



## Factors Affecting Credit Card Use in Bangladesh

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**Abstract-** The credit card industry in Bangladesh is seeing an increasing number of users for the past few years. This paper studies the reason behind the using behavior of customers of credit cards. The paper starts with a brief description credit card and how it developed worldwide and came to Bangladesh. It also discusses the current situation of the credit card industry in the country. After that some literary works were explored to get an idea on what studies have been done on this industry. These works guided the works done in this study. The latter part discusses the data collection and analysis to conduct the research. The paper used two types of analyses to study the credit card use in Bangladesh. Before that it tested the usability of the data collected and filtered. After that, it identified components like convenience, social status, attributes of the credit card and additional benefits provided as some key factors affecting the users' perception and using behavior. It also examines the effect of demographic variables on the using behavior of the customers of credit card. As a whole, the paper studied the using pattern of Bangladeshi customers regarding the continuity of using credit cards.

**Keywords:** credit card, convenience, social status, using behavior, perception.

**GJMBR-C Classification:** JEL Code: F65



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## CHAPTER 1

### I. INTRODUCTION

#### a) Background of the study

Technology has brought about revolutionary changes not only in the favor of checks but also in the favor of cash. This change is introduced as the E-money or Electric money. The first form of electric money was Debit Card. ANZ Grind lays Bank (now Standard Chartered) first started acquiring international card brands like MasterCard and Visa Card back in 1989 through a limited Merchant Network. It also became the first bank to issue MasterCard and Visa credit cards in this country on January 1, 1997. Nowadays, all major banks provide this invaluable service.

A credit card allows consumers to purchase products or services without cash and to pay for them at a later date. A credit card is not just a plastic card but the benefit it provides to the customer is doubtlessly

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outstanding. A credit card is a secured way of transaction and also it is very easy for the users. It almost became past when people used to carry a bulk amount of money to purchase any expensive things. To qualify for this type of credit, the consumer must open an account with a bank or company, which sponsors a card. They then receive a line of credit with a specified dollar amount. They can use the card to make purchases from participating merchants until they reach this credit limit.

In recent years banking industry in Bangladesh has been experiencing a dramatic growth. Use of credit card, a product of banks, is a relatively new phenomenon in Bangladesh, and its market has been growing rapidly with the increasing acceptability of plastic money in numerous outlets.

A credit card offers a lot of facilities to the users. The dual currency credit card has reduced the pain that we had to take before the innovation of credit card. It is a bit problematic to carry the loads of foreign currency while roaming abroad. The dual currency credit card allows the foreign currency part of the credit card will be connected to this entitlement, provided the necessary dollar endorsement had been made on the passport by own bank. Checking into good hotels also got lot easier than before as a credit card is generally required as a guarantee during stay at hotel.

Along with the good sides there are also some bad sides regarding uses of credit cards. First of all a thief can easily steal the credit card if we do not look an eye on it properly. If anyone steals it and we do not notice then he can use it anywhere he wants. Though there are ways to make the card disable for the stealer for which we have to inform it to that particular bank. Most of the banks keep a 24/7 service for managing credit card. Although there is a microchip embedded on the credit card that secures the transaction for a customer. But in the big shopping malls the agents who are expert in copying those pin numbers.

However, these are the things associated with using a credit card. Despite this research attempted to find out more from the user by following specific manner.

#### b) Research Question

- What are the main things that drive people to use credit cards?
- How convenient credit cards are for the users?

- Does demographic factors (age, gender, occupation etc.) have any effect on the use of credit card in Bangladesh?

c) *Research Objectives*

- To find out the main reasons those attract people to use credit cards.
- To see how convenient using credit card from the perspective of Bangladesh.
- To find what are the main causes that drives people using cash rather than credit card.

d) *Limitations of the study*

- The corporate sectors are not always cooperative enough to disclose their information. For which we could not reach as much respondents as expected.
- Enough data could not be collected within given time-frame.

## CHAPTER 2

### II. LITERATURE REVIEW

There are few papers and publications regarding the credit card in Bangladesh. However, those are not enough. Various banks are offering different credit cards to the people having various facilities in Bangladesh. Still some people show negative attitudes toward the credit card like insurance policies.

