

Customers' Satisfaction and Awareness of Commercial Banks' E-Delivery Channels in Urban Punjab

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Abstract

Innovative technology has emerged as a competitive advantage and has transformed the banking environment, customer choices, habits, and most importantly, customer satisfaction levels. A commercial bank's electronic delivery channels positively affect customer satisfaction. In the present study, the researcher, with the size of 1200 e-bank customers' conducted empirical research in urban Punjab in the month of July 2021 and reached the conclusion that the level of Customers' satisfaction is continuously increasing in all types of banks, age, gender, occupation, and location-wise but private sector banks have edge over public sector banks and at the same level of customers' satisfaction somewhat low in rural sector customers' due to lack of awareness regarding e-services of banks. The major implication of this study is that public sector banks should enhance e-services by creating full awareness especially in the rural sector otherwise, their survival may be in danger. The emerging new technology is a threat and also motivation for public sector banks. Secondly, all types of banks should also give their full concentration that is why customers are using only selected e-services for selected purposes and all banks should give full concentration on how they can spread awareness about e-services, especially in the rural sector.

Keywords: Banking, E-banking, E-services, Customers' Awareness, Customers' Satisfaction

1. BACKGROUND

E-banking has revolutionized the financial system especially the Indian banking system. Now the youth is extensively using e-delivery channels which are time savvy, cost-effective, and very fast services of e-technology. There is an evolution of transformation from traditional to modern banking. E-technology is providing more satisfaction to the customers and bankers also. In the cut-throat competition, it is mandatory for all banks to provide information regarding their products and services. The adoption of e-technology as well as customers satisfaction levels is absolutely different in the public sector and private sector banks. The public sector banks in India are late adopters of these e-services, even e-services infrastructure is also different in different types of banks. The present study is devoted to customers' satisfaction and level of awareness in different bank groups with different demographic profiles like age, income, occupation, and gender-wise and location-wise. This study strives to make such banks more customer-oriented, increase awareness, and ultimately enhance customer satisfaction. Several studies conducted in India; found that e-services are creating miracles for their customers. (Daniel, 1999). They analyzed that e-services are creating value to their customers and the number of customers of e-banking is rapidly increasing (karjaluoto, 2002 and Mattila, 2001). The researchers found that ATMs are very convent and source of attracting customers (Mohammed S, and

Tondon R., 2012).

The remaining of the paper is organized as follows. Section two reviews the relevant literature. Section three explains the methodology and data, where as sections four and five discuss the findings and conclusions, respectively.

2. REVIEW OF LITERATURE

A few investigations featured the meaning of e-administrations in bank customer' fulfillment; the scientist dissected that there is a moderate degree of mindfulness and customers' degree of fulfillment (Sweety and Mary 2015). They tracked down that the utilization of e-benefits particularly ATMs is very time sagacious. The specialist tracked down those numerous customers' because of the absence of mindfulness and trust is hesitant to utilize the web. The segment varieties like age, capability, and occupation have an immediate and high relationship with customers' fulfillment (Reneka et al., 2014; John, 2014). The specialist examined with essential information that youthful and taught customers unequivocally connected with the web. They thought of it as cloister and time sagacious to the advertiser of green banking (Jayaraman et al., 2012). They found that ATMs administrations are the religious community and ATM machines accessible. They examined the shortcoming and strengths of ATM administrations advanced by the business banks. They likewise came to on the resolution that multiple occasions ATM card is obstructed and without cash

(Ramraj, 2012; Richa et al., 2012). The exploration found that e-administrations are extremely savvy and quality components of e-administrations are acceptable in private and unfamiliar area banks. He likewise tracked down that quality through e-administrations is additionally emphatically and fundamentally influencing customers' fulfillment (Kumbhar, 2011). Contemplated that e-banks have supplanted numerous actual elements of banks into e-banking, joblessness has expanded and finished up the fate of e-banking is brilliant. They closed the degree of mindfulness is low among the majority particularly among old individuals (Al-Jadeed, 2007; Salami and Olannye, 2013). They connected bank customers' fulfillment with the productivity of banks. They inferred that both are decidedly and altogether associated with one another. Upgrading customers' fulfillment from e-administrations is a need of great importance (Yibin, 2003 and Siam, 2004). Because of the appropriation of e-benefits customers' fulfillment level is persistently expanding (Yousafzai, et al., 2005). They tracked down that after the reception of e-benefits how customers' perspectives changed (Sadiq and Shanmugham, 2003; Unnithan and Swatman, 2001). They found that web banking is practically missing from Malaysian banks because of an absence of safety and because of legitimate issues [Guru, et al., 2000]. Considered the level of customers' fulfillment and furthermore the degree of mindfulness in e-banks and tracked down the low degree of mindfulness is a significant worry for the expedient reception of e-administrations (Subramanian, 2016). They explored the variables which customers' fulfillment in the bank and found that varieties of administration quality significantly affect customers' fulfillment (Tewodros, et al., 2019). They investigated what dependability and responsiveness mean for retail banking administrations. They investigated that the worth of e-administrations among customers is ceaselessly expanding. A wide range of banks should upgrade administration quality through e-administrations (Ibrahim, 2016; Abdullah and Ho, 2010). They presumed that among e-conveyance channels, web banking is exceptionally well known among youthful customers [Goh, et al., 2016].

