Mobile Technology in Commerce

S.Sahayaselvi, Head of the Department of Commerce (S.F), Holy Cross College (Autonomous), Nagercoil.

Abstract

Mobile Commerce is gaining impetus in all walks of life. In comparison to E-commerce, M-commerce is faster in its transactions due to wireless hand set with low cost. It is predicted that in 2030 India will become the world's most populous country out of which 48 per cent will comprise the youth, who tend to be the early adopters of any form of social technology services. The report of Boston Consulting Group, states that around 771 million mobile subscribers are there in India. Therefore this paper highlights the fact that there are number of chances for companies and the citizens of India to shine in the global market due to the advancement of Mobile Commerce. In order to facilitate this, it is the duty of the policy makers and regulators like RBI and TRAI, bankers, mobile service providers and phone makers to introduce Mobile Commerce service widely. This would strengthen the business and trade enormously in the days ahead.

Introduction

Liberalization, Privatization and Globalization (LPG) and Information and Communication Technology (ICT) are the two important boons in the life of a business cycle which brings out a major paradigm shift in the life of an individual as well as in the field of business. Business revolves around every individual, family, organization, and in every nook and corner of the world. Business becomes part and parcel of every one's life. No one can deny that they are not interested in the business. Knowingly or unknowingly every one deals with goods and services on a day today basis. With the advent of M-commerce, business is which was till now confined within the four walls could break its boundaries and conduct transactions in nanosecond speed. There

is a great scope for M-commerce. Several researches conducted by various organizations give a clear picture about the importance of M-commerce in the days to come .For example, the coda research says that mobile commerce will increase at a rate of 65 per cent annually to reach $24 billion in 2015: Huffington post findings assure that M-Commerce will be bigger than E-commerce within 5 years: Allied Business Intelligence (ABI) research states that in 2015, $119 billion worth of goods and services will be purchased via a mobile phone. Hence the business sector is gaining momentum due to the advancement of M-commerce. Today M-commerce penetrates every field like finance, services, retail sector, tele-communication and information

technology. This is a powerful weapon in the hands of the common people to buy and sell their goods and services without going shopping, thus having time for other productive purposes.

Origin of Mobile Commerce

Mobile commerce was born in 1997, when the first two mobile-phones enabled Coca Cola vending machines were installed in the Helsinki area in Finland. The machines accepted payment via SMS text messages. The first mobile phone-based banking service was launched in 1997 by Merita Bank of Finland, using SMS. In 1998, the first sales of digital content as downloads to mobile phones were made possible when the first commercial downloadable ringtones were launched in Finland by Radiolinja (now part of Elisa Oyj). Two major national commercial platforms for mobile commerce were launched in 1999: Smart Money in the Philippines, and NTT DoCoMo's i-Mode Internet service in Japan. Mobile-commerce related services spread rapidly in early 2000. The first book to cover mobile commerce was Tomi Ahonen's *M-profits* in 2002. In April 2002, building on the work of the Global Mobile Commerce Forum (GMCF), the European Telecommunications Standards Institute (ETSI) appointed Joachim Hoffmann of Motorola to develop official standards for mobile commerce. In appointing Hoffman, ETSI quoted industry analysts as predicting "that M-commerce is

poised for such an exponential growth over the next few years". Norway launched mobile parking payments. Austria offered train ticketing via mobile device. Japan offered mobile purchases of airline tickets. Other countries followed it suit, as a result M-commerce spread out its wings far and wide and India is not exempted.

Mobile Commerce in India

There is ample scope for m-commerce in India. According to a recent survey by e-Bay India, 94 per cent of Indian smartphone users access internet on mobile. The survey highlights that shopping is the third most popular category among mobile internet users after e-mail and social networking. Regulators in India like Reserve Bank of India (RBI) and Telecom Regulators Association of India (TRAI), several banks, mobile service providers, and handset manufacturers have come together to leverage M-commerce and take it to the 'unbanked' population. Mobile handset manufacturers are manufacturing Wireless Application Protocol (WAP) enabled smartphones and are offering wireless internet to drive m-commerce.

