



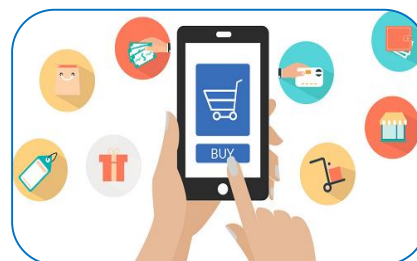
DETERMINES LEADS TO MOBILE COMMERCE NON-ADOPTION IN SOUTH GUJARAT REGION

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ABSTRACT :

This study examines those variables that determine mobile commerce non-adoption among retail commerce customer. By leaning on the earlier literature on online commerce in general and mobile commerce in particular, researcher has included a set of independent variables to a logistic regression model to predict mobile commerce usage and non-usage. The results suggest that innovation resistance has a significant role in mobile commerce non-adoption. In addition the type of device and earlier mobile service usage experience has a highly significant effect on the mobile commerce non-usage behavior. The results show that among demographics only gender has a significant effect on differentiating between mobile commerce users and non-users, while age, household income, and level of education have a non-significant effect.



KEYWORDS : Mobile Commerce, online commerce.

INTRODUCTION

In the last few years we have witnessed remarkable fluctuations in the society's confidence in the Internet as a commercial medium, with connotations of concepts such as Internet and electronic commerce rapidly changing from positive to negative not only in the minds of investors, but also among managers and the general public. The changing attitudes, or rather sentiments, have predominantly originated from the fact that Internet commerce has not proliferated to the extent that was commonly predicted less than a decade ago, with a low volume and adoption rate of electronic shopping methods among consumers. In spite of the fact that e-commerce has not reached the explosive growth figures commonly, yet unrealistically, predicted in the mid-1990s, scholars and industry representatives are now turning their attention towards the promise of electronic wireless media, envisaging that the next - or the real phase of e-commerce growth will be in the area of mobile commerce. Mobile commerce is still in its development phase in India primarily used for basic commerce, purchase of railway tickets, payment of utility bills etc. But its presence is being felt in the business world. Various companies like ICICI, Reliance, Airtel, Tata etc are using this technology or commerce platform to help and facilitate their customers for various functioning & services these are changing the size and style of our wallet. Mobile commerce offers various benefits like ubiquity, personalization, flexibility, distribution, instant connectivity and immediacy.

Characteristics of M-commerce

- **Mobility:** Users can carry their smart phones or other compatible devices such as Tablets, PDA, etc easily and can perform the different M-commerce functions
- **Ubiquity:** Information can be accessed easily and in a real-time environment.
- **Varied users:** M-commerce has varied users from elementary school students to

Grandpas, at varied locations.

- **Ambidextrous:** People uses M-commerce for work & Play i.e. for Business purpose and for personal fun.
- **Willingness:** People are willing to pay for mobile services.

Challenges of M-commerce

M-commerce is a subset of E-commerce; it also faces some of the challenges of E-commerce. Like India has unbanked population, lack of networking problem in rural area. The challenges of M-commerce in India are listed as below:-

- Limited internet access among customers, lack of awareness about services and security among customers.
- High speed bandwidth Internet connection not available to most customers at an affordable rate.
- Lack of penetration of advance mobile in rural area.
- Language barrier:- In India, mostly people are not aware about the English language or not so good in English language .language becomes one of the major factor to purchase, hire and sell a particular product or services.
- Less graphic resolutions: - In comparison to computer, laptop, mobile devices are still less graphic resolutions for that reason consumers are least interested to buy a particular product

Literature Review

Ellen et al. (1991) note that satisfaction with current performance increases resistance to alternatives and reduces the likelihood of adoption. Perceived risks, for their part, derive from physical, social or economic consequences, performance uncertainty and perceived side effects of the innovation (Sheth, 1981). As a part of the risk barrier, Ellen et al. (1991) emphasize the role of perceived self-efficacy, being the perceived ability or skill to successfully perform a given task, in consumer resistance to technological innovations.

The impact of demographics on electronic services adoption has been extensively studied in the past (Harrison and Rainer, 1992; Karjaluoto et al., 2002)

When compared to women, male perceive less risk in online business activities (Garbarino and Strahilevitz, 2004; Nysveen et al., 2005ab; Venkatesh et al., 2003). Males tend to evaluate mobile commerce more positively than women (Yang, 2005) and this attitude might be related to a greater valuation of non-store shopping in general.

Household income and education have been pointed to have significant impacts on the adoption of internet commerce services (Karjaluoto et al., 2002b; Mattila et al., 2003). A greater level of education could lead to a greater understanding and ability regarding self-service technologies (Meuter et al., 2005) and lower perceptions on complexity of innovations.

Objectives

- To study the factors affecting non-adoption of M-commerce in South Gujarat region.
- To study the awareness level of M-commerce in the South Gujarat region.

