

Consumer adoption of m-commerce: Motivations for high involvement product purchase

Swati Mehta

*Symbiosis Institute of Business Management Pune; Symbiosis International (Deemed University)
Pune*

Abstract

Mobile technology has made shopping even more convenient and has also provided lasting advantages for companies to meet consumer needs. The power of a smartphone to access a customer anywhere and anytime lets businesses provide on-the-go services to consumers. It comes with a requirement to make the journey of shopping even more rewarding and personalized.

As people purchase with different shopping objectives, this may lead to vastly different buying habits. This study aims to establish the underlying motivations and perceived risks for using the mobile shopping platforms. This will help retailers proactively improve their mobile shopping services.

Among various product categories, high involvement products like laptop, mobile phone, television etc. is taken into account for the research purpose. Reason being that this category is perceived as a high-stake category.

Purposive sampling method is taken for data collection. Questionnaire was prepared considering 15 different factors. After exploratory factor analysis, 5 major factors were obtained; monetary benefits and risks, psychological factors, product satisfaction related factors, convenience related factors and brand image related factors.

Keywords: *M-commerce, consumer behavior, mobile- technology, shopping motivations, perceived risks.*

1 Introduction:

Mobile phone access has increased at a very fast pace in India. With internet penetrating deeper day by day, mobile shopping applications play a major part in a consumer purchase journey. Mobile phone has ability to reach customers anywhere and anytime which provides the retailer a great opportunity to reach customers even in this fast-paced lifestyle. Thus, mobile shopping channel has become an important medium to connect retailers with customers.

As more and more retailers are utilizing m-commerce channel and number of mobile applications are increasing, the risk of getting lost in the clutter is increasing as well. It becomes important for the retailers to understand customer shopping behavior to gain an edge and sail through the increasing competition and clutter of information. A better understanding of factors that influence the purchasing behavior of customer in mobile-technology enabled shopping environment will help retailers to develop a focused approach to develop and enhance relevant services.

In addition, mobile shopping experiences have some specific characteristics that leads to customer needs and desires that are different from other shopping channels. It is understood that the customers have different motives of shopping which could result in drastically different purchasing habits.

Another question arises that how much can a customer distinguish among value additions that he gets from a variety of new services. This study examines the underlying factors that act as motivations and the factors that are perceived as risks while using mobile channel for shopping high involvement products. The following two research questions are explored;

RQ1: What factors act as a motivation while purchasing a high involvement product using mobile technology?

RQ2: Which factors to prioritize while making business strategy?

2 Theoretical framework and hypothesis formulation

A. Mobile-commerce and Buying Intention of customers

There is an emerging trend of customers moving away from traditional means of shopping. Mobile commerce can be viewed as an extended version of e-commerce. This medium provides benefits like portability as well as ubiquity but also has short comes like smaller screen, inconvenience in multi-tasking etc.

Previous studies have divided the online customers mainly into two types: goal-oriented and experiential consumers (Hoffman and Novak, 1996). The first type of motivations is called Utilitarian motivations and the second type of motivations is called as Hedonic motivations. In case of Utilitarian motivation, the customer considers shopping as an obligated task while for hedonic motivations the notion is that shopping can be done for fun and inner pleasure. In the sense of mobile shopping, both the motivations co-exist. A customer can use mobile phone to collect knowledge and complete a specific task (utilitarian) or just browse through shopping applications in leisure time (hedonic). In case of high involvement products, utilitarian factors play an important role. However, we have also considered various hedonic factors as well in our study.

In this study both types of motivations are taken into consideration. For utilitarian motivation analysis the following factors are taken; convenience in payment, better offers, undamaged product, product brand and specifications, ease of return etc. For hedonic motivation analysis, these factors are considered; psychological distress, touch and feel, satisfaction in avoiding risk for high value products etc.

