Chapter 4

Analysis of

Demographic Profile

Contents

4.1 Overview:

For the purpose of the study, data was collected from 730 bank consumers. As per the data retrieved from the Census India 2011, the male population of Assam consisted of 51.08% of the population, and the remaining 48.92% of the population comprised of the female population. Data collected is in almost the same proportion. Also, the data collected was distributed almost proportionately (to the population of the district) among the three districts. Thus, the sampling profile is a representation of the population profile.

The demographic profiles of the respondents are shown in Table 4.1 below.

Table 4.1: Demographic Profile of the respondents

Demographic Variable	**Category**	**Percentage**	**Frequency**
District	Kamrup (M)	261	35.8%
	Jorhat	204	27.9%
	Dibrugarh	265	36.3%
	Total	**730**	**100%**
Gender	Male	374	51.2%
	Female	356	48.8%
	Total	**730**	**100%**
Age	18-30 yrs	262	35.9%
	31-40 yrs	195	26.7%
	41-50 yrs	172	23.6%
	51-60 yrs	77	10.5%
	61 yrs and above	24	3.3%
	Total	**730**	**100%**
Academic Qualification	Under Graduate	92	12.6%
	Graduate	231	31.6%
	Post-Graduate	323	44.2%
	Professional Degree	84	11.6%
	Total	**730**	**100%**
Employment Status	Government Employee	228	31.3%
	Employee of a private organisation	238	32.6%
	Entrepreneur	77	10.5%

	Yet to be employed	82	11.2%
	Student	105	14.4%
	Total	**730**	**100%**
Monthly Family Income	Less than Rs. 50,000	171	23.4%
	Rs. 50,001 – Rs. 1,00,000	288	39.5%
	Rs. 1,00,001 – Rs. 1,50,000	125	17.1%
	Rs. 1,50,001 – Rs. 2,00,000	40	5.5%
	Above Rs. 2,00,000	106	14.5%
	Total	**730**	**100%**

4.2 Banking Services Used:

The services used by the respondents are graphically represented and interpreted in this section. The data collected from the respondents were analysed and the different online banking services that they avail are shown in Figure 4.1 below.

