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ANALYSIS OF FACTORS AFFECTING CONSUMER BEHAVIOR TOWARDS GREEN BANKING USING TPB MODEL

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ABSTRACT

The purpose of this research paper is to analyze the factors which are affecting consumer behavior towards green banking. Alternatively, the research focuses on how customer's attitude, subjective norms, and perceived behavioral control can play their role in the use and promotion of green banking. To analyze the data, this research paper follows the positivism philosophy therefore a quantitative approach is used to examine the problem by circulating a questionnaire among 263 people who are selected by using purposive sampling technique as the target audience was those people who have Bank account in Pakistan. The findings of this study support the previous results of the theory of planned behavior. Consumer attitude, subjective norms, and perceived behavioral control have a high effect on consumer intention to use green banking which shows that bank consumers in Pakistan are willing to use technology-driven banking practices if they are available. The result also supports past studies on attitude towards the adoption of internet and mobile banking in Pakistan. Our research can be helpful in developing an effective marketing strategy for the adoption of green banking. This study will help the government and marketers to create awareness regarding the benefits of using technology-driven eco-friendly banking practices so that consumers can learn about internet banking and start using it.

Contribution/ Originality: This study introduces a conceptual model that defines relationship between consumer behavior towards green banking and consumer attitude. Apart from this, the study also fills up the gap in previous studies related to this topic by introducing the role of government authorities as a moderator.

1. INTRODUCTION

Green Banking is still a considerably new concept in Pakistan and it has been adopted by some commercial banks in Pakistan. These banks are striving towards incorporating internet banking and energy-efficient technologies. For instance, United Bank Limited (UBL), a commercial bank in Pakistan, has introduced Go-Green initiatives like The UBL Go-Green Internet Merchant Acquiring, The UBL Go-Green e-statement, The UBL Go-Green Short Messaging Service (SMS) alerts (UBL, 2021).

Although internet banking users in Pakistan have reached 15 Million (SBP, 2021), this figure is still quite low compared to the market potential. However, research by Martins, Oliveira, and Popovič (2014) proposed that customers are showing concerns about adopting technology-driven banking practices and many people still prefer

to use conventional banking. Thus, there is a need to analyze consumer behavior towards green banking and factors affecting consumer's intention to use green banking.

This research is focused to analyze the impact of consumer attitude, subjective norms, and perceived behavioral control which are used as independent variables on consumer's use of green banking practices which is used as the dependent variable. Furthermore, the role of regulatory authorities is used as a moderator.

Environmental issues and sustainability are currently ranked as the most serious problems the world is facing today and people are getting aware of its consequences on the overall environment. As a result, consumers are inclined toward purchasing those products which are environmentally friendly (Bu & Go, 2008). In our study, we have used Consumer's Intention to use Green Banking as a mediator between our Independent Variables (IVs) and Dependent Variable (DV). Our IV's are Customer attitude, subjective norms, and perceived behavioral control whereas our DV is Consumer's use of green banking. The above mediator was chosen as it was not used in previous research (Kumar, 2019; Lee, 2010; Min & Galle, 2001).

Moreover, regulatory authorities can play a significant role between Consumer's Intention to use Green Banking & Consumer's use of green banking therefore it has been used as a moderator in our research as it was not used in Park and Kim (2020); Bouteraa, Negra, Shephard, and Chelly (2020) & Akomea-Frimpong, Adeabah, Ofosu, and Tenakwah (2021).

Furthermore, the unavailability of green products, lack of seriousness showed by banks towards environmental issues are also adversely influencing consumer decisions to use green banking. If green banking is not promoted widely and considerable attention is not given then it might result in serious environmental issues.

1.1. Research Question

RQ1: To what extent does consumer's intention to use green banking mediate between our independent variables (customer attitude, subjective norms, and perceived behavioral control) and our dependent variable which is the consumer's use of green banking?

RQ2: How Significant is the role of regulatory authorities between Consumers' intention to use green banking and consumers' use of green banking?

