

M-Commerce in India

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Abstract: M-Commerce and E-Commerce made people to transfer funds, shopping, bidding without going to shops within a moment. E-commerce is conducted on laptops, desktop computers using internet whereas M-Commerce is conducted on mobile phones using internet. M-Commerce is E-commerce on mobile phones. E-Commerce introduced Anytime online transactions and M-Commerce introduced Anytime Anywhere online transactions. The ubiquity, reachability, mobility and flexibility features of M-Commerce have increased the mobile users and mobile internet subscribers in India. M-Commerce is implemented through mobile applications. People are using mobile applications instead of web application for utility bill payment, ticket booking, fund transfer, email and so on. Thus M-Commerce is replacing E-commerce. With these advantages M-Commerce have disadvantages such as tiny screen of device, weak processors, limited memory, poor resolutions, poor data entry, and lack of WAP-enabled devices, expensive data speed, and shortage of bandwidth. This paper sheds light on the M-Commerce, its applications, advantages, disadvantages and the growth of M-Commerce in India.

Keywords: M-Commerce, E-Commerce, Ubiquity, Mobile applications.

I. INTRODUCTION

E-commerce is electronic commerce in which transactions are conducted on desktop computers, laptops using internet. E-commerce has the benefits such as around-the-clock availability, the speed of access, a wider selection of goods and services, accessibility, and international reach[2]. People can visit the different websites and do online transactions, send emails, transfer funds, search for various products within a moment. M-Commerce is E-Commerce conducted on mobile phones using internet. M-Commerce (mobile commerce) is the buying and selling of products and services through wireless handheld devices such as mobile phones. M-Commerce enables users to access the internet without needing to find a place to plug in [21]. Different types of on-line transactions are carried out using mobile phones, mobile applications and internet. People can carry and access mobile phones with preserving the privacy anytime anywhere. Thus, ubiquity, mobility, flexibility, reach ability features of M-Commerce make people possible to do shopping, search various products, transfer funds, ticket booking, utility bill payment anytime anywhere. Mobile money transfer, Mobile ticketing, Mobile vouchers, coupons and loyalty cards, Mobile vouchers, coupons and loyalty cards, Location-based services, Information services are the M-Commerce services which the mobile subscribers can use through different mobile applications using internet.

II. ADVANTAGES AND LIMITATIONS OF M-COMMERCE

User friendly, easy to carry the mobile device, Low internet connectivity area, Secure transactions are some characteristics of M-Commerce [7]. Along with these long distance reach ability, better deals for consumers, time and money savings, easy to use are the benefits of M-Commerce some of which are described below.

A. long distance reach ability

Mobile phones are available to every person and are very important in social and business life. The sellers can reach the customers through mobile phones and customers can access mobile applications to find products. So though seller and customers are at long distance they can reach each other.

B. Better deal for Consumers

The consumers can search different products using mobile application. They can compare the product cost, delivery time and place the order. Thus customer can compare the products and get the best deal.

C. Savings

The consumers can search the required product, compare it and get the best deal without visiting the physical shops. Thus his money and time to travel is saved. He can purchase the product at any time anywhere using mobile applications. Myntra, Jabong are examples of mobile applications.

D. Easy to use

The Mobile applications are easy to use. No special skills are required to use these applications. Further the consumer can pay the bill on delivery of the product. So people can purchase the items using mobile applications easily.

E. Secure transactions The consumers can do the secure transactions i.e. M-Payment using mobile applications. For security the consumers are given login ID and password.

On Time Password is generated for the transaction which is used for user authentication. Thus there is transaction security for M-Payment.

Along with the advantages M-Commerce has disadvantages also. Processing power of mobile device as compared to personal computer, tiny size of the mobile phone screen, non-uniformity of networks, limitations of the network service are some of the limitations of M-Commerce [8]. Some of the disadvantages are described below.

A. Tiny Screen

Tiny screen of mobile device makes the consumer difficult to search more items in one display. Every time the consumer has to zoom the image. The consumer gets tired because of this process. Also the seller can not show eye catching images. So it becomes difficult for retailer to sell the product using mobile application.

B. Speed of delivery

The speed of mobile device is less than personal computers. Further the consumers has to remove the contents such as flash videos and plug-in which consumes a fraction of time. It results in reduced speed of searching, placing order and delivery of the products.

C. Security

Mobile security is improving regularly. But some consumers do not have trust to do the transactions on mobile device. Moreover, mobile device networks provide greater opportunities for hackers than internet. So the transactions conducted on mobile device must be secured transactions.

