has the highest beta value (.340), credit card payment and the demat services have the
241 negative values of (-1.1886) and (-0.127).Error variance is explained by constant by 14.506, followed by tracking
242 transaction (0.422), credit card payment (0.938), demat services (0.518).Sample t-test correlates positively for
243 tracking transaction (1.427) with the frequency of visits to the bank.Y = 29.509 + 0.603 X 1 -1.886 X 2 -0.127X
244 3

245 By substituting the values 0,1,2,3 for the predictor constant, the frequency of visits can be predicted for every
246 account holder.

247 **24 IX.**

248 **25 CONCLUSION AND FINDINGS**

249 India has a well developed banking system. Most of the banks in India were founded by Indian entrepreneurs
250 to provide financial assistance to traders, agriculturists and Indian industrialists. Indian banks have played a
251 significant role in the development of Indian economy by inculcating the habit of saving in Indians and by lending
252 finance to Indian industry. The ICICI Group is well positioned to participate in and contribute to this process.
253 ICICI bank is among the first to recognize the opportunity presented by the retail market. With the increase
254 in employment opportunities, it has made it possible to open up the doors for the retail sectors which have led
255 to access the banks more frequently. The purpose of measuring customers' acceptability of ICICI bank is to see
256 whether the ICICI bank stands in this regard in the eyes of its customers, thereby enabling service and product
257 improvements leading to higher satisfaction levels. The research is just one component in the quest to improve
258 customer satisfaction. The major findings of the study are given below. a. It is found that there exist significant
259 differences between various account services such as current account, saving account, term deposits and demand
260 deposits and 44% of the people have the current d. There exists insignificant differences among the people of
261 the different occupation but, the business men visit the bank the most and the people visit the bank mostly
262 quarterly. e. It is found that, the people have a wide difference with respect to the frequency of visiting the
263 bank and there exists insignificant differences among the people of the different levels of education. f. There is
264 no strong association between the education level and the preferred choice of banking. At the same time it is
265 observed that the people prefer to the ATM card services (36%) the most followed by phone banking (34%). g.

25 CONCLUSION AND FINDINGS

266 There exists a relationship between the rank and the factors influencing the opening of a bank account among the
267 respondents. h. It is found that the Convenient ATM location and the Convenient bank location are the more
268 influencing factors of opening the bank account where as the least preference goes to Loan / Deposits. i. The
269 frequency of visits is positively correlated with the tracking transaction and it is negatively correlated with the
270 credit card payment and demat services. account services followed by the saving account i.e. 26% b. It is inferred
271 that there are significant differences between various account services in terms of the period of association with
the bank. c. It is observed that the people of higher income group visit the bank most. ^{1 2 3}



Figure 1:

1

Sources of variation	d.f.	Sum of squares	Mean Sum of squares	F
Column (type of account)	3	81.267	27.089	F 1
				=
				4.21
Error	12	77.2128	6.4344	
Total	15			
Level of significance : Desired level of significance is 5%				
F 0.05 (3, 20) =3.5874 < Cal. F 1 (type of account) ——H 01 is rejected				

Figure 2: Table 1

272

¹© 2011 Global Journals Inc. (US) September

²© 2011 Global Journals Inc. (US) © 2011 Global Journals Inc. (US)

³© 2011 Global Journals Inc. (US) © 2011 Global Journals Inc. (US) IX September

2

Sources of variation	d.f.	Sum of squares	Mean Sum of squares	F
Column (type of account)	3	81.267	27.089	F 1
				=
				4.21
Error	12	77.2128	6.4344	
Total	15			
Level of significance : Desired level of significance is 5%				
$F 0.05 (3, 20) = 3.5874 < \text{Cal. F 1 (type of account)}$ —— H 01 is rejected				

[Note: ICICI Bank: A Multivariate Analysis of Customers' Acceptability]