B. Factors influencing purchasing decision

The main aim is to identify the factors that influence the customers to select the mobile as a shopping platform for purchasing high value products. The mobile commerce allows consumers to maintain a virtual shopping wish list, navigate with the help of a virtual assistant, scan, enquire, compare and buy goods and services, and also connect with peers through social media post the purchase. Some of the essentials such factors are considered in this study.

Convenience: Payment being one of the major touch-point in online purchase of costly products, it is analyzed whether convenience in payment through mobile influences the purchase decision. Mobile payment options provide lower waiting times during the check-out and thus enhance service experience. Customers have access to a number of accounts without holding multiple cards physically. Similarly, other factors like ability to shop on the go and easy access to any new offers make m-commerce an attractive option in a hectic lifestyle environment.

H1: Convenience of shopping significantly influence preference of customer towards mobile-commerce.

Risk Avoidance: The level of risk that a customer expects depends on two general factors: the extent involved in the buying decision, and the user's feeling of individual confidence that they will "gain" or "lose" all or any of the amount involved. When involvement is high, as in our case, the use of the internet for transactions is a concern, because there is no face-to-face contact between buyer and seller. Payment gateways online often run the risk of a safe gateway. Also, some perceived risks are damage that can occur in commute and possibility of a failed return if the product is not satisfactory.

H2: Perceived risk of product damage has significantly influence preference of customer towards mobile-commerce.

Hedonic Values: Mobile is the biggest source of entertainment in today's time. Considering that shopping applications are a source of passing time while in commute and an emotional connect with the mobile phone, hedonic values play an important role in making m-commerce a preferable shopping medium. Some of the hedonic value factors are personal attachment, visual appeal, ability to connect socially and adverse attitude towards technology.

H3: Hedonic Value attributes significantly influence preference of customer towards mobile-commerce.

User-friendly Interface: The extent a consumer feels at home on a mobile application depends on how quickly can he navigate through the site or application. Customers want a fast response and so it is important to understand what factors make mobile application user-friendly. Easy maintenance of shopping and wish lists has significantly influence preference of customer towards mobile-commerce and ability to automatically detect location and facility to save addresses are two factors taken into consideration.

H4: User-friendly interface significantly influences preference of customer towards mobile-commerce.

Perceived Control: Trust is a major factor for any purchase and it is well developed when a user feels he has more control over the information he collects as well as information that he provides. While customized advertisement can prove a positive factor to attract customers to mobile shopping, inability to control unwanted advertisement can put-off a customer. Similarly, data privacy is a major concern of many customers.

H5: Perceived control significantly influence preference of customer towards mobile-commerce.

3 Methodology

Instrument: Product category is an important factor to narrow down the research to get more accurate observations. Among various product categories, high involvement products like laptop, mobile phone, television etc. is taken into account for the research purpose. Reason being that this category is perceived as a high-stake category. It is difficult to develop trust for purchasing these products through m-commerce. Therefore, by studying this category we expect to understand maximum underlying risk factors that a customer perceives in mobile shopping.

Data collection: Purposive sampling method is taken for data collection. Questionnaire was prepared considering 15 different factors that act as major motivations and perceived risks while shopping high involvement products through mobile shopping sites or applications.

Data from 120 respondents was recorded. A google form was floated on various social media platforms like WhatsApp, Facebook, Instagram etc.

Around 30 respondents were interviewed to understand customer perception to frame the initial 15 factors.

Measurement: All the factors were measured on a 5-point Likert scale, 1 = strongly agree to 5 = strongly disagree. The questionnaire is listed in the appendix. A screening question “Have you ever purchased a high involvement product (like laptop/mobile etc.) through mobile shopping site or application?” was asked to differentiate between customers who do not prefer m-commerce to that who readily use m-commerce as a shopping medium.

Final Study:

Exploratory Factor Analysis: As it has been demonstrated previously that the m-commerce literature does not include adequate theoretical views that can be used to bring specific perceptual features. As a result, we will use exploratory factor analysis for the purpose of dimension reduction. We start with 15 different factors and after analyzing the correlations between factors, these will be combined in appropriate number of motivational factors and risks that influence a consumer’s purchasing decision.