Data Analysis

Reliability Test:

TABLE 1 RELIABILITY STATISTICS

Reliability Statistics	
Cronbach's Alpha	N of Items
.945	18

Here in this scale, Cronbach's Alpha value is 0.945 which is much higher than the standard value 0.7. So the researcher is free to carry out factor analysis with the help of surveyed instrument.

TABLE 2 KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.815
Bartlett's Test of Sphericity	Approx. Chi-Square	2302.058
	Df	153
	Sig.	.000

Table 2 Lists the eigenvalues associated with each linear component before extraction, after extraction and after rotation. The eigenvalues associated with each factor represents the variance explained by that particular linear component. It also explains variance explained in terms of percentage. We can observe that out of 18 variables only 3 factors are extracted which altogether explains almost 78 percent of variance and rest i.e. 22 percent remains unexplained by them.

TABLE 3 TOTAL VARIANCE EXPLAINED

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.897	54.982	54.982	9.897	54.982	54.982	5.511	30.618	30.618
2	2.823	15.681	70.663	2.823	15.681	70.663	4.759	26.439	57.057
3	1.359	7.549	78.212	1.359	7.549	78.212	3.808	21.155	78.212
4	.960	5.334	83.546						
5	.612	3.397	86.944						
6	.412	2.286	89.230						
7	.366	2.031	91.261						
8	.332	1.847	93.108						
9	.274	1.525	94.633						
10	.254	1.410	96.043						
11	.216	1.199	97.241						
12	.140	.779	98.020						
13	.107	.592	98.612						
14	.084	.467	99.079						
15	.059	.326	99.405						
16	.047	.260	99.664						
17	.035	.194	99.858						
18	.026	.142	100.000						

Extraction Method: Principal Component Analysis.

The scree plot is given in Figure 12 indicating the point of inflexion on the curve. This curve begins to tail off after the component 3. We can easily observe from this bi-dimensional plot that upto component 3 the eigenvalue is greater than 1, so we can restrict our analysis considering 3 major components on which the factors can be loaded.

TABLE 4 ROTATED COMPONENT MATRIX

Rotated Component Matrix			
	Component		
	1	2	3
I feel that M-commerce services are difficult to use.	.892		
As per my opinion new technology is often too complicated to use	.814		
Using M-Commerce services is uneconomical	.745		
M-commerce services are slow to use	.729		
M-commerce services are inconvenient to use	.694		
M-Commerce services are perceived to be difficult to use	.671		
M-commerce services projected a very negative image till now in my mind	.650		
I am afraid of fraud through M-commerce application			
I am afraid of entering wrong information on M-commerce application		.869	
I don't feel safe to share details on M-commerce application		.825	
Total costs to perform transactions via M-commerce are more expensive than via other channels.		.814	
Network connection fees for m-commerce are higher.		.762	
M-commerce convenience charges are expensive.		.698	
M-commerce expenses are burdens for users like me.		.657	
Using M-Commerce services does not offer any advantage when compared to other ways of handling financial matters.			.775
Using M-Commerce services do not increase the ability to control financial matters.			.769
Using M-Commerce services do not eliminate the constraints of time and space when conducting transactions.			.712
M-commerce would be charged more than traditional shopping.			.670
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			

Factor Naming and Summary:

Items	Factor Loading	Factor Name
I feel that M-commerce services are difficult to use.	.892	Complicated Technology
As per my opinion new technology is often too complicated to use	.814	
Using M-Commerce services is uneconomical	.745	
M-commerce services are slow to use	.729	
M-commerce services are inconvenient to use	.694	
M-Commerce services are perceived to be difficult to use	.671	
M-commerce services projected a very negative image till now in my mind	.650	
I am afraid of entering wrong information on M-commerce application	.869	Expensive
I don't feel safe to share details on M-commerce application	.825	
Total costs to perform transactions via M-commerce are more expensive than via other channels.	.814	
Network connection fees for m-commerce are higher.	.762	
M-commerce convenience charges are expensive.	.698	
M-commerce expenses are burdens for users like me.	.657	
Using M-Commerce services does not offer any advantage when compared to other ways of handling financial matters.	.775	Unable to Handle

Using M-Commerce services do not increase the ability to control financial matters.	.769	Financial Matters
Using M-Commerce services do not eliminate the constraints of time and space when conducting transactions.	.712	
M-commerce would be charged more than traditional shopping.	.670	

CONCLUSION

- Non-usage three factors are found such as complicated technology, expensive and unable to handle financial matters. All these factors are explaining 78.212% in dependent variable i.e. non-usage of M Commerce.
- The objective study was to identify factors explaining mobile banking non-usage behavior. The results show that the innovation resistance factor and further adapted to mobile commerce have a significant effect on mobile commerce non-usage. Items such as ease-of-use and relative advantage turned out to have the most significant effect

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