Mobile commerce (M-commerce): Insight from consumers in Delhi NCR
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Abstract
The fructifying and enhanced use of smart phones with easily available internet access provides a bigger platform of opportunities to E-Commerce world including the much appreciated Mobile based marketing- M-commerce. It is on the go and easy to use App-based market which is beneficial to both consumers and E-Tailers. And now this is the era of App based mobile marketing and if the business correctly identifies the opportunities provided by this platform, it will take M-commerce to another revolutionary level. The focus of this study is to identify the opportunities as well the customer expectation and experience. This will further help in knowing the factors affecting online consumer behaviour, purchasing pattern and the relationships between these factors. Also this study will help in developing marketing strategies to convert potential buyers into direct customers while maintaining previous customer base. This research will help in finding the impact of m-market on customers’ purchasing patterns and how their security and privacy concerns about mobile marketing influences their online buying behaviour.

Keywords: m-commerce, e-commerce, consumer perception, customer relationship

1. Introduction
This study explores the technological acceptance of mobile commerce and the motivational factors that encourage users to engage in online shopping via mobile phones. Risk factor, huge discounts, increase in number of smart phones and availability of internet access are the key factors for the acceptance of m-commerce. The results were empirically tested from data collected by a survey of Mobile Commerce (m-commerce), to examine the reliability and validity of its acceptance. The findings indicated that the users are keen and accepted this platform depending on different variables. Among them, the compatibility fit, on the go and easy access had the most significant influence on the users. There is a large volume of literature is available now on Mobile Commerce (m-commerce), but the topic is still under gradual developmental process and at the same time offers varied opportunities for further research and applications. The use of mobile as a shopping tool is growing at a very fast pace since the emergence of smart phone devices and personal marketing tools from the e-commerce houses in the past few years. The rapid growth of modern wireless communication technology with the high and easy internet access is profoundly promoting mobile commerce as a significant application from both the business as well as customer perspective. The mobile based shopping apps being convenient, time saving on the go shopping and loaded with pre-installed offers, attracted a mass volume of users specially the youngsters between 15-25 years of age. From the last decade onwards, we have been witnessing a paradigm shift in business processes with the emergence of the Electronic Commerce (E-Commerce). Smart phones and technological advancement propagates the new revolutionary M-commerce world, and transformed business from a wired network to a wireless network. Mobile commerce (m-commerce) can be viewed as a subset of e-commerce and refers to any transaction with monetary value that is conducted via a mobile network while the web browsing and easy access of internet is assumed to be the key to extending m-commerce to customers [3]. When users conduct e-commerce such as purchasing any product or paying bill online, they do not need to use a personal computer indeed, they can use mobile phones to conduct various e-commerce activities. In the past, these mobile devices or technologies were regarded as a kind of luxury for individuals. However, this situation has changed. The market for mobile technologies has seen significant growth in the past few years [6].

Fig 1

M-commerce applications have two major characteristics: mobility and broad reach. Mobility implies portability, e.g.,
users can conduct business at real time via mobile devices. With m-commerce, people can reach up to online business platform at any time via a mobile device. Every day mobile technologies and applications are being developed and updated for m-commerce. It is important to fetch idea from consumers about their perceptions and acceptance to grow and stay competitive. The advantages of using M-commerce is convenience, competitive pricing, rich information, and broader selection options. Consequently, the advancement in modern internet marketing system includes personal advertising, e-mail subscription, pop-ups; flash messages have made customers curious to interact with the internet in their daily lives. Hence, the number of internet users has increasing regularly. This research work tries to find and describe the development of m-commerce applications, consumer behaviour, technological and service acceptance. Consumer concerns regarding the security and privacy while using m-commerce are included. Wireless technology is one of the pivotal technologies of m-commerce that encourages the development and growth of m-commerce. Mobile middleware technologies also plays very crucial role in promoting e-commerce as it acts as the software layer between the wireless networks and the operating systems (Android, iOS or Windows) of the mobile devices to connect the m-commerce applications. With accelerated pace and popularity of m-commerce, these agencies should carefully and timely understand the factors that acts as motivating factors for users to use m-commerce. Finding the essentials of what determines user to go for m-commerce, can provide a great insight to management which further helps in developing effective strategies that will help enterprises to remain competitive and can hold their market.

2. Review of Literature
India has come a long way in the increased use of smart phones and the national capital Delhi NCR too. Although a large volume of literature is available on mobile commerce (m-commerce), but the topic is still under development and offers potential opportunities for further research and applications. A number of studies focused on mobile commerce and its impact on population which is growing rapidly. These studies have provided a plenty of idea for further research and exploration in the same and associated disciplines. Since the subject is at the stage of development, a review of the literature on m-commerce with the objective of finding a qualitative idea in m-commerce research and applications will initiate further research on the growth of m-commerce technologies. In this dynamic and changing technological world mobile commerce further extended the social interactions and customer perception and buying methodologies. According to Forbes report published in January 2016, India has 125 million smartphone users, the world’s third-largest base after China and the United States. The country was slated to overtake the United States by the end of 2016 and become the world’s second-largest market for smartphones, exceeding 200 million smartphone users says research firm eMarketer. By the infusion of huge smart phone users and behavioural changes in their social and personal environment, the expected growth of m-commerce is very high. Internet has changed the traditional way of customers shopping and buying goods and services. With a rapid pace it evolved into a phenomenon which is globally accepted. This literature on customer mindset for online purchasing decisions focused on identifying the factors which affect the willingness of consumers to engage in online shopping via mobile platform [9]. As suggested by the author in previous research paper one of most important factors to motivate shopping over internet is a proper ‘Vendor Selection Process’ having previous ethical and established records of services like, on time and proper handling and packaging of the product to further promote a healthy e-market & customer relationship. Vendor ratings based on the customer reviews on e-commerce websites help the customers to select best available vendors. There should be strict counter action plan in case of management by vendors [10]. Higher the customers’ arrival rate at the sale point, the higher the optimal price and the maximum expected profit is expected by m-commerce [8]. M-commerce is always misunderstood by e-commerce. M-commerce is supposed to enable us to buy everything from anywhere over the internet without the use of a Personal Computer [3]. While in several ways, m-commerce is the continuation of e-commerce with the palm handheld, new generation web-enabled smart phones booming the digital market [4]. Thus it was once believed that if you brought together mobile communications and the internet, two of the biggest things in telecommunications, there would be a tremendous growth propositions. In many ways, m-commerce and the wireless internet have been the victims of over-excited speculation (Darling, 2001). The enthusiasm that originally greeted the concept of the mobile based internet marketing is growing day by day.