Multiple Regression was used to prioritize which factors are more important and should be given emphasis.

4 Analysis And Result

Sample Description: Majority of respondents were in the age group of 18 to 24 years (68%) followed by 25 to 34 years (27%). There were 64% male and 36% female respondents. Majority of them resides in cities. There were 17% of the respondents who had never purchased any high involvement products online. Since mobile as a medium of shopping is still growing substantially in the age group of 18 to 34 years, the research sample is reflective of current and future mobile shoppers.

Results: Kaiser-Meyer-Olkin test (KMO test) was conducted to test the sample adequacy. We got the value 0.683 which is well above minimum level of 0.5. For Bartlett’s test we got probability less than 0.5. This implies that the null hypothesis; there is no significant relation between the factors is rejected at 95% confidence level.

Table- I: KMO and Bartlett’s test

<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>	.683	
<i>Bartlett's Test of Sphericity</i>	Approx. Chi-Square	251.357
	df	105
	Sig.	.000

Exploratory factor analysis: First analysis was taken using Kaiser criterion i.e. extracting factors with eigenvalue ≥ 1 and Varmax rotation. 6 factors were gained that explained 72% of the variance. Since only one factor was loaded in the last factor, next analysis was taken using fixed number of factors as 5.

In this case 72.12% of the variance was explained. Initially there were 15 variables taken and after exploratory factor analysis 5 new variables were defined. The loads of the five variables retained for each underlying variable are shown in Table- II. Many relationships seemed reasonable when we were searching for patterns of similarities between things loaded on each element.

Factor 1 includes Convenience; *Factor 2* includes Hedonic Values; *Factor 3* includes Risk Avoidance related factors; *Factor 4* considers Perceived Control; *Factor 5* considers User-friendly Interface related factors. Although components for factor 5 are not so clearly distinguishable, we can still relate it to the user-friendly interface that mobile as a medium provides.

Ability to shop on commute, payment through UPI and other mobile wallets and quick access to latest offers are main convenience related motivations for the customers. Hedonic Values that influence buying decision include ability to connect socially with friends and share shopping experiences, personal attachment that a person feels to his mobile phone, negative attitude towards changing technology and satisfaction achieved from good visual appeal product.

For visual appeal by online reviews, as we can observe, it is loaded equally into factor 2 as well as factor 5. It can be taken as a hedonic value or factor relating to user-friendly interface. Factor 3 i.e. risk avoidance includes ease of return in case of faulty product, any damage that can be caused while delivery and psychological concern about time taken for the delivery. Factor 4 can be defined as perceived control. It includes the factors; personalized advertisement that appeals customers, lack of restriction on unwanted advertisements and concern for data privacy specially during payments. Factor 5 relates to the role of user-friendly interface for the credibility of the shopping platform. Data Privacy, even though being an important influencer in the decision-making process, is equally loaded in factor 3 (Risk Avoidance) and factor-4 (Perceived Control). However, we can consider it more of a perceived control factor as it is user choice to share as much data as he wishes to

Table- II: Rotated Component Matrix

	Convenience	Hedonic Values	Risk Avoidance	Perceived Control	User-friendly Interface	Buying Intention
Shop_on_commute	.868					
Payment_UPI	.828					
Offers_Update	.720					
Social_Connect		.648				
Personal_Attachment		.785				
Technology_Averse		.761				
Visual_Appeal		.535			.511	
Damage_Commute			.739			
Return_Risk			.726			
Psychological_Distress		.545	.568			
Customized_Ad				.750		
Unrestricted_Ad				.725		
Data_Privacy			.526	.545		

Location_Address					.823	
Wishlist_ShoppingCart					.521	
Buying_Int_1						.771
Buying_Int_2						.728
Buying_Int_3						.651

The final 5 factors obtained are further analyzed using Multiple Regression to get most important factors to be prioritized by businesses to create a better consumer experience. These factors were independent variables and purchasing intention was taken as dependent variable.

