AN EMPIRICAL STUDY ON THE GROWTH OF EMERGING TRENDS IN E- BANKING SERVICES @ CUSTOMER PERSPECTIVE

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Short Profile

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ABSTRACT:

In current scenario e-banking needs to shift from product centric to customer centric. In India e banking services must be designed as per the requirements and expectations of the customers. The present paper aims to identify the problem faced in various online banking operations. This will give a positive direction to design the effective policy for e banking services in future. This paper has been divided into four sections dealing with four aspects of E-banking as ATM, Internet banking, Mobile banking and Credit cards. The purpose of this paper is to determine the level of customer's satisfaction toward the e-banking services. A total of number of customer taken for the study is 200 of PSU and PSIB banks of jaipur. Statistical analysis technique is used to study the significant relationship between the gender and customer satisfaction with e-banking services. The study also includes the Length of the use and Frequency of complaints about E banking products, Problems faced during e operations significantly provides impact on reliability and level of satisfaction among customers for the e banking services. The results of research paper will also helps the banker to form the strategies to meet the need of customers in rapidly changing system of banks in India.

KEYWORDS

E-Banking, Credit cards, Mobile banking, Reliability, Customer satisfaction.

INTRODUCTION :

Today, e-banking is used as a strategic tool in the global banking sector to attract and retain customers. There is huge development in the information technology and electronic data processing encourages the changes in banking industry. Branch banking is now change its operations towards the brick and mortar mode, click and order channels in e-banking. Customers can view their accounts, get e account statements, transfer funds, pay bills using net banking. EFT transactions have been increased and Smart Cards with an embedded micro-processor chip have brought about revolutionary change. Electronic Data interchange (EDI), RTGS, NEFT is most profitable development in the banking sector. Transaction costs have fallen down, productivity has enormously improved. E-banking increases the efficiency in the form of effective payment and enhances the delivery of banking services towards e banking customers to retain them.

REVIEW OF LITERATURE:

•Komal & Vandna (2012) in their research paper examined various ways of using e-banking services and assessed the progress of e-banking in India. The research paper also analyzed the e-banking scenario concerned with ATM, Mobile banking in India and their impact on customer satisfaction by analyzing the problems faced by the customers. This paper contains a comparative study of Private sector Indian banks and foreign banks. The study found that opportunities in e-banking are immense but the only need is to explore them.

Fozia (2013) examined the customer's perception toward the e-banking services. A total of numbers of customers taken for the study were 196. The study suggested the customer's perception regarding the e-banking services of public and private banks which provides help to the banker to understand the customers need in better way in future. This study highlighted that e-Banking will be successful for banks only when they have Commitment to e-Banking along with a deeper understanding of customer needs. The study also compared the e banking services in terms of ATM and complaints of customers in nationalized bank.

Research Gap:

There is a need to identify usage level of new innovative online banking services as Net banking and EFT. This will help the banks to improve their most demanding e-banking products and services and to design the improved strategies for providing effective services to the customers. Today PSU banks are facing extremely intensive competition with private sector banks in India. Thus there is a vital requirement to compare the length of use, frequency of complaints and customer support system for Mobile banking, Credit Cards and CBS banking operations both in PSU and PSIB banks.

OBJECTIVES:

•To explore the growth of e-banking with regards to customers' satisfaction in public and private sector banks.

• To explore the current e-banking scenario concerned with ATM, Internet banking, Mobile banking and Credit cards in banks.
• To assess the impact of ATM, Internet banking, Mobile banking and Credit cards on customers satisfaction through the analysis of problems faced by the customers and customer support system in banks.

Hypotheses:

H_0: There is no significant difference between customer satisfaction level of PSB and PSIB banks with regard to selected e banking services.
Ha: There is a significant difference between customer satisfaction level of PSB and PSIB banks with regard to selected e banking services.
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RESEARCH METHODOLOGY

• Data Collection

This research paper study is descriptive in nature and based on the primary source of data collection. The primary data is collected through the structured questionnaires from 200 customers of the leading PSU and PSIB banks (PNB Bank and Axis Bank) of Jaipur. The stratified random sampling method has been used to provide insights and acceptance of e- banking among customers of both the banks. It will help to identify the association of gender and complaints of respondent with satisfaction level with e banking services.

