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IMPACT OF CONSUMERS' ATTITUDE AND SECURITY ON
BEHAVIORAL INTENTION FOR USING MOBILE PAYMENTS
THROUGH SMARTPHONE

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ABSTRACT

In this paper the impact of factors like security and attitude on behavioral intention for using mobile payments is explained. The sample size for this study is 120 and statistical techniques like regression and ANOVA have been used for data analysis. It is found from this research that security is viewed as most important factor for using mobile payments through Smartphone.

Keywords: Smartphone, mobile payments, mobile Shopping, secure transactions, attitude, behavioral intention.

Introduction

The mobile payments are expected to grow rapidly between 2018 and 2022 in India. The numbers of users grow by 22.6 million by 2022 (STATISTA, n.d.). Recently Google had launched TEZ mobile app for supporting mobile payments. It is also observed that social networking companies like WhatsApp and Facebook are discussing with national payments corporation of India (NPCI) to provide Unified Payments Interface (UPI) enabled payments through mobile phones (Business Line, 2017).

Research Objectives

1. To know the impact of attitude and security on behavioral intention for using mobile payments.
2. To know the influence of gender on attitude for using mobile payments.
3. To know the relationship between age group and behavioral intention towards usage of mobile phone for mobile payments.

Literature Review

The adoption of mobile payments is influenced by factors like trust, mobility, perceived usefulness and ease of use (Dastan & Gurler, 2016). In mobile banking initial trust is affected by information quality and structural assurance. The usage intention is positively influenced by initial trust. The customers in the present era are using mobile wallet and it is depends on factors like reliability, availability and acceptance of mobile wallets by various points (Amoroso & Magnier-Watanabe, 2012)

According to Zhou (2011) the consumers' initial trust for adoption of mobile payments is influenced by factors like perceived security, ease of use and perceived ubiquity. The cost of handling mobile payments also determines usage intention of mobile payments (Zhou, 2011). The mobile

payment systems are positively influenced by characteristics like compatibility, convenience, reachability and mobility (Kim, Mirusmonov, & Lee, 2010).

Shin (2009) had adopted unified theory of acceptance and use of technology (UTAUT) with factors like security, trust, social influence and self-efficacy. The attitude of mobile users is positively influenced by perceived usefulness and ease of use (Shin, 2009). The perceived trust of electronic payment systems is determined by security and trust (Kim, Tao, Shin, & Kim, 2010). The security is about refund of funds whenever an error occurs during online transaction.

The factors like subjective norms, individual mobility and compatibility influenced the usage patterns of mobile payments (Schierz, Schilke, & Wirtz, 2010). When compared with other modes of payments mobile payments are less frequently used by consumers. The external factors like time pressure motivate users to adopt mobile banking for mobile ticketing services (Mallat, Rossi, Tuunainen, & Oorni, 2008).

The gender had an influence on usage of mobile usage for mobile payments from the dimensions of ease of use and usefulness of new technology (Liebana-Cabanillas, Sanchez-Fernandez, & Munoz-Leiva, 2014). The trust on consumers towards mobile payment systems can be determined by factors like perceived reputation and perceived opportunism (Srivastava, Chandra, & Theng, 2010). The trust of consumers in mobile payment systems plays a vital role in growth of mobile transactions. The environmental characteristics and service provider characteristics are two broad dimensions for consumer adoption towards mobile payment (m-payment) systems.

Table 1: Construct, Items, Reliability and Source

Construct	Items	Cronbach's Value
Attitude	1. Using mobile phone for payment of utility bills is a good thing. 2. The standard of living increases through mobile payments. 3. Mobile payments make life more comfortable than traditional payment systems.	0.73
Security	4. The one time passwords in mobile payment transactions ensure safe online transactions. 5. The organizations are more concerned about security during mobile payment transactions. 6. I am always sure of using right mobile app while making mobile payments.	0.62
Behavioral Intention	7. In future I will use Smartphone for paying utility bills. 8. In future I will use Smartphone for online financial transactions. 9. I intend to use Smartphone for leading a comfortable life.	0.69

Research Methodology and Data Analysis

The sample size of the study is 120 and structured questionnaire had been used for primary data collection. The statistical package for social sciences (SPSS version 20.0) had been for conducting statistical tests on primary data. The statistical tests like frequency analysis, descriptive statistics, regression and ANOVA have been used while performing data analysis. Among the total respondents 56 percent are male and 44 percent are female.

The respondents are categorized into four age groups. 34 percent of respondents belong to '18 to 24 Years' age group, 31 percent belong to '25 to 30 Years' age group, 19 percent belong to '31 to 40 Years' age group and remaining 16 percent belong to 'Above 40 Years' age group. The respondents are also categorized on another demographic variable 'occupation'. Among the respondents 32 percent are students, 34 percent are employees, 15 percent are self-employed and remaining 19 percent do some other kind of work.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ATT	120	3.67	5.00	4.186	0.414
SEC	120	3.00	4.67	4.086	0.491
BI	120	4.00	5.00	4.633	0.370
Valid N (listwise)	120				

H1: The attitude of consumers towards mobile payments has an impact on their behavioral intention.

Table 3: Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.227	0.351		12.060	0.000
	ATT	-0.138	0.097	-0.154	-1.416	0.159
	SEC	0.240	0.082	0.319	2.938	0.004

a. Dependent Variable: BI

H2: The security of using mobile payments has an impact on behavioral intention of users.

H3: The gender has an impact on attitude on attitude of users for making mobile payments

Table 4: ANOVA between Gender and Attitude

ATT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.239	1	0.239	1.397	0.240
Within Groups	20.160	118	0.171		
Total	20.399	119			

Table 5: ANOVA between Age Group and Behavioral Intention

BI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.553	3	0.518	4.068	0.009
Within Groups	14.758	116	0.127		
Total	16.311	119			

H4: The age group has an impact on behavioral intention for making mobile payments

Table 6: Results of hypothesis tests

Hypothesis	Result	As per 'p' value from Table No.
H1	Rejected	Table 3
H2	Accepted	Table 3
H3	Rejected	Table 4
H4	Accepted	Table 5

Discussion and Conclusion

The security of mobile payments positively influences on behavioral intention. The features like one time password (OTP) and PIN provides security for online transactions. Irrespective of gender users have positive behavioral intention towards mobile payments. Consumers are having positive attitude towards mobile phones but it does not have an impact on their behavioral intention. The age group of users has a positive impact on behavioral intention for mobile payments.

Future Research

The size of mobile screen influences consumers for using mobile payments or online purchasing. Hence there is need to conduct research to verify impact of features of smartphones on usage of mobile payments. The factors influencing consumers to use Smartphone for mobile payments need to be studied. It is also essential to conduct research whether there is impact of personal or social norms on usage of mobile payments.

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