Over the last couple of years, the number of credit card users have risen tremendously. The way in which the utilization of credit card has developed is exponential as opposed to straight in our nation and around the world (Furnham & Argyle, 1998). As a result, concerns are being raised that it could cause widespread financial difficulties and default among households who might struggle to keep up with their repayments (May, Tudela, & Young, 2005).

The credit card loan service is gaining popularity quickly in higher, middle and even lower class of the nation. The users of credit card feel safer and comfortable in carrying a single piece of plastic card rather than carrying a bundle of money with all the time (Huq, 2011). Bangladesh Bank Statistics shows the contemporary usage has risen and the advances made by the Islamic Banks, Private Banks, on December 2011, Foreign Banks along with State-owned Banks have summed Tk. 1,769.59 corers, and the number of credit cards has risen to 5.51 lac (Bangladesh Bank, 2011). Farukh (2009) revealed that in December 2008 the number of credit card holders was 4.02 lac and the advances made by then credit card offering Banks were Tk. 489.51 corers. It is a very stern revelation though that the average number of credit card users has risen by about 46% every year from 2008 to the end of December 2011, however, the annual growth rate for advances rose for the same period by a seemingly unbelievable 120%, in

comparison to the annual average growth rate between 2004 to 2008 was for local Banks 64.2% and Foreign Banks 20.4% giving an overall rate of 36.1% (Farukh, 2009). This is one of the most important stories swirling around the credit card industry worldwide right now that concerns debt (Andrew, 2014) (Bacchetta & Gerlach, 1997).

The worldwide data suggest that almost all individuals in the U.S. are habituated to making the indiscreet use of credit card that results in overwhelming debt. According to the latest statistics of the U.S. Census Bureau, 2010, U.S. citizens have over \$886 billion in credit card debt and the figure is expected to rise to \$1.177 trillion Americans are accrued by over \$48 billion in new credit card debt, 424% more than what they incurred in 2010 and 577% more than what they incurred in 2009 (Matthews, 2012).

In the UK, approximately 24.5 million transactions worth \$2.85 billion are spent on credit cards per day ([www.creditaction.org.uk](http://www.creditaction.org.uk)). Jaing(2006) has found that credit card use varied considerably with age of the consumers. It is very often considered that people at their young age are more impulsive and inexperienced and indulge more in adventurous activities than they are grown up. As a result, they fall victim to debt. The contemporary research base indicates that people having less income use credit card more than people having higher income and they run into financial difficulties and debt.

Farinha (2014) found that the debt burden ratio increases for lower income households but decreases from a higher level of income onwards. The extreme liberalization of the financial industry is linked to the increased availability of debt products and it helps to provide the money that fuels immediate consumption, a shift from deferred gratification, where one might have saved before purchasing a good Lury. It's conceivable to see the quality of this contention by and by when it is seen that credit card organizations make the facilities effortlessly and very accessible working with the rationality of pay-flex 'purchase now, pay later'. It is claimed that financial services industry is not simply meeting the demand for debt, but it is part of a process which is encouraging debt. This excessive liberalization of financial services and aggressive encouragement of uptake of credit facilities by the banks and other financial institutions may be attributed to a positive link between consumption behavior and credit growth (Bacchetta & Gerlach, 1997).

They (Bangladesh Bank, 2011) found that credit growth has a significant positive impact on consumption growth, and credit availability affects saving behavior. They also show that household debt ratio is negatively correlated with the saving rate, with the saving rate declining and the household debt ratio rising between 1975 and 2005. This is consistent with other studies which strongly suggest that there is

a positive link between consumption behavior and credit growth (Maki, 2000). The causative factor for the customer over-indebtedness due to credit card debt was primarily thought to be as a result of quick interest accumulation throughout the repayment period of the balance (Golmant & Ulrich, 2007). Furthermore, the other important element that has created a rise in over-indebtedness is the stickiness of credit card interest rates (Calem & Mester, 1995), which changes a little, though interest rates for other bank products rise or fall, and thereby the credit card operation earns a very high return in the banking industry at large, which is not at all a good news for the card users. The Federal Reserve's Survey of Consumer Finances (Soong 2008) claims that more than three out of every four American families now-a-days are in debt.

