# Mobile Commerce: The New Era of Shopping

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Abstract - Mobile commerce (also known as Mobile e-commerce or m-commerce) is a new trend for online shopping that uses wireless devices such as mobile phones for online transactions including online shopping, bill payments etc. As the mobile developers are releasing interesting and useful apps every day, the use of mobile phones and tablets is increasing with a rapid pace. This induces mobile users to use their mobile devices for online payments and other transactions. This paper introduces the process of online transactions using mobile phones, its benefits and counterparts as well as the level of adoption of the m-commerce by the people. At the conclusion, it also explores the future opportunities and the challenges for the m-commerce.

## Keywords – M-commerce, Mobile commerce, Challenges to m-commerce, Pros and Cons of mcommerce, Mobile Shopping

#### I. INTRODUCTION

The word m-commerce is derived from the widely used e-commerce which is an acronym for Electronic Commerce. After the great acceptance of e-commerce, the mobile commerce has become handier for the users. The mobile is not remained the device that is used only for making calls and all that simple utilities but it is a magical gadget that can help you pay your bills, purchase products and services online and so on. The scope of mobile commerce is far broad than that of e-commerce as the smart phones have become very common for the public. Performing online transactions using e-commerce requires the person to sit at a proper place to operate the computer. Whereas the m-commerce requires just a smart phone with Internet or Wi-Fi connectivity and the online transaction is just a fun. The usage of m-commerce has been increased due to the availability and ease of use of mobile across the globe.

#### II. PURPOSE OF STUDY

The use of online transactions is increasing very rapidly nowadays. E-commerce has become very essential part of the daily life of human being. Computers and Internet are used for numerous purposes including email, searching information, music, videos, chatting, job searching, online gaming, online ticket booking, paying bills, online banking and lot more. The people who have once tried the online transactions and succeeded are greatly happy with the experience and are ready to take benefits of it. But some people are still hesitated to use mobiles for making online transactions. In this paper, I am going to discuss the process of making online transactions and pros and cons of it. It also explores the difference between e-commerce and m-commerce.

#### III. E-COMMERCE V/S M-COMMERCE

The electronic commerce was first introduced by Michael Aldrich in 1979 in the form of teleshopping which means shopping from a remote location. The teleshopping used domestic television to view the products and the telephone line to order the products. Later the process changed and started to use computers with Internet connection for the online shopping and known by a new term Electronic Commerce or e-commerce. The e-commerce has increased the businesses by making huge money that would be impossible without e-commerce.

The researchers say that e-commerce has gained significant revenue in last few years and has resulted in substantial progress in development of e-commerce applications and websites. This growth is such a remarkable and incredible for both the business-to-business (B2B) and business-to-consumers (B2C) aspects. Here we have considered only e-commerce applications that needs only a specific set of users using PCs connected to a LAN (Local Area Network) cable for Internet connectivity.

The market of e-commerce has been overtaken by the m-commerce which is also known as wireless ecommerce or mobile commerce because it needs only a mobile device which is wireless. The scope of mcommerce is far broader than that of e-commerce because of its universality and ease of use. With the quick proliferation of mobile devices such as mobile phones, PDAs (Personal Digital Assistant) and handheld computers, mobile commerce is widely considered to be a driving force for next generation e-commerce [1].

The term m-commerce or mobile commerce was first introduced in 1997 that meant "purchasing products or services online via wireless devices such as mobile phones or other handheld devices". The other definitions are given below:

"The mobile commerce is defined by the delivery of electronic commerce capabilities directly into the consumer's hand, anywhere, via wireless technology." [2]

"The delivery of trusted transaction services over mobile devices for the exchange of goods and services between consumers, merchants and financial institutions". [3]

## IV. CHALLENGES TO M-COMMERCE IN INDIA

India is a developing country and there is huge potential for all sorts of businesses whether it is offline, ecommerce and m-commerce business. There are various factors that are in favour of m-commerce business in India such as there is a large proportion of young generation in the country that are interested in innovative ways of business like m-commerce, popularity of smart phones among people is rising and various domestic eretailers are working hard to make consumers use mobile applications for placing orders from their portal.

Despite of various factors working in favour of m-commerce in India, there are many challenges to be faced by business organizations. Security is a big feature in consumers' mind while shopping online through mobile applications. There are risks associated with business whether it is offline or online, concepts of economics like demand, supply, market supply and competition etc. are always applicable on all sorts of businesses. Therefore, m-commerce is not a sure way of being successful in business activities.