• Research Variables

Dependent Variable	Independent Variable
Customer Satisfaction	Length of the use of e banking service
Reliability among customers about e banking services	Frequency of complaints about E banking products
	Online Customer Support Services
	Convenience and User friendly Online Banking Services

• Data Analysis

E-banking Growth has been analyzed with using four major e-banking products of selected banks to measure the level of customer satisfaction.

E – Banking Products	Dimension for Study
• ATMs	1. Length of the use of e banking service
• Internet Banking	2. Information about change
• Mobile Banking	3. Frequency of complaints about e banking products
• Credit Card	4. Problems faced during e operations
	5. Reliability of e banking services
	6. Level of satisfaction among customers for the e banking services

1.Length of the use of e banking service

The present growth of ATMs, Internet Banking, Mobile Banking and Credit Cards is analyzed through the length of use by respondents of selected banks. Study time span is divided into five sub-options.

Chart 1.1 Length of use of E banking Services

Table 1:**Length of use**	ATMs	Internet Banking	Mobile Banking	Credit Cards
More than 8 years	60	0	0	0
Last 7-8 Years	86	20	10	10
Last 5-6 Years	39	38	64	64
Last 3-4 Years	9	56	83	83
Last 1-2 Years	6	86	43	43
Total	200	200	200	200
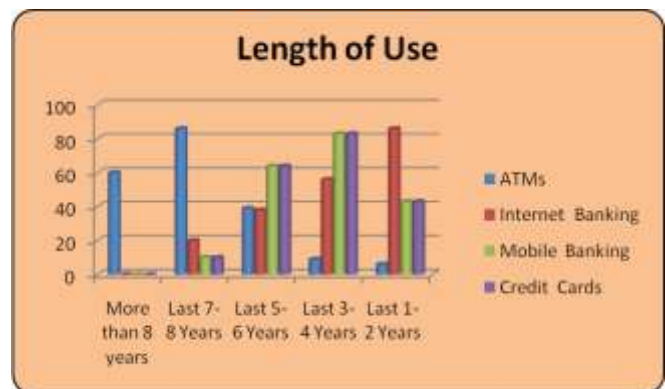
Source : Primary data of customers of selected banks

Above Table1 shows that ATM is the most popular e banking services in terms of time span among all the respondents. 86 respondents are using ATMs for last 7-8 years. 64 respondents gives their view that mobile banking becomes popular from last 5-6 years, 56 respondents are using internet banking from last 3-4 years, whereas 43 respondents are using Credit card services from last 1-2 years.

| Table 1.1 :Test Statistics of Length of use	ATMs	Internet Banking	Mobile Banking	Credit Cards
Mann-Whitney U	4043.000	4918.000	3730.000	4523.500
Wilcoxon W	9093.000	9968.000	8780.000	9573.500
Z	-2.510	-.323	-3.461	-1.227
Asymp. Sig. (2-tailed)	.012	.746	.001	.220
Grouping variable :Bank				
Results: H0	Rejected	Accepted	Rejected	Accepted
Source: Spss Result on Primary Data				

Inference:

From the above table shows out of 4 cases, in 2 cases null hypothesis is accepted as significance is more than 0.05 and in rest of the cases, null hypothesis is rejected as significance is less than 0.05. There is no significant difference between usages of internet banking and credit card services of PNB and Axis bank. Length of use of internet banking and credit cards services among customers of PNB and Axis bank is significantly same. On the contrary, there is a significant difference between usages of ATMs and Mobile banking services of PSU and PSIB bank. Length of use of ATMs and Mobile banking services among customers of PNB and Axis bank is significantly different.

2.Complaints Regarding E-banking Services

To find out the occurrence in which customers are having complaints with regard to e banking services. There are five different parameters of complaints.