Table III: Factor Analysis

Factors	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Convenience	0.187	0.308	0.128	0.602
Perceived Control	-0.703	0.308	0.607	0.602
User-friendly Interface	0.384	0.308	0.988	0.602
Hedonic Values	0.102	0.308	-0.780	0.602
Risk Avoidance	-0.747	0.308	0.827	0.602
Buying Intention	-0.436	0.308	0.229	0.602

Table IV: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-4.52E-18	0.067		0	1
Convenience	0.376	0.067	0.376	5.279	0
Perceived Control	0.661	0.067	0.661	9.697	0
User-friendly Interface	0.145	0.067	0.153	2.244	0.029
Hedonic Values	0.37	0.067	0.38	5.342	0
Risk Avoidance	-0.025	0.067	-0.025	-0.364	0.068

Since Risk Avoidance has significance greater than 0.05, this factor is not a preference for final consideration.

Table- V: Final factors and corresponding variables

Factors	Variable
Convenience	Payment_QR_Code
	Payment_UPI
	Offers_Update
Hedonic Values	Personal_Attachment
	Visual_Appeal
	Social_Connect
	Technology_Averse
User-Friendly Interface	Wishlist_ShoppingCart
	Location_Address
Perceived Control	Customized_Ad
	Unrestricted_Ad
	Data_Privacy

Table VI: Regression Description

Model	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change
1	0.756	0.712	0.5363016	0.756	22.23

Since R square value is above 0.7, the model is a good fit. 75.6% of the variance was explained by this model. For 95% confidence interval, for the factors convenience, perceived control, user-friendly interface and hedonic values, NULL hypothesis is rejected and thus they are most important factors to be taken into consideration.

5 Conclusion

The study had objective to determine motivating factors in purchase of high involvement products through mobile shopping medium. Through the analysis we concluded that various factors can be mainly categorized into five factors; convenience, hedonic values, user-friendly interface, perceived control and

risk avoidance. We also realized that both utilitarian as well as hedonic factors play role in influencing customer buying decision.

In understanding why customers use the mobile shopping system, the multidimensions of mobile commerce motivation are essential. Every factor obtained offers an insight for better understanding of mobile shoppers and impacts decisions taken for creating better shopping experiences. Retailers can develop an ability to analyze the behavior and characteristics of the mobile shoppers and by focusing on the above factors can drive consumers towards their products.

Since the sample of this study is from India and predominant respondents are in the age group of 18 to 34 years, therefore, other countries and age-groups may have restricted use for the study. Findings indicate plenty of other varied paths for further study. More research scope is available to look into how mobile apps can meet the needs of consumers, based on the variables examined in this report.

References

1. Weng Onn Leea,, Lai Soon Wongb, “Determinants of Mobile Commerce Customer Loyalty in Malaysia”, *Procedia - Social and Behavioral Sciences* 224 (2016) 60 – 67
2. Eleonora Pantano, Constantinos-Vasilios Priporas,
3. “The effect of mobile retailing on consumers' purchasing experiences: A dynamic perspective, *Computers in Human Behavior*,”Volume 61 2016,Pages 548-555 ISSN 0747-5632.
4. Xiabing Zheng, Jinqi Men, Feng Yang, Xiuyuan Gong, “Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing”, *International Journal of Information Management*, Vol. 48(2019) 151-160
5. Md. Alamgir Hossain, “Security perception in the adoption of mobile payment and the moderating effect of the gender”, *PSU Research Review*, Vol.3 No.3,2019pp. 179-190 Emerald Publishing Limited,2399-1747
6. Kiseol Yang, Hye-Young Kim, “Mobile shopping motivation: an application of multiple discriminant analysis”,*IJRDM* 40,10.