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Strength and Weakness of Mobile – Commerce: A Study

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Abstract: Mobile – Commerce is fastest growing alternative for carrying out business transactions. The business atmosphere has broken its traditional barriers and evolved rapidly with the internet and mobile technology. Now days with the use of mobile phones and internet tools, we can do variety of business related transactions e.g. online shopping, mobile ticketing, online Auctions etc. Now most of the organizations viz. banking sector, consumer goods, telecom, transport, insurance, and health has extended their service on the mobile phones devices. The mobile technology has penetrated into the lives of people, and made their lives stress-free and easy, still people find it difficult to understand its infinite possibility of uses and perspectives. The main reason and worry of the mobile phone users is about the identity and security of personal information being hacked or getting misused for unlawful activities. These kinds of anxiety increases while doing money transactions on the internet or sharing personal information for online activities. The mobile – commerce is based on the use of wireless and mobile technology, and these technologies are on the increase to cater the needs of trading on mobile devices. This paper gives an insight about the strength and weaknesses of the Mobile – commerce.

Keywords: Mobile – Commerce, Mobile – Commerce Applications, Issues of Mobile Commerce, E – Commerce, Mobile Phones.

I. INTRODUCTION

Mobile – Commerce is buying and selling of product on the internet using mobile phones and internet technology. Mobile – commerce has not restricted itself to only selling or buying of products using mobile phones but also includes other activities such as, tacking of locations, share-markets trading, health care, education, online shopping, banking etc. Many mobile applications have been developed that help to carry out the online transaction with ease. Many business organizations now have extended their services and support using this mobile technology for better communication to its customers and users. We can say commerce has come a long way since its origin, with internet technologies; it progressed into e- commerce from commerce and now with e-commerce into mobile-commerce. The mobile based applications have helped commerce to come out of its traditional boundaries and have embraced

this mobile technology to redefine commerce the way it is in the present scenario. The mobile – commerce applications have played a significant part by combining internet technology and mobile technology to help the people to buy and sell products or services online. These mobile commerce applications have evolved with the time and have become the suitable tool in mobile – commerce.

II. REVIEW OF LITERATURE

(Agarwal and Bhatawal, April – 2015) said that how m-commerce have become popular in India, and gave some causes for it such as less prices of mobile phones, mobile applications that help people to carry out day- today activities easily, portability and availability of the devices. They also discussed about the issues surrounding the m-commerce, why people hesitate to carry out transaction on the mobile phones.

(Dr. Batra and Dr. Juneja, February – 2013) discussed about mobile commerce in India and gave some insight about the various mobile commerce applications that helped people to do business using mobile technology. They also said about issues related to the speed and security of information, due to which the performance of the mobile commerce and its growth may suffer if appropriate measures are not taken.

(Tendon, Mandal and Saha) explained issues related to the mobile e-commerce and talked about the benefits and challenges present in the mobile technology such as network, services and mobile protocols.

(Giri and Singh, 2014) projected about the issues in mobile e-commerce. It covered various phases of mobile e-commerce services like mobile financial services, mobile payments, mobile banking, etc... Their study also highlighted about the security issues related to network technologies, radio interface, connectivity or communication infrastructure and wireless devices in mobile e-commerce that has become a barrier in the progress of mobile e-commerce.

(Gupta and Vyas, April – 2014) stated the growing intensity of m-commerce in India and also enlightened about the benefits of the m-commerce and why people are more happy in using the facility for online transactions. He discussed drawbacks of e-commerce like, lack of internet connectivity, lack of awareness, less number of mobile users etc.

III. STRENGTHS OF MOBILE – COMMERCE

Expenditures

In Mobile – Commerce one can exchange money or do financial transactions between two or more people for purchase of products or services using mobile phones for payments. In mobile payment system transactions are carried out using secure mobile electronic payment gateway.

Finance

User can get information of their bank account balance through Short-Messaging-Service (SMS) or by an electronic mail (e-mail) on their mobile phone devices using mobile banking service. Banking transactions like fund transfer between accounts, share market trading can be carried out without the need to be physically present at the bank counter as these service are provided by various banks that supports Mobile – Commerce.

