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# Intention to Adopt M-Commerce over E-Commerce

Sameeah Alvi

BBA Student at KASB Institute of Technology

Ume Laila

BBA Student at KASB Institute of Technology

Kamran Khan

PhD Scholar at Iqra University

Assistant Professor KASB Institute of Technology

Karamatullah Hussainy

PhD Scholar at Preston University

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#### Abstract

M-commerce is the subsequent generation of e-commerce which facilitates the user to access internet without requiring a place for plug-in. Today, mobile is not merely used for sending messages or for calling but it serves a wide variety of other purposes that are beneficial in corporate world. M-commerce helps in improving relationship with customers. It is an area that is still under development phase and offers potential prospects for further research and applications. Since the subject is at the stage of progress, this research help explore how and why m-commerce is gaining continuous popularity and taking over e-commerce and initiates further research on the reasons of growth of m-commerce expertise. Prior studies suggest that ecommerce and m-commerce are not only leading edge for doing global business and trade but also offers multiple benefits to the business, government and consumers on substantial scale. The incredible growth in mobile phone access shows that majority of people have adapted to mobile phone and advancement in mobile technology and its usage is not limited for making basic phone calls, but can be used almost in every sector of human activity if one has the required technological knowledge. Since the time e-commerce has evolved, the world of business has observed a drastic change in the way trade activities are conducted. On the other hand, influx of m-commerce has given rise to valuable commerce transformation. Significant advancement has been made in mobile Internet and SMS-based mobile advertising adoption, but there are other vital topics that need to be addressed and this research further explore one such area, that is, mcommerce in banking sector. For any country banking sector is an integral part of its financial services industry. Structure of the Banking Sector of Pakistan as it being a developing country and having a comparatively low level of income, is requisite growth rate is low as there is hardly any savings. The newer concept in Pakistan is the standard of living along with the quality of life

which focuses on individual aspects of human nature. These have led to foreign aids which have been the holding force to bridge the gap for us between our savings and investments. Simple random sampling technique has been used to identify the segment whereas customers of four banks are taken as respondents in this study. The demographic characteristics include workforce of eighteen years and older and who have access to Internet, Mobile Phone and Bank account. Questionnaire used in the study is based on 5 points Likert Scale whose reliability is also checked before conducting the analysis. Multiple- regression, ANOVA and Correlation analysis has been used to test the hypotheses. This paper summarizes the progress and the future directions of m-commerce which depicts that the arrival of m-commerce has added to the margins of effective commerce revolution and is constantly taking over e-commerce and ecommerce activities. Future researchers may also identify the importance of m-commerce in other industries as well.

**Keywords**: *M*-Commerce, *E*-Commerce, *SMS*-Based Mobile Advertising, Technological Knowledge, Mobile Phone Access, Mobile usage

#### Introduction

#### **Overview and Background**

Mobile commerce or M-Commerce refers to the transactions being done by wireless handles devices like Personal digital assistants and mobile phones. M-Commerce is an extension to E-Commerce where internet and computer networks play a dominant role in the trading of goods or services. The emergence of latest technologies has made it possible to conduct businesses from wireless network rather than wired systems. For instance, e banking can now be easily done through mobiles or PDA's and personal computers are no more required.

Thus, it can be said that "M-Commerce is a subset of E-commerce". M-Commerce is beneficial to both, individuals and corporate. It facilitates each individual to do his/her work efficiently in accordance with their schedule. It allows them to do a number of activities in simple ways rather than doing it physically thus, saving time. In short, users get a quicker and flexible access. M-commerce can also be defined as "*any transaction having a monetary value that can be conducted through a mobile communication networks or a Wi-Fi network*" (Dhingra & Bhardwaj, 2015)