## CHAPTER 3

### III. METHODOLOGY

The main purpose of this chapter is to present the information to let the reader understand all the steps and processes taken to conduct the study. Both primary and secondary sources of information were used.

Primary data were collected from the credit card users in Bangladesh. This study covered students, job-holders, self-employed, military people, homemakers and retired persons for collecting information. There were 15 items in the questionnaire as independent variables. Sixty-nine credit card users were interviewed

with the help of a structured questionnaire. A structured questionnaire within a 5-point scale was developed for the items affecting the credit card users. A five-point scale ranging from 1 to 5 with 1 indicating strongly disagree and 5 indicating strongly agree was used in the questionnaire. An online version of the question was prepared to reach more respondents. This study identified items or variables that affect the credit card users through literature review. A major part of the study was done with help of some existing papers and articles regarding this.

The study covers some reliability and appropriateness tests before the analyses. Along with Factor analysis, Stepwise Regression was used to analyze the data. Principal Component Analysis was conducted to identify the factors concerning the credit card users in Bangladesh. The analyses were done with the help of Microsoft excel and SPSS data analysis software.

## CHAPTER 4

### IV. ANALYSES

#### a) Reliability and Appropriateness tests

The data set went through some reliability test before being analyzed. The Cronbach's  $\alpha$  was used to determine the extent of coherence among the variables. The standard cutoff rate for Cronbach's  $\alpha$  is 0.60. Here, we have used a cutoff rate of 0.4, considering this region of the world. The values for the factors are:

Factors	Cronbach's $\alpha$
Convenience	0.53
Special purpose use	0.4
Credit card attributes	0.56
Status	0.78

This indicates that the variables are perfect for using where 'Special purpose use' has the lowest value and 'Status' has the highest value.

The second reliability test was done to measure the appropriateness of the variables to be used for factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.65
Bartlett's Test of Sphericity	Sig. 0.00

Here, the KMO value is 0.65 which by exceeding 0.60 (Hair et al., 2006) proves the factor analyses' usefulness to analyze the data. On the other hand, the Bartlett's Test of Sphericity shows a value less than 0.05 proving that the dataset is perfect for factor analysis. So, the variables in this dataset are enough correlated for the analysis.

#### b) Factor Analysis

The factor analysis was done to identify the principal components affecting the credit card use in

Bangladesh. Each identified principal components represent some variables. The analysis was done through Principal Component Analysis (PCA) using varimax rotation. The KMO value and Bartlett's Test of Sphericity have already proved the appropriateness of the data. However, during the analysis some of the variables were loaded on multiple factors for which those variables have been removed from the data set. The variables were- Use of multiple credit cards, Difficulties arisen from using credit card and Control over expenditure. From the remaining data four

components were found with Eigen values more than 1 and the data used were 69.18% of the total variance which proves the sample used were pretty good.

The following figure shows the important values for the analysis.

Principal components and variables	Factor loading	Eigen value	% of variance
Component 1: Convenience		1.359	13.587
Using credit card is more convenient than using cash	0.857		
Using credit card is a simple process	0.798		
Paying with credit card is more safe than paying with cash	0.315		
Component 2: Special purpose use		1.034	10.345
I use credit card for specific purposes only	0.841		
It is necessary to carry a credit card with me while travelling overseas	0.653		
Component 3: Credit card attributes		2.649	26.486
The size of my credit card is comfortable for me to use	0.779		
The additional benefits (discounts for specific payments) from the credit card are very useful	0.667		
Customer service policy of the credit card providers is very helpful	0.492		
Component 4: Status		1.876	18.758
Using credit card makes one feel wealthy and well-respected	0.866		
Using credit card makes one feel classy	0.909		

From this factor analysis, the variables have been grouped based on their correlation. Each of the components represent the variables under them and the factor loading shows how accurately the principal components are working as representatives of the variables.