The Reserve Bank of India approved mobile payment for merchant transactions-the proposal to extend payment facility was put forth by National Payment Corporation of India (NPCI). NPCI rolled out pilot projects

with 6 banks, namely ICICI Bank, Union Bank of India, State Bank of India, Canara Bank, Standard Chartered Bank, and Kotak Mahindra Bank. In May 2011, the RBI relaxed the norms for making payment through mobile phones, it has increased the limit of virtual money a user can load on a cell phone to 50,000 from 5,000. Bharti Airtel has linked a deal with State Bank of India. Comviva is on the verge of providing solutions for microfinance operations especially in data collection work.

The following are the emerging services of mobile Commerce in India

- Increased mobile penetration and use of GPRS (General Packet Radio Service) on handsets has resulted in the digital downloads market to cross Rs.2.55 Billion by end of March 2008.

- Monetary transfers or transactions through mobile phones are found to be much cheaper than traditional bank transfers as the transaction costs are much lower in the former.

- Innovative solutions for daily use such as payment of auto or taxi fares and mobile re-charge.

- Inter-bank transfer services are possible. For example ICICI Bank Ltd, which is India's second largest private bank, has already started offering all its services through mobile phones (called mobile banking) since January 2008. The Standard Chartered bank has launched a service that enables money transfer from any ATM to any mobile phone across the country. The recipient receives a pin number on his or her mobile phone and the sender has to convey the order number to the recipient. Using these two the recipient can withdraw money from the banks' ATMs.

- Feasibile studies are being conducted to offer mobile commerce to microfinance firms to enable them collect payments from remote areas.

Although the M-commerce market in India is still in its initial phase, but with the growth of smartphones, tablets, and mobile devices, M-commerce has started to gain importance in the digital market place. Mobile phone penetration in India is more than 60 per cent and is expected to be over 90 per cent by 2015. Over the last few years, services like M-banking, M-trading, and M-shopping segments have shown significant growth. A recent study shows that 45 per cent of smartphone owners and 53 per cent of tablet owners plan to purchase more products on their handheld devices in the future, predicting a huge opportunity for the service in the country.

The Areas of Development in M-Commerce

Over the past 10 years mobile phones have changed the way that we live and work especially the people in

the metropolitan cities. Many of us consider mobile phones as extensions of ourselves. These days it's more likely that we'll forget our keys than our mobile phone when we leave home in the mornings. The mobile phones are connecting people more than ever before and becoming new glue holding together social interaction and relationships. A mobile phone makes us available to others, be it business or individuals, 24 hours a day, and 7 days a week. The mobile commerce launched into the field of finance, service sector, retail market, banks, telecommunication and information technology. The following are some of the areas in which the mobile commerce plays a significant role in the business scenario both inside and outside India.

Mobile Ticketing

Tickets can be sent to mobile phones using a variety of technologies. Users are then able to use their tickets immediately, by presenting their phones at the venue. Tickets can be booked and cancelled on the mobile device with the help of simple application downloads, or by accessing the WAP (Wireless Application Protocol) portals of various travel agents or direct service providers.

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.

Mobile Banking

Banks and other financial institutions use Mobile Commerce to allow their customers to access account information and make transactions, such as purchasing stocks, remitting money. Several bills can be paid using mobile and the user can also check the available balance, the status of cheques, the status of requested processing and customer care support. User can transact money or transfer money, or pay the bill from his bank account using mobile commerce facilities. Banks also provide round the clock customer care services, which can be used any time through voice calling. Each bank has separate software that can be installed in a mobile phone with the help of a user ID and customer can do financial transactions. ATM cards lost can be blocked. Cheque books can be requested using mobile banking.

Mobile Brokerage

Stock market services offered via mobile devices have also become more popular and are known as mobile brokerage. They allow the subscribers

to react to market developments in a timely fashion and irrespective of their physical location. While in the stock market, the user can access the stock market quotes and get in live touch with current trading status on the mobile. This can be in two forms either voice (customer assistance) or non-voice (sms alerts) or both. The share broker sends market trends and tips of trading on their clients' mobile. Also the brokers can suggest the appropriate stock for intra-day trading to their users.