Owing to the advanced and refined communication technologies, the web-enabled mobile phones have seen a universal speedy growth. But, with respect to empirical investigations, M-Commerce has hardly seen any growth because of substantial ambiguities engaged in mobile research. One such issue is that M-Commerce does not have any standard in terms, conception, and theories. Even though the infrastructure of wireless technology is different everywhere but researchers are likely to examine the word "M-Commerce" without taking into consideration the particular circumstances and fundamentals of what they are exploring. In general, m-commerce obtains position in a strategic area called a "mobile portal" where 3G networks provide large scale usage of internet and multimedia applications. Particularly on mobile phones a very little work has been done to address the question of interactivity of mobiles though its been argued that mobile phone is an alternative technology to connect globally instead of internet. (Okazaki, 2005)

In the current era, the development in M-Commerce is due to the improved and greater mobility of people. There has been a considerable increase in the use of internet through mobile device. IDATE shows that the quantity of people in Europe using internet through mobile is continuously increasing. This illustrates the rising mobile lifestyle. Different studies recommend

that with the utilization of mobile internet, firm can generate more business prospects in the marketplace. (Cao, Lu, Gupta, & Yang, 2015)

The progress seen in mobile technology in 21<sup>st</sup> century has become a part of every person's life at its each aspect whether it is work, education, social life, entertainment or anything. Besides this, M-Commerce is also playing its essential role in corporate world by building new prospects in the field of mobile advertising, mobile banking, mobile entertainment, mobile learning and mobile payment. Contrary to usual internet, mobile internet provides a number of advantages like customization, mobility, and convenience. Having these advantages, now the activities of electronic commerce can be conducted through mobile phones. (Wong, Tan, Ooi, & Lin, 2015)

Now days, the leading source of communication is mobile phones mainly because they are cost effective and offers ease to its customers as compared to landline telephones. E commerce businesses are now done through mobile commerce but the main variation between the two is that Ecommerce is a wireless internet for carrying out financial services and purchases. Mobile commerce has involved enormous interchange because of its exceptional distinctiveness. The booming recognition has enforced the commercial world to build up a new exchange stage that can reach to masses. (Jahanshahi, Mirzaie, & Asadollahi, 2011)

Without any doubt, the wireless, mobile networks and devices are developing these days. Since 1990s there has been a great shift in techniques conducting business with the appearance of the electronic commerce. Every aspect whether educational, trade, and even individuals have been concentrating on this new method of conducting business online. Highly developed and mature wireless and mobile expertise smooth the progress of e-commerce done from a wired network to a wireless network. M-Commerce refers to those transaction with financial value

conducted through a mobile network. When e-commerce is conducted by clients in the form of electronic banking or purchasing of products, they don't have to use the personal computers for the process. Certainly, they can merely use some cell phones such as smar phones of personal digital assistants to perform their e-commerce actions. (Ngai & Gunasekaran, 2007)

#### **Problem Statement**

After the uprising of E-Commerce Mobile Commerce has become the newest topic in the present day. This study will focus on the potential grounds behind the popularity of M-Commerce over E-Commerce. In addition, it will discover the main factors of M-Commerce adaptation in the businesses and its role in the business growth.

# Significance of the study

Due to mobile commerce, a significant change has been observed for services of individuals, organizations and society. As this study focuses on the efficiency of the main factors of Mobile commerce (i.e. feasibility, flexibility and reliability), it will provide guidelines to the businesses in the field of banking to facilitate them get competitive advantage by using it as a strategy.

#### Scope

Increasing numbers of mobile subscribers leads to the growth potential of Mobile Commerce, that's why it is being adapted by the business to serve their customers more effectively than E-Commerce. This paper will cover all the aspects of technological approaches that lead to a revolution in mobile industry and its implication in banking.