2.1 Research Gap

Most studies concluded that customers' satisfaction has increased with the adoption of e-services, but people still need to be more aware of these services, especially in rural areas. The present study contributes to the existing literature on customer satisfaction and awareness of e-services.

3. Methodology and Data

This section describes the different data types, sources, reports, descriptive statistics, and discusses the research study methodology.

3.1 Types and sources of data

(a) Primary data and their sources: The wellsprings of the essential information for the examination were e-banking customers of six areas of Punjab, specifically, Ludhiana, Amritsar, Jalandhar, Patiala, Kapurthala, and Bathinda. These regions were chosen based on the most noteworthy education rate in Punjab State. Just those customers were remembered for the study that has the insight of no less than three years of involvement utilizing e-administrations of those branches and areas of banks. Information was gathered with the assistance of a pre-trying and clear cut poll.

(b) Secondary data and their sources: The secondary data were used to strongly support the present study and to get the relevant finding of other empirical studies. The sources of secondary data were library books, newspapers, reports, journals, and at the same time researcher used the publications of the Reserve Bank of India.

3.2. Sampling techniques and sample size

The Population of this study was e-banking customers of only selected bank branches and selected areas of Punjab. A random sampling technique was used to collect the response of e-bank customers. Data was collected with the help of a pre-tested and well-defined questionnaire. five-point Likert-type scale was used. The total sample size was 1200 customers' which were equally distributed among four bank groups.

3.3 Methods of data analysis

In order to facilitate and describe the findings of the study, descriptive statistics were employed in analyzing this study, and SPSS version 16 was used to calculate various statistical values. Tables, percentage, weighted average scores (WAS), the chi-square test were specifically used in the study.

4. Empirical Results and Sensitivity Analysis

4.1 Demographic profile of the respondents

58.17pc are males and the maximum respondents are from the service class. Age-wise 37.5pc have the age group up to 25 years. 58 pc are male respondents and 42 pc are female respondents

Table 4.1: Demographic profile of the respondents (Percent)

Group /Sub Group	Number	%
Banking Group		
1.Group-I	300	25.00
2.Group-II	300	25.00
3.Group-III	300	25.00
4.Group-IV	300	25.00
Area		
1.Rural/Semi-Urban	400	33.33
2.Urban	400	33.33
3. Metropolitan	400	33.33
Annual Income		
1.Up to 1 Lakh rupees	413	34.42
2. 1 – 2 Lakh rupees	408	34.00
3. Above 2 Lakh rupees	379	31.58
Gender		
1.Male	698	58.17
2.Female	502	41.83
Occupation		
1.Service	525	43.75
2.Business	406	33.83
3.Professional	269	22.42
Age Group (Yr.)		
1.Up to 25	450	37.50
2.25-35	321	26.75
3.Above 35	429	35.75
Total	1200	100.00

Source: Compiled from questionnaires

4.2 Extent of awareness about ATMs

ATM is a very important and useful technique of e-banking. ATM is used to withdraw the money and also deposits the money at any time. It is a very useful and effective technique for e-delivery channels. In this survey, we take the response from 1200 respondents that are using this channel of e-banking. ATM is an extremely important and useful technique of banking. ATM is employed to withdraw the cash and also deposits the cash at any time. It's a very useful and effective technique for e-delivery channels. During this survey, we take the response from 1200 respondents that are using this channel of e-banking.

Table 4.2: Extent of awareness about ATMs

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi ²	WAS
Banking Group		14.33	4.67	35.67	45.33		1.12
1.Group-I		14.33	4.00	37.00	44.67		1.12
2.Group-II		14.67	4.67	36.67	44.00	0.76	1.10
3.Group-III		15.00	3.67	37.00	44.33		1.11
4.Group-IV							
Area		15.50	4.50	36.50	43.50		1.08
1.Rural		14.75	5.00	37.75	42.50	3.76	1.08
2.Semi-Urban		13.50	3.25	35.50	47.75		1.18
3.Urban							
Annual Income		10.65	4.60	38.26	46.49	19.90**	1.21
1. Up to 1 Lakh rupees		14.22	6.13	35.29	44.36		1.10
2. 1 – 2 Lakh rupees		19.26	1.85	36.15	42.74		1.02
3. Above 2 Lac.							
Gender		16.05	4.30	34.67	44.99	4.19	1.09
1.Male		12.55	4.18	39.24	44.02		1.15
2.Female							
Occupation		13.90	5.14	34.10	46.86	6.94	1.14
1.Service		14.53	2.71	38.92	43.84		1.12
2.Business		15.99	4.83	37.92	41.26		1.04
3.professional							
Age Group (Yr.)		17.11	4.22	35.11	43.56		1.05
1.Below 25		9.66	4.67	33.96	51.71	15.67*	1.28
2.25-35		15.62	3.96	40.09	40.33		1.05
3.Above 45							
All Data		14.58	4.25	36.58	44.58		1.11

Source: Same as Table 4.1

* indicates significant LOS at 5%

** indicates significant LOS at 1%

This system is usually employed by customers whose income is up to 1 lakh rupees i.e. 47 pc customers because they need large knowledge about ATMs. Gender-wise, male customers are more conscious of ATMs than female customers. Occupation-wise, service class customers use more ATMs than the purchasers of business or professional groups. Age group-wise, we observe that the majority of customers between the age brackets of 25 to 35 years are more conscious of ATM and above this age, customers are less conscious of this service. The chi-square test shows that according to income-wise, the difference within the opinion of consumers is critical at 1 pc LOS. The chi-square test shows that according to age-wise, the difference within the opinion of consumers is critical at 5 pc LOS. Overall, the study reveals that 45 pc customers have large knowledge about ATMs. There are only 15 pc customers that have only touch knowledge about ATMs.