Our objective of the research is to gauge the significance of the role of regulatory authorities in the use of green banking, to find out the mediating effect of consumer's intention to use green banking between customer attitude and consumer's use of green banking and to explore the mediating effect of consumer's intention to use green banking on consumer's use of green banking. Thus, this study introduces a conceptual model which includes consumer's psychological assessment, individual skills, and social pressure to adopt green banking as independent variables and overall customer use of green banking as the dependent variable.

Our research will be helpful for regulatory authorities such as the government & State Bank of Pakistan (SBP) that how can they play their role to promote green banking and spread awareness among consumers. Furthermore, it will also help a researcher to know that to what extent consumer attitude is significant in the use of green banking. Through our research consumers will also know their importance in the promotion of green practices and also prefer green products while making a purchase decision. Moreover, our research will also be helpful for Banks to introduce more green products to make sure the sustainability of the green environment.

2. LITERATURE REVIEW

2.1. Green Banking

According to the State Bank of Pakistan, green banking is the type of banking that facilitates the use of eco-friendly practices in the banking sector and assists customers in decreasing their carbon footprints (SBP, 2015). A green bank is a bank that promotes environmental sustainability by introducing green technologies in internal and external bank operations to reduce carbon footprints (Bose, Khan, Rashid, & Islam, 2018).

All over the globe, various banks have initiated Green banking by implementing environment-friendly platforms. The green banking concept has encouraged banks to introduce paperless, technology-driven goods and services such as Online payment channels, Automated Cash deposits, etc. (Sharma & Choubey, 2022). For example, the Bank of Ceylon has adopted technology-oriented mechanisms to aid in the reduction of carbon footprints (Herath & Herath, 2019). Similarly, Banks in Bangladesh, Brazil, Colombia, China, Indonesia, Mongolia, and Nigeria have taken green banking initiatives to promote mobile and internet banking (Weber & Oyegunle, 2016).

Green banking initiatives create an eco-friendly image of the Bank (Sharma & Choubey, 2022) and aids in increasing customer loyalty and satisfaction (Herath & Herath, 2019). Thus, this study focuses on the influential factors that aid in increasing customer's use of green banking.

2.2. Theory of Planned Behavior

According to the Theory of Planned Behavior (TPB), the chances of performing a particular behavior increase when a person has a positive consumer attitude, social support, and greater control towards that behavior (Ajzen, 1991). TPB is a renowned theory to predict consumer behavior in different areas including green consumption (Yadav & Pathak, 2017).

In this research, TPB theoretical model has been used to study the impact of customer attitude, subjective norms, and perceived behavioral control on consumer's use of green banking. Moreover, the role of regulatory authorities has been used as a moderator between consumer's intention to use green banking and consumer's use of green banking.

2.3. Consumer Attitude and Consumer Intention towards Green Banking

Consumer Attitude refers to an individual's psychological assessment of a specific behavior. Theory of Planned Behavior postulates that a person having a positive attitude towards any particular behavior is likely to conduct that behavior (Ajzen, 1991). Thus, attitude is considered an important factor to predict behavior.

According to Wang, Liu, and Qi (2014) consumers who are more conscious about the environment are expected to prefer eco-friendly products. Similarly, other research studies have shown that green product consumption is related to consumers' positive attitudes towards environmental issues (Paul, Modi, & Patel, 2016). Previous studies have also validated that such relationships exist in emerging Asian economies (Jaiswal & Kant, 2018).

Keeping in view the above discussion, it can be concluded that Consumer attitude has a profound impact on consumer's decision-making towards acceptance of Green banking. Thus, we propose the following hypothesis:

H1: Consumer Attitude has a positive impact on consumer's intention towards green banking.

2.4. Subjective Norm and Consumer Intention towards Green Banking

According to Ajzen (1991) subjective norm is the "perceived social pressure" to carry out or not to carry out a behavior. In other words, an individual's perception of a particular behavior is affected by the judgment of other people (Choi, Jang, & Kandampully, 2015). These "other people" include family members, friends, relatives, and other reference groups.

Previous research has claimed that social norms are influential in creating green consumption (Yadav & Pathak, 2017). Some studies also point out a positive relationship between subjective norms and consumer intention to use green products (Jaiswal & Kant, 2018).