## **Overview of Industry**

For any country banking sector is an integral part of its financial services industry. The Structure of the Pakistani banking segment has significantly changed over the last 10 years, particularly subsequent the privatization of the state-owned banks that is due to the 1990's amendments of the Banking Companies Ordinance which launched the system of financial sector reforms by agree to privatization of the state-owned banks. The sector observed an exceptional growth in 2001-03 where deposits increased by almost100%. At present there are 39 banks, including 11 international banks, working in Pakistan. The competition is comparatively high, especially later than challenging capital adequacy standard set down by the State Bank of Pakistan to develop the stable and sustainable banking system to create a center of attention foreign investment and prevailing profitable customers are the only alternative left to banks for endurance.

#### **Objectives**

The primary purpose of this research is to analyze how & why M-Commerce is gaining continuous popularity & taking over E-Commerce. It also focuses on a crucial assessment of the occurrence of Mobile Commerce & to evaluate its future capacity. This study focuses mainly on the convenience, probability and approval of Mobile Commerce services in the banking sector.

- To access how usability makes M-Commerce more feasible than E-Commerce.
- To study the affect of awareness & know-how of m-banking among mobile subscribers.
- To examine the accessibility factor that gives M-Commerce an edge over E-Commerce
- To evaluate how flexibility makes it convenient for users to apply M-Commerce

• To suggest recommendation regarding creating effective cell phone banking system.

## Hypotheses

HA1: There is a significant relation between usability and M-Commerce. Ho1: There is no significant relation between usability and M-Commerce

HA2: There is a significant relation between technological know-how and M-commerce. Ho2: There is no significant relation between technological know-how and M-commerce.

HA3: There is a significant relation between convenience and M-commerce.

Ho3: There is no significant relation between convenience and M-commerce.

HA4: There is a significant relation between flexibility and M-commerce.

Ho4: There is no significant relation between flexibility and M-commerce.

HA5: There is a significant relation between Security and M-commerce.

Ho5: There is no significant relation between Security and M-commerce.

## Summary

M-Commerce is an addition to E-Commerce where internet and computer networks play a dominant role in the trading of goods or services. Through this research we will get to know the activities that are now being performed by E-Commerce and what more could be done. We will also explore the relationship of variables such as Security, flexibility, accessibility technological know-how and usability with M-Commerce.

### **Literature Review**

M-commerce allows transaction to be done through a wireless telecommunication network. There is need for expansion of a number of e-Commerce set of rules which could improve the usability, accessibility and ensure the confidentiality of fair exchange. However due to lacking in these factors, it is now being over taken by Mobile Commerce. (Dhingra & Bhardwaj, 2015) The major dissimilarity in mobile commerce characterization with electronic commerce is that the latter uses the internet to perform financial services and purchasing uses wireless technology. Mobile commerce has attracted massive traffic because of its exceptional features. And that is why it is being implemented by many businesses such as Banking. (M N. J., 2013) Initially, mobile banking was offered through SMS. But, when smart phone was introduced, it offered mobile wed and supported mobile banking. Until 2010 mobile banking, has been executed via mobile web or SMS. Rahmath, Hundewale, & Kam (2011) the services which are offered by mobile banking are mini statements, account information, checking history of accounts, alerts if any activity happens in the account, mutual funds (investment and redemption), requesting for cheque books and checking of account balance (ishangoma, 2011).

#### Usability

The main benefit of mobile commerce is to help public do their jobs as per the schedule and smoothly as it is easy to carry mobile which helps user to avoid to go to work physically or to a certain place for performing tasks (Dhingra & Bhardwaj, 2015; Hussain & Kutar, 2012). In wireless applications, usability refers to the studies design limitation forced by a bandwidth limitation and small display of handheld devices (Chan, Fang, Brzezinski, Zhou, Xu, & Lam, 2002). The usability of mobile commerce is one of the biggest challenging issues to adopt mobile

commerce. New challenges in the design of usability in mobile commerce that is not limited to the small screen size but the input method too. Kaur (2014) m-commerce is consequently a gigantic signal of business. The distance between customer and purchaser is considerably reduced using the m-commerce. (Jakimoski, 2014)

