



APPLICATION OF M-COMMERCE IN INDIA

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Abstract: *Mobile computing has spread almost every aspect of life - personal, social and economic systems. The maturity of the technology and its affordance has allowed its application to commerce thereby yielding the area of mobile commerce. It encompasses interactive business activities and processes related to a commercial transaction conducted through communications networks that interface with wireless devices. These systems provide a new way to organizations and users for performing various commerce-related tasks without regard to time and location. The purpose of this article is to explore how mobile applications have been applied in various domains of life in India. We hope that this study will provide useful insights into the application of m-commerce. The authors conclude that M-Commerce may, become the most prevailing method of conducting business transactions because of its obvious benefits.*

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INTRODUCTION:

Mobile commerce (M-commerce) can be viewed as a subset of E-commerce [1, 2] and refers to any transaction with monetary value that is conducted via a mobile network. It is defined as a value-added service that enables mobile users to conduct reliable and secure transactions using well designed mobile applications. Its features may be summarized as follows:

- It allows the user to network with a mobile application everywhere, even while driving or moving.
- It has the ability of an application to offer a service specific to the location of the customer i.e. it provides location based services.
- It has the ability to amend an m-commerce activity according to a customer profile, and use the customer's account for payment.
- The applications are available at any time & anywhere.

These features can be described as ubiquity, Locality and personalization and accessibility.

M-Commerce is slowly becoming a dominant force in business and our social setup. There has been substantial advancement in technology and also the people demand for communications which are not only cost effective but can also deliver fast and easily accessible from anywhere anytime and this has revolutionized the telecommunications industry over the past two decades.

The market for mobile technologies has seen significant growth in the past few years. This is creating new openings for the expansion of m-commerce. According to a study conducted by Forrester Research Inc. Mobile Commerce Forecast 2012-17(US), Total M-Commerce growth will be 129% in 2012, 62% in 2013, 40% in 2014, 29% in 2015 & 21% in 2016. Ericsson estimates that by 2018, 85% of the world's population will have access to mobile-broadband coverage via 3G networks, and 50% will have 4G.

CLASSIFYING M-COMMERCE RESEARCH AREAS:

M-commerce is relatively a new area. Research in this area has been conducted starting from 2'000s. Varshney and Vetter developed a 4-level framework for m-commerce within which M-Commerce operates. It includes M-commerce applications, Wireless user infrastructure, Mobile middleware, and Wireless network infrastructure. M-commerce applications need the technology of wireless user infrastructure, mobile middleware



platform , and wireless network base. [3,4,5] whereas Wireless Use Infra structure includes Mobile Interfaces and , Mobile handheld devices.

This framework includes:

1. Theory of Mobile Commerce covers application development and guidelines for M-Commerce behavior issues, economics, strategies ,business models and legal issues
2. Wireless Network Base covers Networking requirements and Wireless and mobile network
3. Mobile Middleware is software that connects disparate mobile applications, programs and systems. It covers software Agent Technologies, Database Management, Protection issues, Wireless and mobile communication systems, Wireless and mobile Network protocols.
4. Wireless User Infrastructure deals with Mobile networks and Mobile handheld device.
5. Cases & Applications of M-Commerce includes Location-based services(LBS), Mobile marketing, Mobile leisure services and games, Mobile monetary applications, Product locating and searching, Wireless re-engineering etc.

APPLICATION AREAS OF M-COMMERCE:

M-commerce has opened new ventures for mobile phones and services. Mobile Phones which were initially used to make voice calls are now have full spectrum of uses in terms of entertainment (games, songs, videos etc), social networking (facebook, twitter, whatsapp etc.) and commercial transactions and much more. These services are expected to overtake voice in revenue generation for operators. The market for mobile phones – smart phones, handheld computers and wireless PDAs is increasingly motivated by multimedia-based Internet applications M-Commerce applications can be divided into three areas [6]. These are Mobile Payment, Mobile Entertainment and Mobile Business.

