ANALYSIS OF MOBILE-E-COMMERCE BUSINESS MODEL

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Abstract

**E-COMMERCE** - Electronic commerce is a delivery of information, product/service, or payment by telephone lines, computer networks, or any other means. E-Commerce endeavors is to improve the execution of business transaction over various networks, these improvements may result in more effective performance with better quality, greater customer satisfaction, an better corporate decision making, greater economic efficiency (lower cost) and more rapid exchange (high speed accelerated, or real time interaction). More specifically, electronic commerce enables the execution of information –leader transaction between the two parties using interconnected networks.[1]

I. INTRODUCTION

1.1 **E-COMMERCE** - Electronic commerce is a delivery of information, product/service, or payment by telephone lines, computer networks, or any other means. E-Commerce endeavors is to improve the execution of business transaction over various networks, these improvements may result in more effective performance with better quality, greater customer satisfaction, an better corporate decision making, greater economic efficiency (lower cost) and more rapid exchange (high speed accelerated, or real time interaction). More specifically, electronic commerce enables the execution of information –leader transaction between the two parties using interconnected networks.[1]
1.1.1 What is E-commerce:

Applications began in the early 1970s with such innovations as electronic transfer of funds. However, the applications were limited to large corporations and a few daring small businesses. Then came electronic data interchange (EDI), which automated routing transaction processing and extended EC to all industries.

Since the commercialization of the Internet and the introduction of the Web in the early 1990s, e-commerce applications have expanded rapidly. By 2000 there was a major shakeout in e-commerce activities when hundreds of dot-com companies went out of business. The shakeout lasted about three years. Since 2003, e-commerce continues its steady progress. Today, most medium and large organizations and many small ones are practicing some e-commerce. [2]

**M-Commerce**

1.2 Mobile commerce –

1.2.1 Introduction - While electronic commerce continues to have a profound impact on the global business environment, technologies and applications have begun to focus more on mobile computing and promotion, buying, and selling of goods and services through electronic data communication the wireless Web. With this trend comes a new set of issues and problems specifically related to wireless e-commerce. Ultimately, researchers and developers must determine what tasks users really want to perform anytime from anywhere and decide how to ensure that information and functionality to support those tasks are readily available and easily accessible. It provides an overview of some of the relevant technologies, applications, and issues in the relatively new field of wireless e-commerce. Wireless e-commerce also called mobile commerce is the networks that interface with wireless or mobile devices. Wireless e-commerce is a subset of wireless computing, which is the accessing of information systems by wireless means. Many of the issues that affect wireless computing in general also affect wireless e-commerce. Mobile e-commerce also includes the use of devices such handheld and laptop computers that interface with computing resources through wired synchronization. We do not consider this wired form of mobile e-commerce in this paper principally because it is likely to be replaced by wireless devices in the future. Our focus here is on the wireless forms of mobile commerce.

1.2.2 Technologies - Wireless technologies for mobile commerce can be roughly categorized into mobile client devices for interactivity (or
m-commerce terminals) and communications infrastructure.[3]

Consumer to business e-commerce will soon come from smart phones using mobile commerce technology. Many researchers suggested that next phase of electronic business growth will be in wireless and M-commerce. To better understand the potential effects of m-commerce on businesses, a quick review of definition and background information about it would be beneficial.

In general M-commerce is a natural successor to electronic commerce. The rapid proliferation of mobile devices, including handheld computers, mobile phones and PDAs, mobile commerce is widely considered to be a driving force for next-generation electronic commerce. M-commerce should not be viewed as e-commerce with limitations, but rather as a unique form of e-commerce with its own unique benefits. Additionally, m-commerce is not a substitute for Personal computers. Rather, it is a new and a much more powerful way to communicate with customers. Time sensitivity, Intimacy, location awareness and ubiquity are key concepts that make m-commerce so different from ‘traditional’ electronic commerce. The other difference between m-commerce and e-commerce is the opportunity to connect information with objects in a more direct way than has been possible until now. [4]

2. Problem Formulation

2.1 Statement Of Problem

To assess the knowledge of the people regarding mobile-commerce and Electronic-commerce. This Study related to the knowledge of the m-commerce and E-Commerce. In this study we gain the knowledge from the people of those which is related to the m-commerce and e-commerce. So for that we conduct a survey and take the people response for that way. We conduct survey from the educated and uneducated person. This survey collect in the Punjab. This study and survey is very important for the awareness For the mobile technology and its using.

2.2 Purpose of The Study-

- Provide an overview of the fundamentals about mobile and m-commerce.
- Show what are the categories of M-commerce applications.
- To assess the knowledge of people regarding Mobile-commerce and e-commerce.
- Collected the data.
- Get the knowledge of the people Age, Occupation, Gender, and Education Qualification.

