



“MOBILE COMMERCE - THE NECESSITY OF TIME”

SUMIT GOKLANEY

Guru Nanak College, Killianwali Punjab University, Chandigarh (India)

Abstract

Mobile Commerce is the subset of e-commerce, which includes all e-commerce transactions, carried out using a mobile (hand held) device. This paper attempts at figuring out the relevance and potential role that M commerce in India is at its infancy. With significant uncertainties and complexities due to evolving business and regulatory models, which are further complicated by the involvement of large member of interrelated players in it. Timely and correct public policy intervention are needed to allow it to unravel its potential and help the country to reap the benefits. The basic purpose of topic is to throw light upon increasing use of mobiles & smart phones in business, trade & commerce industry. The topic has been divided in to four phases. In the first phase, general introduction about mobile commerce has been discussed. The third phase of the topic describes the key statistics on use of mobile & Smart phones by Indian in various market segments. In the final phase, efforts have been made to explain the impact of M-commerce on Indian Youth & issues and challenges which still to be concentrated and addressed in the area.

Keywords: mobile commerce, m-commerce, customers relationship management, M-Banking.

INTRODUCTION

Mobile commerce (M-commerce) is an emerging business paradigm in which the buying and selling of products and services is done through mobile equipment. These equipments are mobile phones, personal digital assistant (PDA) or other hand held wireless devices. Mobile commerce, or m-commerce, has dramatically changed the dynamic between buyer and seller. In the new digital “always connected” age, customers want to feel empowered to use mobile

technologies to make the shopping experience easier and more pleasurable-whenver and wherever they choose to shop.

Products and service Available

Mobile Banking

Banks and other financial institutions use mobile commerce to allow their customers to access accounts information and make transactions, such as purchasing stocks, remitting money. This service is often referred to as mobile banking or M-Banking.

The reserve bank of India said in its latest **Financial Stability Report** that take up of mobile banking in India has been encouraging but slower than expected over the last three years.

Only banks that are licensed and supervised in India by the Reserve Bank of India are allowed to offer Mobile banking there. Currently, 78 banks including a number of regional rural banks and urban cooperative banks have been given permission to provide mobile banking services in India, the Central Bank said.

According to the Financial Stability Report, the mobile banking channel has the potential to be one of

The key tools for achieving financial inclusion in India. "Helped by the rapid spread of use of mobile

Telephony, the growth in mobile banking has been encouraging over last three years," the report noted. ever, the growth and acceptance of mobile banking as a channel for accessing banking services has below expectation."

Mobile ticketing

Tickets can be sent to mobile phones using a variety of technologies, Users, are then able to use them

immediately, by presenting their mobile phone at the ticket check_ Most number of users are now

towards this technology, Best example would be IRCTC where ticket Comes as SMS to users.

App-Based Marketing

With the increasingly widespread use of smart phones, app usage has also greatly increased. mobile marketers have increasingly taken advantage of smart phones apps as a marketing resource allows for direct engagement, payment, and targeted advertising,

SMS & Push Notifications

Push notifications were first introduced to smart phones by Apple with the advent of the iPhone in 2007. They were later further popularized with the Android operational system, where the notifications are shown on the top of the screen. It has helped application owners to communicate directly with their end users in a simple and effective way. If not used wisely it can quickly alienate users as it causes Interruption to their current activities on the phone. It can be much cheaper if compared to SMS marketing for the long run but it can become quite expensive on the short run, because the cost involved in application development. once the application is download and installed provided the feature is not turned off it is practically free, because it uses interne bandwidth only. SMS and push notifications can be part of a well developed in bound mobile marketing strategy.

Mobile vouchers, coupons and loyalty cards

Mobile ticketing technology can also be used for the distribution of vouchers, coupons, and loyalty cards. These items are represented by a virtual token that is sent to the mobile phone. A customer presenting a mobile phone with one of these tokens at the point of sale receives the same benefits as if they had the traditional token.

Content purchase and delivery

Currently, mobile content purchase and delivery mainly consists of the sale of ring-tones, wallpapers, and games for mobile phones. The convergence of mobile phones, portable audio players, and video players into a single device is increasing the purchase and delivery of full-length music tracks and video. The download speeds available with 4G networks make it possible to buy a movie on a mobile device in a couple of seconds.

