

Customer Perception and Satisfaction towards Payment Banks: A Study of Haryana

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Abstract – At present India is growing as a digitalized country. In this era of digitalization, the new concept or model has been emerged known as ‘PAYMENT BANKS’. These banks are licensed by Reserve Bank of India. It is a digital banking system launched by RBI to reach small villages and low income groups. The present paper provides a purview of customer’s perception, satisfaction and loyalty towards payment banks .These statistical tools and techniques are used in this study such as univariate statistics, Anova, t- test etc. has been used to extract the output. The study revealed that customers using payment banks are highly satisfied with the services of payments and they found it time efficient and secured. The study also found that customers are loyal towards payments banks and there is no difference exist in customer’s loyalty among all categories.

Keywords: Payments Banks, Customer’s Perception

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1. INTRODUCTION

The banking sector has gone a big change over the few decades, commencing as a mere avenue for deposit and lending, today banks are emerging as integrated providers of financial services. Several forms of banks have emerged over the year and particularly in the part of IT (information technology) age, there is a change in the nature of service provided by them. Payment banks is an offshoot of IT-based extension of the logical channel of financial services to reach out to their customers. Particularly, in a country like India, bank need to strive for customer proximity and payment banks are emerging as a cost-effective solution to reach the unreached areas. Payment bank is a new type bank in which all banking activities may be perform on the mobile phone with the help of internet. These banks are different from traditional banks because they can perform some certain restricted banking functions that allowed by Banking Regulation Act, 1949. Payment banks are restricted from providing loan and advance services but they can accept deposits, transfer of funds, internet banking, payment and remittance services and function as a business correspondent of other scheduled banks.

2. THEORETICAL BACKGROUND OF THE STUDY

This study is basically focus upon payment banks but, due to limited numbers study available on payment banks some studies on the mobile banking

has taken into the account to get the insight simulating. Chandarana (2015) organized a conceptual study on payment bank to know his working procedure in India. The study is based on secondary data from various websites, news articles and publications. The study concluded that the payment bank is a new concept in India and it would provide a good platform for the users, as they can now perform all banking activity on their mobile phones.

Laforet and Li (2005) investigated the market status for mobile banking in China and also examined mobile banking user’s demographic, attitudinal and behavioural characteristics. Relevant data were collected from 128 respondents living in six major cities of China through a random sampling method and used T-test & ANOVA to analyse the data. The study found that there was a very low level of awareness of mobile banking. Lack of concept understanding & its benefits, perceived risks, computer & new technological skills and cash-carry habit were the major barriers for the adoption of mobile banking. The study also found that most of the users were male and aged person as compared to younger and female.

Cruz et al. (2010) organized a study to find out the main factors for the adoption of mobile banking and the impact of socio-demographic variables on them. The data was collected from 3,585 customers of a major Brazilian bank through, online survey and used Multidimensional scaling and Chi-square test is

used to check differences between socio-demographic variables. The study found that the majority of respondents were not using any kind of mobile banking services and the main reasons behind this was the Perception of cost, risk, low perceived relative advantage and complexity. The study also observed that there was no influence of socio-demographic variable over the adoption of mobile banking service.

Ganguli and Roy (2010) organized a study to identify the customer various generic service quality dimensions in technology-based banking and also examined the impact of these variables on customer satisfaction and loyalty. The data was collected from 325 undergraduate University students of Massachusetts, USA. They adopted the Confirmatory Factor Analysis and Structural Equation Modelling to check the reliability of the construct and test relationship among them. The study identified four major dimensions of generic service quality: customer service, technology convenience, technology usage easiness and reliability, technology security and information quality. The study found a significant positive impact of technology usage easiness and reliability on customer satisfaction and loyalty. Moreover, the study also observed that customer loyalty was positively influenced by technology convince and customer satisfaction.

