

# ATM as an Enabler of Customer Satisfaction in Banks - An empirical study

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## ABSTRACT

In the post globalization era , multi national banks have entered India with state of the art technology enabled services like ATMs, E-banking, mobile banking etc,. This has prompted even Indian banks to follow the suit. This empirical study was undertaken to find out whether introduction of ATMs has helped Indian banks in non metro cities like Hubli in Karnataka to increase Customer Satisfaction. On the basis of 5 point Likert scale, using SPSS software, this paper analyzes the different factors affecting customer satisfaction leading to a mathematical model and some measures are suggested to make ATM services more effective.

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### Introduction

Considering the history of banking, all transaction have been done manually. And the competition in the same sector was very low due to number of banks, customer base, and restriction on MNC banks to enter Indian market. The banking sector has been considered as a major participant in service industry involving ample transaction between the customers and personnel within banks on various aspects.

Early 90's saw the on set of globalization in Indian market with most of the sectors including banking opening up to global competition. This has prompted many Multi National banks like City Bank, Standard Chartered Bank, ABN AMRO etc., to look at Indian market for their business. They brought with them new processes, new products and had very different approach towards getting their business from Indian customer. Some of their processes which used technology were ATM, Internet-banking. Mobile Banking etc., Technological innovations have changed the way bankers perform routine business practices and the way they interact with their customers on a day-to-day or even hour-to-hour basis. This has led to enhanced customer satisfaction.

### Need for the Study :

This new pace has changed the environment of competition in the Indian market. The traditional (nationalized and private) banks geared up with the same speed.

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The technological innovations, which have changed the way bankers perform routine business practices and the way they interact with their customers differently than they used to be earlier. In spite of all such development, in all major banks of India it was traditional. Only of late other banks also have started taking recourse to this.

It is now felt that all the banks, if they want to survive in this ever-changing market, should embrace technology. Many banks are introducing technology enabled services like ATM s, E-banking, Mobile Banking, etc.

A need has been felt to know whether the introduction of technology enabled services in the form of ATM services are really contributing to the enhancement of customer satisfaction both external customers and there by leading to improved business. Whether customers want or they don't want, still, these services are being offered to them by the banks.

Since no research work is done in this regard in this particular region of North Karnataka, a need has been felt to research and find out to what extent introduction of technology has really contributed to the objective of its introduction i.e., Customer satisfaction. In the process of doing this, how it has affected the customers and the bank personnel.

Specifically Hubli city in Dharwad district is chosen because it is the major commercial center in North Karnataka and would represent all such non-metro cities in Karnataka and India.

**Objectives:**

1. To find out the reasons of customers, which made them to avail technology related services like ATM Debit Cards from banks and the present usages of those services.
2. To study the perception of bank customers towards various factors with respect to ATM Debit Cards
3. To investigate the relationship between customer satisfaction vis-à-vis different factors of ATM Debit Cards
4. To develop a model of mathematical equations for predicting customer satisfaction of ATM card given their rating in various factors and to identify relative importance of each factor against overall satisfaction.

**Research Methodology -**

<u>Sl</u>	<u>Item</u>	<u>Description</u>
A.	Type of Study	Exploratory, Descriptive and Causal
B.	Source of data collection	Primary source
C.	From whom	
	1. Population	Customers who are having ATM cards in Hubli City
	2. Sampling Unit	Individual participant
	3. Sampling Element	Individual participant
	4. Sampling method	Purposive Judgmental sampling
	5. Sample Size	1522 ATM users
D	Tool of Data Collection	Schedule / Questionnaire
E	Statistical Techniques	Graphs, charts, Mean, Regression Analysis
F	Scope and limitation	The Scope of the study is limited to the responses of customers of Hubli city

**Questionnaire Design and Measurement Scale:**

While developing the Questionnaire inputs from customers and the employees of banks and a thorough study was undertaken to arrive at the factors and items used in the study. A pilot testing of the questionnaire with the help of 20 customers was undertaken to test the understanding of the elements of the questionnaire.

Likert type 5-point scale is used to find out the level of satisfaction as regards the different factors affecting Customer satisfaction of various technology enabled services users and bank employee's opinions. The scores range from 1 to 5 where 1 stands for Highly Dissatisfied and 5 stands for Highly Satisfied.

