
Analyzing Customer Preferences Towards Mobile Based Shopping

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Ritesh Kumar Singhal¹, Ashish Vaibhav²

Abstract

The main emphasis of this research paper is to study the customer preference towards various application of Mobile Commerce in current scenario. Mobile commerce refers to the ability to conduct wireless commerce transactions using mobile applications in mobile devices. It is a new concept and is emerging in a context of established norms, rules and standards. The adoption rate of m-commerce will increase based on the ease of its use and the increasing penetration of mobile and internet. Regarding the buying process for m-commerce, a variation on a more traditional commerce model is developed. However proper support from the Government and favourable regulations could further boost the growth of m-commerce. After online shopping, APP based shopping is growing at a significant rate. People transact on APP based mobile device, where mobile is working as virtual store. After analysing the collected data, it is found that maximum persons agree that online shopping from mobile is more efficient and also they believe that they will intend to continue shopping using mobile phones. This paper analyzes the customer choice towards APP based mobile shopping especially in youth and females. Also, the survey identifies opportunities and challenges in APP based shopping.

Keywords

Mobile Commerce, APP, Customer

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^{1,2}Assistant Professor, Ajay Kumar Garg, Institute of Management, Ghaziabad, India.

Corresponding author:

Email: ritesh@akgim.edu.in



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Introduction

In the age of rapid growing pace of information technology, the consumers are also experiencing day-to-day changes and options in buying the goods and services. Due to availability of such technologies a new markets, products and services are emerging so rapidly that it is becoming difficult for consumers and the regulators to keep pace with these changes. Consumers are often confused about the changes and have to figure out new technologies for themselves using own idea. Regulators may step in to address such issues faced by the consumers but this is generally after significant gap and consumers might have adopted by then and the market may have already moved on. It is thus of concern for consumers who are engaged in online market confidently, which is continuously changing? It for the regulators to identify the failures when markets emerge, and then change quickly as per the existing standards. A simple way out to address these challenges is to first identify underlying principles, which remain constant, despite technological change:

- Consumers should be provided necessary information about their rights and responsibilities, which will allow them to make decisions across technological platforms as per their convenience and ease.
- Consumers should be kept away from misleading information about the products
- Consumers should have access to secure and safe transactions for their purchases and should not be liable for transactions if consumers have not authorized to do so.
- Consumers should be educated to easily identify and engage with complaints for handling the disputes and use available resolution mechanisms.

In e-market mobile commerce is a broad term, which has been applied to a different type of transactions. The mobile commerce is described as a consumer service using their mobile device for getting service as per need and application for example sending an SMS to subscribe for a ring tone service; Consumer using his/her mobile device to access the ringtone service, using the internet for purchasing clothing; or the consumer may be swiping a mobile device on a scanner at a café for paying bills of coffee. The cost of the bills is being deducted using transaction from pre-paid funds on some wallet or linked to some accounts, which is stored on a phone. Kisielowesk a-Lipman [2009] observed, the most popular products and services in the mobile commerce market like ringtones, various screen savers, games, online games and utensils are broadly referred to as mobile premium services^[1]. Various goods like e-tickets, digital music, e-books and physical goods are also under this category and being subscribed as usual. Transactions of this type are often low in value and are simpler to conduct using mobile sets. Increasingly, m-commerce technology is developing to allow for more varied transactions. In some countries, consumers can pay for train tickets, bus tickets, air tickets or buy a coffee via their mobile phone. By development in near field communication (NFC) technology, various goods and services are available to the consumers in this market are further likely to diversify, which has improved lifestyle and reduced the consumer time. NFC technology uses radio communications for communicating information between two devices, which is to be processed a transaction; for example, a phone having a chip stored on its SIM card, is being used with a 'reader' on the place decided by the service provider, which may be gates at a train station. The term mobile commerce was originally used in 1997 by Kevin Duffey at the launch of the Global Mobile Commerce Forum, which means "the delivery of electronic commerce capabilities directly into the consumer's hand, anywhere, via wireless technology." The Mobile Commerce is thought of "a retail outlet in your customer's pocket."

In present time the mobile commerce has risen to thousand crores of rupees around the world. Asia representing more than half of the market, and has been forecast to reach much higher in near future. According to BI Intelligence in January 2013, 29% of mobile users have now made a purchase with their phones. Walmart and other such stores estimated that 50% of all visits to internet is the shopping site from a mobile devices. Bank of America predicts approx \$97.0 billion in purchases will be made from mobile devices by European and U.S. shoppers in 2018. Muller (1990)^[2] in his research reveals the success of the mobile commerce can be attributed to the personal nature of wireless devices. Adding to this are its unique features of voice and data transmission and distinct features like localization, feasibility and convenience. The sustained growth of the mobile commerce around the world has been more because of the transfer of technology according to the needs of local geography^[3].