4.3 Extent of awareness about credit cards

Like ATMs, a credit card is also a facility given by the banks to its customers. This service makes customer's

shopping more easily. Credit cardholders use this to make their payments easy. They need not pay their bills in cash. They use a credit card when they need them and the amount is deducted from their account automatically. In this way, now people do not need to carry cash money with them when they are going out shopping. Overall, a survey report about credit card awareness has done on 1200 respondents, in which 58 pc are male customers and 42 pc are female customers, it also shows that only 18 pc respondents have the large knowledge about credit cards and only 3 pc customers have very little knowledge about credit cards. Bank group-wise, 21 pc customers of foreign banks are aware of the credit card and they have large knowledge about credit cards. But percentage of other banks is very low i.e. 17 pc. This data shows that foreign banks customers are more aware of credit cards than Indian banks customers. Area-wise, awareness in urban areas is more than in rural/semi-urban and metropolitan areas. There are 18.75 pc respondents of urban areas and 18.25 pc of other areas that have large knowledge about credit cards. Income-wise, there are 21 pc respondents whose income is above 2 lakh rupees that have a large knowledge about credit cards. Occupation-wise, survey report shows that professional class is less aware of credit cards than service and business class. Age group-wise, data shows that knowledge of credit cards is more in that age group of above 35 years. The chi-square test depicts that according gender-wise, the difference in the opinion of customers is significant at 5 pc LOS. The chi-square test depicts that according occupation-wise, the difference in the opinion of customers is significant at 1 pc LOS. Overall, data shows that only 18.42 customers have large knowledge about credit cards.

Table 4.3: Extent of awareness about credit cards (Percent)

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi ²	WAS
Banking Group	4.00	16.33	12.33	50.00	17.33	5.84	0.60
1.Group-I	3.67	18.33	11.00	50.00	17.00		0.58
2.Group-II	3.00	15.67	13.33	50.33	17.67		0.64
3.Group-III	3.00	17.33	9.67	48.33	21.67		0.68
4.Group-IV							
Area	3.25	17.25	11.50	49.75	18.25	2.44	0.63
1.Rural	4.00	18.25	11.25	47.75	18.75		0.59
2.Semi-Urban	3.00	15.25	12.00	51.50	18.25		0.67
3.Urban							
Annual Income	2.91	14.77	13.80	50.12	18.40	11.03	0.66
1. Up to 1 Lakh rupees	4.90	19.12	10.54	49.02	16.42		0.53
2. 1 – 2 Lakh rupees	2.37	16.89	10.29	49.87	20.58		0.69
3. Above 2 Lac.							
Gender	3.30	18.62	11.75	50.86	15.47	11.32*	0.57
1.Male	3.59	14.54	11.35	48.01	22.51		0.71
2.Female							
Occupation	3.43	17.71	11.05	47.24	20.57	20.49**	0.64
1.Service	3.94	14.53	9.36	51.72	20.44		0.70
2.Business	2.60	18.96	15.99	51.30	11.15		0.49
3.professional							
Age Group (Yr.)	2.22	18.22	14.00	49.78	15.78	13.18	0.59
1.Below 25	3.12	17.45	10.90	49.84	18.69		0.64
2.25-35	4.90	15.15	9.56	49.42	20.98		0.66
3.Above 45							
All Data	3.42	16.92	11.58	49.67	18.42		0.63

4.4 Extent of awareness about internet banking

Today, most banks are providing internet banking facilities. We can make our transactions through the internet, we don't need to go to banks for our transactions. If we want to transfer any amount from our account to another account, we can easily do it by using internet banking.

Overall, a survey report of 1200 respondents shows that 19 pc female customers and 18 pc male customers have large knowledge about internet banking. Age-wise, respondents whose age is between 25 to 35 years are

more aware of internet banking. Area-wise, the report shows that the urban and rural/semi-urban respondents are aware of this service but the percentage in the metropolitan areas is less than in rural and urban areas. This percentage is 16 pc in the metropolitan areas and 20 pc in rural and urban areas. The service class is more aware of internet banking than any other class group. Foreign bank customers are more aware of internet banking i.e. 20 pc. Overall, data shows that only 18.50 pc customers are fully aware of internet banking

Table 4.4: Extent of awareness about internet banking (Percent)