3. RESEARCH METHODOLOGY

The survey study design was adapted to collect data for testing the research model. The survey was adapted from those used in a number of acceptance studies and current literature on m-commerce. The focus was on continuance intention toward m-commerce. The data was collected both offline from under graduate and graduate students and Teachers.

This research Methodology is a analytical research. The data after collection has to be processed and analysed in accordance with the outline laid down for the purpose at the time of the developing the research plan. This is essential for a scientific study and for insuring ensuring that we have all relevant data for making contemplated comparisons and analysis. Technically speaking, processing implies editing, coding, classification and tabulation of collected data so that they are amenable to analysis. In the process of analysis the valid data can be said to indicate any conclusions.

The methodology of the research indicates the general pateern adopted for organizing the procedure for the gathering valid and reliable data for purpose. This chapter deal with the methodology undertaken to access the knowledge of people regarding m-commerce and e-commerce.

The research approach indicates the broad based procedure for collection of data. The research approach will be used to identify the mobile-commerce among the people.

The research methods are the techniques methods researchers use in performing research operation. Research methodology is way to systematically solve the research problems. It may be understood as a science of study to know how research is done scientifically. This chapter presents the methodology adopted for the study. This includes research approach, research design, setting, survey for data collection and survey techniques.

It includes:
1. Research approach
2. Research design
3. Selection and description of setting for study
4. Data collection procedure

3.1 Research approach: This research approach indicates the broad based procedure for collection of data in a particular situation.

To accomplish the objectives of the study, research approach will be used to identify the m-commerce and e-commerce among people.
3.2 Research design: Research design refers to plan structure and strategy of the specific survey of answering the research question. Definition: It is the print for the conduct of a study by collected and analyzing data including specification for enhancing the study integrity.

3.2.1 Independent variable:
- Age
- Name
- Occupation
- Gender

3.2.2 Dependent variable:
- M-commerce
- E-commerce

3.3 Setting of the study: The physical location and condition in which the data collection takes place in a study known as setting the present study was conducted on the hundred people in Punjab. The people gave her expected cooperation for conducting the survey.

3.4 Sample
We have selected a sample of 100 people for the survey.

Population:
Population refers to the entire aggregate or totality of all objects or members that confirm to set of specification. The accessible poputation is the population of the subjects for a particular study. The target population is the total group of subject about whom the investigator is interested and to whom the results could be reasonably be generalized.

4. DATA INTERPRETATION

4.1 Comparison and Analysis of Mobile Commerce and Electronic Commerce

4.1.1 M-commerce vs E-commerce
M-commerce and E-commerce refer to the field of marketing – buying, selling, distributing and servicing, different products through commercial transaction on the internet with the use of specific device or computer.

M-commerce
M-commerce stand for mobile commerce wherein commercial transaction are done in using cellular phone that have access to the internet. Before there was no M-commerce because phone with internet capability were not yet available. When mobile phone with internet invented, marketing has expanded more. In the mobile commerce every person using the mobile technology in her life for own convenience, today many phone have access to the internet ,with the rise of such
technology. M-commerce is becoming more popular.

**E-COMMERCE**

**E-Commerce** : the process of buying, selling, or exchanging products, services, and information through computer networks. E-Commerce stands for electronic commerce where in business transaction are done over the internet, usually transaction are done using a computer or laptop. This has become very popular not become computer with internet capability has become very accessible to people. Electronic Commerce or e-commerce is concerned with the selling as well as purchasing of services or products by means of the internet or other computer networks. Mobile Commerce deals with the commerce that is done through mobile devices like mobiles, a Smartphone or a Personal Digital Assistant (PDA). Business to business or B2B refers to electronic commerce between business rather than between a business and a consumer. B2B business often deal with hundreded or even thousand of other businesses, either customer or supplier. Carrying out these transaction electronically provide advantage over traditional methods. When implemented properly, E-Commerce is often faster, cheaper and more convenient than the traditional methods of goods and services.

4.1.2 Survey of mobile – commerce and e-commerce

Table no.1 Mobile commerce

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>83%</td>
</tr>
<tr>
<td>No</td>
<td>13%</td>
</tr>
</tbody>
</table>

Figure no.1 Mobile commerce

Above survey graph shows that in that time 87% customer are connected with mobile and using the M-commerce. Where some people are less using the M-commerce. In that time where many people use the mobile where they are all not using the mobile for commerce purpose. 80% people are agreed with the M-commerce. They are use the m-commerce for the business, Personal, Entertainment, Delivery, Bill – payment and m-payment. They are happily using these services. They
mentioned that these services are not costly. They mentioned that these services charges are acceptable. They use these services easily.