HA1: There is a significant relation between usability and M-Commerce

## Security

The most important element in m-commerce is security issues. To make customers feel comfortable when using mobile phones, quality of the security level provided is ensured. (Yazdanifard & Elkhabir, 2011) mobile commerce requires strict controls over its security in performing transactions as in wireless access procedure there are various restrictions. Xu (2013) the information residing in the mobiles and integrity of the information within the wireless network has to be given much importance. (Prakash & Balachandra, 2015) Lack of recognition of the relative advantage and other aspects like risk and social security are a major barrier to a person's intention to adopt. AUDI (2016) stated that the security is one of the key factor of mobile commerce that may be ensured via digital signatures which is ensured through digital signatures for verification of consumer and commercial and Strong Encryption. (Hsieh, 2007)

HA2: There is a significant relation between security and M-Commerce

#### Feasibility

M-commerce provides numerous advantages and utility through which businesses can benefit. It may be expected that the mobile commerce helps organizations change in their way s to do the businesses, and if put into practice and managed suitably, it might be able to help to develop the

efficacy and usefulness of how their business function. Xu (2009) stated that its an another way which has been made possible in mobile commerce concept, where cell phones can pay their strong role in the society. Deshmukh, Deshmukh, & Thampi (2013) suggested that the number of mobile phone users having access to internet has increased which generates a good likelihood for the public to go ahead for the latest way of business known as mobile commerce (Kord, Karimzadegan, & shastan, 2012).

HA3: There is a significant relation between feasibility and M-Commerce

## Convenience

M-commerce lets the users access their data at any time and any place in a simple way. This accessibility feature acts as an advantage for m-commerce over e-commerce. In case of e-commerce, the users can access their data at a specific place only through specific device, but m-commerce simply requires a Mobile-phone. (Jahanshahi ET AL., 2011) On one hand, the distinctive challenge for mobile commerce is that it needs a continuous change as per the need of external environment. On the other hand, mobile commerce provides the aptitude and convenience to perform the transaction anywhere through wireless technology. Xu (\2009) stated that the companies may access the users through their cell phones and for users they may also take benefits of mobiles phones by using different social media applications. Dhingra & Bhardwaj (2015) explored that the Internet Technology is an open system of catering for high productivity, applications designs, maintenance and integration requirements (Hsieh, 2007; M, N, Jagannat, & Chahar, 2013).

HA4: There is a significant relation between accessibility and M-Commerce

## **Technological Know-How**

The progression in technologies and emergence of modern services depict that the world is now transforming itself from e-commerce to m-commerce. Studies show that majority of the people are now moving towards m-banking system because it helps in accessing financial services in a convenient way. People who are not using any m-banking service have shown willingness to use it due to apparent significance of technology in monetary convenience. The behavior of usage of mobile subscribers or consumers in technology usage i.e. mobile banking predicted is mainly dependent on perceived value and perceived ease of the technology that results in the intentions to perceive the technology. Ishangoma, (2011) argued that wireless technology adds ease to m-commerce use. Despite its advantages, the users of the m-commerce application have unease due to the incomplete information of the new technologies and systems (Xu, 2013).

HA5: There is a significant relation between technological know-how and M-Commerce

#### 2.6 Intention to Adopt M-Commerce

Ajzen & Fishbein (1975) defined intentions as the indicator of one's willingness to execute a given behavior. The theory of planned behavior given by Ajzen & Fishbein (1975) highlighted the relationship between intention and behavior, attitude in which intentions are measured as the direct variable in explaining the behavior of the consumers. This study identifies the stick out belief of M-commerce users. Since the usage of mobile commerce is at the early stage, the understanding of attitude of consumers the adoption of this technology is difficult. It is therefore recognizing the need to investigate the initial adaptation of M-commerce (Joubert & Belle, 2013; Hassan, Kouser, Abbas, & Azeem, 2014).