Chart 2: Complaints Regarding E-banking Services

Table 2:Complaints	ATMs	Internet Banking	Mobile Banking	Credit cards
Very Often	2	0	1	6
Often	36	9	20	49
Sometimes	92	31	51	63
Rarely	40	126	96	58
Never	30	34	32	24
Total	200	200	200	200
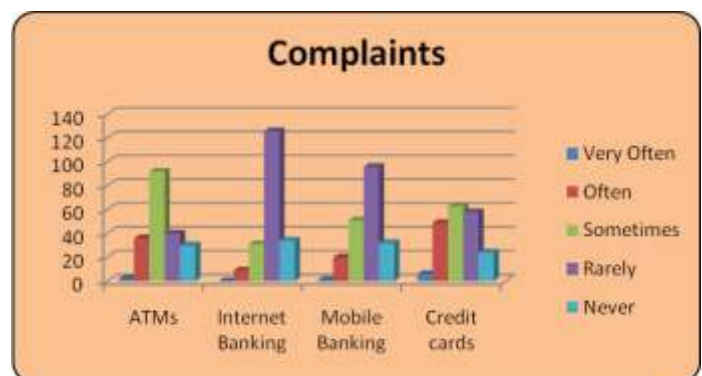
Source : Primary data of customers of selected banks

Above Table 2 shows maximum 30 respondents out of 200 whom never had problems with ATMs whereas 49 respondents often have complaints about credit cards services of the banks. The table also

shows that 126 respondents and 96 respondents rarely have complaints about Internet banking and Mobile banking respectively, only few respondents never had complaints with internet and mobile banking. There are more complaints about credit card services in both PSU and PSIB banks.

Table 2.1:Test Statistics of Complaints	ATM Complaints	Internet Banking Complaints	Mobile Banking Complaints	Credit Card Complaints
Mann-Whitney U	**4874.000**	**4362.000**	**4465.000**	**2909.000**
Wilcoxon W	**9924.000**	**9412.000**	**9515.000**	**7959.000**
Z	**-.327**	**-1.811**	**-1.403**	**-5.304**
Asymp. Sig. (2-tailed)	**.744**	**.070**	**.161**	**.000**
Grouping variable :Bank				
Results: H0	**A**	**A**	**A**	**R**
Source: Spss Result on Primary Data				

Inference:

It is evident through table that out of 4 cases, in 3 cases null hypothesis is accepted as significance is more than 0.05 and in one case, null hypothesis is rejected as significance is less than 0.05. In other words, it can be concluded that the level of complaints in ATMs, internet banking and mobile banking among customers of PNB and Axis bank are significantly same. On the contrary, the level of complaints in credit cards services of PNB and Axis bank are significantly different.

3. Grievance Settlement System for e banking Customers

The information from the respondents has been collected on the grievance settlement system for e banking services to know the satisfaction of customers .whether these e banking instruments are satisfactory or not. The study contains five different parameters of customer satisfaction level with regards to e banking services provided by PSU and PSIB banks.

Chart 3: Grievance Settlement System of E-banking Services

Table 3: Grievance Settlement System	ATMs	Internet Banking	Mobile Banking	Credit cards
Very Good	78	70	78	33
Good	92	96	92	89
Average	26	34	26	76
Poor	4	0	4	2
Extremely Poor	0	0	0	0
Total	200	200	200	200

Source : Primary data of customers of selected banks

Above table 3 shows Grievance Settlement System for ATM and Internet banking provide good services as per 92 and 96 respondents respectively out of 200 respondents ,grievance settlement system for mobile banking provides very good services as per 78 users, whereas 89 respondents found credit card Grievance Settlement services are good.

| Table 3.1: Test Statistics of Grievance Settlement System	ATMs	Internet Banking	Mobile Banking	Credit cards
Mann-Whitney U	4754.000	4971.000	4823.000	4987.000
Wilcoxon W	9804.000	10021.000	9873.000	10037.000
Z	-.730	-.077	-.472	-.034
Asymp. Sig. (2-tailed)	.465	.938	.637	.973
Grouping variable :Bank				
Results: H0	A	A	A	A
Source: Spss Result on Primary Data				

Inference:

It is evident with the help of table that out of 4 cases, in all the cases null hypothesis is accepted as significance is more than 0.05. Grievance Settlement System for ATMs, internet banking and mobile banking and credit cards among customers of PNB and Axis bank are significantly same.