Location-based services

The location of the mobile phone user is an important piece of Information used during mobile commerce location or m-commerce transactions . Knowing the location of the user allows for location based services such as:

- Local discount offers
- Local weather
- Tracking and monitoring of people

Information services

A wide variety of information services can be delivered to mobile phone users in much the same way as it is delivered to PCs. These services include:

- News
- Stock Quotes
- Sports Scores
- Financial Records
- Traffic Reporting

Mobile Brokerage

Stock Market services offered via mobile devices have also become more popular and are known as

Mobile Brokerage. They allow the subscriber to react to market developments in a timely fashion and

Irrespective of their physical location.

Mobile Purchase

Catalog merchants can accept orders from customers electronically, via the customer's mobile device. In

Some cases, the merchant may even deliver the catalog electronically, rather than mailing a paper catalog to the customer. Some merchants provide mobile websites that are customized for the smaller screen and limited user interface of a mobile device.

Mobile marketing and advertising

In the context of mobile commerce, **mobile marketing** refers to marketing sent to mobile devices. Company have reported that they see better response from mobile marketing campaigns than from traditional campaigns. The primary reason for this is the instant nature of customer decision-making that mobile apps and websites enable. The consumer can

receive a marketing message or discount coupon and, within a few seconds, make a decision to buy and go on to complete the sale – without disrupting their current real-world activity.

For example, a busy mom tending to her household chores with a baby in her arm could receive a marketing message on her mobile about baby products from a local store. She can and within a few clicks, place an order her supplies without having to plan ahead for it. No more need to reach for her purse and hunt for credit cards, no need to log into her laptop and try to recall the web address of the store she visited last week, and surely no need to find a babysitter to cover for her while she runs to the local store.

Mobile Commerce is on hike — Why

According to BI Intelligence in January 2013, 29% of mobile users have now made a purchase with their phones. Walmart estimated that 40% of all visits to their internet shopping site in December 2012 was from a mobile device. Bank of America predicts \$67.1 billion in purchases will be made from mobile devices by European and U.S. shoppers in 2015. Mobile retailers in UK alone are expected to increase revenues up to 31% in FY 2013 - 14. The reasons for increasing users of mobile in business and commerce industry are very much clear :

- Providing wider reach
- Reducing transaction cost
- Streamline business processes
- Competitive pricing
- Video conferencing can also be done through m-commerce
- Flexible Accessibility
- Easy Connectivity

ISSUES AND CHALLENGES IN M-Commerce

Lack of awareness.

Only a few practical m-commerce applications currently exist, although the number has begun to increase As a result, there is relatively little consumer awareness about the value of m-commerce.

Concerns about security

Even more than with Internet-based e-commerce, ordinary users worry about the safety and reliability of conducting business over a wireless connection. Users will engage in m-commerce only if they trust that the transactions made through their devices are secure.

Lack of a simple, standardized payment mechanism.

There is no equivalent in India of the credit card or ATM to provide an easy way to make payments or transfer funds via a mobile phone. Several countries (such as Japan, but not the United States) have already developed phone-based "mobile wallets," but there is nothing like this in India.

Imbalance between service providers and network operators.

On the Internet, any provider who conforms to the Net's standards can put an application online without anyone's permission; on mobile networks, providers have to work with private network operators. In addition, service providers complain that it is difficult to negotiate deals and to arrange for prompt settlements from operators who are focused on attracting more subscribers rather than increasing the revenue per subscriber.

Heterogeneous environment

Another challenge for service providers is that they must develop applications for multiple networks and a wide range of devices. According to Vanu Bose, chief executive officer (CEO) of Vanu Inc., where as there are only two major Web browsers for PCs, in the world of mobile phones there are multiple systems with multiple browsers, so the same application can look completely different on different screens. Without standardization, developing m-commerce applications can be prohibitively expensive.

Lack of high speed connections

Access to high-speed networks is important to providing "rich" applications. The 4G network that will deliver higher speeds for mobile connections are on the way but have not yet arrived in whole India.