Advantages and Disadvantages of Mobile Commerce

There are nearly two billion cellular internet users in the world that makes seventeen percent of the global Sale. M-Commerce is 1 of the most benefitted & rising market in the mobile marketplace. Cellular Sale Cobra CIR2000A Wireless Internet and FM Radio with USB Port, SD Card Slot, CD Player, Touch Sensitive Controls commerce is the technology to conduct commerce through a mobile gadget such as pill, PDA or smartphone. Following the increase of ecommerce, m-Commerce has paved its way into the marketplace. What makes m-Commerce popular among customers is the capability to shop or make payment, irrespective of their present location^[4].

Benefits of m-Commerce

The m-Commerce pattern is catching interest of many shopaholics. There are numerous reasons, which make m-Commerce a better option for buyers:

- Cellular gadgets are current everywhere and have much wider attain than computers. Consequently, it is simpler for customers to use a m-Commerce software to carry out transactions.
- With growing competitors, there are higher chances of customers obtaining better deals on mobile commerce sites.
- A mobile commerce app removes the need of buyer heading to a physical shop, that saves time & money. Consumers can access hundreds of goods on their mobile devices. This offers a scope for retailers to increase their reach & revenue.

Drawbacks of m-Commerce

Mobile commerce has certain restrictions attached to it:

- Cellular gadgets have small display in comparison to lap tops & personal computers, which does not give a very great buying encounter to buyers.
- Presently, mobile commerce applications have particular restrictions associated to graphics & functionalities because it is a new technology. Therefore, buyers favour e-commerce applications.
- Poor internet connectivity and sluggish speed tends to make the entire item purchase & payment process a trouble for buyer. The broader acceptance of 3G is certainly going to speed-up m-Commerce.

- Information transferred through cellular devices & wireless networks have higher risk of getting hacked.
- Developing mobile commerce software is more expensive than an e-commerce app, consequently, not all retailers go for it.
- Men prefer creating purchase on their smartphones, while ladies prefer tablets Future of m Commerce.

There are still some locations where cellular commerce has to improve such as secured transaction, improved graphics, and much better Discount COWON Z2 16GB White with free carrying case, Body & LCD protective film and extra USB cable buying experience^[5]. Mobile application development companies are continuously working towards improving the quality of applications and giving a rich user experience. So, we can predict that coming years are definitely going to be great for cellular commerce marketplace^[6].

Mobile app Based Shopping Companies

Flipkart, is an E-Commerce company established in 2007 by Sachin Bansal and Binny Bansal. It mainly operates in India, having its headquarters at Bangalore, Karnataka. Flipkart has launched its own product range under the name “DigiFlip” with products including tablets, USBs, and laptop bags, which has further risen to variety of product ranges.

Amazon.com Inc. is an American electronic commerce company with headquarters in Seattle, Washington. It is the largest Internet-based online retailer in the United States. Amazon.com started as an online bookstore, but soon diversified to other products, selling DVDs, VHSs, CDs, video and MP3 downloads/streaming, software, video games, electronics, apparel, furniture, food, toys, and jewelry.

Snapdeal.com is an online marketplace, New Delhi, India. The company was started by Kunal Bahl, a Wharton graduate as part of the dual degree M&T Engineering and Business program at Penn.

Research Objectives

- To study the customer preference towards various applications of Mobile Commerce in current scenario.
- To develop a better understanding and application on how m-commerce can be used by customer today.
- To study the satisfaction level of such customers in respect to the mobile app. used by the customers.

Research Methodology

Questionnaire developed was used for getting the responses. Random sampling was done from people using mobile camera applications located in NCR. In these areas total targeted sample was 100. From these targeted samples 75 usable responses were received.

Analysis

The details of responses related to survey from different respondents are given below. The details of responses

Q.1: Do you believe that On line Shopping using mobile phone saves time?

Table 1. Responses of First Question

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid1	23	30.7	30.7	30.7
2	21	28.0	28.0	58.7
3	12	16.0	16.0	74.7
4	13	17.3	17.3	92.0
5	6	8.0	8.0	100.0
Total	75	100.0	100.0	

According to the graph 31% of respondents strongly agree that yes online shopping using mobile phone saves time and 8% are disagree to this statement

Q.2: Online shopping from mobile applications use to saves money?

Table 2. Responses of Second Question

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	19	25.3	25.3	25.3
2	19	25.3	25.3	50.7
3	18	24.0	24.0	74.7
4	8	10.7	10.7	85.3
5	11	14.7	14.7	100.0
Total	75	100.0	100.0	

According to the graph 25% of respondents strongly agree that yes online shopping using mobile phone saves money and 28% agrees to this while 15% are strongly disagree to this statement

Q.3: Online shopping using mobile phone is more relaxing shopping?

According to the graph 23% of respondents strongly agree that yes online shopping using mobile phone is relaxing shopping and 9% are disagree to this statement

Q.4: Online shopping using mobile phone is more easier shopping?