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi ²	WAS
Banking Group	5.33	21.67	11.67	44.00	17.33	2.30	0.46
1.Group-I	4.67	21.00	11.33	44.33	18.67		0.51
2.Group-II	5.67	19.33	11.67	45.67	17.67		0.50
3.Group-III	4.33	20.00	10.67	44.67	20.33		0.57
4.Group-IV							
Area	5.50	20.00	11.25	44.25	19.00	2.46	0.51
1.Rural	5.00	20.75	11.75	42.75	19.75	2.46	0.52
2.Semi-Urban	4.50	20.75	11.00	47.00	16.75		0.51
3.Urban							
Annual Income	4.60	20.82	9.20	48.43	16.95	18.76*	0.52
1. Up to 1 Lakh rupees	6.62	18.87	13.48	38.48	22.55	18.76*	0.51
2. 1 – 2 Lakh rupees	3.69	21.90	11.35	47.23	15.83		0.50
3. Above 2 Lac.							
Gender	6.16	20.77	10.60	44.41	18.05	5.55	0.47
1.Male	3.39	20.12	12.35	45.02	19.12	5.55	0.56
2.Female							
Occupation	4.57	20.00	10.29	44.57	20.57	9.50	0.57
1.Service	3.94	21.92	12.81	43.35	17.98	9.50	0.50
2.Business	7.43	19.33	11.15	46.84	15.24		0.43
3.professional							
Age Group (Yr.)	6.44	20.44	8.22	46.89	18.00	17.21*	0.50
1.Below 25	4.67	16.20	12.77	46.11	20.25		0.61
2.25-35	3.73	23.78	13.52	41.26	17.72		0.45
3.Above 45							
All Data	5.00	20.50	11.33	44.67	18.50		0.51

Source: Same as Table 4.1

4.5 Extent of awareness about mobile banking

M-Banking offers numerous benefits like great security, simple entry, and copious applications for cell phones. We get the outcome from information that metropolitan respondents are more mindful than customers of

provincial/semi-metropolitan and metropolitan regions. Pay insightful, 44.4 pc customers that are procuring pay between 1 to 2 lakh rupees have less information about versatile banking than the customers of other pay gatherings. This sort of distinction is likewise found in all age gatherings.

Table 4.5: Extent of awareness about mobile banking

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi ²	WAS
Banking Group	8.00	26.67	13.67	35.33	16.33	3.52	0.25
1.Group-I	7.67	26.33	13.00	35.67	17.33		0.29
2.Group-II	6.67	28.00	13.33	34.67	17.33		0.28
3.Group-III	6.33	24.33	11.67	39.00	18.67		0.39
4.Group-IV							
Area	7.00	26.50	12.75	36.50	17.25	3.52	0.31
1.Rural	7.75	23.75	13.25	38.25	17.00		0.33
2.Semi-Urban	6.75	28.75	12.75	33.75	18.00		0.28
3.Urban							
Annual Income	7.99	33.90	10.90	31.72	15.50	30.77**	0.13
1. Up to 1 Lakh rupees	7.11	22.06	15.69	40.44	14.71		0.34
2. 1 – 2 Lakh rupees	6.33	22.69	12.14	36.41	22.43		0.46
3.Above 2 Lac.							
Gender	8.31	27.51	12.46	34.38	17.34	5.65	0.25
1.Male	5.58	24.70	13.55	38.65	17.53		0.38
2.Female							
Occupation	5.33	23.24	15.62	38.10	17.71	19.69*	0.40
1.Service	8.87	26.35	9.61	37.19	17.98		0.29
2.Business	8.18	32.34	12.64	30.86	15.99		0.14
3.professional							
Age Group (Yr.)	8.00	22.00	12.44	35.33	22.22	17.34*	0.42
1.Below 25	5.61	29.60	12.15	37.38	15.26		0.27
2.25-35	7.46	28.44	13.99	36.13	13.99		0.21
3.Above 45							
All Data	7.17	26.33	12.92	36.17	17.42		0.30

Source: Same as Table 4.1

Occupation-wise, the expert class is less mindful of portable banking. Generally speaking, the outcome uncovers that there are just 7 pc respondents that have almost no information and 36 pc customers have to some degree information yet 18 pc customers who are in legitimate dash of portable banking. The chi-square test shows a critical distinction at 1 pc LOS in the different subgroups of pay gatherings and age-wise and occupation-wise, it is huge at 5 pc LOS.

4.6 Extent of awareness about tele-banking

An arrangement of executing business with a bank by phone and PC is known as telebanking. Sex astute, male

customers are more mindful than female customers about tele-banking. This assistance is generally utilized by private and unfamiliar banks to draw in more customers.

44.50 pc customers of the semi-metropolitan region and 45.76 pc respondents that are acquiring pay up to 1 lakh rupees and 46.06 pc business class customers are less mindful of tele-banking. The chi-square report shows that distinction according to customers is critical at 1 pc LOS as per region astute and pay shrewd. Based on the general report, there are just 11 pc respondents that know about telebanking for the huge scope and 17 pc customers are less mindful of tele-banking.

Table 4.6: Extent of awareness about tele-banking (Percent)