Auctions

Over the past three years, mobile reverse auction solutions have grown in popularity. Unlike traditional auctions, the reverse auction or low –bid auction bills the consumer's phone each time they place a bid. Many mobile SMS commerce solutions rely on a one-time purchase or one-time subscription; however, reverse auctions offer a high return for the mobile vendor as they require the consumer to make multiple transactions over a long period of time.

Mobile Purchase

Catalog merchants can accept orders from customers electronically, via the customer's mobile device. In some cases, the merchant may ever deliver the catalog electronically, rather than mailing a paper catalog to the customers. Some merchants provide mobile websites that are customized for the smaller screen and limited user interface of a mobile device.

Mobile Marketing

Mobile marketing refers to marketing sent to mobile devices. Companies have reported that they see better response from mobile marketing campaigns than from traditional campaigns. The product shown in the mobile creates demand in the mindset of the young, who tend to be early adopters of any form of social technology services.

Mobile Advertising

Manufactures/wholesalers/retailers are sending their advertisements through mobile phones. The mobile service providers advertise their attractive packages like any special offer, booster packages by sending SMS to their customers.

Service / Retail Sectors

Service and retail sectors are also among the leading sectors, which have benefited most from mobile commerce. M-Commerce has proved a major boon for these sectors. Several business dealings no matter how big or small are being finalized on the mobile phone. The customers would be able to book the order, hire carrier/courier services and above all pay the dues related to it through mobiles.

Content Purchases and Delivery

Currently, mobile content purchase and delivery mainly consist of

the sale of ring-tones, wall papers 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.

Limitations

Despite the fact that the use of M-Commerce is growing rapidly there are still limitations that cause limited use of M-Commerce:

The limited bandwidth that can be supported by mobile devices currently is very small which causes web developers to reduce the usage of rich data. The screen size of a mobile device is very limited. This also limits the viewing capacity of the user.

Due to the slow processing speed web developer would have to use server side scripting which will bring more loads to the servers. As wireless connection of a mobile device to the internet is still a relatively new technology, the cost of using such connection is also expensive as the technology is still under heavy development. Therefore online M-commerce has a long way to go.

Recommendations

The report by Buzz City states that, 35 per cent of mobile users are unaware of the basic mobile transactions available on phone. Hence it is the responsibility of the producers, wholesalers, retailers and agents to organize the awareness campaigns to educate the general public about its utility and its convenience.

For every commerce graduate-mobile commerce can be one of the core papers wherein the students learn the art of transaction through mobile.

The middle man's exploitation can be eliminated to a certain extent, when the producer and customer transact directly via mobile phone. Therefore there is every possibility of direct marketing, due to the advent of mobile commerce.

The Government of India can enact laws or code of conduct with regard to the conduct of business through mobile. Otherwise the innocent and ignorant people might be cheated by the greedy sellers.

Conclusion

Smart mobile devices are now an everyday item and imagining our lives without it is almost impossible now. These devices have drastically transformed the communication world and are all set to become one of the most dominant aspects of the ways people avail services and products. M-commerce is gaining popularity among the Information Technology employees. When they install software (eg. in case of SBI bank it is SBI freedom) the mobile users are able to check the

account balance, mini statements (last 5 transactions) fund transfer from one bank to other banks or within the same bank, request for cheque book, payment of bills like electricity board and LIC, blocking facility when the ATM card is lost and mobile top-up .With this growth we, the Indians should not be satisfied, because 75 per cent of the Indian population who live in the rural villages, may not even know how to operate mobile banking. The mobile banking services have not reached properly in the rural banking sector. Therefore the success of M-commerce in India is exclusively dependent upon the policy makers, corporate giants, and academicians, who in turn should persuade, educate the citizens of India to do their buying, selling and payment through mobile. Thus within 5 to 6 years, India will take a lead in the M-commerce sector.

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