Figure 3: Table 2

3

Sources of variation	d.f.	Sum of squares	Mean Sum of squares	F
Row (Frequency of visits)	3	83.621	27.873	4.22
Column (Income level)	3	79.856	26.619	4.0331
Error	9	59.4	6.60	
Total	15			
Level of significance : Desired level of significance is 5%				
$F 0.05 (3, 15) = 3.2874 < \text{Cal. F 1 (Frequency of visits)}$ —— H 01 is rejected				
$F 0.05 (3, 15) = 3.2874 < \text{Cal. F 2 (Income level)}$ —— H 02 is rejected				

Figure 4: Table 3

4

Sources of variation	d.f.	Sum of squares	Mean squares	Sum of F
Row (Frequency of visits)	3	71.9088	23.9696	3.87
Column (Occupation)	3	70.0344	23.3448	4.11
Error	9	41.12	5.68	
Total	15			

Figure 5: Table 4

25 CONCLUSION AND FINDINGS

8

Preferred choice of Banking	Under	Graduates	Post Graduates	Professionals	Total
Phone Banking	19	12	6	5	42
Internet Banking	3	3	4	8	18
ATM	9	8	8	20	45

Figure 6: Table 8 :

9

d.f Asymp. Sig. (2-sided)

Figure 7: Table 9 Value

10

: Rank

Figure 8: Table 10

11

(Observed	E	O -E
	(Expected frequency)	
1.616	0.20	1.416
1.56	0.20	1.36
2.232	0.20	2.032
1.992	0.20	1.792
1.92	0.20	1.72

Test statistic : KS -calculated value is obtained by the following rule

$$? (O-E) = 8.608$$

$$KS -calculated value = (1.36 / ? n) = 0.1225$$

Calculated Value > Tabulated value, H 0 is rejected and H 1 is accepted.

Figure 9: Table 11 O

12

Model R	R	Adjusted	R	Std. Error of the Esti-
	Square	Square		mate
1	.989	.978	.968	1.63656

a Predictors : (Constant), X3, X1, X2

Figure 10: Table 12 :

13

: Correlations				
	Y	X1	X2	X3
Y	1	.975	-.985	-.932
X1		1	-.967	-.905
X2			1	.943
X3				1

** Correlation is significant at the 0.01 level (2-tailed).

Figure 11: Table 13

14

Model	Unstandardized		Standardized		t	Sig.
	B	Std. Error	Beta			

Figure 12: Table 14 :

273 [Icici and Bank] *A Multivariate Analysis of Customers' Acceptability* REFERENCES RÉFÉRENCES REFER-
274 ENCIAS, Icici , Bank .

275 [Dr and Srtivastava ()] *Banking theory and practice*, P Dr , Srtivastava . 2007. Himalaya Publishing House. p. .
276 (Tenth revised edition)

277 [Business Today (2007)] *Business Today*, 25 th February , 2007. (Bank Ratios)

278 [Chandana et al.] *e-Business adaptation -a comparison of Australian and Indian experiences in Internet banking*,
279 R Chandana , Paula M Unnithan , Swatman .

280 [Nalini Prava] 'Emerging Scenario of Indian banking Industry'. Tripathy Nalini Prava . *Mahamaya Publication*,
281 2005 edition, p. .

282 [Tripathy (2007)] 'ICICI Bank aims for 30-35 percent growth'. Devidutta Tripathy . *International Business*
283 *Times*, 7 th December, 2007.

284 [Nandini Sen Gupta and Bureau (2008)] 'ICICI Bank may cut rates by 50-75 bps in'. Nandini Sen Gupta , Bureau
285 . www.icici.com *Business Standard*, January 29. 29 th December, 2008. 11. 28 th July, 2008 12. (How ICICI
286 Bank plans to meet challenges)

287 [Sathya Swaroop] 'Indian Banking System'. Debasish Sathya Swaroop . *Mahamaya Publication*, 2005 Edition, p.
288 . (Bishnu Priya mishra)

289 [Iyengar] *Introduction to banking*, Vijayaragavan Iyengar . p. . (Excel Books. First edition)

290 [Dr and Shajahan] *Research methods for management*, . S Dr , Shajahan . Jaico Publication , Second Edition.
291 p. .

292 [Santosh Kumar (2008)] M V Santosh Kumar . *ICICI Bank: Buy" Business Daily from The Hindu group of*
293 *publications*, (Sunday) 14 th December, 2008.