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi^2	WAS
Banking Group	18.00	26.00	3.67	42.67	9.67	4.04	0.00
1.Group-I	15.33	26.67	3.67	43.33	11.00		0.08
2.Group-II	19.00	24.33	4.00	42.67	10.00		0.00
3.Group-III	15.00	25.33	4.00	43.00	12.67		0.13
4.Group-IV							
Area	16.75	26.00	3.50	43.25	10.50	13.76	5 pc
1.Rural	13.00	25.00	3.75	44.50	13.75		0.21
2.Semi-Urban	20.75	25.75	4.25	41.00	8.25		-0.10
3.Urban							
Annual Income	20.58	20.82	4.36	45.76	8.47	29.57**	1 pc
1. Up to 1 Lakh rupees	12.25	30.88	2.70	39.46	14.71		0.13
2. 1 – 2 Lakh rupees	17.68	25.07	4.49	43.54	9.23		0.02
3.Above 2 Lac.							
Gender	16.05	25.50	4.73	42.26	11.46	4.87	0.08
1.Male	17.93	25.70	2.59	43.82	9.96		0.02
2.Female							
Occupation	16.38	29.14	3.62	39.43	11.43	9.22	0.00
1.Service	16.75	23.89	3.69	46.06	9.61		0.08
2.Business	17.84	21.19	4.46	44.98	11.52		0.11
3.professional							
Age Group (Yr.)	14.89	26.00	4.00	44.22	10.89	11.83	0.10
1.Below 25	15.58	26.17	5.92	42.68	9.66		5 pc
2.25-35	19.81	24.71	2.10	41.72	11.66		1 pc
3.Above 45							
All Data	16.83	25.58	3.83	42.92	10.83		5 pc

Source: Same as Table 4.1

4.7 Extent of awareness about all e-channels

All e-channels are utilized by every one of the banks to give solace to their customers. At first, these procedures were begun by unfamiliar and private area banks. At present unfamiliar banks are utilizing these e-channels and nationalized banks have additionally begun to follow them. There are 16 pc respondents of nationalized banks and 21 pc are of unfamiliar banks

that are generally mindful of e-channels. In metropolitan regions, these channels are utilized more than in different regions. Mindfulness pretty much every one of these re-directs is more in pay bunch for example over 2 lakh rupees. 43.62 pc customers of administration class are less mindful of e-channels. The chi-square test uncovers the huge distinction according to customers at different phase's old enough gathering at 1 pc LOS

Table 4.7: Extent of awareness about all e-channels (Percent)

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi^2	WAS
Banking Group	9.00	10.67	21.67	42.00	16.67	6.80	0.47
1.Group-I	7.33	13.00	18.33	43.00	18.33		0.52
2.Group-II	8.67	10.00	19.67	43.67	18.00		0.52
3.Group-III	7.00	13.00	16.67	42.33	21.00		0.57
4.Group-IV							
Area	7.50	11.50	19.25	43.50	18.25	9.15	0.54
1.Rural	5.75	12.50	19.50	41.50	20.75		0.59
2.Semi-Urban	10.75	11.00	18.50	43.25	16.50		0.44
3.Urban							

Annual Income	10.17	13.80	17.43	39.71	18.89	9.42	0.43
1. Up to 1 Lakh rupees	7.35	11.27	20.10	43.63	17.65		0.53
2. 1 – 2 Lakh rupees	6.33	9.76	19.79	45.12	19.00		0.61
3. Above 2 Lac.							
Gender	7.59	12.03	19.05	43.70	17.62	1.58	0.52
1. Male	8.57	11.16	19.12	41.43	19.72		0.53
2. Female							
Occupation	8.76	10.48	20.00	43.62	17.14	3.60	0.50
1. Service	7.64	12.32	17.98	42.61	19.46		0.54
2. Business	7.06	13.01	18.96	41.26	19.70		0.54
3. professional							
Age Group (Yr.)	7.33	6.67	23.56	42.67	19.78	29.83**	0.61
1. Below 25	9.35	13.71	14.95	40.81	21.18		0.51
2. 25-35	7.69	15.38	17.48	44.29	15.15		0.44
3. Above 45							
All Data	8.00	11.67	19.08	42.75	18.50		0.52

4.8 Extent of unawareness about all e-channels

Despite numerous long periods of advancement of banks, even today not all customers are aware of e-banking and e-channels, without a doubt, not many customers are aware of these e-channels. Bank bunch insight, 20 to 23 percent of all bank bunch customers are generally unaware of e-

channels. In metropolitan regions, 19 percent of respondents are generally unaware of e-channel. In terms of attention to e-channels, pay astute with salaries more than 1 lakh rupees have given less reaction. Expert class customers are more likely to use e-channels than administration and business class customers.

Table 4.8: Extent of unawareness about all e-channels (Percent)

Group /Sub Group	V. Little	A Little	Undecided	Some	Large	Chi^2	WAS
Banking Group	12.33	10.67	14.33	42.67	20.00	5.82	0.47
1. Group-I	10.00	12.00	13.67	43.00	21.33		0.54
2. Group-II	9.33	9.33	16.67	43.67	21.00		0.58
3. Group-III	11.33	9.00	16.33	40.00	23.33		0.55
4. Group-IV							
Area	10.25	12.00	14.75	42.50	20.50	19.19*	0.51
1. Rural	10.75	13.25	13.00	43.25	19.75		0.48
2. Semi-Urban	11.25	5.50	18.00	41.25	24.00		0.61
3. Urban							
Annual Income	13.56	9.93	18.89	39.47	18.16	28.61**	0.39
1. Up to 1 Lakh rupees	7.60	7.84	12.01	46.08	26.47		0.76
2. 1 – 2 Lakh rupees	11.08	13.19	14.78	41.42	19.53		0.45
3. Above 2 Lac.							
Gender	11.60	11.32	16.19	39.97	20.92	6.35	0.47
1. Male	9.56	8.76	13.94	45.62	22.11		0.62
2. Female							
Occupation	11.24	9.33	12.57	43.62	23.24	16.17*	0.58
1. Service	10.10	11.08	18.23	37.44	23.15		0.52
2. Business	10.78	10.78	15.99	47.21	15.24		0.45
3. professional							
Age Group (Yr.)	9.78	10.22	14.00	44.00	22.00	15.20	0.58
1. Below 25	10.90	13.40	18.07	41.43	16.20		0.39
2. 25-35	11.66	7.93	14.45	41.26	24.71		0.59
3. Above 45							
All Data	10.75	10.25	15.25	42.33	21.42		0.53

The chi-square test shows that a huge distinction exists in client assessments at 1 pc LOS according to pay astute and 5 pc LOS according to occupation and region. Generally, 42 percent of customers are required to examine their reports.