## Methodology

## **Data Collection**

In this research, survey method has been used by developing questionnaire to collect data from different people. Our target was 200 respondents. The criterion of selecting the respondent to get our questionnaires filled was to choose those who have a bank account, internet and a Mobile phone. We approached people in two ways i.e. through online medium and through manual questionnaires. We shared the link of our online questionnaire on linked-in and with some other employees. Manually, we got it filled from MBA students, some teachers, family members and their office colleagues, friends and relatives but made sure that they all meet this criterion.

# **Sampling Technique**

Convenience sampling technique has been used. This is because we collected data from the people who were convenient to us and were meeting the criteria too.

#### **Sample Size:**

The target of this research paper was to reach 200 respondents and for those more than 200 questionnaires was distributed among them 144 were collected through online medium i.e. Google docs and more than 100 were collected manually among them 10 were found doubtful.

## **Instrument of data Collection**

The instrument that has been chosen for the data collection are questionnaire and online medium i.e. Google Docs

# **3.5 Research Model**

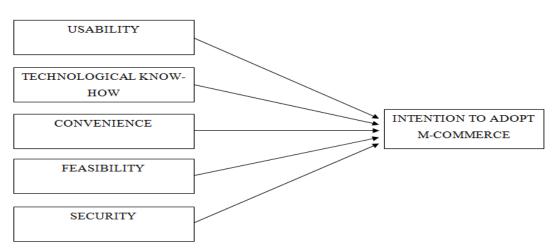


Fig. 1: Research Model on E-Commerce being taken over by M-Commerce

# **Statistical Technique**

To test the hypotheses, the study uses correlation and regression techniques to get the desired results as there are several indicators that are affecting the dependent variables. The regression analysis is a technique which tells the total impact of predictors on the dependent variable.

# **Result and Analysis**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the | Durbin-Watson |
|-------|-------------------|----------|-------------------|-------------------|---------------|
|       |                   |          |                   | Estimate          |               |
| 1     | .604 <sup>a</sup> | .365     | .348              | .56888            | 2.018         |

a. Predictors: (Constant), knowhow, security, feasibility, Convenience, usage

b. Dependent Variable: IntentionToAdoptMCommerce

Interpretation: R = Simple correlation + 0.604 (high degree of relation)

R square total variation in dependent variable 36.5% i.e. Very less variation

Model Summary<sup>b</sup>

# **ANOVA**<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
|       | Regression | 36.041         | 5   | 7.208       | 22.273 | .000 <sup>b</sup> |
| 1     | Residual   | 62.783         | 194 | .324        |        |                   |
|       | Total      | 98.824         | 199 |             |        |                   |

a. Dependent Variable: IntentionToAdoptMCommerce

b. Predictors: (Constant), knowhow, security, feasibility, Convenience, usage

Interpretation: The statistical significance of regression model that was run hence prediction is

# **Coefficients**<sup>a</sup>

| Model |             | Unstandardized |            | Standardized | t Sig. |            | Collinearity |       |
|-------|-------------|----------------|------------|--------------|--------|------------|--------------|-------|
|       |             | Coefficients   |            | Coefficients |        | Statistics |              | ics   |
|       |             | В              | Std. Error | Beta         |        |            | Toler        | VIF   |
|       |             |                |            |              |        |            | ance         |       |
| 1     | (Constant)  | .072           | .212       |              | .339   | .735       |              |       |
|       | Convenience | .121           | .087       | .094         | 1.385  | .168       | .704         | 1.421 |
|       | Security    | .226           | .073       | .201         | 3.085  | .002       | .773         | 1.294 |
|       | Usage       | .161           | .098       | .126         | 1.653  | .100       | .564         | 1.773 |
|       | Feasibility | .180           | .085       | .151         | 2.131  | .034       | .655         | 1.528 |
|       | Knowhow     | .290           | .084       | .253         | 3.464  | .001       | .614         | 1.628 |

a. Dependent Variable: IntentionToAdoptMCommerce

less than 0.0005 which is less than 0.05 and it indicates that the regression model statistically significantly predicts that outcome variable i.e. Intention to adopt M-Commerce.