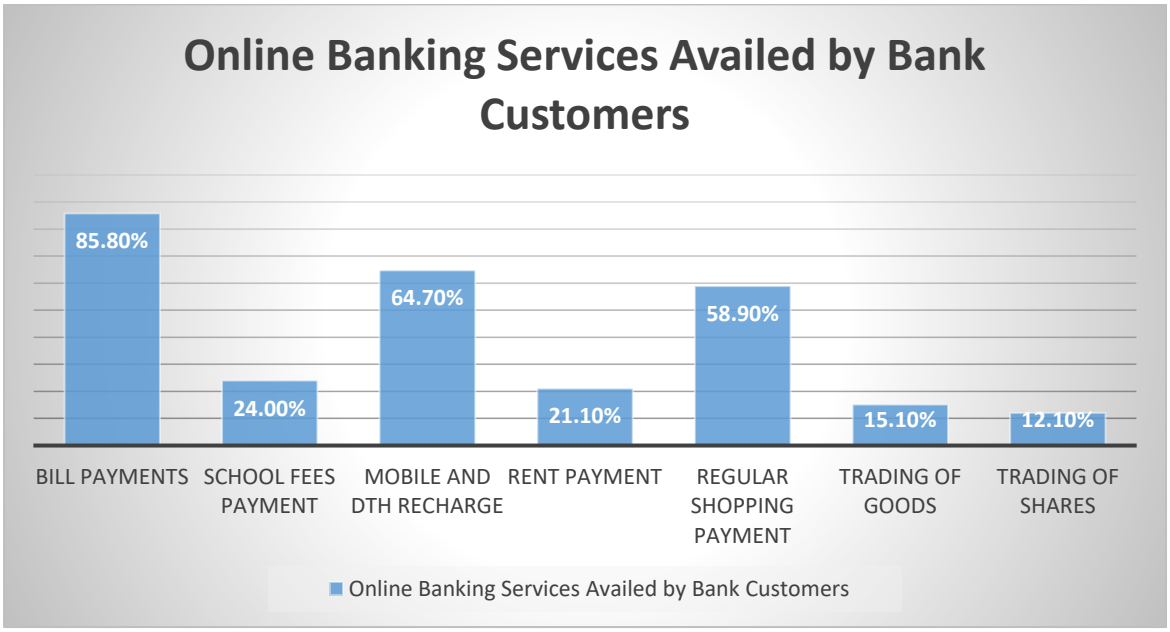

Fig 4.1: Segregation of online banking services availed by bank consumers

It can be observed from Figure 4.1 that the use of online banking platforms is used mostly for the payment of bills. This includes electricity bills, water supply bills, etc. This was followed by mobile and *DTH recharge and payment for regular shopping. The least usage

*DTH – Direct To Home (television)

of online banking service platforms are for school fees payment, rent payment, trading of goods, and trading of shares.

The data showing the segregation of the various banking accounts held by the respondents are shown in Figure 4.2

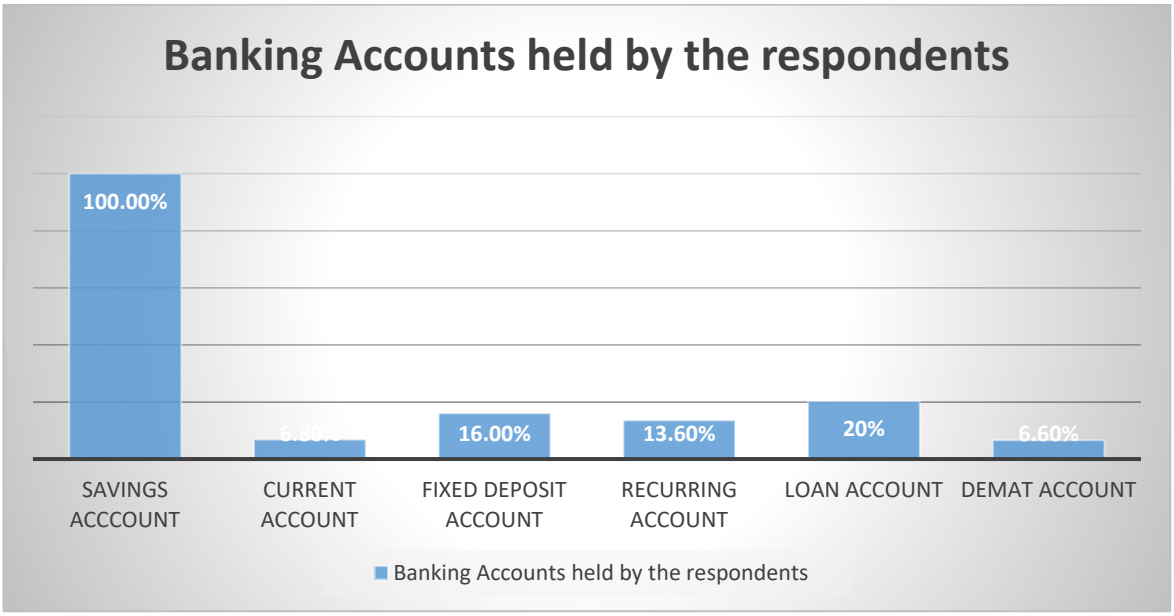

Fig 4.2 Segregation of banking accounts held by the respondents

It can be observed from Figure 4.2 that all of the respondents had a savings bank account with 100% of the respondents possessing a savings account. This was followed by a loan account, fixed deposit account, recurring account, and current account. The least amount of respondents were observed to possess a demat account.

4.3 Analysis of the Demographic Data:

In section 4.2 it can be observed that the respondents were using online banking services to fulfil their various needs ranging from bill payments to trading of shares. It was also observed that the consumers held different accounts in their respective banks (for eg. savings a/c, recurring deposit a/c, fixed deposit a/c, etc.). Analysing demographic data with regard to the frequency of usage of online banking services is crucial since it provides useful insights into customer behaviour and preferences. This will help in painting a picture of their usage pattern across the various demographic variables. To further analyse the association between the “frequency of usage of online banking services” and the

various demographic variables certain hypotheses were formulated which are shown in Table 4.2 below.