According to the graph 19% of respondents strongly agree that yes online shopping using mobile phone is more easier shopping and 10% are disagree to this statement.

Table 3. Responses of Third Question

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid1	17	22.7	22.7	22.7
2	18	24.0	24.0	46.7
3	19	25.3	25.3	72.0
4	14	18.7	18.7	90.7
5	7	9.3	9.3	100.0
Total	75	100.0	100.0	

Table 4. Responses of Fourth Question

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	14	18.7	18.7	18.7
2	22	29.3	29.3	48.0
3	16	21.3	21.3	69.3
4	15	20.0	20.0	89.3
5	8	10.7	10.7	100.0
Total	75	100.0	100.0	

Hypothesis

Factor analysis is a statistical method used to describe variability among observed correlations variables in terms of a potentially lower no. of unobserved variables called factors.

H0: Gender and shopping relaxation is independent to each other.

H1: Gender and shopping relaxation is not independent to each other.

Using Chi Square test

*Online shopping using mobile phone is more relaxing shopping? Cross-tabulation

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 2.05.

Form the chi square statistics it concluded that null hypothesis is accepted therefore Gender and shopping relaxation is independent to each other.

Factor Analysis

The mean score Table 7 suggest that mobile APP shopping is much easier as compared to conventional shopping, however technological awareness is necessary for doing APP shopping.

Since KMO sampling adequacy is more than 0.5, therefore sample is adequate for this particular research.

From principle components analysis, the most important factor is “shopping relaxation” and “easy to use” whereas the least important factor seems to be “money saving” and “efficiency”.

Table 5. Cross-Tabulation

		Online shopping using mobile phone is more relaxing shopping?					Total
		1	2	3	4	5	
Gender F	Count	3	7	7	5	0	22
	Expected Count	5.0	5.3	5.6	4.1	2.1	22.0
M	Count	14	11	12	9	7	53
	Expected Count	12.0	12.7	13.4	9.9	4.9	53.0
Total	Count	17	18	19	14	7	75
	Expected Count	17.0	18.0	19.0	14.0	7.0	75.0

Table 6. Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.610 ^a	4	.230
Likelihood Ratio	7.608	4	.107
N of Valid Cases	75		

Table 7. Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Do you believe that Online Shopping using mobile phone saves time?	2.44	1.307	75
Online shopping from mobile applications use to saves money?	2.64	1.362	75
Online shopping using mobile phone is more relaxing shopping?	2.68	1.275	75
Online shopping using mobile phone is more easier shopping?	2.75	1.274	75
Online shopping using mobile phone are more efficient shopping.	2.75	1.264	75

Still many people prefer conventional shopping over APP based shopping because of touch and feel and bargaining etc.

Table 8. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.881
Bartlett's Test of Sphericity	
Approx. Chi-Square	281.700
Df	10
Sig.	0.000

Table 9. Communalities

	Initial	Extraction
Do you believe that Online Shopping using mobile phone saves time?	1.000	.764
Online shopping from mobile applications use to saves money?	1.000	.747
Online shopping using mobile phone is more relaxing shopping?	1.000	.842
Online shopping using mobile phone is more easier shopping?	1.000	.819
Online shopping using mobile phone are more efficient shopping.	1.000	.706

Table 10. Component Matrix

	Component
	1
Online shopping using mobile phone is more relaxing shopping?	0.918
Online shopping using mobile phone is more easier shopping?	0.905
Do you believe that Online Shopping using mobile phone saves time?	0.874
Online shopping from mobile applications use to saves money?	0.864
Online shopping using mobile phone are more efficient shopping.	0.840

Research Findings and Conclusions

The major research findings of the study are:-

- Most of the surveyed respondents in subject were aware about all the aspects of mobile shopping Row ever they occasionally use mobile for online shopping and transactions.

- Most of the respondents were feeling that online shopping from mobile saves time and money while doing such purchases.
- Most of the respondents felt that online shopping from mobile is more relaxing than traditional shopping.
- Most of the respondents feel secure with shopping on internet using mobile phone, and intent to continue shopping using mobile phones.

The mobile commerce (m-commerce) marketplace is growing and new products and services are constantly becoming available. Smartphone technology is one important factor driving growth. This is because as phone software becomes more sophisticated, m-commerce transactions are faster, easier and safe to engage in. While independent developers have led innovation in mobile shopping apps, retailers, brands, and local businesses are facing an imperative in integrating high-value mobile shopping capabilities into their customers' experiences or risk disintermediation.

Table 11. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.877	77.533	77.533	3.877	77.533	77.533
2	0.389	7.788	85.321			
3	0.328	6.566	91.887			
4	0.246	4.927	96.814			
5	0.159	3.186	100.000			
Extraction Method: Principal Component Analysis.						

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