Thus, the subjective norm can play a vital role in increasing consumer intention to use green banking and we propose that:

H2: Subjective norm has a positive impact on consumer intention towards green banking.

2.5. Perceived Behavioral Control and Consumer Intention toward Green Banking

Ajzen (1991) defined perceived behavioral control (PBC) as a person's perceived ease or difficulty of carrying out a specific behavior. According to the TPB model, the development of perceived behavioral control is essential to generate a consumer's intention to carry out a behavior (Maichum, Parichatnon, & Peng, 2016). In the context of this research, PBC is the individual's judgment about his or her self-competence to use green banking services i.e. whether he or she has the necessary knowledge and resources to use green banking.

Previous researches have divided PBC into two kinds:

Internal PBC: Internal PBC measures internal capabilities i.e. an individual's skills, confidence, and knowledge to perform a particular behavior (Armitage & Conner, 1999). Maichum et al. (2016) have cited previous research papers to propose that an individual's confidence in his ability to control behavior has a positive connection with his or her use of a particular product. In our research framework, internal PBC corresponds to an individual's perception of his or her skills and knowledge to utilize green banking services.

External PBC: According to Kidwell and Jewell (2003) external PBC involves exterior limitations to perform a particular behavior. This includes the availability of external resources such as time, money, availability of hardware and software, etc. that may limit one's capacity to use green banking.

Several previous studies have proved PBC to play a vital role towards green purchasing behavior such as green hotels (Chen & Tung, 2014) organic products (Maichum et al., 2016) and green products (Moser, 2015). Therefore, Perceived Behavioral control can have a considerable impact on consumer's intention to use green banking and we propose the following hypotheses:

H3: Perceived behavioral control has a positive impact on consumer intention towards green banking.

2.6. Role of Regulatory Authorities on Consumer Intentions to Use Green Banking and Consumer's Use of Green Banking

Rapid worldwide climate changes are now becoming a serious threat for the banking sector also which is leading authorities and regulators to pay some serious attention to climate changes with regards to the financial risk associated with them (Park & Kim, 2020). To accelerate the process of green banking, governments and regulatory authorities are key players as their efforts may speed up the entire process. However, Banks must not only dependent on government actions and should show a proactive approach rather than a reactive approach as a result of pressure build by regulatory authorities (Louche, Busch, Crifo, & Marcus, 2019).

Though it's a fact that the regulatory authorities and governments are the key players to promote green banking, they can also play a vital role in the consumer's behavior to use green banking. According to Kumar (2019) respondents of the research showed agreement on the introduction of strict rules and regulations by authorities to increase the adoption of green practices. However, they urge to introduce environment-friendly alternative green products against existing products that are less environmentally friendly. Moreover, they also wanted easy access to green products.

According to Bu and Go (2008) our environment is exposed to different issues which included air pollution, dangerous waste disposal, and polluted water. These all issues are demanding some serious developments in the green banking process.

Although several studies on the role of government authorities, the introduction of green products by banks, and customer use of green Banking were conducted by several authors (Kumar, 2019; Lee, 2010; Louche et al., 2019) however, there was lack of direction regarding how the government can play its role to promote green banking, what green products should be introduced by Banks/organization, how can regulatory authorities play a role to turn customer's intention into the actual use of green initiatives. Furthermore, the audience selected in the said studies was restricted, to age, specific country, and gender-specific.

There are some similarities found in research studies conducted by Park and Kim (2020) and Kumar (2019) as both studies considered general consumption practices of green products and services. However, Kumar (2019) used a sample size of young people whereas no information on sample size was mentioned in Park and Kim (2020).

Considering the above discussion, we can conclude that role of regulatory authorities is very vital to promote the use of green banking practices. Regulatory authorities can increase awareness about green banking products, provide incentives, and resultantly can increase customer intentions to use green banking. Thus, we propose the following hypothesis:

H4: The role of regulatory authorities has a positive impact on consumer intentions to use green banking and consumer's use of green Banking.