Marketers should not view m-commerce as e-commerce, but rather as wireless improved technology based platform in its own unique medium, with its own unique benefits [11]. Even though, wireless technology is sometimes regarded as an enhancement tool rather than a brand new medium of marketing communication [8]. The market leaders in the m-commerce industry can take a much broader perspective of this particular technology, the dynamics of market, and potential customers. M-commerce is not only operates as a new distribution channel, or a mobile marketing replacing Personal Computers but it provides a new aspects to extend and explore buyer-consumer relationship having a very powerful impact on communication with consumers. Obviously, people will not shop with their phones in the same way they shop with Personal Computers. Unleashing the value of m-commerce requires understanding the role that mobility plays in people’s lives today. That calls for a radical shift in thinking [7].

3. Research Methodology

![Fig 2: Shows the timestamp of the survey](image-url)
The above graph shows the timestamp when the survey was done [Fig-II]. The survey questionnaire consisted of two parts. The first recorded the subject’s demographic and general information. While the second part collected the subject’s information related to their perception of variable in the survey questionnaire. The demographic variables assessed were gender, age group, educational level, income level, frequency of using a mobile phone and the their degree of familiarity with online mobile based services. The second section asked each subject to indicate his or her degree of agreement with each item. Data were collected using a Likert five point and in a single case for recommendation 10 point scale is taken. From 1-5 & 1-10 where 1 indicated strongly disagree to 5 & 10 which indicate strongly agree respectively. The survey questionnaire was distributed online via e-mail, Link generation and distribution through WhatsApp messenger, facebook messenger and other social media platforms to gather information.

4. Data Analysis and Results

We tried to find the responses that can help in demonstrating and exploring the research idea. The data indicates that the majority of the respondents are youngsters having a college education unlike at the time of emergence of e-commerce where online consumers are generally older people, well-educated with high income level. There is a perceived risk factor that the users expected of as an outcome of m-commerce. The degree of engagement of consumers in online transactions via m-commerce is perceived as being consistent taking into the considerations of potential user’s existing values, their beliefs, previous experiences and current needs and requirements. While the perceived usefulness emphasizes the degree to which a consumer believes that engaging in online shopping via m-commerce platform would enhance their performance. Perceived ease of use is another important factor which a person believes that it requires least effort from customers to engage in m-commerce transactions and their behavioural intention is their likeliness to be engaged in these transactions. The general perceived quality and ease of access is recommended high but needs some attention for further improvement [Fig-IV], while at the same time majority of population are highly satisfied with their shopping experience via mobile phones [Fig-III]. The frequency of using m-commerce is very high among younger generation between 15-25 years of age. Tempting discounts and great offers are the key driving factors for the respondents to engage in m-commerce with a high degree of interest. They provide several other offers including the modern day reward points and cash back (pay full amount at the time of purchase and after a period, some per cent of amount to be mentioned will be refunded back) while shopping through these mobile apps. A better and improved service also plays an important role in retaining the customers. Another factor is variety of products at fingertips with a shopping at their own comfort of home, office or wherever they wanted. Respondents also indicate that m-commerce sites sell good products and on or before delivery due to highly competitive environment within these companies and also easy to use comparatively. Some suggested that there should be insurance against their purchase because of some cases in NCR happens where damaged or different product delivered.

5. Conclusion & Suggestion

From the answers and suggestions provided by the respondents a point should be seriously taken by m-commerce agencies that irrespective of their regular visit and shopping there exists some sort of insecurity and privacy breach on the back of their mind. So, they must provide some sort of service, suggestion which ensures consumer privacy and security. Other things are great as consumers show a higher degree of satisfaction towards m-commerce agencies and their willingness to involve in this shopping platform ensures the success and growth perspective of m-commerce. The current systems applications and tools are providing user friendly interface and designs but the m-commerce should develop these features regularly, they should regularly update their applications keeping in mind of customer’s perceived ease of use and risk factors. There is a positive relationship and chances of increase in m-commerce as majority of respondents wish to strongly recommend it to others [Fig-V].
6. Limitations
The findings of this research is predictive in nature, at the same time can provide ideas for further research in the m-commerce domain but the time and manpower involved in this survey was limited and sample size was small. The objective of this paper is only giving an idea about consumer perception and engagement with m-commerce and associated risk factors while using mobile as a shopping platform. This research has traditional limitations associated with survey research such as selection errors, measurement errors and interviewers effect.

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