CONSUMERS BEHAVIOR TOWARDS DEBIT CARD PAYMENT MODE WHILE SHOPPING AT RETAIL STORES

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ABSTRACT

This paper attempts to identify different factors affecting consumers on adoption of debit card payment with reference to shopping at retail stores. With this view, a month long survey was conducted among consumers, who do shopping through debit card in which 175 respondents were interviewed using convenient sampling. The entire analysis shows that debit card payment behavior among consumers varied. Study also concludes that most significant factor influencing their debit card payment behavior was perceived ease of use and usefulness of card. Finally, it is believed that the outcomes of this research will have an impact on society to understand changing behavior of people towards making payment that can help different marketers who want to create value to the consumers by providing them different payments options in the market.

Key words: Debit card payment, Consumer Behavior, Marketers

INTRODUCTION

The first Automated Teller Machine (ATM) was introduced by Himalayan Bank Ltd in 1995. Considering the growing popularity of debit cards, an understanding of changes in the debit card payment behavior of consumers can help the marketers provide value added services to their consumers. Many studies have been conducted worldwide to analyze consumer's use of debit cards at point-of-sales. Debit card alongside credit and prepaid card payments are substituting cash at major purchasing points in developed countries.

A study in U.S. from Javeline Strategy and Research (2012) found that debit and credit cards overtook cash for bulk of sales volume at retail point of sale in U.S. This is supported by previous studies in U.S. by Meijer, Schuh and Zabek (2011), which concluded that debit cards were the most commonly used payment instrument especially among young consumers.

There is an urgent need for a research to be conducted in developing countries like India to determine major factors that can influence consumers to use debit cards. Hence, this study



aims to identify different factors that can influence the debit card usagewhile shopping at retail stores in India, and we attempt to validate relationship between such factors. We believe that the present study will be a benchmark model to understand the basic demographic characteristics of consumers who use the card while making payment in RetailStores.

To materializethis studyin practice, we have developed a conceptual model devised to determine such factors which isbeing discussed further. Thereon, the methodology under which the research was conducted is put into light followed by discussions on the results of data analysis. Finally, concluding remarks has been made based onanalysis of the entire study.

CONCEPTUAL MODEL

It is known to us that consumers display their behavior in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs. This study provides marketers the knowledge and skills necessary to carry out detailed consumer analyses which could be used for developing marketing strategies.

To conceptualize our basic framework, we followed research model of Adeoti and et.al. (2013). The study worked on determining demographic and socio-economic factors affecting adoption of debit cards through cross sectional survey of the point-of-sales among 300 respondents in Lagos State, Nigeria. It revealed that consumer's life-stage and status characteristics (such as education) were found to positively and significantly influence the debit card use.

We have extended a basic model into two different sections to look into perspective from both debit card and non-debit card users at point-of-sales. The conceptual framework of the model has been developed as follows:

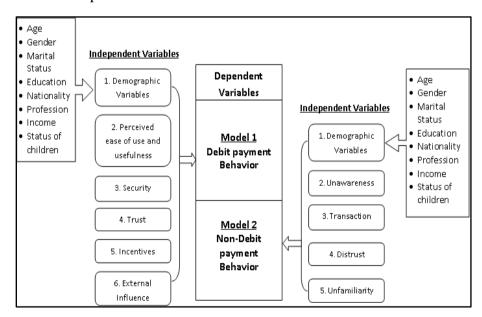


Figure 1: Conceptual Framework



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The above figure shows the framework of the study. First model aims to evaluate debit payment behavior whereas second model attempts to evaluate non-debit payment behavior among the debit card users. Different questions were categorized under the identified factors to evaluate both the models. They are discussed in the following paragraphs.

Influential factors for the debit payment behavior of consumers in *model-1* were classified as: Demographic characteristics, Perceived Ease of use and Usefulness(PEU), Security, Trust, Incentives on debit use, and External influence. Under Demographic Variables, consumers were categorized under nationality, gender, marital status, age, education, profession, income and status of children. Least square regression equation is used for validating relationship for estimating average response value which is developed as shown below:

$$Y=b_0+b_1\chi_1+b_2\chi_2+b_3\chi_3+b_4\chi_4+b_5\chi_5+e$$

Where, Y= Debit payment behavior

 b_0 = Constant

 χ_1 = Perceived Ease of use and usefulness

 χ_2 = Security

 $\chi_3 = Trust$

 χ_4 = Incentives

 χ_5 = External influences

e= Disturbance term

In model 2,the influential factors identified to evaluate the non-debit payment behavior are: Demographic Characteristics, Unawareness, Transaction Fee, Distrust and Unfamiliarity. Demographic variables are categorized as same as in model 1. To determine the relationship, least square regression equation for estimating average response value is developed as:

$$Z=\alpha_0+\alpha_1y_1+\alpha_2y_2+\alpha_3y_3+\alpha_4y_4+e$$

Where, Z= Non- Debit payment behavior

 α_0 = Constant

 $y_1 = Unawareness$

y₂= Transaction Fee

 $y_3 = Distrust$

y₄= Unfamiliarity

e= Disturbance term

The study isboth qualitative and quantitative in nature which ismore of exploratory than truly a nationally representative survey. The study represents urban population. The survey was conducted among randomly selected 175 consumers of Retail Stores during one month period. On an average, everyday6 respondents were selected to fill the questionnaire and only those shoppers who possessed at least one debit card were chosen for the survey.