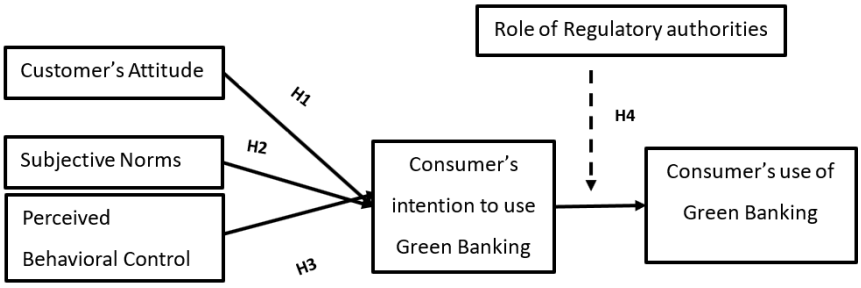

Figure 1. Conceptual model.

3. METHODOLOGY

To analyze the data, this research paper follows the positivism philosophy therefore we have used a quantitative approach to examine our problem (Crossan, 2003). The purpose of using the positivism philosophy is to study the variables from an objective point of view and we as a researcher would remain as an independent observer by analyzing the facts deduced from data analysis without any biases. This research uses a deductive approach to collect and analyze quantitative data. Using a deductive approach will help us effectively predicting the influence of TPB constructs on Consumer behavior and how this factual knowledge can be used by stakeholders to improve their performance. Since the primary focus of this study is to apply theory to gathered data, therefore, the deductive approach is used (Bashir, 2013). We have used non-probabilistic sampling as we don't have a sample scale available for all bank customers. Furthermore, we have used purposive sampling for collecting data to filter out relevant audiences which is also one of the non-probabilistic sampling techniques, and the same was used in research (Etikan, Musa, & Alkassim, 2016). Our sampling unit is Bank customers as the domain of this research is limited to bank customers who have a Bank account in Pakistan and the use of purposive sampling will help us in surveying those respondents. The minimum sample size for our research model has been calculated as 77 by using G Power software and the exact sample size is planned as 240 by multiplying construct items by 10. The statistical technique used in our research is Partial least square structural equation modeling (PLS-SEM) which is a statistical approach that has been used here for data analysis among the variables. The reason why we used PLS-SEM is that our research is linked with a theoretical framework according to a forecast point of view when the examination is worried about testing a hypothetical system according to an expectation viewpoint (Hair, Risher, Sarstedt, & Ringle, 2019). Furthermore, the small sample size and effective utilization of marker variables were also the main reasons for selecting PLS-SEM (Hair et al., 2019).

3.1. Measures

The estimation of the factors is reliant upon the things or scales that were taken from the past research paper. We have used 6 variables to test their relationship with the help of scales. Scales are either selected from past research papers or adapted based on previous data. The variables we used include Customer's Attitude, Subjective Norms, Perceived Behavioral Control, Consumer's intention to use Green Banking, Consumer's use of Green

Banking and Role of Regulatory authorities. We have adopted a total of 4 customer attitude (AT) scales from (Choi. & Mertens, 2019; Maichum et al., 2016; Yadav, Chauhan, & Pathak, 2015). Scales on subjective norms (SN) were adapted from Armitage and Conner (1999) & Yadav et al. (2015) whereas for perceived behavioral control toward green banking (PBC) items have been chosen from Maichum et al. (2016) & Yadav et al. (2015). Consumer's intention to use Green Banking (CI) scales are taken from Chan and Lau (2000) & Yadav et al. (2015) and scales on Green Banking Behavior (GB) are adapted from Lee (2008). Items for the role of regulatory authorities (RA) were adapted from (Chong, Ooi, Lin, & Tan, 2010). Our all responses are gathered on a 5-points Likert scale where "1" denoted "Strongly Disagree" and "5" denoted "Strongly Agree".

4. DATA ANALYSIS

There were 263 respondents to our questionnaire out of which 19 respondents failed to qualify as a target sample; 11 respondents didn't have a Bank account in Pakistan while 8 respondents said that they were not familiar with Green banking. The demographics of the remaining 245 respondents are shown in Table 1.

Table 1. Sample characteristic (n=245).