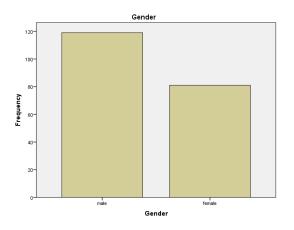
# Coefficient

Interpretation: It provides necessary information to predict whether E-Commerce is being taken over by M-Commerce or not. Regression Equation

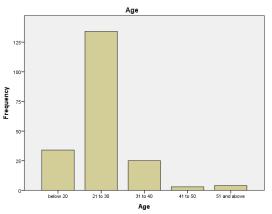
Intention to Adopt M-Commerce = 0.072 + (0.121 + 0.226 + 0.161 + 0.180 + 0.290)

Demographic Analysis

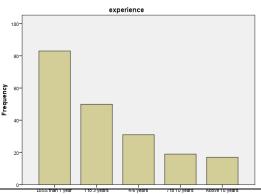
Gender: Out of 200 respondents, 120 were male and 80 were female. Our research did not focus on gender, as it is suitable for any person having a mobile and internet access.



Age: Out of 200, 125 respondents' belonged to the age group of 21-30 years as this is the age group that perform majority of the transactions through mobile phone.

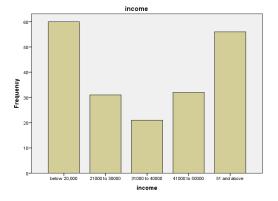


Experience: The experience of 80 respondents was less than one year but 120 respondents had experience of more than one year, hence they are more into mobile banking and transaction through mobile.



experience

Income: They income of 60 respondents was below 20,000 and the income of 140 respondents was above 20,000. Hence, 120 respondents were dealing in mobile banking more often.



#### Conclusion

The presence of M-commerce has enhanced the way how we conduct business. Still there is a lot of work, which can be done for M-commerce for its growth. Due to Mcommerce, our time saves because of online transaction on mobile which is less expensive as compared to E-commerce. This research combines different opinions of consumers about the different aspects of m-commerce and e-commerce. It analyses and examines the effects of apparent differences in technology and value between m-commerce and e-commerce. From the above discussion we can easily state that commerce has gone through radical changes to keep pace with varying world. E-commerce had played vital role for businesses around the world. We believe that m-commerce is becoming increasingly persistent. The presence of e-Commerce has revolutionized the way we conduct business. The introduction of m-Commerce has further pushed the boundaries of innovation. The dividing line between e-Commerce and m-Commerce

is vague at present. This paper has considered where the dividing line should be and concludes that usage, know-how and technology define key characteristics that define both forms of virtual commerce. The mobile Internet channel has unfastened new potential.

## Recommendation

Since this research is only limited to Karachi so in future it can expand to other cities and provide more exposure to the firm and organization to know more about the adaptation of M-Commerce. By exploring it, firms/organization will get to acknowledge them regarding the behavior of the people towards acceptance of M-Commerce and also improves their online services by ensuring the security of M-Commerce. Moreover, we restrict this research to online mobile banking so in future it will be conducted in other sectors of the business. M-Commerce technology is getting popular day by day and further investigation can be done as it offers a variety of growth opportunities. Additional perceived variables such as value, quality, and benefits may be incorporated in future study.

