

Awareness of rural customers about different green banking services in Punjab, India

ABSTRACT

Environmental degradation has become the major concern nowadays being faced by mankind. The role of banks in energy saving and cutting emissions is well established in developed economies. Green banking is a vital step in this direction which enriches economic growth without compromising environmental health. Thus the present study was conducted to investigate the awareness regarding green banking services among rural customers. Two public banks (Punjab National Bank and State Bank of India) were selected randomly from five districts, i.e., Ludhiana, Mansa, Patiala, Amritsar and Hoshiarpur, of Punjab state, India. From each district fifty customers from each bank were selected as respondents. Thus, from each district a sample of 100 respondents was selected. Total sample size for the study was 500. Data was collected through the interview of the respondents. The results of the study revealed that overall awareness was highest for ATM (95%), followed by debit card (90%), mobile banking (76%), net banking (69%) and credit cards (61%). Respondents fully aware about ATM services namely balance inquiry, cash withdrawal, cash deposit, getting cash receipt. The findings indicated that respondents were partially aware about credit cards and services related to credit cards as well as regarding debit cards and related services. Thus, the study suggests that there is a need to create awareness among rural customers about different green banking services.

Keywords: Awareness; green banking; mobile banking; rural customers; services. .

1. INTRODUCTION

Green banking is recognized as a promoting environment friendly practices that reducing carbon footprint from banking activities. It is like a normal bank, which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve the natural resources (Cholasseri, 2016). According to the report of Reserve bank of India, IDRB (2013), green banking is efficient to make internal bank processes, physical infrastructure and information technology effective towards environment by reducing its negative impact on the environment to a minimum level. Various advantages of green banking comprise less work on paper, reduced driving to different bank branches, etc. Simultaneously, it also cut down the cost of bank and branch by decreasing various expenses. Hence, green banking mitigates the credit risk, reputation risk and also the legal risk while keeping in view the state of environment (Kapoor, et al 2016).

Various studies across the world have supported that banks can contribute in different global efforts to make our planet a better place to live in. It encourages banks to carry out environment-friendly investments by combining its operational investments and technology know-how in banking business activities. The performance of a bank largely depends upon the performance of its clients. The banks have to diligently check that the customers' projects are meeting all the legal and environmental compliances as any failure can result in nonperforming assets for the banks (Harshita, 2017). Green banking can significantly aid in the achievement of sustainable development by spreading knowledge as well as providing instruction. To motivate enterprises to make an investment in the green projects, it's important to assist consumers gain an idea of utilizing environment friendly products. Since banking sector is one of the major stake holders in

the Industrial sector, it can find itself faced with credit risk and liability risks. Further, environmental impact might affect the quality of assets and also rate of return of banks in the long-run (Biswas, 2016). Hence, there is an urgent need to take strict measures by government to increase awareness and helping them to change consumption habits in support to green products (Tu & Dung, 2017). Moreover, green banking is the phenomenon which is getting popular these days due to its being eco-friendly. Thus there is a need to find out awareness about such initiatives among rural customers and thus, their adoption level of these services. Although a few studies have been conducted abroad and in different states of India on urban customers, but there is no literature on use of green banking services in Rural Punjab. Keeping in view the above scenario current study was undertaken to find out the awareness of rural customers about different green banking services in the state of Punjab, India.

2. METHODOLOGY

The study was conducted in randomly selected five districts of Punjab state i.e. Ludhiana, Mansa, Patiala, Amritsar and Hoshiarpur. Further two public banks i.e. Punjab National Bank and State Bank of India were also selected randomly from each district. Five districts were selected due to limited time constraint. Two public banks i.e. Punjab National Bank and State bank of India were selected purposively as it was found from initial discussion with bank officials that these two banks are having more branches in rural areas. Fifty customers from each bank were selected as respondents making a total of 100 respondents from each district, thus comprising a total sample of 500 respondents for the study. The respondents were visited personally for collection of data.