#### c) Step-wise Regression

A stepwise regression analysis was done using 'I often use credit card' as the dependent variable. In the first model, component 1 from factor analysis was used as the independent variable, where 'Paying with credit card is safer than paying with cash' is the predicting variable with a  $R^2$  of 0.085.

The second model used both component 1 and component 2 as independent variables where the predicting variable turns out to be 'It is necessary to carry a credit card with me while travelling overseas'. The third model adds the 'Age' variable with the previous two components. The introduction of age did

not bring any change as the predicting variable stays the same as it was at the second model.

The fourth model takes component 1, 2, 3 and 'Age' as independent variables and the predicting variables for this model are 3- 'Customer service policy of the credit card providers is very helpful', 'Age', and 'The size of my credit card is comfortable for me to use'. The fifth model takes 'Sex' of the respondents into account and the predicting variable does not change from the fourth model.

In the sixth model, component 4 is added and the predicting variables are changed into the following two- 'Customer service policy of the credit card providers is very helpful' and 'Using credit card makes one feel classy'. This proves the effect of component 4 on the use of credit card. In the seventh and eighth model 'Occupation' and 'Marital Status' of the respondents were added respectively and both the model shows the same predicting variables as it was shown in the sixth model.

Variables	$R^2$	$\beta$	Predicting variable
Dependent variable: I often use credit card			
Model 1: Independent variable: Component 1	0.085	0.292	Paying with credit card is safer than paying with cash
Model 2: Independent variable: Component 1 Component 2	0.098	0.313	It is necessary to carry a credit card with me while travelling overseas
Model 3: Independent variable: Component 1 Component 2 Age	0.098	0.313	It is necessary to carry a credit card with me while travelling overseas



Model 4: Independent variable: Component 1 Component 2 Age Component 3	0.105	0.324	Customer service policy of the credit card providers is very helpful
	0.172	0.329 0.258	'Customer service policy of the credit card providers is very helpful', and Age
	0.228	0.268 0.263 0.246	'Customer service policy of the credit card providers is very helpful', 'Age', and 'The size of my credit card is comfortable for me to use'
Model 5: Independent variable: Component 1 Component 2 Age Component 3 Sex	0.105	0.324	Customer service policy of the credit card providers is very helpful
	0.172	0.329 0.258	'Customer service policy of the credit card providers is very helpful', and Age
	0.228	0.268 0.263 0.246	'Customer service policy of the credit card providers is very helpful', 'Age', and 'The size of my credit card is comfortable for me to use'
Model 6: Independent variable: Component 1 Component 2 Age Component 3 Sex Component 4	0.105	0.324	'Customer service policy of the credit card providers is very helpful'
	0.191	0.301 - 0.293	'Customer service policy of the credit card providers is very helpful' and 'Using credit card makes one feel classy'
Model 7: Independent variable: Component 1 Component 2 Age Component 3 Sex Component 4 Occupation	0.105	0.324	'Customer service policy of the credit card providers is very helpful'
	0.191	0.301 - 0.293	'Customer service policy of the credit card providers is very helpful' and 'Using credit card makes one feel classy'
Model 8: Independent variable: Component 1 Component 2 Age Component 3 Sex Component 4 Occupation Marital Status	0.191	0.301 - 0.293	'Customer service policy of the credit card providers is very helpful' and 'Using credit card makes one feel classy'

## CHAPTER 5

### V. DISCUSSION AND CONCLUSION

The study has identified 4 major components affecting the use of credit card in Bangladesh. The components focus more on the general use of credit card rather than the features (interest rate, deposition amount etc.) of it. The study has looked into the continuity of using a credit card by an individual which led to factors like- Convenience, Special purpose use, Credit card attributes and Status. Based on reliability tests and factor analysis the initial data from the questionnaire were filtered. The regression was done to identify the effect of the 4 components and demographic variables on the regular use of credit card. The result shows that only the age of the respondents has a slight effect, the other demographic variables does not drive the behavior regarding the use of credit card. However, some of the variables under the 4 components have major impact on the using behavior of credit card. In this way, the two types of

analysis answered the research questions of the research.

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