4.9 Satisfaction level from ATM

Of all the e-delivery channels, ATMs are the most popular and convenient for everyone. Most customers in

the four bank groups are satisfied or highly satisfied. Customers in metropolitan areas are more satisfied with ATM performance than those in rural and urban areas. In terms of satisfaction, 38.48 percent of customers earning between 1 and 2 lakh rupees are more satisfied than those earning up to 1 lakh rupees or above 2 lakh rupees. According to income-wise, the difference in the opinion of customers is significant at a level of 5 percent LOS.

Table 4.9: Satisfaction from ATM (Percent)

Group /Sub Group	H. DisSat.	DisSatis.	Undecided	Satisfied	H. Satisf.	Chi^2	WAS
Banking Group	4.67	14.00	-	37.00	44.33	2.47	1.02
1.Group-I	5.33	14.00		36.67	44.00		1.00
2.Group-II	5.67	15.67		37.67	41.00		0.93
3.Group-III	6.00	16.00		38.33	39.67		0.90
4.Group-IV							
Area	6.25	15.25	-	37.00	41.50	3.03	0.92
1.Rural	5.75	16.00		37.00	41.25		0.92
2.Semi-Urban	4.25	13.50		38.25	44.00		1.04
3.Urban							
Annual Income	4.60	12.59	-	37.53	45.28	12.63*	1.06
1. Up to 1 Lakh rupees	3.68	15.69		38.48	42.16		1.00
2. 1 – 2 Lakh rupees	8.18	16.62		36.15	39.05		0.81
3.Above 2 Lac.							
Gender	4.87	15.33	-	37.54	42.26	1.11	0.97
1.Male	6.18	14.34		37.25	42.23		0.95
2.Female							
Occupation	4.76	15.62	-	39.81	39.81	8.22	0.94
1.Service	7.39	14.53		34.48	43.60		0.92
2.Business	3.72	14.13		37.17	44.98		1.06
3.professional							
Age Group (Yr.)	7.11	13.33	-	36.89	42.67	10.96	0.95
1.Below 25	3.12	19.00		37.69	40.19		0.93
2.25-35	5.36	13.52		37.76	43.36		1.00
3.Above 45							
All Data	5.42	14.92	-	37.42	42.25		0.96

Meanwhile, both male and female customers are equally satisfied or highly satisfied. 39.81 percent of customers engaged in service occupations are more satisfied than businessmen and professionals. In terms of age, customer satisfaction is higher among customers over 25 than those below 25. Thus, all data shows that 42.25 pc of customers are highly satisfied and 37.42 pc are only satisfied with the statement above.

4.10 Satisfaction level from credit cards

In order to pay their bills, most customers use credit cards. The most important advantage of credit is that it

is a cost-effective solution for bulk payment transactions such as salaries, pensions, interest, commission, dividends, etc. by public or private companies or government departments. Among four bank groups, G-I customers are more satisfied and highly satisfied than customers of the other three groups. Customers in metropolitan areas are more satisfied, 42.75 percent, and highly satisfied, 28.75 percent, than those in rural and urban areas. According to the survey, customers earning up to a lakh rupees are more satisfied and highly satisfied with the use of credit cards.

Table 4.10: Satisfaction level from credit cards (Percent)

Group /Sub Group	H. DisSat.	DisSatis.	Undecided	Satisfied	H. Satisf.	Chi^2	WAS
Banking Group	3.67	12.67	14.00	42.67	27.00	2.15	0.77
1.Group-I	3.00	13.67	15.00	42.67	25.67		0.74
2.Group-II	3.33	15.33	14.00	40.67	26.67		0.72
3.Group-III	3.00	15.67	14.67	40.33	26.33		0.71
4.Group-IV							
Area	3.00	16.50	14.50	41.25	24.75	6.48	0.68
1.Rural	3.50	15.50	14.50	40.75	25.75		0.70
2.Semi-Urban	3.25	11.00	14.25	42.75	28.75		0.83
3.Urban							
Annual Income	3.39	11.14	12.35	42.62	30.51	14.85	0.86
1. Up to 1 Lakh rupees	1.96	16.18	15.20	42.40	24.26		0.71
2. 1 – 2 Lakh rupees	4.49	15.83	15.83	39.58	24.27		0.63
3.Above 2 Lac.							
Gender	4.44	13.32	13.75	41.83	26.65	9.04	0.73
1.Male	1.59	15.74	15.34	41.24	26.10		0.75
2.Female							
Occupation	3.24	17.14	16.00	37.52	26.10	29.45**	0.66
1.Service	2.22	16.50	11.82	44.09	25.37		0.74
2.Business	4.83	5.58	15.24	45.72	28.62		0.88
3.professional							
Age Group (Yr.)	3.56	13.56	16.67	39.78	26.44	8.09	0.72
1.Below 25	4.36	16.20	13.40	41.12	24.92		0.86
2.25-35	2.10	13.75	12.82	43.82	27.51		0.81
3.Above 45							
All Data	3.25	14.33	14.42	41.58	26.42		0.74