Commercial

Advertising on Mobile device is done for marketing of products to the customer. This is done by monitoring the people's pattern of purchasing of products. This way of promotions on mobile phones helps the business houses to have effective two way communication and Customer Relationship Management, Promote Mobile Campaigns at Lower Prices, Collect Relevant and Accurate Customer Data.

Show business

Mobile phone users can also use their mobile phones for entertainment, users can listen music, watch movies, and update their status on their social networking account. Entertainment on mobile is business to consumer services, it has some distinctive characteristics such as user-friendliness, efficient, adaptability.

Shopping

Transactions like booking movie tickets, railway reservations extends mobile users ability to a new level. Mobile phone users can book a taxi using location based services, or buy some electronic devices online.

Mobile Price

The low cost of the mobile phone devices has made it popular and easy affordable for all walks of life. Even the services on mobile phones like internet, call rates have come down. Most of the service providers are providing internet facility at a very less price.

Mobile phones are easy to carry

Earlier to carry out any online transactions we used to use desktop computers or laptops but using these technology restricted the mobility of the users as these machines are not easy to carry and move around to carry out the activities. Whereas the use of mobile phones gave us the opportunity to do the task on the move. We can carry out online transactions on the mobile phones irrespective of the location.

Affordable Internet Connections

One of the reason for efficiently using mobile – commerce is use of internet on mobile phone devices. Due to the less cost of the internet and requires very low connectivity signal one can browse on the internet on the mobile phones easily. Now the rates and speed of 3G connections on the mobile phones for internet facility has become affordable and within the reach of the mobile phone users.

Protected transactions

When transactions are carried out on mobile in mobile – commerce, the transactions are carried out in a secure way. The transactions is carried out securely by sending a code to the user mobile when the code is processed the transactions gets over. This type of transactions ensures faith in the users to carry out transactions online.

Learning

Education content can be found online and can be accessed from any location on the mobile phones. Many mobile applications have been developed that can help the user such as students to get access to the periodical easily.

Transportation

A mobile device can be used to find out the status of the traffic movement at any given location at any moment of time. This is possible due to the facilities of global positioning system present in mobile device. This facility can also be used to observe the traffic movement and also to track the movement of the vehicle using the applications installed in mobile device.

Fitness care

The expenses in the health/fitness care industry can be made cost effective with the mobile – commerce technology. With the mobile – commerce technology the patient's conditions can be monitored remotely, and can provide aid to the patients irrespective of the geographical locations. This technology help to provide enhanced medical care in a very efficient way.

IV. WEAKNESSES OF MOBILE – COMMERCE

Smaller Screen

The mobile phone device screen size is smaller in comparison to desktop computer system, due to which it sometimes becomes very difficult to read the text on the screen, or get the clear view of the image displayed in it. This becomes a problem when we are doing online transactions like online shopping or online money transfer, we cannot get the clear view of the product or the text description is very small. Now the efforts are made by the service providers to develop the content to fit in the size of the mobile screen so that the user finds it easy to navigate through the information displayed.

Spectrum/ Bandwidth

As the number of mobile phone users increases it also increases in the services provided on the mobile devices by the service providers. The service providers find it difficult to provide services on the existing spectrum/bandwidth as it becomes too bulky to accommodate the signals. This will lead to some disturbance with other signals and in turn the services may not be available for the user using mobile – commerce applications.

Safety

The rules and regulations for communications present in wireless transmission in mobile – commerce are not highly secure. Since there are very few software's that can encode the signals used for communications or exchange of information content on wireless communication medium. Due to such situations mobile – commerce users find it difficult to do any online transaction related activity.

Signaling Infrastructure

There is always an issue with the quality of signal with mobile phone users. One of the major issue concern in mobile – commerce, is about the network quality of wireless communication. When the mobile phone user is using any wireless services his major worry is about the signal getting disconnected. Even if the signal is good but the quality is not sound to carry out any online transaction as it takes more time for uploading and downloading of the information on the mobile phones. Though there are networks like 2G, 3G, and 4G that give high speed internet at affordable price but still the issue of signaling is a major concern as it gets disconnected from time to time due to poor signaling infrastructure setup. Till there is an improvement in the network infrastructure setup the mobile – commerce will progress at snail pace only.