## Security

Increased number of cases of frauds due to hacking and theft of credentials of a user lead consumers to be concerned about security in m-commerce. Cash on delivery is a good option provided by portals to make consumers feel secure. However, cash on delivery especially for orders of significantly large amount leads to increase in risk for the service provider. Therefore, it is important for companies to ensure that consumers trust on their transaction system and feel free to carry out transaction. There are various security techniques and encryptions available to companies to ensure security. "GSMprovides a relatively secure connection through the PIN(personal Identification Number) when turning on thehandset. An authentication protocol between handset andthe network through SSL encryption of voice and data is what the technology can do today and what the consumerhas been led to expect."<sup>[4]</sup>

## Business Risks

Despite of huge potential for businesses in Indian market, it is important for companies to note that people are looking for innovative ideas and better deals over internet. Another factor against m-commerce is that, consumers are ambiguous about quality of products especially the products in groceries, cloths and footwear segment. One major factor behind this is the quality of product, people are able to check for quality of products at store, as per their wisdom and knowledge and then decide if they should buy product or not. Because of this reason, customers do not find shopping groceries online as a convenient way. Size of smart phones is increasing rapidly but still there are times when people are not able to observe and analyse products easily on mobile screen. Therefore, it is difficult for companies to convince consumers that they are going to get high quality products with lower prices as compared to deals provided at brick and mortar stores.

Domestic e-commerce giants of India such as Flipkart and Snapdeal have launched their mobile applications to enable consumers get services through smart phones. Paytm is another leading company in m-commerce field.

Companies are providing discounts and other types of offers for consumers ordering using mobile applications. "Snapdeal revealed its mobile apps contributed about 45% of sales on the mobile platform in the previous three months. The report further revealed Flipkart got about 20% of its orders through mobile apps and hopes mobile users to contribute half its total sales in a year."<sup>[5]</sup>

## V. PROS AND CONS OF M-COMMERCE

M-commerce seems attractive and convenient at first glance however, everything comes with several advantages and disadvantages, both. It is important to analyse advantages and disadvantages of m-commerce for consumers as well as companies. Some of the major advantages of m-commerce include convenience of use, reduce costs and increases personalization. On the other hand some of the major disadvantages of technology include small screen size of phones; apps are to be developed for each platform.

## Advantages of M-commerce

M-commerce has been very popular in recent years majorly because of advancements in technologies and convenience of usage.

Convenience of using smart phones to place orders online is a major factors working in favour of m-commerce. There is a large proportion of population using smart phones daily, especially in developed and developing countries. People are able to use mobile phones at every place to use the services of e-commerce websites through the application provided by them. Majority of e-commerce giants have launched their mobile applications for the convenience of users.

M-commerce is also cost friendly for users because of the fact that mobile internet is generally cheaper as compared to internet services being used at laptops or computer through Wi-Fi connectivity or dongles etc.

M-commerce also increases personalization of shopping as generally people are able to use their own phone to utilize m-commerce facility. Like usage of Facebook and Gmail, users are able to shop through their own mobile phones.

## Disadvantages of M-commerce

Smaller screen size and security concern generally lead consumers to opt for e-commerce over m-commerce. Screen size of smart phones is being increased by makers but it is sometimes inconvenient for users to analyse products on the basis of photos seen on small screens.

Disadvantage or the extra burden to be handled by companies includes the fact that there is a wide range of platforms in smartphones. Companies have to develop applications for all the platforms to cover market properly.

Another major issue for consumers is high probability of fraud. "Any one, good or bad, can easily start a business. And there are many badsites which eat up customers' money. There is no guarantee of product quality. Mechanical failures can cause unpredictable effects on the total processes. As there is minimum chance of direct customer to company interactions, customer loyalty is always on a check."<sup>[6]</sup>

## VI. FUTURE PERSPECTIVES

After looking at various aspects regarding m-commerce and analysing various pros and cons of m-commerce, it is important to see future perspectives of m-commerce. Advantages of m-commerce are expected to surpass the disadvantages and it is expected that m-commerce will be widely used for shopping, mobile recharges and DTH recharges etc. Technology is in initial phase and work is in progress to make transactions more secure. Smarts phones are very popular and are gaining much more popularity day by day. Convenience of "any time anywhere use" is greatest strength of m-commerce and people are accepting this innovative way of shopping.

#### VII. CONCLUSION

M-commerce is the latest way of shopping being popular among large population. There are various advantages of m-commerce that are helping companies to adopt this route; also the convenience of its usage is attracting consumers. However, there are certain challenges to be faced by companies in convincing consumers about m-commerce's advantages and convenience. Overall, convenience of m-commerce is expected to surpass its little disadvantages and in future, m-commerce is expected to become much more popular.

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