Ramadan and Aita (2013) organized a study to investigate the impact of perceived satisfaction of mobile payment applications with user experience and expectation on brand loyalty and future usage. The data was collected from 305 users of Countries in the Middle-East, through focus group survey and used Structural Equation modelling to analyze the data. The study found that satisfaction with the quality of mobile payment application affected by increased experience and expectation, then it affects brand loyalty and purchase intention as well as. In addition, the service provider should keep in mind features of usability, availability, reliability, adaptability, accessibility, responsiveness and security while inventing mobile applications.

Extant review of the theoretical background reveals that there are very little studies has been conducted on payment. It is a new concept of banking through mobile phone. Today's every sector need to take care of their consumers and for this, they have to develop and design their services to improve their satisfaction, but satisfaction is not an only single aspect to study they also need to maintain loyalty in their customers. So, it is very essential to study, what are the factors, which affects the consumer satisfaction and loyalty of payment banks customers. It will help to improve the services rendered towards payment bank customers and also helpful for policymakers to design better policies according to current consumer requirements.

3. RESEARCH METHODOLOGY

Exploratory research design are used in the purposed study in order to understand the customer perception regarding payment banks in India. For this purpose a self-administrated questionnaire was developed to measure the customer perception. Customer's opinion and beliefs were measured on the five point Likert scale. Total 30 statements were included in the study, in which 20 statements were related to the customer perception, 10 statements used to measure customer satisfaction and loyalty. The data was collected from 200 users of the payment who were living in the Haryana state. Mean and standard deviation tools were used to describe the nature of the data and purposed hypothesis was tested with help of T-test and ANOVA.

4. DESCRIPTIVE ANALYSIS OF CUSTOMER PERCEPTIONS, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

4.1 Univariate Statistics: Mean and Standard Deviation

Univariate analysis is the evaluation of each or individual variable and points out the qualitative aspect of those variables. It describes about the patterns in the responses of the users and helps in the further application of tools and techniques. Mean and standard deviation have been used to understand the pattern of particular variables in the study. Mean score of the variables represents the central tendency of that variable and standard deviation tells about the variability in the data sets. All the statements are classified into three categories: the first table describe the mean score of the factor related to the customer perception towards Payment Banks. The second table based on univariate analysis of the overall satisfaction level of Payment Bank users and the third table indicates the score of overall customer loyalty.

Table: 1.1

Mean and standard deviation score of the factor related to the services aspect

Sr. No	Statements of variables	Mean	S.D.
01	I do not experience any difficulty while using the bank payment application.	3.60	1.147
02	Graphics used in payment banking application are so meaningful to content.	3.85	1.009
03.	The language used in the payment bank application is meaningful and easy to understand.	3.86	1.013

04.	Account opening process on payment bank application is very simple.	3.65	1.129
05.	It is difficult to find any option on the payment bank application.	2.34	0.985
06.	I use the payment bank due to the attractive discounts and cashback offers found on it.	3.70	1.203
07.	Payment banks pay interest at higher rates than other banks.	3.11	1.208
08.	Commission or charges of payment banks are higher to other banks.	2.81	1.217
09.	The interest policy used by the payment bank is less effective for attracting new customers.	2.95	1.153
10.	The payment bank does not misuse my personal information.	3.49	1.178
11.	All financial transactions through payment banks are secure.	3.68	1.060
12.	The payment bank pays good attention to the privacy of its customers.	3.71	1.060
13.	Payment banks do not care about the financial security of their customers.	2.38	1.297
14.	It is very easy to get any information from the payment bank's Online Customer Service executive.	3.18	1.266
15.	If any kind of fault, the customer service executive of the payment bank first apologizes to you.	3.22	1.125
16.	Payment banks generally take a long time to resolve your complaints.	3.06	1.146
17.	It takes very short time through payment bank online service support system to get info regarding services.	3.48	1.046
18.	The payment bank takes less time to complete the financial transactions	3.67	1.121

	of its customers.		
19.	All information provided by payment banks is always wrong.	2.21	1.131
20.	All services provided by the payment bank are completed on time.	3.76	0.898

Above table shows the mean and standard deviation of all statements included in the questionnaire to know about the factors affecting satisfaction and loyalty of the customers of Payment Banks. Higher mean represents a higher rate of the agreement by the respondents towards statement and lower mean indicate the lower rate of the agreement or disagreement by the respondents towards the particular statement.