Table 4.2 – List of Null-Hypotheses

Sl. No.	Hypothesis
1	H_{01}: There exists no significant association between 'frequency of usage of online banking service' and 'district' of the consumers
2	H_{02}: There exists no significant association between 'frequency of usage of online banking service' and 'age' of the consumers
3	H_{03}: There exists no significant association between 'frequency of usage of online banking service' and 'gender' of the consumers
4	H_{04}: There exists no significant association between 'frequency of usage of online banking service' and 'education qualification' of the consumers
5	H_{05}: There exists no significant association between 'frequency of usage of online banking service' and 'employment status' of the consumers
6	H_{06}: There exists no significant association between 'frequency of usage of online banking service' and 'monthly family income' of the consumers
7	H_{07}: There exists no significant association between 'frequency of usage of online banking service' and 'type of bank' of the consumers

Chi-Square test was conducted to test the following hypotheses. ***In the following section respondents who use online banking services more than once a week or everyday are categorised as frequent users, while those who use it more than once a month are termed as infrequent users.***

H_{01}: There exists no significant association between 'frequency of usage of online banking service' and 'district' of the consumers

The results of the same are shown in Table 4.3, 4.4 and 4.5.

Table 4.3: Cross tabulation of 'Frequency of usage of Online Banking Services' and 'District'

		Frequency online banking			Total
		Frequent Users		Infrequent Users	
		Everyday	More than once a week	More than once a month	
District	Kamrup(M)	45	114	102	261

	Jorhat	41	94	69	204
	Dibrugarh	48	114	103	265
Total		134	322	274	730

Table 4.4: Distribution of frequent and infrequent users among the districts

District	Frequent Users	Infrequent Users
Kamrup (M)	61%	39%
Jorhat	66%	34%
Dibrugarh	61%	39%

Table 4.5: Chi Square test results (District)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.824	4	.768
Likelihood Ratio	1.838	4	.723
Linear-by-Linear Association	.028	1	.936
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and districts to which the respondents belongs to. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.768, which is more than 0.05, thus, indicating that there exists no significant association between the two variables. Thus, we do not reject the null hypothesis. Hence, it can be concluded that there is no association between usage of online banking services and place of the respondents. An even distribution of frequent and infrequent users was observed among the districts (Refer Table 4.4).

H_{02}: There exists no significant association between 'frequency of usage of online banking service' and 'age' of the consumers

The results of the Chi-Square test are shown in Tables 4.6, 4.7 and 4.8 below.

Table 4.6: Cross tabulation of 'Frequency of Usage of Online Banking Services' and 'Age'

		Frequency of online banking			Total
		Frequent Users		Infrequent Users	
		Everyday	More than once a week	More than once a month	
Age	18-30 yrs	65	111	86	262
	31-40 yrs	30	93	72	195

	41-50 yrs	21	86	65	172
	51yrs and above	18	32	51	101
Total		134	322	274	730

Table 4.7: Distribution of frequent and infrequent users among the age groups

Age	**Frequent Users**	**Infrequent Users**
18-30 yrs	67%	33%
31-40 yrs	63.1%	36.9%
41-50yrs	62.2%	37.8%
51yrs and above	49.5%	50.5%

Table 4.8: Chi Square test results (Age)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.903	8	.000*
Likelihood Ratio	28.315	8	.000
Linear-by-Linear Association	9.183	1	.003
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and the age group of the respondents. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.000*, which is less than 0.05, thus, indicating that there exists a significant association between the two variables. The null hypothesis is therefore, rejected. Respondents in the age group of 18 to 50 years used online banking services more frequently as compared to 51 years and above (see Table 4.7).

H_{03}: There exists no significant association between 'frequency of usage of online banking service' and 'gender' of the consumers

The results of the Chi-Square test are shown in Tables 4.9, 4.10 and 4.11 below.