The Interview Schedule was prepared by the researcher after the review of the literature. Interview Schedule was used to collect the primary data. It contained the items on the various personal, socio-economic profile, information related to bank, items related to awareness and adoption of green banking by the customers. Data was collected through interview and was analyzed using frequency, mean and analysis of variance. The frequency was worked out by calculating the number of respondents belonging to a particular response category. For calculating the mean value of a data set, all the observations or values of dataset need to be summed and divided by the number of observations and values for calculating the median, arrange all the values of the data set in an ascending or descending order and then observe which value appears in the mid. All observations or values need to be summed and divided by number of values for calculating the mean value.

3. RESULTS AND DISCUSSION

3.1 Awareness and usage of different bank services among respondents

The analysis of the data revealed that most of the respondents (95%) were aware of the ATM however eighty-eight per cent of the respondents use the ATM. For mobile banking, 76.2 per cent of the respondents were aware while only 40.8 per cent were found to be using mobile banking services. Sixty-nine per cent of the respondents were aware of the net banking and only few of the respondents were using net banking (14.8%). Further it was observed that most of the respondents (90.2%) were aware of the debit cards though 88% were using debit cards (Table 1).

Table 1: Awareness and usage of different bank services among respondents of the study

area (n=500)

Service	Awareness <i>f</i> (%)	Use <i>f</i> (%)
ATM	475 (95.0)	440 (88.0)
Mobile banking	381 (76.2)	204 (40.8)
Net Banking	345 (69.0)	74 (14.8)
Credit cards	307 (61.4)	23 (04.6)
Debit cards	451 (90.2)	440 (88.0)

Thus it can be concluded that awareness was highest for ATM, followed by debit card, mobile banking, net banking and credit cards. As far as use is concerned, ATM and debit cards were used by majority. For mobile banking, net banking and credit cards there was high difference between awareness and utility.

3.2 Awareness among respondents about the services provided with the use of ATM

Level of awareness among the respondents regarding the services provided with the use of ATM. The findings of the study revealed that 79.6 per cent of the respondents were fully aware that they can check their account balance while using ATM whereas, meager percentage of respondents were partially (12.8%) or not aware (7.6%) of the same. Majority of the respondents (86.6%) were fully aware that the ATM's are used to withdraw the cash. However, very few of respondents were partially aware or not aware about the cash withdrawal service. Further, it was found that seventy-one per cent of the respondents knew that they can deposit cash through ATM. Around three fourth of the respondents were fully aware that they can get receipt while using ATM while 16.6 per cent were partially aware and rest of the respondents were not aware (Table 2). Regarding deposit of cheque through cheque deposit machine, only twenty-nine per cent of the respondents were fully aware closely followed by the respondents who were not aware (28%) whereas, forty-three per cent of the respondents were partially aware about the depositing of cheque through cheque deposit machine (CDM). Almost equal percentage of the respondents showed similar trend for the awareness regarding getting cheque receipt through ATM after the deposit of cheque through CDM. Around one fifth of the total respondents were fully aware that they can send their request through ATM for getting cheque book while 28.4 per cent respondents were partially aware. Half of the respondents were not aware at all about this service of ATM. Only one fourth of the respondents were fully aware about withdrawing money from different bank's ATM but with interest rates whereas, almost equal percentage of respondents was partially or not aware (36.8 and 38.4%, respectively).

Table 2: Awareness among respondents about the services provided with the use of ATM

Dimension	Fully aware <i>f</i> (%)	Partially <i>f</i> (%)	Not aware <i>f</i> (%)	Mean	F value
Balance inquiry	398 (79.6)	64 (12.8)	38 (07.6)	1.72	92.26454** (p value 0.0)
Withdraw cash	433 (86.6)	35 (07.0)	32 (06.4)	1.80	
Deposit cash	355 (71.0)	90 (18.0)	55 (11.0)	1.60	
Get cash receipt	374 (74.8)	83 (16.6)	43 (08.6)	1.66	