According to the table 1.1 customers highly agree to the statement "The language used in the payment bank application is meaningful and easy to understand." With score (Mean=3.86, SD=1.013), given statement represent to the language used in the application are easily understandable by the users and payment bank applications provides options of the different languages to their customer. Second highly agreed statement was "Graphics used in payment banking application are so meaningful to content." (Mean=3.85, SD=1.009), high score of the statement indicates that content and graphics used in the application are so meaningful and easy to understand, both higher ranked statement is related to the 'ease of use', meaning that payment banks applications are easy to handle. The third highly ranked statement is "All services provided by the payment bank are completed on time." (Mean=3.76, SD=0.898), the mean score of this statement indicates that transactions through payment banks are time efficient. The fourth highly ranked statement is "The payment bank pays good attention to the privacy of its customers." (Mean=3.71, SD=1.060), high rank of this statement represents that customers are agreed upon payment banks pays good attention over privacy.

Table: 1.2

Customer satisfaction mean and standard deviation score

Sr. No.	Statements of variables	Mean	S.D.
01.	Payment banks have all the facilities, which should be in	3.49	1.165

	an ideal bank.		
02.	Current banking services provided by payment banks are useful for all customers.	3.61	1.111
03.	All services provided by the payment banks meet customers' expectations and requirements.	3.76	1.048
04.	Whenever I use the services of the payment bank, I feel highly satisfied.	3.78	0.979
05.	The payment bank provides fast and satisfactory services to its customers.	3.85	0.867
06.	Overall satisfaction level of the respondent	3.698	1.034

Table 1.2 describes about mean and standard deviation scores of statements related to the customer satisfaction. Mean score of the Overall Customer Satisfaction found 3.698 with 1.034 standard deviation, it showed that customers are more than moderate satisfied with services of Payment banks. Overall score of the customer satisfaction calculated by adding the score of all five statements and divided by a number of the statement.

Table: 1.3

Customer loyalty mean and standard deviation score

Sr. No.	Statements of variables	Mean	S.D.
01.	I will always use the payment bank in my all financial transactions.	3.49	1.22
02.	I will continue to use the payment bank until I get another bank that offers better services.	3.64	1.098
03.	I have positive thoughts about the payment bank services.	3.76	0.99
04.	I will always say positive things about the services of the payment bank.	3.67	0.963
05.	I would give advice to all my friends and relatives to make their financial transactions by the payment bank.	3.85	0.974

06.	Overall loyalty of the respondent.	3.682	1.049
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Table 1.3 comprised the mean and standard deviation scores of statements related to customer loyalty. The overall mean score of customer loyalty is 3.682 with 1.049 standard deviation. Respondents are found more than average level loyal towards Payment Banks.

4.2 Comparison of Mean Score: ANOVA and T-Test

T-test and ANOVA have been conducted to check the results related to the hypothesis based on categorical (Age of the respondent, Gender, Residential status and Educational qualification) variables. The results of the test have been used to confirm that whether mean score of different categories are statistically equal or not. T-test is used to compare the mean score of two different categories. In the case of more than two categories, ANOVA has been conducted. However, before applying the Parametric Tests over the responses of users, all assumptions related to Normality have been tested. Test of normality confirms with Kolmogorov-Simonov Test and Homogeneity of the variance checked by using Levene's Test. All the data has found normally distributed and all parametric test can be perform on the primary data.

