

---

# **A Review of Literature on Mobile Commerce Research and Applications**

**Elangbam Binodini Devi**

Assistant Professor,  
Department of Business Management,  
H.N.B. Garhwal University (A Central University)  
Srinagar-Garhwal, Uttarakhand, INDIA.  
email: [binodinielangbam@gmail.com](mailto:binodinielangbam@gmail.com).

(Received on: May 15, Accepted: May 20, 2017)

## **ABSTRACT**

Mobile is being utilized to order goods and services, purchase and sale of products in M-commerce. Transactions are possible only through internet access. Nowadays maximum companies in India initiated mobile phones as a technique for conducting growing business. Sectors such as Financial sector, Telecom sector, Banking & Real Estate applied mobile commerce as a medium for trade dealings. Web data explore, Short Message Services, Multimedia Message Service, internet banking, game, email, chat, weather forecast, Global Positioning Service) etc are some of the current mobile internet applications.

A review on previous literature on research and applications of mobile-commerce are discussed. The paper highlights its development level and the essential techniques & medium are also studied.

**Keywords:** Business, internet access, mobile phones & transaction.

## **INTRODUCTION**

Mobile commerce is propagation of electronic commerce. Business transactions can be done at any location, more secure and commodious. M-Commerce offers welfares like accessible at any place, more assure and convenient. Normally M-commerce is practiced to buy air, railway and movie tickets, pay insurance premium, buy gifts, shopping, recharge mobile accounts, provident fund and income tax payment. M Commerce with omnipresence, suitable and individualize will become the adjacent mode of business. Transactions with pecuniary are conducted through mobile telecommunications network. However disadvantages of its mobile applications cannot be ignored.

## REVIEW OF LITERATURE

*Shintaro Okazaki (2005)*

Several E-commerce journals and some business journals have published many articles on E commerce and M commerce. Electronic Markets in 2002 was the first, followed by International Journal of Electronic Commerce, Decision Support Systems and Journal of Business Research and many more. Number of research papers on mobile was undertaken by Barnes. The study was based on preliminary frameworks for value-chain creation & wireless advertising. His ferment were conceptual, but became a useful base for others' empirical explorations.

*E.W.T. Ngai & A. Gunasekaran (2007)*

Various crucial applications of Mobile commerce comprised of financial applications, advertising, inventory management, browsing, proactive service management, wireless re-engineering, auctions or reverse auctions, entertainment and games, mobile offices, mobile distance education & wireless data centres. Mobile commerce entertainment services & games prevailed in the m-commerce applications globally in the future.

*Murugadoss K Panneerselvam (2013)*

Mobile was introduced in India in the year 1995 and speeded in a decade that it has become a necessity for every individual; also penetrated in Indian rural market. Mobile users had to 52.41 crores in December, 2009 from 7.94 lakhs in December, 1997 (COAI and TRAI). This record of 13 years made India the quickest uprising mobile phone market. E-commerce activities conducted any time or location through Mobile commerce. Technologies being utilized in Mobile commerce might be listed as: Global System for Mobile Communication and High Speed Circuit Switched Data protocol based on GSM. General Packet Radio Service wireless service based on GSM, Enhanced Data rate for Global Evolution, UMTS (Universal Mobile Television System), Microbrowsing, WAP (Wide Application Protocol) and Bluetooth.

The first mobile commerce was initiated in Helsinki area of Finland by Coca-cola Company in 1997 through vending machine by making payment through mobile phones. First mobile Banking service was also started by Merita bank located at Finland in 1997.

*Sujata P. Deshmukh, Prashant Deshmukh & G.T. Thampi (2013)*

Majority of Indian population did not own landline or bank account, but surprisingly they had a mobile handset with enough balance to transact. Only 2 % of Indian population happily read in English, mobile commerce would be in grand success if the content in numerous local languages. As per the forecast made by TechNavio's analysts, Mobile Commerce market in India would raise at a CAGR 71.06 % during 2012-2016. As per the study of KPMG, consumers in India and China headed for personal banking and retail transactions through mobiles.

*Kush Dhingra, Abhishek Bhardwaj, Aashish Aggarwal (2015)*

Mobile is used for messaging or calling, it is also familiar for searching information and purchasing & selling activities. Wireless application protocol (WAP) is the technology used for business dealings in mobile phones. Improved relationship with customer is the resultant outcome of M-commerce. Government of India had speeded in the upgradation of internet connectivity; it's time to make people aware about M-commerce.