D. Mobile Phone Configuration

Mobile phone configuration must be compatible with the mobile application. The configuration limits the installation and hence use of mobile application.

III. GROWTH OF M-COMMERCE IN INDIA

Various mobile applications are developed for Smartphone users. State Bank Freedom of State Bank of India , iMobile of ICICI , Axis Mobile for Android of AXIS Bank are the mobile banking applications which are used for on line fund transfer, utility bill payment. IRCTC Connect is used for railway ticket reservation, Mpesa by vodafone is used to transfer fund, pay utility bills, Book My Show is used to book movie tickets.[14][15][16][17][18][19].

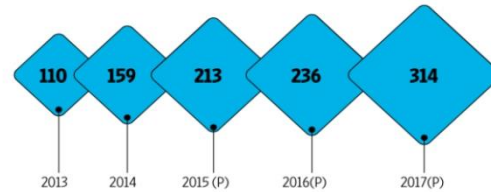
Ubiquitous feature of M-Commerce is turning people from E-Commerce to M-Commerce.

The development of low-cost smart phones and low mobile tariffs helped for tremendous growth in mobile internet subscribers and hence tremendous growth of M-Commerce in India.

In India 60% of internet users access the internet via their mobile phones.

The number is expected to reach 315 million by 2017, estimates IAMAI-KPMG report [18] as shown in Fig.1.

MOBILE INTERNET USERS IN INDIA 2013-17 (E)
(in million)



Source: Iamai-IMRB Mobile Internet in India 2014 report; KPMG-Ficci M&E industry report 2015

Fig.1 Mobile Internet users in India

Mobile internet is the next BIG revolution in India and as per a study conducted by Google India and IPSOS, around 94% Indian Smartphone users have used their smart device to access internet from their phone. 56% of smartphone users in the country access the internet multiple times a day (in US, the number stands at 53%). 40% users surf the Net at least once a day. Only 6% never use their phone for connecting to the Web (1% for US). About 76% of smartphone users in India access social networking sites on their devices compared to 54 per cent in the US. 77% of smartphone owners listen to music, while 33 per cent use it for playing games and 32 per cent read newspapers or magazine [13].

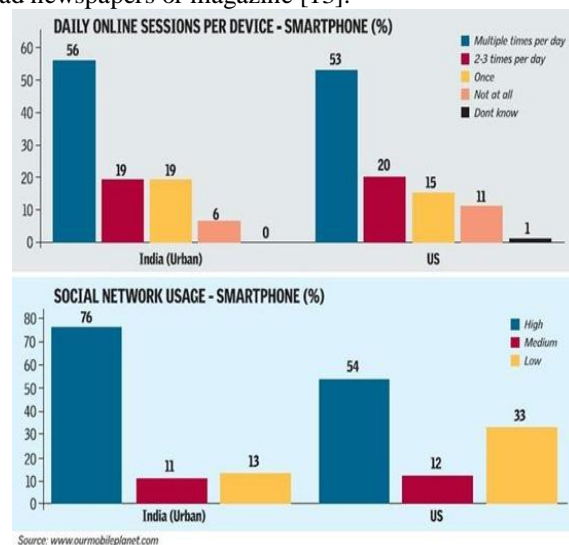


Fig.2 Daily Online Sessions per Device

Thus India is going through a sort of E-Commerce revolution and with more activities happening on the smartphones, experts believe that M-Commerce is becoming the future of E-Commerce[20]. M-Commerce is benefiting from an evolution in consumer behavior and advancement in technology. More and more consumers are shopping across smartphones and tablets.

Consumers are getting more comfortable using mobile devices for payment via everyday activities like buying coffee. These repetitive purchases with mobile apps not only open the way for larger transactions, but provides companies more and more information about their customers to give more relevant offers and increase long-term customer value [21].

IV. CONCLUSION

M-Commerce is buying and selling the products using mobile device, mobile applications and internet. M-Commerce includes the activities of E-Commerce conducted on mobile device. Mobility, flexibility, reachability, ubiquity are the features of M-Commerce where as tiny screen, low processing power of mobile device, security of mobile transactions are the limitations of M-Commerce.

By considering the features of M-Commerce people are using mobile applications for utility bill payment, fund transfer, railway ticket reservations, movie ticket booking and so on. Advancement and low cost of smartphones, reduced mobile internet tariff, busy life of people have attracted the people to do transactions on mobile device. Smartphones are developed to overcome the limitations of M-Commerce. Mobile applications are also developed to give more security to the transactions. Increasingly people are using mobile applications instead of web applications. M-Commerce is progressing and within some years huge number of people will be using mobile applications.

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