**Discussions and Conclusion :**

**Sampling Profile of ATM Debit Card Customers:**

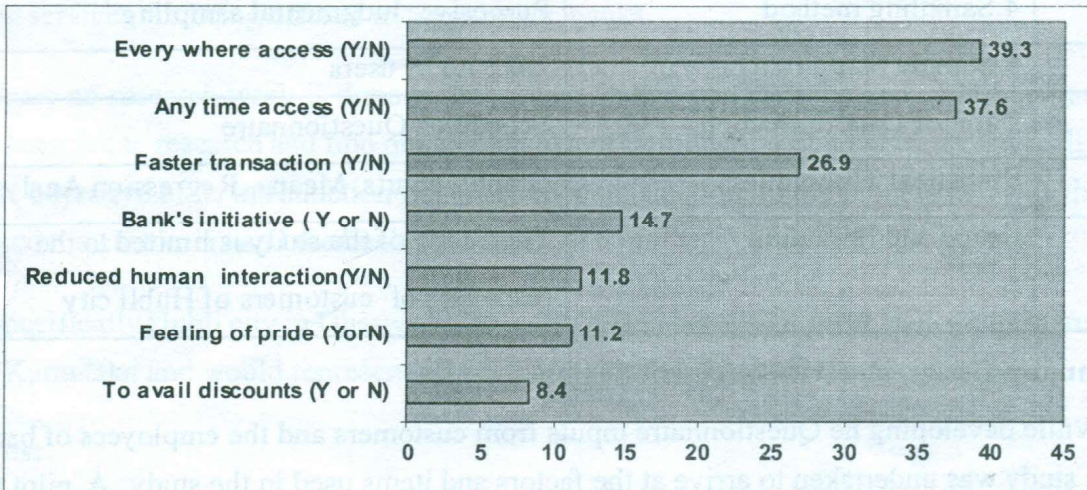
**Table No:1 Bank Type/ more frequently used card**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SBI & allies	502	32.9	32.9	32.9
Public sector banks	412	27.2	27.2	60.1
Old Private Sec banks	179	11.7	11.7	71.8
New Private Sec banks	429	28.1	28.1	100.0
Total	1522	100.0	100.0	

**Table No: 2 Occupations of ATM Debit Card Customers**

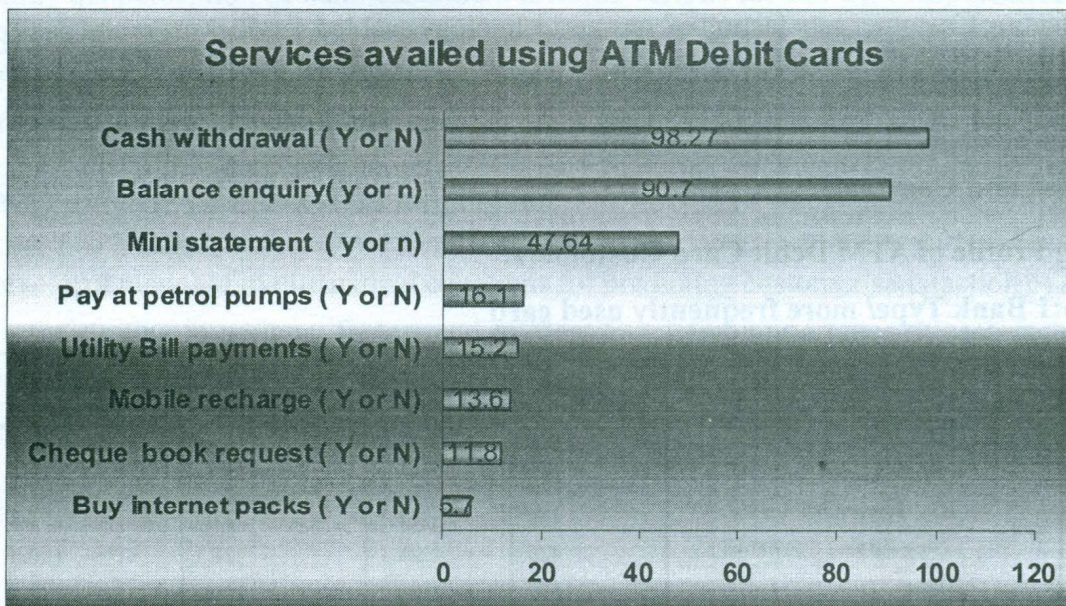
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Student	511	33.6	33.6	33.6
House Wife	61	4.0	4.0	37.6
Business	296	19.4	19.4	57.0
Salaried	520	34.2	34.2	91.2
Self Employed Professional	98	6.4	6.4	97.6
Retired	16	1.1	1.1	98.7
Others	20	1.3	1.3	100.0
Total	1522	100.0	100.0	