In other words, it can be concluded that the customers of both banks are satisfied with regards grievance Settlement System of e banking services.

Reliability of e banking Services among customers

Reliability of e-banking products is very significant dimension for the study, which constitute the present status of e-banking and has been analyzed on the basis of given parameters.

Table 4: Reliability	ATMs	Internet Banking	Mobile Banking	Credit cards
Strongly Agree	133	72	127	109
Agree	59	110	55	91
Neutral	8	16	18	0
Disagree	0	2	0	0
Strongly DisAgree	0	0	0	0
Total	200	200	200	200
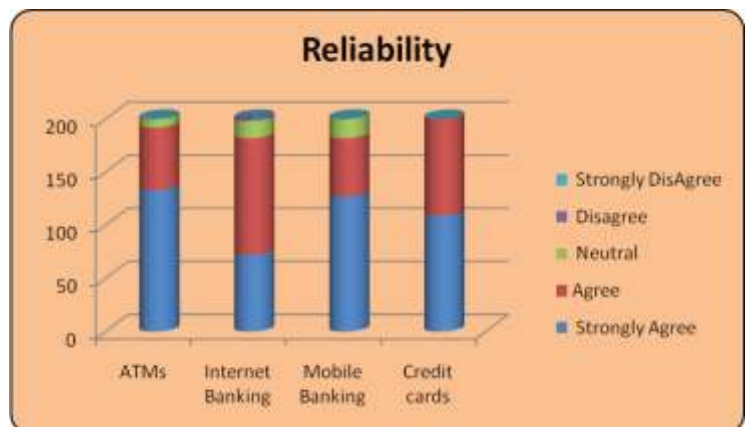
Reliability

Source : Primary data of customers of selected banks

Table 4 shows that out of the four services ATM is the very reliable with maximum 133 numbers of respondents, and 55 respondents agree with reliability of mobile banking . The table also shows that 110 respondent agree with reliable services of internet banking, whereas 109 respondents are strongly agree with reliability of credit.

| Table 4.1: Test Statistics of Reliability	ATMs	Internet Banking	Mobile Banking	Credit cards
Mann-Whitney U	4693.000	4963.000	4809.000	4550.000
Wilcoxon W	9743.000	10013.000	9859.000	9600.000
Z	-.910	-.102	-.549	-1.275
Asymp. Sig. (2-tailed)	.363	.919	.583	.202
Grouping variable :Bank				
Results: H0	A	A	A	A
Source: Spss Result on Primary Data				

Inference:

From the above table, it is evident that in all 4 cases null hypothesis is accepted as significance is more than 0.05 .In other words, it can be concluded that reliability of ATMs, internet banking and mobile banking and credit cards services among customers of both PSU and PSIB banks are significantly same.

4. Level of Satisfaction for e banking services among Customers

With the help of online banking support services, level of satisfaction among customers about e banking product has also been analyzed on the basis of five parameters

Table 5 Level of Satisfaction	ATMs	Internet Banking	Mobile Banking	Credit cards
Strongly Agree	141	64	96	96
Agree	55	126	84	92
Neutral	4	6	18	6
Disagree	0	4	2	6
Strongly Disagree	0	0	0	0
Total	200	200	200	200
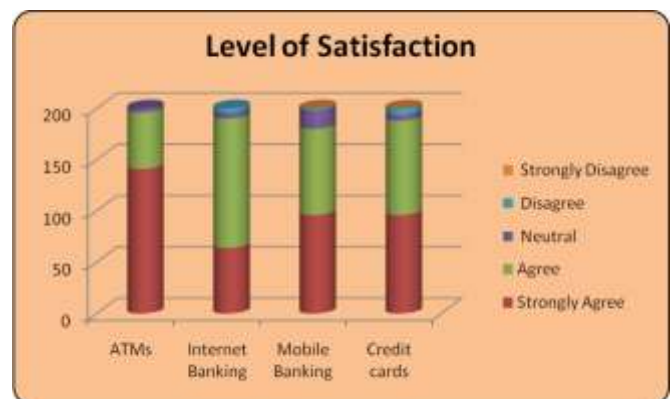
Source: Primary data of customers of selected banks

Above Table 5 present the satisfaction level, which is highest in ATM, as 126 respondents are satisfied with Internet banking, 96 respondents' credit cards and M-banking. The table also reveals that dissatisfied level is highest in case of Credit card and lowest in Internet banking.