Table: 1.4

Mean and standard Error score of customer loyalty based on gender

Group Statistics					
Variable	Gender	N	Mean	S.D.	S.E.
Overall Customer Loyalty	Male	106	3.6849	0.69827	0.06782
	Female	94	3.6787	0.81080	0.08363

Table 1.4 shows the Mean, Std. Deviation and Std. error of the mean of the male and female respondents. Male respondents mean score of customer loyalty was 3.6849 with S.E. 0.06782 whereas the mean score of the female respondent 3.6787 with S.E. 0.08363. Mean score of both categories seems more or less equal.

Table: 1.5

T-test result of overall customer loyalty based on gender

Variables	Mean difference	S.E. difference	T-value	df	P-value	Null hypothesis
Gender	0.00618	0.10671	0.058	198	0.954	Accepted

Table 1.5 indicates Mean difference (0.00618) between the average score with P-value (sign. = 0.954). P-value of the T-test was found more than 5% which revealed that there was no significant

difference between Male and Female customer loyalty in Payment Banks.

Table: 1.6

Mean and standard Error score of customer loyalty based on residential status

Group Statistics					
Variable	Residential status	N	Mean	S.D.	S.E.
Overall Customer Loyalty	URBAN	96	3.7708	0.69342	0.07077
	RURAL	104	3.6000	0.79562	0.07802

Table 1.6 describes Mean, SD and SE of Mean of Customer Loyalty based on residential status. Mean score of the urban user based on their customer loyalty was 3.7708 with S.E 0.07077 while the mean score of the rural user was 3.6000 with S.E. 0.07802.

Table: 1.7

T-test result of overall customer loyalty based on gender

Variables	Mean difference	S.E. difference	T-value	df	P-value	Null hypothesis
Residential status	0.17083	0.10591	1.613	198	0.108	Accepted

It is clear from table 1.7 that difference between mean scores urban and rural users was 0.17083 with S.E. difference 0.10591 P-value was 0.108, which was more than 0.05 indicates that there was no statistical difference in customer loyalty between urban and rural payment bank service users.

Table: 1.8

Result of ANOVA based on Age-group

Difference	Sum of Squares	Df	Mean Square	F	Sig.	Null hypothesis
Between Groups	1.298	3	.433	.764	.516	Accepted
Within Groups	111.037	196	.567			
Total	112.335	199				

Table 1.8 represents the result of the Analysis of variance (ANOVA) of different Age-groups Customer Loyalty. ANOVA jointly compare the mean score of various age groups and indicates F-ratio value 0.764 with sign. 0.516, which is found more than 0.05 and shows the null hypothesis was rejected. There was no significant difference between the age groups (18-24, 24-30, 30-40 and more than 40).

Table: 1.9

Multiple Comparisons of different Age group based on Post Hoc Test

(I) Age of respondents	(J) Age of respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
18-24	24-30	.03706	.12246	.990	-.2803	.3544
	30-40	-.02801	.18156	.999	-.4985	.4424
	above 40	-.22402	.17871	.594	-.6871	.2390
24-30	18-24	-.03706	.12246	.990	-.3544	.2803
	30-40	-.06506	.17691	.983	-.5235	.3933
	above 40	-.26108	.17398	.439	-.7119	.1897
30-40	18-24	.02801	.18156	.999	-.4424	.4985
	24-30	.06506	.17691	.983	-.3933	.5235
	above 40	-.19601	.21963	.809	-.7651	.3731
above 40	18-24	.22402	.17871	.594	-.2390	.6871
	24-30	.26108	.17398	.439	-.1897	.7119
	30-40	.19601	.21963	.809	-.3731	.7651

Table 1.9 exhibits the individual comparison of different Age-groups. Tukey HSD post hoc test was used to calculate comparisons among different age groups. The table indicates there was no significant difference among all the age groups at the individual level.