Deposit cheque through CDM (cheque deposit machine)	145 (29.0)	215 (43.0)	140 (28.0)	1.01
Get cheque receipt through ATM	121 (24.2)	227 (45.4)	152 (30.4)	0.94
Send cheque book request through ATM	108 (21.6)	142 (28.4)	250 (50.0)	0.72
Withdraw money from any bank's ATM but with interest rate	124 (24.8)	184 (36.8)	192 (38.4)	0.86
Fixed deposit	183 (36.6)	113 (22.6)	204 (40.8)	0.96
Pay Insurance premium	134 (26.8)	144 (28.8)	222 (44.4)	0.82
Get passbook printed	266 (53.2)	135 (27.0)	99 (19.8)	1.33
Overall Mean	1.22			

Mean range: 0 (Not aware) to 2 (Fully aware)** significant at the 0.01 level (n=500)

Regarding fixed deposit services provided with the use of ATM, it was found that 40.8 per cent of the respondents were not aware followed by fully aware (36.6%) and partially aware (22.6%). Around forty-five per cent of the respondents were not aware that they can pay their insurance premium through ATMs however, 28.8% were partially aware whereas 26.8 per cent of the respondents were fully aware about this service. Above half of the respondents (53.2%) were fully aware about printing of passbook through ATMs whereas, twenty-seven per cent of the respondents were found to be partially aware followed by 19.8 per cent who were totally unaware about the service while using ATM. Sharma and Choubey (2022) examined the effects of green banking initiatives and found that more than 60% of respondents were aware and using ATM services.

Finding of the study indicated from the mean score that respondents were fully aware about ATM services namely balance inquiry (\bar{X} =1.72), cash withdrawal (\bar{X} =1.80), cash deposit (\bar{X} =1.60), to get cash receipt (\bar{X} =1.66). For rest of the services, respondents were in the range of partially aware to not aware. Overall mean score for the ATM services (\bar{X} =1.22) depicted that respondents were partially aware of the services provided with the use of ATM. There was significant difference in awareness about various services under ATM at one per cent level of significance ($F =92.26454$; $p < 0.01$) as depicted by Analysis of Variance (ANOVA).

3.3 Awareness among respondents about the services provided under Mobile Banking

Data pertaining to awareness level of the respondents regarding the services provided under mobile banking has been presented in Table 3. From the analysis, it was found that 69.2 per cent of the respondents were fully aware about checking balance or account statement through mobile banking followed by twenty-six per cent of the respondents who were totally unaware about the mentioned service. Regarding the transfer of funds, more than half of the respondents were fully aware that they can transfer funds into their self-accounts within the bank (54.4%), third party

accounts within the bank (55.6%), transfer funds to other bank accounts (58.80%) and transfer to mobile (55%) whereas, almost one fourth of the respondents were totally unaware about transferring funds by using mobile banking. Further, sixty-one per cent of the total respondents found to be fully aware to recharge mobile phones through mobile banking followed by the respondents who were not aware (24.8%) for the same. For paying bills like electricity/loan payment/DTH dish/cable TV/ LPG cylinder booking through mobile banking, fifty-eight per cent of the respondents opined that they are fully aware followed by unaware (24.2%) and partially aware (17.8%). For fixed deposit, only 32, 32.6 and 30.6 per cent of the respondents were fully aware about opening FD/RD, viewing receipt of FD/RD and closure of FD/RD, respectively.

Table 3: Awareness among respondents about the services provided under Mobile Banking