Source: Same as Table 4.1

According to the survey, male and female customers are either equally satisfied or highly satisfied. 28.62 percent of customers in professional occupations are more satisfied than those in service or business occupations. According to this chi-square, the customer's opinion is significantly different at the occupation-wise level of 1 percent LOS. Customers over 35 are more satisfied than those under 35. Based on the survey, 41.58 pc of customers are satisfied and only 26.42 pc are highly satisfied

4.11 Satisfaction from internet banking

Among the four banks G-I and G-II customers are equally satisfied as the other two groups. Customers who live in metro cities are more satisfied and highly satisfied than those in rural and urban areas, as evidenced by the survey. Customers earning up to 1 lakh rupees are more satisfied - 48.67 percent - and highly satisfied - 22.28 percent - than those earning over 1 lakh rupees with internet banking performance. Internet banking results in a higher satisfaction rate for female customers, i.e. 21.71 pc, whereas male customers are less satisfied. Professional customers are more satisfied than service and business customers.

Table 4.11 Satisfaction from internet banking (Percent)

Group /Sub Group	H. DisSat.	DisSatis.	Undecided	Satisfied	H. Satisf.	Chi^2	WAS
Banking Group	10.33	13.00	5.33	49.33	22.00	10.57	0.60
1.Group-I	9.00	13.00	6.00	49.67	22.33		0.63
2.Group-II	14.00	16.33	6.67	44.00	19.00		0.38
3.Group-III	13.33	14.33	7.67	46.33	18.33		0.42
4.Group-IV							
Area	11.75	15.00	7.25	47.00	19.00	5.97	0.47
1.Rural	12.00	14.50	7.50	46.50	19.50		0.47
2.Semi-Urban	11.25	13.00	4.50	48.50	22.75		0.59
3.Urban							
Annual Income	11.62	11.14	6.30	48.67	22.28	9.89	0.59
1. Up to 1 Lakh rupees	13.73	15.93	5.88	46.57	17.89		0.39
2. 1 – 2 Lakh rupees	9.50	15.57	7.12	46.70	21.11		0.54
3. Above 2 Lac.							
Gender	10.74	15.76	6.73	47.28	19.48	5.18	0.49
1.Male	12.95	11.95	5.98	47.41	21.71		0.53
2.Female							
Occupation	11.81	18.29	5.33	41.52	23.05	48.59**	0.46
1.Service	15.02	10.34	4.43	50.00	20.20		0.50
2.Business	6.32	11.90	11.52	54.65	15.61		0.61
3.professional							
Age Group (Yr.)	8.44	11.33	7.78	50.89	21.56	21.07**	0.66
1.Below 25	15.58	16.82	5.30	40.50	21.81		0.36
2.25-35	12.12	15.15	5.83	48.72	18.18		0.46
3.Above 45							
All Data	11.67	14.17	6.42	47.33	20.42		0.51

Source: Same as Table 4.1

At the level of occupation-wise 1 pc LOS, the chi-square test shows there is a significant difference in the opinion of customers. The customers less than 35 years of age are highly satisfied with the service, i.e. 21.81 pc compared to the customers above 35 years of age. Using the Chi-square test, it can be seen that the difference in the opinion of customers is significant at the level of 1 percent LOS. According to the survey, 47.33 percent of customers are satisfied and only 20.42 percent are highly satisfied with the performance of internet banking.

4.12 Satisfaction from mobile banking

Mobile banking is the latest technology that has had a significant impact in helping banks and their customers. Customer requirements are reduced to just a mobile

phone. Now, bank customers can access their accounts no matter where they are, whether at the office or on the road. In comparison with the other three bank groups, customers of G-II are the most satisfied, at 50.33 percent. Rural and urban customers are more satisfied than metropolitan customers. Income groups earning up to 1 lakh rupees are highly satisfied - 13.32 compared to income groups earning above 1 lakh rupees. According to income-wise, the Chi-square test indicates that the difference in opinion of customers is significant at 1 percent LOS. Gender-wise, female customers are more satisfied, at 51.59 percent, than male customers, at 44.84 percent. 58.74 % of customers working in professional occupations are more satisfied than those in service or business occupations.