Variables	Category	Frequency	Percent
	Under 18 years	3	1.224
	18 – 25 years	62	25.306
	26 – 35 years	122	49.795
	36 – 45 years	43	17.551
	46 years or above	15	6.122
Gender	Male	207	84.489
	Female	38	15.511
Education	Matric / O'Levels	4	1.632
	Intermediate/A'Levels	16	6.530
	Under-Graduate	63	25.714
	Graduate	89	36.326
	Post-Graduate	73	29.795

Figure 1 depicts reasons why survey respondents preferred to use green banking practices like online banking, mobile banking, etc. These statistics show that online banking is chosen because of convenience, accessibility, and time and cost savings. Only 18.7% of respondents reported that they favored green banking because of environment-friendliness.

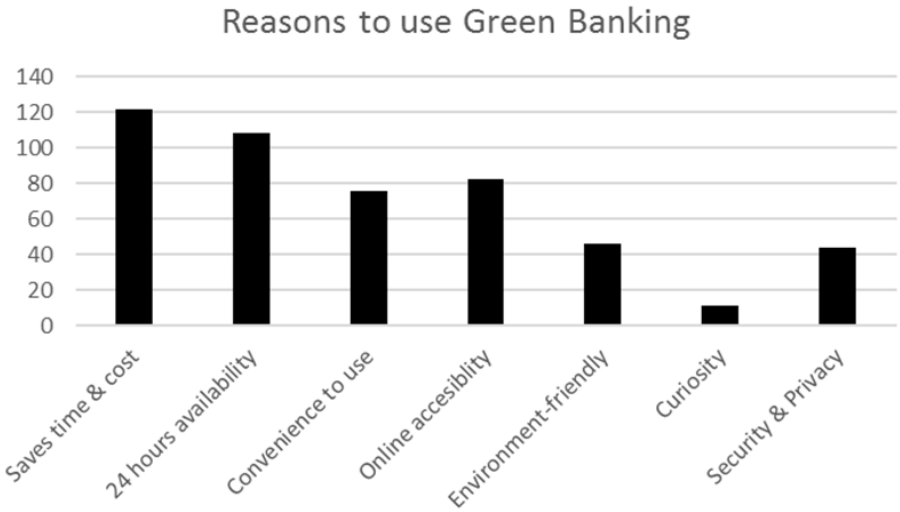

Figure 1. Reasons to use Green Banking (Multi-response question).

After data collection, various statistical tests were performed for data analysis to check the relationship of variables in between them and to derive conclusions based on the test results. Table 2 shows the results of the univariate normality test. Since the skewness and kurtosis of each item under consideration was between the acceptable range of +3 to -3, we can conclude that the data is normally distributed.

Table 2. Univariate normality.

	No.	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
AT1	4	3.824	4	1	5	1.017	0.092	-0.789
AT2	5	3.424	3	1	5	1.076	-0.128	-0.396
AT3	6	3.669	4	1	5	1.111	-0.064	-0.739
AT4	7	3.473	3	1	5	1.105	-0.171	-0.453
SN1	8	3.596	4	1	5	1.056	0.050	-0.663
SN2	9	3.282	3	1	5	1.025	0.019	-0.358
SN3	10	3.033	3	1	5	1.198	-0.955	-0.149
SN4	11	3.118	3	1	5	1.045	-0.087	-0.153
PBC1	12	3.771	4	1	5	1.025	0.249	-0.766
PBC2	13	3.416	3	1	5	1.06	-0.102	-0.378
PBC3	14	3.694	4	1	5	1.103	0.133	-0.803
PBC4	15	3.473	3	1	5	1.082	-0.157	-0.427
CI1	16	3.743	4	1	5	1.115	-0.173	-0.757
CI2	17	3.049	3	1	5	1.029	-0.055	-0.121
CI3	18	3.804	4	1	5	1.059	0.930	-1.096
CI4	19	3.478	3	1	5	1.071	-0.146	-0.402
GB1	20	3.776	4	1	5	1.093	-0.269	-0.715
GB2	21	3.400	3	1	5	1.074	-0.029	-0.434
GB3	22	3.416	4	1	5	1.142	-0.576	-0.454
GB4	23	3.429	4	1	5	1.084	0.120	-0.646
RA1	24	3.927	4	1	5	0.999	0.170	-0.815
RA2	25	3.518	3	1	5	1.141	-0.269	-0.451
RA3	26	3.824	4	1	5	1.025	0.640	-0.969
RA4	27	3.527	3	1	5	1.052	-0.014	-0.441

Note: The table shows that skewness and kurtosis of each item are within the acceptable range of -3 to +3.
AT = Consumer Attitude towards Green Banking.
SN = Subjective Norms.
PBC = Perceived Behavioral Control.
CI = Consumer's Intention to use Green Banking.
GB = Consumer's use of Green Banking.
RA = Role of Regulatory Authorities.