Table 4.9: Cross tabulation of 'Frequency of Usage of Online Banking Services' and 'Gender'

		Everyday	More than once a week	More than once a month	Total
Gender	Female	82	167	125	374
	Male	52	155	149	356
Total		134	322	274	730

Table 4.10: Distribution of frequent and infrequent users among the genders

Gender	**Frequent Users**	**Infrequent Users**
Female	66.6%	33.4%
Male	58.1%	41.%

Table 4.11: Chi Square test results (Gender)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.827	2	.012
Likelihood Ratio	8.882	2	.012
Linear-by-Linear Association	8.653	1	.003
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and the gender of the respondents. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.012, which is less than 0.05, thus, indicating that there exists a significant association between the two variables. The null hypothesis is rejected. Online usage was found to be more among female respondents (Refer Table 4.10).

H_{04}: There exists no significant association between 'frequency of usage of online banking service' and 'education qualification' of the consumers

The results of the Chi-Square test are shown in Tables 4.12, 4.13 and 4.14 below.

Table 4.12: Cross tabulation of 'Frequency of Usage of Online Banking Service' and 'Educational Qualification'

			Everyday	More than once a week	More than once a month	Total
Academic Qualification	Under Graduate		27	25	40	92
	Graduate		50	98	83	231
	Post Graduate		43	159	121	323
	Professional Degree		14	40	30	84
Total			134	322	274	730

Table 4.13: Distribution of frequent and infrequent users among the Educational Qualification of the respondents

Educational Qualification	**Frequent Users**	**Infrequent Users**
Under Graduate	56.5%	43.5%
Graduate	64.1%	35.9%
Post Graduate	62.5%	37.5%
Professional Degree	64.3%	35.7%

Table 4.14: Chi Square test results (Educational Qualification)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.245	8	.004
Likelihood Ratio	23.081	8	.003
Linear-by-Linear Association	1.539	1	.215
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and the educational qualification of the respondents. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.004, which is less than 0.05, thus, indicating that there exists a significant association between the two variables. The null hypothesis here, is rejected.

Usage of online banking services was more frequent among the respondents having graduate, post-graduate and professional qualification (Refer Table 4.13).

H_{05}: There exists no significant association between 'frequency of usage of online banking service' and 'employment status' of the consumers

The results of the Chi-Square test are shown in Tables 4.15, 4.16 and 4.17 below:

Table 4.15: Cross tabulation of 'Frequency of Usage of Online Banking Service' and 'Employment Status'

		Everyday	More than once a week	More than once a month	**Total**
Employment status	Government employee	39	100	89	228
	Employee of a private organisation	36	118	84	238
	Entrepreneur	20	34	23	77
	Yet to be employed	9	34	39	82
	Student	30	36	39	105
Total		134	322	274	730

Table 4.16: Distribution of frequent and infrequent users among the Employment Status of the respondents

Employment Status	**Frequent Users**	**Infrequent Users**
Government Employee	60.9%	39.1%
Employee of a private organisation	64.7%	35.3%
Entrepreneur	70.1%	29.9%
Yet to be employed	52.4%	47.6%
Student	62.9%	37.1%

Table 4.17: Chi Square test results (Employment Status)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.290	8	.009
Likelihood Ratio	19.696	8	.012
Linear-by-Linear Association	.701	1	.402
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and the employment status of the respondents. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.009, which is less than 0.05, thus, indicating that there exists a significant association between the two variables. The null hypothesis, here is rejected.

Other than people who are 'yet to be employed' all the other categories had higher usage of online banking services (Refer Table 4.16).

H_{06}: There exists no significant association between 'frequency of usage of online banking service' and 'monthly family income' of the consumers

The results of the Chi-Square test are shown in Tables 4.18, 4.19 and 4.20 below.

Table 4.18: Cross tabulation of 'Frequency of Usage of Online Banking Service' and 'Monthly Family Income'

		Frequency of online banking		
		Frequent Users		Infrequent Users
		Everyday	More than once a week	More than once a month
Monthly family income	Less than Rs. 50,000	32	70	69
	Rs. 50,001 - Rs. 1,00,000	42	117	129
	Rs. 1,00,001 -Rs. 1,50,000	24	60	41
	Rs. 1,50,001 - Rs. 2,00,000	5	27	8
	Above Rs. 2,00,000	31	48	27
Total		134	322	274

Table 4.19: Distribution of frequent and infrequent users among the Monthly family income of the respondents