Table 4.12: Satisfaction from mobile banking

Group /Sub Group	H. DisSat.	DisSatis.	Undecided	Satisfied	H. Satisf.	Chi^2	WAS
Banking Group	8.00	19.00	14.00	49.67	9.33	4.70	0.33
1.Group-I	7.33	18.33	14.00	50.33	10.00		0.37
2.Group-II	10.33	20.00	13.33	45.67	10.67		0.26
3.Group-III	8.00	21.33	14.67	45.00	11.00		0.30
4.Group-IV							
Area	9.00	20.00	14.00	46.00	11.00	4.52	0.30
1.Rural	8.50	20.50	14.25	45.50	11.25		0.31
2.Semi-Urban	7.75	18.50	13.75	51.50	8.50		0.35
3.Urban							
Annual Income	5.81	19.13	14.04	47.70	13.32	21.89**	0.44
1. Up to 1 Lakh rupees	10.78	23.04	15.44	43.14	7.60		0.14
2. 1 – 2 Lakh rupees	8.71	16.62	12.40	52.51	9.76		0.38
3.Above 2 Lac.							
Gender	9.31	21.49	13.75	44.84	10.60	7.48	0.26
1.Male	7.17	17.13	14.34	51.59	9.76		0.40
2.Female							
Occupation	9.33	22.10	13.52	44.00	11.05	25.51**	0.25
1.Service	8.87	17.49	17.98	45.07	10.59		0.31
2.Business	5.95	18.22	8.92	58.74	8.18		0.45
3.professional							
Age Group (Yr.)	3.78	16.67	12.00	56.89	10.67	48.41**	0.54
1.Below 25	9.66	23.05	12.46	41.43	13.40		0.26
2.25-35	12.35	20.28	17.25	42.66	7.46		0.13
3.Above 45							
All Data	8.42	19.67	14.00	47.67	10.25		0.32

Source: Same as Table 4.1

A Chi-square analysis reveals a significant difference in the opinion of customers at a 1 pc LOS at the occupation level. Customers between 25 and 35 years of age are more satisfied than customers over 35 years of age. Chi-square reveals that the difference in the opinion of customers is significant 1 pc LOS at the level age-wise. Overall, data shows that 47.67 pc are satisfied and only 10.25 pc are highly satisfied with the performance of mobile banking.

4.13 Customer's satisfaction level from all e-channels

The data shows that group-I have the highest level of satisfaction - 27.67 percent versus the other three groups. Customers in rural and urban areas are equally satisfied, 37.50 percent each, but metropolitan customers, 28.50 percent, are more satisfied than rural and urban area customers.

Table 4.13: Customers satisfaction from all e-channels (Percent)

Group /Sub Group	H. DisSat.	DisSatis.	Undecided	Satisfied	H. Satisf.	Chi^2	WAS
Banking Group	6.00	20.33	8.67	37.33	27.67	5.43	0.60
1.Group-I	5.67	20.33	10.33	37.67	26.00		0.58
2.Group-II	8.00	22.00	8.67	37.00	24.33		0.48
3.Group-III	8.67	22.00	10.00	36.33	23.00		0.43
4.Group-IV							
Area	7.25	21.75	10.25	37.50	23.25	6.27	0.48
1.Rural	8.50	21.75	9.50	36.25	24.00		0.46
2.Semi-Urban	5.50	20.00	8.50	37.50	28.50		0.64
3.Urban							
Annual Income	6.30	18.89	12.35	36.56	25.91	12.00	0.57
1. Up to 1 Lakh rupees	8.33	22.55	8.58	34.31	26.23		0.48
2. 1 – 2 Lakh rupees	6.60	22.16	7.12	40.63	23.48		0.52
3.Above 2 Lac.							
Gender	7.02	21.06	8.74	38.25	24.93	1.51	0.53
1.Male	7.17	21.31	10.36	35.46	25.70	40.14**	0.51
2.Female							
Occupation	6.86	25.52	6.48	38.10	23.05		0.45
1.Service	9.85	18.23	10.10	38.92	22.91		0.47
2.Business	3.35	17.10	14.13	32.34	33.09	6.36	0.75
3.professional							
Age Group (Yr.)	6.44	19.33	10.67	39.11	24.44		0.56
1.Below 25	7.79	23.99	8.41	36.76	23.05		0.43
2.25-35	7.23	20.98	8.86	35.20	27.74		0.55
3.Above 45							
All Data	7.08	21.17	9.42	37.08	25.25		0.52

Source: Same as Table 4.1

Customers earning above 2 lakh rupees are more satisfied with the performance of e-channels than those earning below 2 lakh rupees. Men, at 38.25 pc, are more satisfied than women, at 35.46 pc.

4.14 Issues, Challenges and Opportunities

Based on this study, one of the major issues is that rural customers are less satisfied with banks' e-channels because they are less aware of them. Secondly, customers are not fully aware of how e-delivery channels work, resulting in less satisfaction. There is a major challenge in making people aware of the issue, particularly in the rural sector. However, proper planning and mindset can help them achieve this goal.

5. Conclusion and Policy Implications

5.1 Conclusion

It has been concluded that most customers, especially the young, the rich, the males, the post-graduates, and the service class prefer ATMs, credit cards, and internet banking as these are cost-effective and convenient ways of availing e-banking services. The most satisfied customers are those using ATMs followed by those using credit cards. Study findings indicate that overall, customers are not much aware of all e-channels, but prefer ATMs due to their convenience and cost-effectiveness. E-bank customers prefer their quick and innovative services at better e-banks. In fact, the majority of customers prefer e-banks, suggesting that e-

banks have surpassed partially IT-oriented banks.

5.2 Policy Implications

In the study investigation, it was found that bank customers had begun doing their banking through electronic channels. Although the level of customer satisfaction from e-innovation is increasing, many banks should improve their level of mindfulness, especially in rural areas. Banks in the public sector should pay close attention to e-services. However, their future might be at serious risk unless they build more trust and mindfulness with their customers regarding e-services. The results of the study suggest that public sector banks should create awareness of their e-services and win the trust of their customers.

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