Table 3 depicts results of multivariate analysis and since the p-values of skewness and kurtosis are lower than 0.05, it provides evidence to conclude that the data is not normally distributed.

Table 3. Multivariate normality (Mardia's multivariate skewness and kurtosis).

	b	z	p-value
Skewness	208.425	8510.707	0.000
Kurtosis	1022.946	47.453	0.000

Note: Since the p-value is less than 0.05, it shows data is not normally distributed.

Table 4 shows that the outer loadings of the constructs were greater than the acceptable range of 0.5. From the whole model, only 24 items were retained as they had outer loadings above 0.5. Similarly, the measurement model results were favorable towards convergent validity. Composite reliability (CR) of items of the model range from 0.861 to 0.937, while Average Variance Extracted (AVE) values were between 0.612 to 0.787 that are well above the accepted standards of 0.7 for CR and 0.5 for AVE. These results indicate that the measurement model is meaningful and reliable.

Table 4. Measurement model results.

	Outer Loadings	Composite reliability (CR)	Average variance extracted (AVE)
AT		0.937	0.787
AT1	0.848		
AT2	0.905		
AT3	0.885		
AT4	0.909		
SN		0.861	0.612
SN1	0.83		
SN2	0.858		
SN3	0.579		
SN4	0.829		
PBC		0.929	0.767
PBC1	0.887		
PBC2	0.903		
PBC3	0.802		
PBC4	0.908		
CI		0.907	0.71
CI1	0.817		
CI2	0.793		
CI3	0.899		
CI4	0.858		
GB		0.882	0.655
GB1	0.79		
GB2	0.886		
GB3	0.654		
GB4	0.886		
RA		0.933	0.777
RA1	0.832		
RA2	0.889		
RA3	0.921		
RA4	0.882		

Note: This table indicates the values of outer loadings and all the values are greater than the threshold of 0.5. Similarly, CR and AVE of constructs are above the limits. The threshold for composite reliability is 0.7 and AVE is 0.5.
AT = Consumer Attitude towards Green Banking.
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PBC = Perceived Behavioral Control.
CI = Consumer's Intention to use Green Banking.
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Table 5 represents the details of discriminant validity. The values for various constructs are well below the threshold of 0.85.

Table 5. Discriminant validity.

	AT	CI	GB	PBC	RA
AT					
CI	0.803				
GB	0.684	0.842			
PBC	0.791	0.765	0.624		
RA	0.767	0.824	0.824	0.793	
SN	0.675	0.81	0.664	0.67	0.562

Note: Threshold for discriminant validity is 0.85 or less.
AT = Consumer Attitude towards Green Banking.
SN = Subjective Norms.
PBC = Perceived Behavioral Control.
CI = Consumer's Intention to use Green Banking.
GB = Consumer's use of Green Banking.
RA = Role of Regulatory Authorities.

Table 6 supports the multicollinearity of our research variables as the values are lower than 3.3.

Table 6. Variance inflation factor (VIF).

	CI	GB
AT	2.288	
CI		2.197
CI*RA		1.387
GB		
PBC	2.303	
RA		2.437
SN	1.768	

Note: VIF for each construct is less than the threshold (3.3).
AT = Consumer Attitude towards Green Banking
SN = Subjective Norms
PBC = Perceived Behavioral Control
CI = Consumer's Intention to use Green Banking
GB = Consumer's use of Green Banking
RA = Role of Regulatory Authorities
CI*RA indicates moderating effect of regulatory authorities on relationship between CI & GB

Hypothesis 1 postulated that customer attitude has a positive impact on consumer's intention to use green banking. The findings in Table 7 support the hypothesis 1 ($\beta = 0.353$, t = 3.669, p = 0.000, $F^2 = 0.149$). As revealed in Table 7, significant positive impact of subjective norms was found on consumer intention to use green banking was found ($\beta = 0.333$, t = 4.351, p = 0.000, $F^2 = 0.173$). Thus, hypothesis 2 was supported.