Both primary and secondary sources of data were used for the study. As a primary source of data; quantitative method like researcher administered questionnaire was used whereas qualitative method like observation, face to face interview with the representatives of Retail Stores along with card issuers was done.

RESULTS AND DISCUSSION

1. Descriptive Analysis

The demographic distribution of respondents from the entire survey is found as follows; male respondents (56.6%), who aged between 26-35 years (52%), held profession as job holders (36.6%), possessed masters and above level of education (60.6%), financially independent (78.9%), and income between INR 15,000-30,000 (30.9%).

Results show that most of the consumers of Retail Stores i.e. 104 (59.4%), use debit cards for purchasing while 71(40.6%) did not use the cards for purchasing. Across gender, more female (60.5%) use debit cards at point-of-sales (POS) and 41.4% male did not use card for purchasing. Likewise, across marital status, there were more married respondents (65.30%); across age group, more respondents whose age range was between 36-55 years of age (90.9%); across profession, job holders (68.8%); under income category, those earning above Rs. 51,000 salary (70.6%); and across the status of children, there were more respondents to use debit cards at point-of-sales who had one or more children (66.7%).

The respondents frequently visitRetail Store for purchase but their percentage of using debit cards for payments at Retail Storewas low. Only 25% of them used the card frequently at Retail Store. Similarly, most of consumers (70%) did not face problems while using the card at Retail Store. Those who faced problems at Retail Storementioned acceptance of card, inaccessibility of card line, twice debit of amount, confusion among staffs, double swipe as major problems, and they even complained that card was not working while making payment.

It was found that most of the debit card users used the card because of its ease of use and usefulness, security, and their trust on them. They use card as substitute of cash/cheque, and responded that they were satisfied to use the card. The non-users of debit card payment on the other hand responded that the transaction fee as major factor for them for not to use debit card for payments. However, their level of interest along with their intention to use the service in near future was high.

2. Inferential Analysis

The hypothesis testing explained that there is statistically mean difference in the payment behavior across region and income; and there is statistical relationship between the debit-payment behavior and perceived ease of use and usefulness. It also examined that there is significant relationship between frequency of purchase and frequency of debit card use at Retail Store(i.e. higher the frequency of purchase from Retail Store, higher is the probability of debit card usage for payments at the store). Moreover, the testing verified that there is statistically mean difference in the non-debit payment behavior across the age group, i.e. older people are less likely to not use debit cards at point-of-sales than the younger ones.



The analysis predicted that the correlation exist between independent variables of debit-payment behavior i.e. perceived ease of use and usefulness and security; Perceived ease of use and usefulness and trust; Perceived ease of use and usefulnessand external influence; security and trust; security and incentives; security and external influence etc. The following table-1 and table-2 explained the actual outcome of the collected information.

Table.1:Multiple regression analysis for consumers' debit payment behavior

	R	Adjusted R	Std. Error of the		
R	Square	Square	Estimate	F- value	p-value
0.747	0.559	0.536	0.43196	24.812	0.000

Table 2:Coefficient of variables for consumers' debit payment behavior

Model 1			Standardized			Co-linearity
	Un-standardized		Coefficients	t-	p-	Statistics
	Coefficients			value	value	(VIF)
	Beta	Std. Error	Beta			
(Constant)	0.598	0.277	-	2.163	0.033	
PEU	0.691	0.101	0.702	6.828	0.000	2.346
Security				-		
	-0.048	0.094	-0.053	0.513	0.609	2.373
Trust	0.094	0.075	0.123	1.247	0.216	2.155
Incentives	0.01	0.045	0.017	0.222	0.825	1.281
External				-		
Influence	-0.017	0.048	-0.027	0.348	0.728	1.292
D						

Source: Generated result from SPSS using the raw data of field survey

Multiple regression analysis reveals that the *model-1* on consumers' debit payment behavior is highly significant in which the five independent variables explain 55.9% of the variance in the dependent variable. In contrary to this, the *model-2* based on non-debit card payment behavior is not significant since the variables only explain 3.6% variance in the dependent variable. However, among the independent variables of non-debit payment behavior, unawareness and distrust, unawareness and unfamiliarity, transaction fee and distrust, transaction fee and unfamiliarity, distrust and unfamiliarity are positively and significantly correlated with each other.

CONCLUSION

The outcome of the research shows that there is a shift in consumer preferences in using debit card at POS but cash is still highly preferred by the consumers for making purchases. However, by understanding the most significant attribute that can affect debit card usage; as it is seen from the results are region and income; these authorities have an opportunity to



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increase payments from debit cards by targeting the right group and expanding to new markets. It can enable them to offer better services to their consumers.

The study revealed that the consumers are satisfied with debit card usage, and the non-debit card users are interested to use the card for purchases and intend to use the card in near future. The awareness level and familiarity with such payment system is also high but marketers and bank authorities are not paying greater attention to increase such debit card use. Moreover, the research highlights the problems faced by consumers while using the card for payment. This study has conducted a survey among limited respondents of the region. Therefore, the readers can take this research as preliminary study for conducting broader consumer related survey with nationally representative samples. Future studies are suggested to extend the survey around other places of the country including broad categories of respondents such as regulators, service providers and consumers which help to identify the significant factors that impact consumers' debit payment behavior.

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