**Reasons for Holding ATM Debit Card (In Percentages):**



- The main reasons which made the customers to go for having a ATM Debit Card is to Access bank everywhere (39.3%),

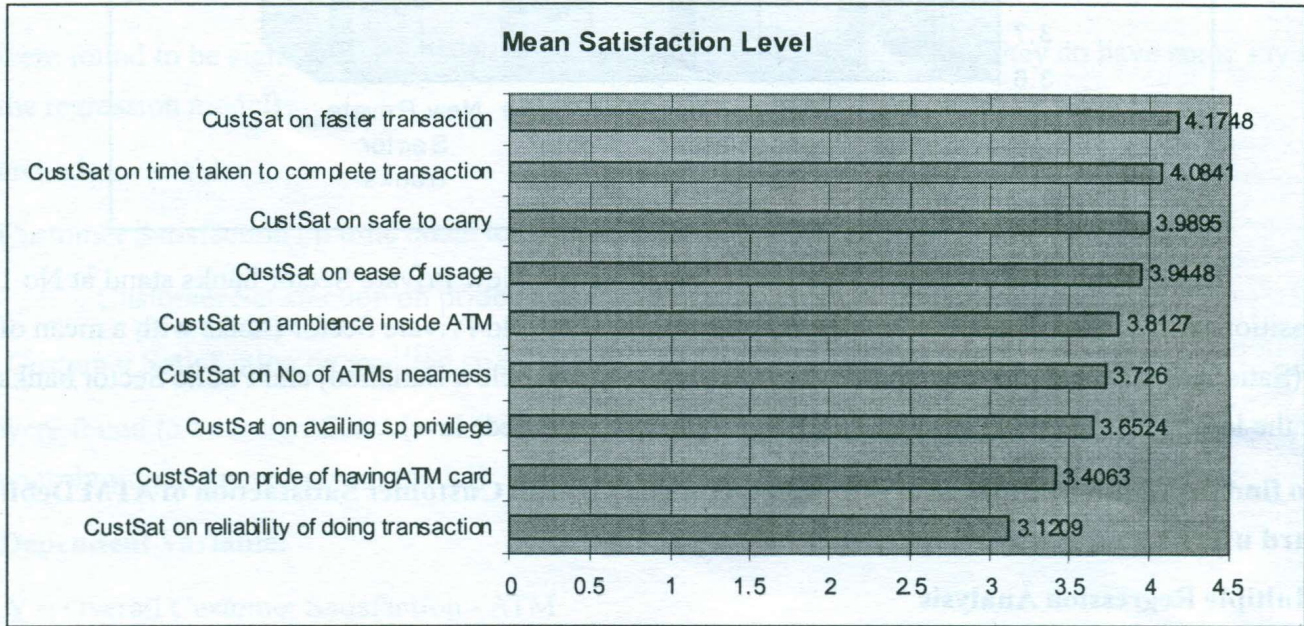
**Services Availed Using ATM Debit Cards :**



The various purposes for which ATM Debit Cards are used are as follows :

Maximum respondents (98.27%) have used these ATM cards for Cash Withdrawal., 90.7 % of respondents have used cards to find out the Balance in their Accounts.