Likewise, positive effect of Perceived Behavioral Control on consumer intention to use green banking was found ($\beta = 0.226$, t = 2.738, p = 0.003, $F^2 = 0.061$). Thus, hypothesis 3 was supported. Hypothesis 4 also received empirical support. The results showed a significant positive impact of consumer intention and consumer's use of green banking ($\beta = 0.387$, t = 4.047, p = 0.000, $F^2 = 0.160$). For hypothesis 5, the results did support that regulatory authorities can have a moderating effect in relationship between consumer intention and consumer's use of green banking. ($\beta = -0.080$, t = 2.612, p = 0.005, $F^2 = 0.030$).

Table 7. Structural model results.

Relations	Beta coefficient	Standard error	T Statistics	P Values	F square	Decision
Main effect						
AT -> CI	0.353	0.096	3.669	0.000	0.149	Supported
SN -> CI	0.333	0.077	4.351	0.000	0.173	Supported
PBC -> CI	0.226	0.083	2.738	0.003	0.061	Supported
CI -> GB	0.387	0.096	4.047	0.000	0.160	Supported
Moderating effect						
CI*RA -> GB	-0.080	0.031	2.612	0.005	0.030	Supported
Indirect effect						
AT -> CI -> GB	0.136	0.058	2.345	0.010	0.018	Supported
SN -> CI -> GB	0.129	0.039	3.327	0.000	0.016	Supported
PBC -> CI -> GB	0.087	0.037	2.373	0.009	0.007	Supported

Note: Threshold's for the above table are: P-value < 0.05, T-statistics > 1.645, $F^2 > 0.35$ (large effects), $F^2 > 0.15$ (moderate effect), $F^2 < 0.02$ (small effect).
AT = Consumer Attitude towards Green Banking.
SN = Subjective Norms.
PBC = Perceived Behavioral Control.
CI = Consumer's Intention to use Green Banking.
GB = Consumer's use of Green Banking.
RA = Role of Regulatory Authorities.
CI*RA indicates moderating effect of regulatory authorities on relationship between CI & GB.

Finally, the findings on indirect effect indicate that consumer intention (CI) plays a mediating role between consumer attitude (AT), subjective norms (SN), perceived behavioral control (PBC), and consumer's use of green banking (GB).

Table 8 represents values of R square for consumer intention (CI) and consumer's use of green banking (GB). The results show moderate variability of both constructs because of independent variables.

Table 8. R Square.

	R Square
CI	0.636
GB	0.607

Note: R Square > 0.75 (substantial), 0.5 (moderate), 0.25 (weak).
CI = Consumer's Intention to use Green Banking
GB = Consumer's use of Green Banking

Table 9 shows the predictive relevance of various independent variables with respect to consumer intention to use green banking (CI). The results reveal that predictive relevance of customer attitude (AT), subjective norms (SN), and Perceived Behavioral Control (PBC) is medium.

Table 9. Predictive relevance.

Endogenous latent variable (DV)	Exogenous latent variable (IV)	Q^2 included	Q^2 excluded	q^2	Effect
CI	AT	0.444	0.406	0.068	Medium
	SN	0.444	0.400	0.079	Medium
	PBC	0.444	0.430	0.025	Medium

Note: q^2 > 0.75 (substantial), 0.5 (moderate), 0.25 (weak).
AT = Consumer Attitude towards Green Banking.
SN = Subjective Norms.
PBC = Perceived Behavioral Control.