Table: 1.10

The result of ANOVA based on educational qualification

	Sum of Squares	df	Mean Square	F	Sig.	Null hypothesis
Between Groups	2.486	3	.829	1.479	.222	Accepted
Within Groups	109.849	196	.560			
Total	112.335	199				

Analysis of variance (ANOVA) was used to confirm whether there is any significant difference in customer loyalty with a diverse educational background. Table 1.10 presents the results of the comparison of the mean score of different educational background customer loyalty and shows the F-ratio (i.e. F=1.479) with P-value (i.e. p=0.222). The probability value was found more than 5% (p>0.05) which confirms the null hypothesis, there was an insignificant difference in customer loyalty of users with different educational qualification.

Table: 1.11

Multiple Comparisons of Educational Qualification based on Post Hoc Test

(I) Educational qualification	(J) Educational qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
up to 12 th	UG	.30558	.15925	.223	-.1071	.7182
	PG	.25278	.14562	.308	-.1246	.6301
	M.Phil./Ph.D.	.13205	.18544	.892	-.3485	.6126
UG	up to 12th	-.30558	.15925	.223	-.7182	.1071
	PG	-.05280	.13351	.979	-.3987	.2931
	M.Phil./Ph.D.	-.17353	.17608	.758	-.6298	.2827
PG	Upto 12th	-.25278	.14562	.308	-.6301	.1246
	UG	.05280	.13351	.979	-.2931	.3987
	M.Phil./Ph.D.	-.12073	.16386	.882	-.5453	.3039
M.Phil./Ph.D.	Upto 12th	-.13205	.18544	.892	-.6126	.3485
	UG	.17353	.17608	.758	-.2827	.6298
	PG	.12073	.16386	.882	-.3039	.5453

Above table indicates the results of multiple comparison of table 1.11 and shows the difference of means score of customer loyalty with standard error difference and have significance values more than 5%, which confirms that there was also insignificant difference among customer loyalty of participants with different education background (i.e. up to 10, 12th, Under Graduates and Post Graduates).

DISCUSSION

Individual analysis of the data is the most important analysis to understand the nature of the data sets or patterns of all responses. Descriptive analysis revealed that all the respondents were satisfied with the services of the payment and they have moderate level loyalty in them. Customers of the payment banks were highly satisfied with the ease of use, time efficiency and security features of the payment banks services. T-test and Analysis of variance were also used to confirm the hypothesis about socio-demographic variables. The results of the tests revealed that there was no significant difference in customer loyalty between all the categories.

CONCLUSION

Descriptive analysis are used to understand the nature or characteristics of the individual variable. Higher value of means are found of statements "The language used in the payment bank application is meaningful and easy to understand." (Mean=3.86, SD= 1.013) to content." (Mean=3.85, SD=1.009), statement "All services provided by the payment bank are completed on time." (Mean=3.76, SD=.898) and statement "The payment bank pays good And followed by statement "Graphics used in payment banking application are so meaningful attention to the privacy of its customers." (Mean=3.71, SD=1.060). High mean of first two statements revealed that using applications of the payment are easy to use. Third statement high mean indicating that time efficiency of the payment bank services are good and forth statement are related to the security feature and high value of means towards this

statement showed that security arrangement of payment banks are satisfying.

The overall mean score of the "Customer Satisfaction" variable has been find out 3.698 with 1.034. This value of mean score shows the good degree of customer satisfaction to the payment banks. Mean score "Customer loyalty" variable are also found more than moderate value (i.e. mean=3.682, SD=1.049), which shows the good degree of consumer's loyalty towards payment banks.

Independent T-test and ANOVA was used to confirm the research hypothesis about difference in mean scores of "Customer Loyalty" based upon categorical variables such as Age, gender, residential status and educational qualification. Kolmogorov-Simonov Test are used after conforming assumption related to the normality. The null hypothesis of all the tests (T-test and ANOVA) are accepted and revealed that, "There is no significant difference have been exist in customer loyalty among all categories". Customer loyalty are found independent from effect of all socio-demographic variables.

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