Table 4.1 :Test Statistics of Level of Satisfaction	ATMs	Internet Banking	Mobile Banking	Credit cards
Mann-Whitney U	4814.000	4744.000	4380.000	4258.000
Wilcoxon W	9864.000	9794.000	9430.000	9308.000
Z	-.573	-.739	-1.678	-2.037
Asymp. Sig. (2-tailed)	.567	.460	.093	.042
Grouping variable :Bank				
Results: H0	A	A	A	R
Source: Spss Result on Primary Data				

Inference:

From the above table, it is evident that out of 4 cases, in 3 cases null hypothesis is accepted as significance is more than 0.05 and in one case, null hypothesis is rejected as significance is less than 0.05. Level of customer satisfaction about ATMs, Internet banking, mobile banking among customers of PNB and Axis bank are significantly same. On the contrary, the customer satisfaction regarding credit cards services are significantly different in both PNB and Axis bank.

5.Status of All E-banking Products

The present status of e-banking services is analyzed in all the banks with the help of total CSL and total number of respondents using these products. Total CSL includes the customer satisfaction level on the different levels & for different products also.

Table 6:   Status of e- banking products
Total CSL =Agree + Strongly Agree

E banking Product	Total CSL	Total CSL %	Total no. of users
ATM	196	98	200
Internet Banking	190	95	200
Mobile Banking	180	90	200
Credit Card	188	94	200

Source: Primary data of customers of selected banks

Inference:

Above table 6 elucidate the present status of e-banking products. It is clear that internet banking is having maximum 92 per cent CSL and respondents using it are also maximum 100 per cent. Position of mobile banking is worst with minimum 76 per cent and 53 per cent CSL and users respectively. ATM's is at

second place with 2nd highest CSL (90 per cent) and in usage, it is at third place with 80 per cent usage rate. Credit card is at third place in terms of CSL 80 per cent but its usage rate is second highest.

To study the level of customer satisfaction further, the respondents are divided into three categories as given, below average, average and above average levels, which have been defined as Low, Medium and High respectively.

6.CSL of ATMs, Internet Banking , Combined CSL of All E-banking Products

Table 7 CSL of ATM's		
CSL	Frequency	CSL Frq Basis
Low	4	Low CSL = Neutral + Disagree
Medium	55	Medium CSL= Agree
High	141	High CSL=Agree + Strongly Agree

Table - 8: CSL of Internet Banking		
CSL	Frequency	CSL Frq Basis
Low	10	Low CSL = Neutral + Disagree
Medium	126	Medium CSL= Agree
High	64	High CSL=Agree + Strongly Agree

Product	Low	Medium	High
ATM	4	55	141
Internet Banking	10	126	64
Mobile Banking	20	84	96
Credit card	12	92	96

Source: Primary data of customers of selected banks

CONCLUSION:

The analysis shows that among all the e-banking products and services, CSL of ATM is highest and the number of users of ATM is also more as compared to other services. Internet banking and credit card comes at second and third position of CSL, as the number of users is more in case of credit cards as compared to Internet banking as depicted by table-9. Mobile banking is at the lowest position in terms of CSL and also in number of users. Therefore, the null hypothesis, There is no significant difference between customer satisfaction level of PSU and PSIB banks with regard to selected e banking services cannot, be accepted. E-banks need to shift now from product centric to customer centric .Opportunities and challenges offered by e-banking can cover the expectation of customers on the given dimensions of e

banking services for channel delivery and knowledge management.

LIMITATIONS

• The sample taken for the study is restricted to a particular region.
• Bias of the respondents may effects the results of the study.
• Though the resources seem sufficient and enough to achieve high standard for this research, but the major demerit of the study is the availability of time for data collection and analysis.

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