Mobile Commerce in India & Its impact on Indian Youth

Recent study states that consumers in India are leading the demand for mobile commerce service, with 97 percent of consumers asking for more mobile interactions with banks, telcos, retailers, utilities and other businesses. The surging popularity of mobile commerce in the country also highlights the increase in the internet penetration with 63 percent off consumers accessing the Internet on their mobiles at least once a day. Over 65 percent of the users feel mobile is a convenient mode of transaction leading to a greater consumer adoption in this segment.

The study found that India scores high in using mobile for banking transactions when compared to other countries in the world. As per the statistics, excluding voice messages, most of the mobile owners turn to their mobile phones for bill payments (78 percent), bank transactions (72 percent) and for setting up a new account (74 percent).

The research shows how mobile-based transactions have gained popularity in India and has become an integral part of the Indian youth's life.. More than half of the youths in India indulge in maximum mobile purchases for entertainment service like cinema, theatre shows, DVDs, sport games (53 percent) followed by music downloads (48 percent). The other key purchases via mobile are clothes/footware/other attires (47 percent) and books or e-books (40 percent). While embracing the appetite for mobile purchase adoption, it is vital that organizations looking to develop products and services for India are able to balance the desire for ease and convenience with security requirements. In the study, 57 percent of the users in the country believe that once they gain confidence in mobile security, they will increase their mobile payment activity. consumers in India are driven to buy goods using their mobile phone by exclusive offers (33 percent) and (26 percent).

Concluding Remarks

As the internet finds its way into our purses or shirt pockets, the devices we use to access it are becoming more personal too. Already today, mobile phones know the phone numbers of our friends and colleagues. They are starting to track our location. Tomorrow, they will replace our wallets and credit cards. One day, they may very well turn into intelligent assistants capable of anticipating many of our wishes and needs, such as automatically arranging for taxis to come and pick us up after business meetings or providing us with summaries of relevant news and messages left by colleagues. But, for all these changes to happen, key issues of interpretability, usability, security, and privacy still need to be addressed.

The following aspects need to be addressed to offer a secure infrastructure for financial transaction over network :

- Physical part of the hand-held device. If the bank is offering smart-card based security, the physical security of the device is more important.
- Security of any thick-client application running on the device. In case the device is stolen, the hacker should require at least an ID/Password to access the application.
- Authentication of the device with service provider before initiating a transaction. This would ensure that unauthorized devices are not connected to perform financial transactions.
- User ID / Password authentication of bank's customer.
- Encryption of the data being transmitted over the air.
- Encryption of the data that will be stored in device for later / off-line analysis by the customer.

REFERENCES:

1. Tsalgatidou, A., Veijalainen, J., and Pitoura, E, Challenges in Mobile Electronic Commerce:
proceedings of leC 2000, 3rd International conference on innovation through E-Commerce, Manchester, UK, November 2000), 14-16.
2. NOKIA — Mobile commerce, <http://www.nokia.com/mobilcommerce/>
3. Schiller, J. Mobile Communications. Great Britain: Pearson Education Limited (2000).
4. Lin, Y.B., and Chlamtac, I. Wireless and Mobil Network Architectures, USA: John Wiley & Sons, Inc. (2001)
5. Wireless Application Protocol (WAP), <http://www.wapforum.org>
6. Tsalgatidou, A., and Veijalainen, J. Mobile Electronic commerce: Emerging Issues. Proceedings of EC-WEB 2000, 1st International Conference on E-Commerce and Web Technologies, London, Greenwich U.K.(September 4-6, 2000), 477-486.
7. Keng, S., Ee-Peng, L. Mobile Commerce: Promises, Challenges, and Research Agenda. Journals of Database Management, v 12, i3 (2001), 4-24.

8. Irvine, C. Emerging Value Propositions for M-commerce. *Journal of Business Strategies*, v 18, i2
(2001),133- 149.
9. Pitoura, E., Samaras, G., *Data Management for Mobile Computing*, Kluwer Academic Publishers
(1998).
10. Pressman, R.S., *Software engineering: A practitioner's approach*, London: McGraw-Hill
(2000).