## References

- Audi, M. F. (2016). Adoption of Mobile Banking Applications in. *Journal of Internet Banking and Commerce*, 5.
- Cao, Y., Lu, Y., Gupta, S., & Yang, S. (2015). The effects of differences between e-commerce
- and m-commerce on the consumers' usage transfer from online to mobile channel. International Journal of Mobile Communication, 2.
- Chan, S. S., Fang, X., Brzezinski, J., Zhou, Y., Xu, S., & Lam, J. (2002). Usability For Mobile Commerce Across Multiple Form Factors. *Journal of Electronic Commerce Research*, 187-199.
- 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*, 55- 60.
- Dhingra, K., & Bhardwaj, A. (2015). M-Commerce. International Journal of Engineering Research and General Science, 1.
- Hassan, M., Kouser, R., Abbas, S. S., & Azeem, M. (2014). Consumer Attitudes and Intentions
  to Adopt Smartphone Apps: Case of Business Students. *Pakistan Journal of Commerce and Social Sciences*, 1-17.
- Hsieh, C. T. (2007). Mobile Commerce: Assessing New Business Opportunities. Communications of the IIMA, 88-96.
- Hussain, A., & Kutar, M. (2012). Apps vs Devices: Can the Usability of Mobile Apps be Decoupled from the Device? *IJCSI International Journal of Computer Science*, 11-16.

- Iqbal, B. A. (2013). E-Commerce Vs Mobile Commerce. International Journal Of Applied Research, 1-24.
- Ishangoma, A. R. (2011). Analysis Of Mobile Banking For Financial Inclusion In Tanzania:. Journal of the Association for Information Systems, 14.
- Jahanshahi, A. A., Mirzaie, A., & Asadollahi, A. (2011). Mobile Commerce Beyond Electronic Commerce: Issue And Challenges. Asian Journal of Business and Management Sciences, 1-2.
- Jakimoski, K. (2014). Analysis of the Usability of M-Commerce Applications. International Journal of u- and e- Service, Science and Technology, 13-20.
- Joubert, J., & Belle, J.-P. V. (2013). The Role of Trust and Risk in Mobile Commerce Adoption within South Africa. International Journal of Business, Humanities and Technology, 27-38.
- Kaur, M. (2014). A Brief Study on Usability Principles of Mobile Commerce. International Journal of Computational Engineering Research, 20-25.
- Kord, B., Karimzadegan, D., & shastan, M. O. (2012). An investigation about obstacles of Mobile Commerce in Iran. *International Journal of Computer Science Issues*, 252-258.
- M, N. J. (2013). Analysis of E-Commerce and M-Commerce: Advantages, Limitations and Security issues. *International Journal of Advanced Research in Computer and Communication Engineering*, 1.

- M, N., N, K., Jagannat, S., & Chahar, D. (2013). Analysis of E-Commerce and M-Commerce: Advantages, Limitations and Security issues. *International Journal of Advanced Research in Computer and Communication Engineering*, 2360-2370
- Ngai, E., & Gunasekaran, A. (2007). A review for mobile commerce research and applications. International Journal of Mobile Communication, 1.
- Okazaki, S. (2005). New Perspectives On M-Commerce Research. Journal of Electronic Commerce Research, 1.
- Prakash, K., & Balachandra. (2015). Security Issues And Challenges In Mobile Computing
  And M-Commerce. International Journal of Computer Science & Engineering Surve
  , 29-45.
- R. S., Hundewale, N., & Kam, A. (2011). Customer's Adoption of Mobile-Commerce-A Study on Emerging Economy. *International Journal of e-Education, e-Business, e-Management* and e- Learning, , 2.
- Wong, C.-H., Tan, G. W.-H., Ooi, K.-B., & Lin, B. (2015). Mobile shopping: the next frontier of

The shopping industry? An emerging market perspective. International Journal of

Mobile Communications, 2.

- Xu, H. (2013). M-Commerce development in China: Users' perspectives. *Journal of Technology Research*, 3.
- Xu, H. (2009). M-commerce development in China: Users' perspectives. *Journal of Technology Research*, 2.

Xu, H. (2013). M-commerce development in developing country: Users' perspective. *Journal of Technology Research*, 3.

Xu, H. (2013). M-commerce development in developing country:Users' perspective. Journal of

Technology Research, 3.

Yazdanifard, R., & Elkhabir, M. S. (2011). Mobile Commerce and Related Mobile Security Issues. *International Conference on Software and Computer Applications*,