Monthly Family Income	**Frequent Users**	**Infrequent Users**
Less than Rs. 50,000	59.6%	40.4%
Rs. 50,001 - Rs. 1,00,000	55.2%	44.8%
Rs. 1,00,001 -Rs. 1,50,000	67.2%	32.8%
Rs. 1,50,001 - Rs. 2,00,000	80%	20%
Above Rs. 2,00,000	74.5%	25.5%

Table 4.20: Chi Square test results (Monthly Family Income)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.030	8	.000
Likelihood Ratio	28.553	8	.000
Linear-by-Linear Association	13.483	1	.000
N of Valid Cases	730		

The chi-square test was conducted to check whether there exists a significant association between the frequency of usage of online banking services and the monthly family income of the respondents. The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.000*, which is less than 0.05, thus, indicating that there exists a significant association between the two variables. The null hypothesis in this case in rejected.

Consumers with higher monthly family income (Rs. 1,00,001 and above) had higher usage of online banking services as compared to consumers with low family income (i.e. below Rs. 1,00,000) (Refer Table 4.19).

H_{07}: There exists no significant association between 'frequency of usage of online banking service' and 'type of bank' of the consumers

The results of the Chi-Square test are shown in Tables 4.21, 4.22 and 4.23 below:

Table 4.21: Cross tabulation of 'Frequency of Usage of Online Banking Service' and 'Type of Bank'

		Everyday	**More than once a week**	**More than once a month**	**Total**
Type of bank	Private Sector Bank	48	119	89	256
	Public Sector Bank	86	203	185	474
Total		134	322	274	730

Table 4.22: Distribution of frequent and infrequent users among the type of the banks

Type of Bank'	**Frequent Users**	**Infrequent Users**
Private Sector Bank	65%	35%
Public Sector Bank	60.9%	39.1%

Table 4.23: Chi Square test results (Type of Bank)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.343[a]	2	.511
Likelihood Ratio	1.348	2	.510
Linear-by-Linear Association	.754	1	.385
N of Valid Cases	730		

The Chi-Square test was conducted at 5% level of significance. It was observed that the p-value is 0.511, which is more than 0.05, thus, indicating that there exists no significant association between the two variables. Therefore, the null hypothesis is not rejected.

A summary of the hypotheses testing results are shown in Table 4.24.

Table 4.24: Result of the Hypotheses Testing

Hypothesis	Status of Null Hypothesis
H_{01}: There exists no significant association between 'frequency of usage of online banking service' and 'district' of the consumers	Not Rejected
H_{02}: There exists no significant association between 'frequency of usage of online banking service' and 'age' of the consumers	Rejected
H_{03}: There exists no significant association between 'frequency of usage of online banking service' and 'gender' of the consumers	Rejected
H_{04}: There exists no significant association between 'frequency of usage of online banking service' and 'education qualification' of the consumers	Rejected
H_{05}: There exists no significant association between 'frequency of usage of online banking service' and 'employment status' of the consumers	Rejected
H_{06}: There exists no significant association between 'frequency of usage of online banking service' and 'monthly family income' of the consumers	Rejected
H_{07}: There exists no significant association between 'frequency of usage of online banking service' and 'type of bank' of the consumers	Not Rejected

4.4 Summary:

This chapter provides an overview of the usage of online banking services by the various demographic groups of the respondents. A diagrammatic representation of the various online banking services availed by the bank consumers is provided which portrays that payment of bills, DTH and mobile recharge, and regular shopping payment are three of the most used online banking services availed by the bank consumer. Though other services, like payment of school fees, payment of rent, trading of goods, and trading of shares is also done, the number of such transactions was comparatively lower. A diagrammatic representation of the various banking accounts held by the respondents is also forwarded in this chapter. It was observed that 100% of the respondents had a savings bank account.

Chi square tests were performed to test the hypothesis stated in this chapter. The chi-square analyses were conducted to examine the relationship between 'online banking service usage frequency' and the demographic variables. According to the test results, the variable 'frequency of online banking service usage' has a significant relationship with the variables - age, gender, education level, employment status, and monthly family income. However, the variable 'frequency of utilisation of online banking service' was observed to have no significant association with the variables – district and type of bank.