Dimension	Fully aware <i>f</i> (%)	Partially <i>f</i> (%)	Not aware <i>f</i> (%)	Mean	F Value
Check balance/ account statement	346 (69.2)	24 (04.8)	130 (26.0)	1.43	20.17592** (p value 0.00)
Transfer funds within bank:					
Self-accounts (PPF, RD, Loan)	272 (54.4)	96 (19.2)	132 (26.4)	1.28	
Third party (account within your bank)	278 (55.6)	100 (20.0)	122 (24.4)	1.31	
Transfer funds to other banks:					
Transfer to account	294 (58.80)	86 (17.20)	120 (24.00)	1.35	
Transfer to mobile	275 (55.0)	106 (21.2)	119 (23.8)	1.31	
Recharge:					
Recharge Mobile	305 (61.00)	71 (14.20)	124 (24.8)	1.36	
Pay various bills:					
Electricity/Loan payment/Post-paid mobile/DTH Dish/cable TV/LPG cylinder booking/Any other	290 (58.00)	89 (17.80)	121 (24.2)	1.34	
Fixed deposit:					
Opening FD/RD	160 (32.0)	128 (25.6)	212 (42.4)	0.90	
View receipt of FD/RD	163 (32.6)	128 (25.6)	209 (41.8)	0.91	
FD/RD closure	153 (30.6)	116 (23.2)	231 (46)	0.84	
Overall Mean				1.20	

Mean range: 0 (Not aware) to 2 (Fully aware);** significant at the 0.01 level(n=500)

Mean scores of the awareness level depicted that respondents were partially aware of all the services provided under mobile banking. Overall mean score was calculated as 1.20 which indicates the level of awareness as partial. Ramya and Promoth (2020) studied the awareness about mobile banking among people and found that majority of the consumers were aware that mobile banking is available in India, but very few were aware and familiar with various banking transactions that can be done with the help of mobile banking. This means that people are not aware of all the services under mobile banking as they are using only few of them. Statistical analysis in terms analysis of variance (ANOVA) revealed that there was significant difference in awareness about various services under mobile banking at one per cent level of significance (F

=20.17592; $p < 0.01$).

3.4 Awareness among respondents about the services provided under Net Banking

Table 4 depicts that almost half of the total respondents were fully aware that they can create net banking login for accessing the bank services (52.6%) and check their account balance (54.4%) with the help of net banking while the rest were not aware or partially aware. Out of total respondents, a greater number of respondents stated that they are totally unaware to transfer funds by IMPS (44.6%), NEFT (41%) and RTGS (41%) with the help of net banking. However, 27, 30.6 and 26.4 per cent of the respondents reported that they are fully aware of transferring funds through IMPS, NEFT and RTGS through net banking while, the rest were partially aware. For paying bills through net banking, 46.8 per cent respondents affirmed that they are totally aware followed 31.2 per cent who were completely unaware for the same. Only one fourth of the respondents were fully aware that they can pay credit cards outstanding through net banking. Further, it was observed that almost same number of respondents i.e., 30.2% and 32% were fully aware that they can go for mutual fund investment and insurance plans, respectively, through net banking. Around twenty-eight per cent of the respondents avowed that they are fully aware about the loan related services that can be availed through net banking however, around forty per cent stated that they are totally aware and rest of the respondents were partially aware of such services provided under net banking.

Table 4: Awareness among respondents about the services provided under Net Banking

Dimension	Fully aware <i>f</i> (%)	Partially <i>f</i> (%)	Not aware <i>f</i> (%)	Mean	F value
Create net banking log in for accessing our bank	263 (52.6)	75 (15.0)	162 (32.4)	1.20	17.34718** (p value= 0.00)
Check balance / statement	272 (54.4)	69 (13.8)	159 (31.8)	1.23	
Transfer funds by:					
IMPS (Immediate Payment service)	135 (27.0)	142 (28.4)	223 (44.6)	0.82	
NEFT (National electrical fund transfer)	153 (30.6)	142 (28.4)	205 (41.0)	0.90	
RTGS (Real time Gross Settlement) (more than 2 lakh)	132 (26.4)	163 (32.6)	205 (41.0)	0.85	
Pay bills online:					
Electricity bill/Mobile/telephone bill/Gas bill/Insurance premium/Mutual Funds	234 (46.8)	110 (22.0)	156 (31.2)	1.16	
Credit card outstanding can be paid.	125 (25.0)	163 (32.6)	212 (42.4)	0.83	
Do mutual fund investment	151 (30.2)	167 (33.4)	182 (36.4)	0.94	
Take Insurance plan Health/Children/Retirement	160 (32.0)	172 (34.4)	168 (33.6)	0.98	