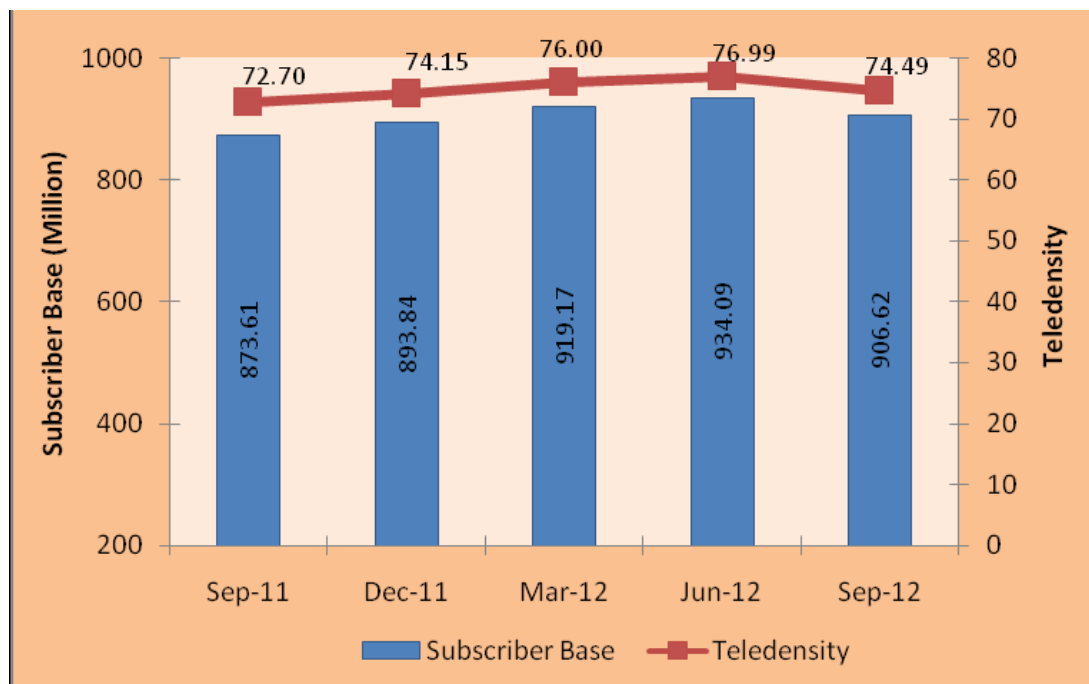
- Mobile Payments: Local Payment, E-Tickets, Transportation and ,Remote Payment Stock Trading Banking
- Mobile Business: Enterprises, Public Organizations, Medical Insurance and Financial Sales
- Mobile Entertainment: Content Download and ,Town information



M-COMMERCE IN INDIA:

HomeShop18 promises that M-commerce will contribute more than 25 per cent of the total traffic in e-commerce (online shopping) by 2015. Its CEO & founder Sundeep Malhotra says "In the next three years mobile commerce will constitute more than 25 per cent of the total traffic in e-retailing,"

- As per IAMAI (Internet and Mobile Association of India) and IMRB (Indian Market Research Bureau), India is expected to have close to 165 million mobile Internet users by March 2014, up from 87.1 million in December 2012 since more people are accessing the web through mobile devices..
- TechNavio's report of the "Mobile Commerce Market in India 2012-2016" estimate the Mobile Commerce market in India to raise at a CAGR(Compound Annual Growth Rate) of 71.06 percent over the period 2012-2016. One of the prominent factors accelerating this market is the growth in mobile subscriptions. The M- Commerce marketplace in India has also been receiving government and regulatory support.
- Acc. To TRAI's The Indian Telecom Services Performance Indicators July-Sept 2012 released on 11 Jan. 2013 ,the mobile subscribers for the year 2011 & 2012 are as follows: [ibid]





PROMISES & PROBLEMS:

M-commerce revolution is bound to create a deep impact in India where the Mobile phone usage is on increase (all companies including Apple, Samsung, Blackberry, Nokia, Micromax, LG, HTC, are majorly promoting these) and new customer friendly applications are being developed so as to improve upon the services and to make them more personalized, time bound and those which create awareness. The potential of M-commerce is being utilized by corporate and there is much more to happen in coming years. The upcoming 4G systems are considered to have better security, higher speeds, more capacity, less costs, and intelligent devices which will help in achieving m-commerce applications. Improved wireless security and privacy using data encryption and user education and the wide deployment of 4G systems, it is likely that m-commerce may, become the most prevailing method of conducting business transactions. We are already witnessing payments, ticket bookings, data transfer including photographs with lesser times, easy access to information worldwide etc. through mobile applications,

But M-commerce has certain limitations in terms of security, limited bandwidths, low data transmission speeds, inadequate coverage, limited access to financial services, health concerns and government regulations. These resources are much better in developed countries as compared to India.

CONCLUSION:

Although M-Commerce is novice, it is promising a great Business revolutionary change in India. It has a big market in India which is yet to be explored. A large population having access to mobile devices is a potential market for M-Commerce applications. There is a growing awareness among the business community in India about the would-be benefits of M-Commerce. On the other hand, M-commerce has presented certain challenges such as lack of trust, expensive, security in Indian business environment .But one thing is certain that is **Mobile commerce is anticipated to grow by leaps & bounds in India** . It has a great scenario in the second most populated country of World.

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