**Mean Level of Customer Satisfaction for the different items in the Scale for ATM Debit Card Users :**

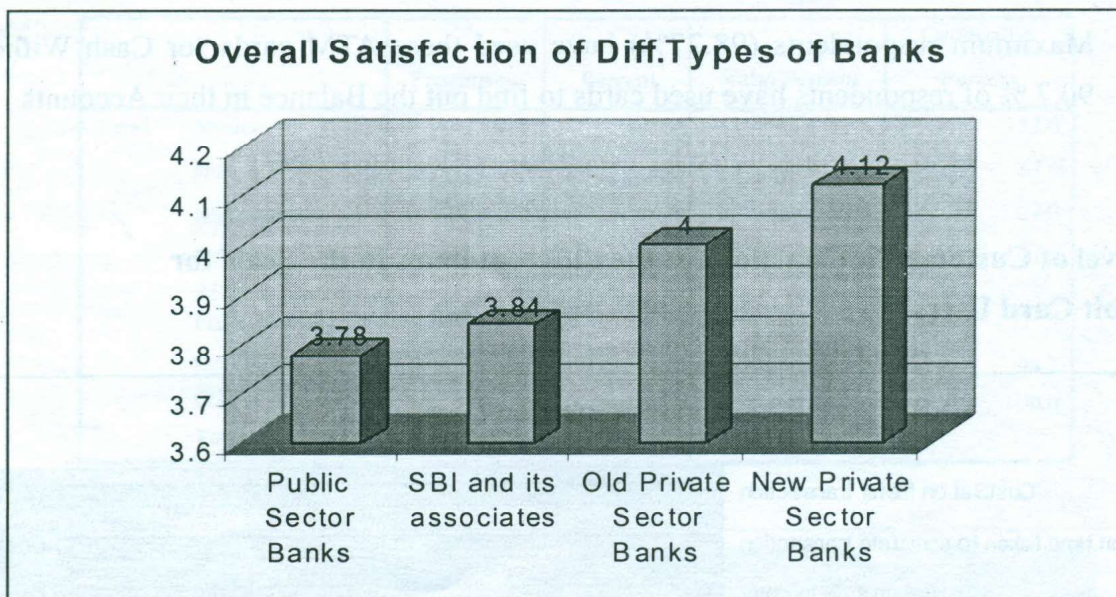


From the analysis it is found that the mean satisfaction levels for all the items have mean of more than 3, which indicates at least that they are not on the dis satisfied side.

**Comparison of Overall Satisfaction level of ATM Services for different types of Banks:**

Type of Bank	Overall Satisfaction Level
SBI and its associates	3.84
Public Sector Banks	3.78
Old Private Sector Banks	4.0
New Private Sector Banks	4.12

**Comparison of Overall Satisfaction level for different types of Banks :**



It can be inferred that out of the four types of banks, New Private Sector banks stand at No.1 position with a mean of 4.12 (above Satisfied), followed by Old Private Sector Banks with a mean of 4 (Satisfied), SBI and its associates with a mean of 3.84 (just below Satisfied) and Public Sector banks at the last position with a mean of 3.78 (slightly below Satisfied) level.

**To find the relative influence of different factors on Overall Customer Satisfaction of ATM Debit card users :**

**Multiple Regression Analysis**

**SPSS Output :**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.931	.870	.081	.79939

a Predictors: (Constant), CustSat on reliability of doing transxn, CustSat on availing sp privilege, CustSat on safe to carry, CustSat on No of ATMs ,nearness, CustSat on pride of having atm card, CustSat on faster transxn, CustSat on time taken to complete transxn, CustSat on ease of usage , CustSat on ambience inside ATM

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	2.048	.182		10.995	.000
	CustSat on No of ATMs ,nearness	.063	.026	.061	2.292	.022
	CustSat on faster transxn	.070	.031	.065	2.444	.015
	CustSat on pride of having atm card	.03	.024	-.035	-1.295	.195
	CustSat on safe to carry	.062	.026	.065	2.418	.016
	CustSat on availing sp privilege	.001	.023	.001	.046	.963
	CustSat on ambience inside ATM	.052	.026	.057	1.976	.048
	CustSat on ease of usage	.095	.031	.090	3.156	.002
	CustSat on time taken to complete transxn	.004	.032	.038	1.359	.174
	CustSat on reliability of doing transxn	.167	.018	.169	6.714	.000