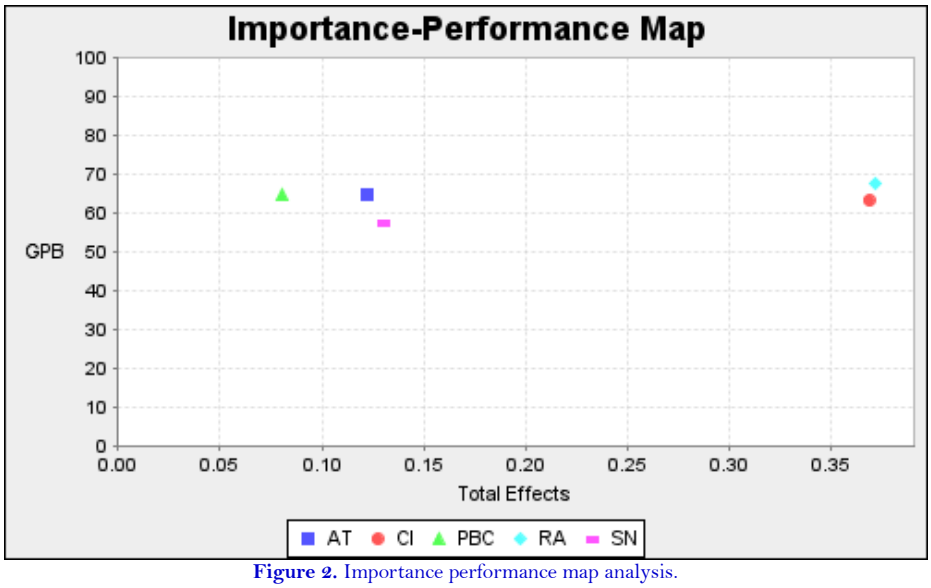

Figure 2. Importance performance map analysis.

Figure 2 maps the importance-performance of the constructs under consideration. Three of the constructs, consumer attitude (AT), Perceived behavioral control (PBC), and subjective norms (SN) have high importance but are not performing well. The role of regulatory authorities (RA) and consumer intention (CI) are the variables with high importance and high performance.

5. DISCUSSION

The findings of this study support the previous results of the Theory of Planned Behavior. Consumer attitude, subjective norms, and perceived behavioral control have a high effect on consumer intention to use green banking which shows that bank consumers in Pakistan are willing to use technology-driven banking practices if they are available. These findings support the previous study conducted in India which showed that TPB variables significantly influence consumer's adoption of internet banking (Yadav et al., 2015). The result is also consistent with past studies which demonstrated that consumer behavior is strongly linked with attitude towards the adoption

of internet and mobile banking in Pakistan (Mazhar et al., 2014). These results show that customers with positive attitudes towards online banking tend to prefer eco-friendly banking. Similarly, it indicates that family, friends, and reference groups have a considerable impact on a customer's decision to use internet banking. The positive relation between PBC and consumer intention (CI) shows that Pakistani consumers have high control over themselves while taking decisions regarding banking transactions.

Besides this, our research findings also suggest that consumer intention to use green banking is positively related to consumer behavior towards green banking. This study supports the results of previous studies on consumer intention to use internet banking (Yadav et al., 2015).

6. CONCLUSION

Our research findings point out many suggestions that can be helpful in developing an effective marketing strategy for the adoption of green banking. As subjective norms have the highest influence on consumer intention, marketers should try to promote green banking using reference groups. Similarly, consumer attitudes towards green banking should be changed by running informational ads and promotions.

Moreover, the government and marketers should try to create awareness regarding the benefits of using technology-driven eco-friendly banking practices so that consumers can learn about internet banking and start using it. Apart from this, the government should provide incentives to promote green banking by lowering taxes, imposing charges on paper use, and facilitate prompt resolution of online banking queries.

7. LIMITATIONS AND FUTURE RESEARCH

This study also has some limitations. First, this research only focused on green banking from the perspective of consumption of paper-less online banking. It did not focus on green financing and its promotion. Future research can focus on ways in which green financing can be promoted and what is consumer behavior in it. Secondly, the sample size and data used in this study were collected from mostly educated people of urban areas of Pakistan where internet banking is mostly popular. Upcoming studies can focus on consumer behavior towards green banking in less educated and rural setups. Lastly, variables like the introduction of incentives to use green banking, convenience to use, also influence consumer behavior towards green banking. These variables can be researched in future studies.

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