Loans					
Check loan eligibility amount	142 (28.4)	158 (31.6)	200 (40.0)	0.88	
Avail personal automobile	144 (28.8)	151 (30.2)	205 (41.0)	0.88	
Overall Mean (%)				0.96	

Mean range: 0 (Not aware) to 2 (Fully aware); ** significant at the 0.01 level(n=500)

Similar to mobile banking, mean scores of the awareness level depicted that respondents were partially aware of all the services provided under net banking. Overall mean score was calculated as 0.96 which indicates the level of awareness as partial. Bendigeri and Hulgar (2014) analyzed the awareness level of internet banking services among the customers of private and public sector banks of Hubli City. They found that 63 percent of the respondents were partially aware about the internet banking services and 16 percent of them were totally unaware. The analysis of variance (ANOVA) among different services under net banking was calculated and it was found that there was significant difference in awareness about various services under net banking at the level of one per cent significance ($F=17.34718$; $p < 0.01$).

3.5 Awareness among respondents about the use of Credit Cards

Analysis of the data depicts that majority of the respondents (65.60%) were unaware about the recyclable credit cards (Table 5). Thirty-nine per cent of the respondents reported that they are not aware about taking credit using credit cards followed by 36.80 and 24.20 per cent who were fully and partially aware, respectively. Forty per cent of the respondents reported that they were not aware that credit cards allow spending more money than they have. Around thirty-six per cent of the respondents were fully aware that they have to pay back the amount used through credit cards by due date whereas only 34.80 per cent of the respondents were totally aware that if they can't pay back by due date then they can convert that amount to EMIs. Around thirty-nine per cent of the respondents were not aware that banks ensure credibility of the user before issuing credit cards. Forty per cent of the respondents were fully aware that they should not share their credit card number or OTP with anyone while 39.60 per cent were not aware about the same. More number of the respondents i.e., 41.60 per cent reported that they are completely aware that they can pay bills or do cashless shopping. Further, 40.40 per cent of the respondents stated that they were not aware about the reward points earned with the use of credit cards followed by 36.80 per cent respondents who were fully aware and 22.80 per cent were partially aware.

A study conducted in China by Stavins (2021) showed that less financially prepared individuals use cash more and credit cards less, compared to those with higher emergency savings, while people with low emergency savings rely more on cash than credit cards, they revolve more debt, and so a financial shock is costlier for them. Thus comparing both the studies it was observed that people are not fully aware of the various services under credit card due to lack of timely and meaningful information and also due financial risk issues.

Table 5: Awareness among respondents about the use of Credit Cards

Dimension	Fully aware	Partially	Not aware	Mean	F value
	<i>f (%)</i>	<i>f (%)</i>	<i>f (%)</i>		

Credit cards are recyclable.	76 (15.20)	96 (19.2)	328 (65.60)	0.50	11.38211 (p value =2.83)
Can take credit using credit card	184 (36.80)	121 (24.20)	195 (39.00)	0.98	
It allows us to spend more than we have	189 (37.80)	111 (22.20)	200 (40.00)	0.98	
We have to pay back the amount used through this card on specified due date.	179 (35.80)	115 (23.00)	206 (41.20)	0.95	
If unable to pay by due date, then we can convert this amount in Easy instalment (EMI).	174 (34.80)	134 (26.80)	192 (38.40)	0.96	
Before issuing credit cards banks ensure our credibility	171 (34.20)	133 (26.60)	196 (39.20)	0.95	
We should not share credit card No/ OTP etc with anyone	200 (40.00)	102 (20.4)	198 (39.60)	1.00	
Pay all utility bills online: (Electricity bill/Mobile bills/Gas bills/School/college fee)	208 (41.60)	100 (20.00)	192 (38.40)	1.03	
Do cashless Shopping (Online/Offline)	208 (41.60)	95 (19.00)	197 (39.40)	1.02	
Earn Rewards points	184 (36.80)	114 (22.80)	202 (40.40)	0.96	
Overall mean				0.93	

Mean range: 0 (Not aware) to 2 (Fully aware)(n=500)

Overall mean score (\bar{X} =0.93) indicated that respondents were partially aware about credit cards and services related to credit cards. The analysis of variance (ANOVA) depicted no significant difference in awareness about various credit card services ($F = 11.38211$; $p = 2.83$), which means respondents were knowing about various services related to credit card.