a Dependent Variable: Cust Sat on Overall - ATM

It is observed that out of the different independent variables

Customer Satisfaction on reliability of doing transxn,

Customer Satisfaction on safe to carry,

Customer Satisfaction on No of ATMs, nearness,

Customer Satisfaction on faster transxn,

Customer Satisfaction on ease of usage and

Customer Satisfaction on ambience inside ATM

were found to be significant (value of significance less than 0.05, meaning they do have some say in the regression model)

and other variables

Customer Satisfaction on time taken to complete transxn,

Customer Satisfaction on pride of having atm card and

Customer Satisfaction on availing sp privilege

were found to be insignificant ( value of significance is more than 0.05 meaning, they don't have any contribution in the regression model)

**Dependent Variable:**

Y = Overall Customer Satisfaction - ATM

Constant:

$$a = 2.048$$

**Independent Variables:**

Reliability of doing transaction : X1 Regression Coefficient:  $b_1 = 0.167$

Ease of usage : X2 Regression Coefficient:  $b_2 = 0.095$

Faster transaction : X3 Regression Coefficient:  $b_3 = 0.070$

No of ATMs nearby : X4 Regression Coefficient:  $b_4 = 0.063$

Safe to carry : X5 Regression Coefficient:  $b_5 = 0.062$

Ambience inside ATM : X6 Regression Coefficient:  $b_6 = 0.052$

**Regression Model :**

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + e$$

$$Y = 2.05 + 0.167 X_1 + 0.095 X_2 + 0.070 X_3 + 0.063 X_4 + 0.062 X_5 + 0.052 X_6 + e$$

Looking at the regression coefficients ( the higher the value of regression coefficient , the more it influences the dependent variable ) , it can be inferred that the most influencing factor on Overall customer Satisfaction is Reliability of doing transactions, followed by Ease of Usage, Faster transaction, No of nearby ATMs, Safe to carry and Ambience inside the ATM.

**Suggestions :**

- 1) In order to be more competitive, banks should provide good service to its customers, install more ATMs to be able to reach customers better , have competitive Service Charges and demand lesser Minimum Balance.
- 2) The customers are using ATM debit cards for Cash withdrawal , Balance enquiry and to get Mini Statements. The Banks should create awareness regarding the other services like Utility Bill payments, New Cheque book request, buying Internet packs, paying pay to petrol pumps etc., so that customers will have a feel of the power of their cards and thereby provide more business to the Banks.
- 3) In order to increase the Level of Customer Satisfaction, Banks should take necessary steps to make the usage at ATMs more easy and user friendly.
- 4) Since Apr 1st 2009, as per RBI notification, the customers have the privilege of using any Banks' ATM for Balance Enquiry and Cash withdrawal. This calls for a Interchange agreement between banks. As per the current arrangement, each bank is entitled to charge Rs. 18 for every Third party transaction. Banks should make efforts to see that its customers use its own ATMs always. Because it may so happen that if the customers find other Banks' ATM more attractive, they may go to that ATM for transactions even though their ATM is available nearby. This will lead to jeopardizing the efforts of installing more ATMs.
- 5) In comparison with New Private Sector Banks and Old Private Sector Banks, the Public Sector Banks and SBI and its associates should enhance their efforts to increase the customer satisfaction levels to further improve their business.
- 6) In order to achieve higher Customer Satisfaction, priority should be given in the following order:
  - I- Reliability of doing transaction,
  - II- Number of ATMs and their nearness,
  - III- Providing Faster transactions,
  - IV- Ease of usage at ATM,
  - V- Ambience inside ATM.

**Conclusion :**

The present research was undertaken with an objective of finding out whether introduction of ATMs by Indian Banks in non metro cities like Hubli , has really helped them in attaining elevated Customer Satisfactin levels. It is found from the research that introduction of ATMs by Indian banks has definitely helped to increase the customer satisfaction level. The overall satisfaction level is not the same across different types of banks. The New Private Sector banks are leading where as Public Sector banks are last in this regard. The regression model provides the priority to be given to the different factors in

the order of their influence on Overall Customer Satisfaction level. The future of Indian banks depends on how effectively and speedily they are able to implement the necessary actions keeping in mind the needs of the customers.

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