*Anshu Agarwal & Dr. Pravin H. Bhatnawal (2015)*

Mobile service providers namely Bharti Airtel, Reliance and Vodafone had cut down their 3G rates in India ranged from 70 percent to 90 percent. As per the statement of TRAI, over 431 million internet capable mobile devices availed in the country. With it large number of consumers could enjoy easy accessibility. Banking services in mobile raised tremendously, majority of banks (Axis Bank, State Bank of India, Bank of Baroda etc.) allowed banking services, like credit card payment, bill payment, on-the-go access to financial services & real-time personalized messages.

Although the charge of 2G found affordable to major population, but its speed proved quite low that not worthy for purchases and its payments. Indians could not bear the reduced charge of 3G, high rate 4G services also found but in limited cities and locations.

*Satinder & Niharika (2015)*

India stood as the second greatest mobile market in the world. On the basis of the survey of IAMAI and IMRB international, internet users of India accomplished 302 million on December 2014. It was accorded as a cusp year for India in M-commerce sphere. Smart phone penetration in Indonesia was shown as 23 percent, India as 18 percent and Philippines as 15 percent as per the survey of Nielsen hold on 2014. PayPal mobile commerce stated that mobile phones transactions crossed over 250 percent in 2014 by examining the last financial year. Cell phones furnished mixture of data, included of stock data, traffic information, news, sport score, financial record, multi casting system etc.

Wi-Fi acted as the connection commonly used by mobile users in malls or internet cafes and in turn resulted in to slow pick up of 3G connections in India with a penetration level of 3.4 percent by January 2014. M-commerce had disadvantages of wireless network coverage, security issues, technical unsuitable in devices, low standard, decelerate access speed & expensive phones' prices.

*Rupinder Kaur & Sofia Singh (2016)*

Incurion of smart phone was 8 percent till end of 2014 and will increase to more than 20 percent in 2017. Wireless mobile device is the instrument through which buying and selling of goods and services could be done. Internet, wireless and E-Commerce are the components of M-Commerce. Indispensable technologies for mobile commerce might comprise of: device-smart phones, personal digital assistant; operating system- symbian (EPOC), palm operating system, pocket personal computer, proprietary platforms; presentation standards- HTML, WML, HDML, i-Mode; Browser- Phone.com UP Browser, Nokia browser, MS Mobile Explorer and other micro-browsers &; Bearer Networks- GSM, GSM/GPRS, TDMA, CDMA, CDPD, paging networks.

In India, mobile commerce was in the beginning stage of its development. It had been said that mobile phone devices used in the country would be turned into smart phones up to 80 percent. E-tailers recognize the importance of mobile commerce in increased sales. Snapdeal.com had a record of figuring 50 percent of sales from customers using mobile devices, even though on one year ago the share of mobile purchases was 5 percent. Flipkart accounted for 20% of its e-commerce orders from mobile devices used customers & targeted to reach up to 50% in future.

## **CONCLUSION**

The succeeding mode of business is the mobile commerce. Matured financial area and increased number of smart phone subscribers led m-commerce market developed in India. When we discussed about growth in mobile commerce, some years would take to bring in level of China's mobile transactions development. Technologies for getting the customers might be named as SMS (Short Message Service), MMS (Multi-media Message Service, Mobile Web Applications, Bluetooth or Bluecasting, Location-based marketing and Voice.

## **REFERENCES**

1. Agarwal, A. & Bhatawal, P.H. 2015. M Commerce in India: Promise and Problems. *International Journal of Research in Computer and Communication Technology*, 4 (4): 273-276.
2. Deshmukh, S.P., Deshmukh, P. & Thampi, G.T. 2013. Transformation from E-commerce to M-commerce in Indian Context. *IJCSI International Journal of Computer Science Issues*, 10, 4(2): 55-60.
3. Kush Dhingra, K., Abhishek Bhardwaj, A. & Aggarwal, A. 2015. M-Commerce. *International Journal of Engineering Research and General Science*, 3 (2), Part 2: 704-706.
4. Ngai, E.W.T & Gunasekaran, A. 2007. A review for mobile commerce research and applications. *Decision Support Systems*, 43: 3 – 15.
5. Okazaki, S. 2005. New Perspectives on M-Commerce Research. *Journal of Electronic Commerce Research*, 6 (3): 160-164.
6. Panneerselvam, M.K. 2013. Mobile Commerce – A Mode of Modern Business. *Asia Pacific Journal of Marketing & Management Review*, 2 (7): 141-149.
7. Rupinder Kaur, R. & Sofia Singh, S. 2016. Mobile Commerce: Indian Perspectives. *International Journal of Innovative Research in Computer and Communication Engineering*, 4 (3): 4320-4326.
8. Satinder & Niharika 2015. The Impact of Mobile Commerce in India: A SWOT Analysis. *2<sup>nd</sup> International Conference on Science, Technology and Management- University of Delhi*: 2503-2513.
9. [www.conferenceworld.in](http://www.conferenceworld.in)