3.6 Awareness among respondents about the use of Debit Cards

From the findings of the study it was observed that forty-seven per cent of the respondents were fully aware that debit cards are recyclable while, 33.40 per cent were not aware. Further, it was found that almost 68 to 71 per cent of the respondents were completely aware about the various debit card related dimensions like issuance of debit cards from banks is easy, ATM transaction are not possible without debit cards, cashless shopping can be done by using debit cards and debit card number/PIN/CVV/OTP should not be shared with anyone whereas, only few respondents were unaware about the same. Furthermore, nearly half of the respondents were fully aware that they can withdraw money from any bank's ATM without extra payment for five times, pay all kind of utility bills and do cashless shopping and earn rewards with the use of debit

cards however, one fourth of the respondents were partially aware and rest were not aware of the mentioned services.

Table 6: Awareness among respondents about the use of Debit Cards

Dimension	Fully aware <i>f</i> (%)	Partially <i>f</i> (%)	Not aware <i>f</i> (%)	Mean	F value
Debit cards are recyclable.	235 (47.00)	97 (19.40)	167 (33.40)	1.13	16.81928 (p value = 1.27)
It is easy to get debit card issued from banks	347 (69.40)	103 (20.60)	50 (10.00)	1.59	
ATM transactions are possible only using debit card.	343 (68.60)	106 (21.20)	51 (10.20)	1.58	
You can do cashless shopping using debit cards	347 (69.40)	102 (20.40)	51 (10.20)	1.59	
We should not share Debit card No./PIN/ CVV/ OTP etc with anyone	354 (70.80)	92 (18.40)	54 (10.80)	1.60	
Earn rewards or points which can be redeemed for contribution to eco-friendly charitable organizations	92 (18.40)	126 (25.20)	282 (56.40)	0.62	
Withdraw money from any bank's ATM without extra payment (5 times)	282 (56.40)	128 (25.60)	90 (18.00)	1.38	
Pay all utility bills online: (Electricity bill/Mobile bills/Gas bills/School/college fee)	298 (59.6)	125 (25.00)	77 (15.40)	1.44	
Do cashless Shopping (Online/Offline)	284 (56.80)	129 (25.80)	87 (17.40)	1.39	
Earn Rewards points	257 (51.40)	126 (25.20)	116 (23.20)	1.28	
Overall mean (%)				1.36	

Mean range: 0 (Not aware) to 2 (Fully aware)

(n=500)

A study by Jayaraj (2019) revealed that majority of respondents (98.30%) are using their debit cards for cash withdrawals, which supports the findings of this study as in the present study also majority of the respondents were using their debit cards for cash withdrawals. Sixty percent of cardholders were using their cards for the purpose of fees and bill payments while 51.7 percent were using the cards for online payments. It can be concluded that majority of respondents were aware of using debit cards for cash withdrawals, fees and bill payments and for online transactions also no significant difference was observed in awareness about various debit card services (F =16.81928; p=1.27).

4. CONCLUSION

The present study concludes that people were found to be more aware of the ATM. This study was carried out to identify the level of consciousness of the rural customers regarding green banking services in the banks of Punjab state, India. As far as use was concerned, ATM and debit cards were used by majority. Thus it was concluded that there is a need not only to create awareness but also educating rural masses through workshops on digital literacy about use of green banking services. It will definitely help in overcoming the fear from their minds which can ultimately lead to enhanced adoption of green banking service. This study was conducted solely from the rural population's point of view; a comparative study from the rural and urban population can help in understanding the overall situation much better. Future research could also include a comparative analysis of all the Indian states providing state wise differences in use of green banking services and the factors associated with this.

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