Trade

The mobile – commerce as of now is developing and trying to find a place as an alternative to traditional way of doing commerce. Still most of the business houses carry out their business transactions traditionally. There are many companies who are developing applications where the traditional business can be shifted on the mobile technology. But still both the customers and business firms hesitate to do transaction using mobile – commerce platform. The mobile – commerce which works on the wireless technology has to address its own problems such as internet service, connectivity problem, network problem, security and safety of information etc... As a result of which this the companies and customer are not finding it as easy and convenient way of doing online transactions. The day is not far, with the development of new technology in wireless communications mobile – commerce will definitely be the popular platform of commerce.

Speed anxiety

Many users using application for transactions in mobile – commerce fear about the connections being disconnected in the middle of the transactions. This may be the cause of low speed problem in mobile network. Due to this irregularities of speed in the network signal the mobile – commerce users hesitate to carry out transactions online.

Cost of Services

As there are many mobile – commerce applications available for carrying out transactions and exchange of information, there are some competitions present about charges for providing the services. These charges may be different for different services provided and since the cost of services vary from one service provider to another. There may be a problem as to how to fix the cost as many services are provided by different service providers for different services and each services may involve many service providers for completing the transactions.

Absence of Awareness

Mobile phone users are still not aware about the term mobile – commerce and are not aware of the services available on it. Mobile phone users still find it difficult to carry out transaction online using mobile phones due to fear of security.

Difficulties in Payment

When mobile phone users are doing online payments they have the fear in mind that there is always a risk of information getting stolen by hackers. Sometimes even if the signal is weak of the mobile network then there is chances of transactions getting cancelled. If the mobile phone does not have any security software or applications installed then there is always risk of information getting taken away by the hackers. With all this factors are not solved it becomes difficult for the mobile – commerce users to develop faith in the system.

Linguistic Obstacle

The mobile – commerce applications are in English languages. And most of the mobile phone users do not understand the English language, though they can perform some basic operations of mobile phones. When carrying out any online transactions like online purchase they find it difficult to understand the payment option displayed on the screen, and hence they hesitate to do shopping using mobile phones as they fear of some wrong option getting selected. So for any type of purchases or selling of products on the internet using mobile – commerce portals do require the knowledge of English language.

Composite Mobile App

The mobile – commerce portals are difficult to understand when compared to electronic commerce portals. Because of small screen size of mobile phones the portals of online shopping becomes too crowded, and the navigation options, text descriptions are not visible properly. The mobile apps have to be easy and user friendly so that the mobile user can use the mobile – commerce portals effortlessly and conveniently.

Smart Phone Users

May people use mobile devices for making and receiving calls. There are many mobile phone users use very basic phones that does not support the mobile – commerce applications. For use of any mobile – commerce applications the mobile phones have to be of higher end configurations in terms of hardware features i.e. it has to be a smart phone device that can support high speed internet facility and can also support mobile – commerce applications. When a large amount of the smart phone users increase then there is opportunity of the mobile – commerce reaching every corner of the globe.

V. CONCLUSIONS

This paper showcased about the strength and weakness of the mobile commerce. It is also required to view from future point of view that mobile – commerce overcomes its weaknesses and except to see that it becomes one of the important tool for online purchases. Now days there is increase in the use of smart mobile phone, due to its affordability and very stress-free to use. Gone are the days when mobile phones where used for making and receiving calls. With the improvement in the wireless communications one can use mobile phones for buying and selling of products online from the comforts of their homes. They can make payments, book tickets, do banking

transactions etc. Though there are some technical problems faced in the mobile - commerce applications, service providers are trying to improve the infrastructure and developing techniques to cut down the prices of services, so that most of the smart phone users can use mobile – commerce in their day to day activities. The day is not far when mobile – commerce exceeds all the weakness and become popular in the commerce world.

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