Table no 2. Mobile commerce

<table>
<thead>
<tr>
<th>Satisfied</th>
<th>64%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>31%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>5%</td>
</tr>
</tbody>
</table>

Above graph shows that mostly people are connected with mobile for complete own needs. So for that m-commerce websites are very successful. 6% people they are not using m-commerce for the delivery so according to him these are not successful. So for that 67% people are satisfied from these.

Table no 3 Mobile commerce

<table>
<thead>
<tr>
<th>Agree</th>
<th>74%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>17%</td>
</tr>
<tr>
<td>Neutral</td>
<td>7%</td>
</tr>
</tbody>
</table>

Figure no . 2 Mobile commerce

1. Is the mobile-commerce websites successful?

2. Are you using the mobile-commerce for the personal purpose?

3. Are you using the mobile-commerce for the business purpose?

4. Are you satisfied with mobile-commerce?

Figure no.3 Mobile commerce

1. Do you think mobile-commerce is a secure system for the consumer?

2. Do you agree with online delivery?

3. Do you agree the mobile-commerce services will be costly for the customers?
4. According to you m-commerce is fast from the e-commerce in online delivery?

Above graph shows that the 74% people are agree that m-commerce is a secure system for these and 62% people are agree that m-commerce is fast from e-commerce. Because ½% people are live in connect with e-commerce. 7% people are disagree with online delivery mostly educated people are come in this category.

**E-commerce**

**Table no. 4 Electronic commerce**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>89%</td>
</tr>
<tr>
<td>No</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Figure no.4 Electronic commerce**

Above graph shows 89% people are trusted in the e-commerce. They are trusted in e-commerce without m-commerce. Where 89% people are agreed with e-commerce where 11% people are not trusted in this.

**Table no. 5 Electronic commerce**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>66%</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>31%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>6%</td>
</tr>
</tbody>
</table>

1. Are you satisfied with the product in your order?

2. Are you satisfied with your past purchase/services?

Above graph shows that maximum user are satisfied from the product ordering which they do on the m-commerce and satisfied from past services and purchasing. Some &% people are not satisfied because they do not using the m-commerce.

**Table no.6 Electronic Commerce**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree e-commerce is</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>
helpful in the e-business?

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree</th>
<th>Disagree</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you agree the product delivered on time?</td>
<td></td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Do you agree return policy is important after purchasing product?</td>
<td>Neutral</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

Above graph shows that 70% people are agree with e-commerce for its using in the e-business. Some customer wanted that in the purchasing must be product return policy because they want change the product. Where multiple user are agree with e-commerce where 8% people are neutral from that.

**4.1.2 Comparison of m-commerce and e-commerce**

**Mobile-commerce**

Table no. 7 Mobile Commerce

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you a mobile user?</td>
<td>86%</td>
<td>5%</td>
</tr>
<tr>
<td>Is the m-commerce websites are successful?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure no.6 Electronic commerce**

1. Do you agree e-commerce is helpful in e-business?
2. Do you agree the product delivered on time?
3. Do you agree return policy is important after purchasing product?

**Figure no.7 Mobile Commerce**
Above Graph is a comparison of the whole M-Commerce survey response.

Above survey graph shows that in that time 87% customer are connected with mobile and using the M-commerce. Where some people are less using the m-commerce. In that time where many people use the mobile where they are all not using the mobile for commerce purpose. 80% people are agreed with the M-commerce. They are use the m-commerce for the business, Personal, Entertainment, Delivery, Bill – payment and m-payment. They are happily using these services. They mentioned that these services are not costly. They mentioned that these services charges are acceptable. They use these services easily. graph shows that mostly people are connected with mobile for complete own needs. So for that m-commerce websites are very successful .6% people they are not using m-commerce for the delivery so according to him these are not successful .So for that 67% people are satisfied from these. Above graph shows that the 74% people are agree that m-commerce is a secure system for these and 62% people are agree that m-commerce is fast from e-commerce. Because ½% people are live in connect with e-commerce. 7% people are disagree with online delivery mostly educated people are come in this category.

**E-commerce**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>89%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you trust online trade?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you satisfied with your past purchase/services?</td>
<td>Dissatisfied</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Table no. 8 Electronic commerce**

**Figure no. 8 Electronic Commerce**

Above graph is a comparison of the whole E-Commerce survey response.

Above graph shows 89% people are trusted in the e-commerce. They are trusted in e-commerce without m-commerce. Where 89% people are agreed with e-commerce where 11% people are not trusted in this. Maximum user are satisfied from the product ordering which they do on the m-commerce and satisfied from past services and purchasing.
Some people are not satisfied because they do not use the m-commerce.

Above graph shows that 70% people are agree with e-commerce for its using in the e-business. Some customers want that in the purchasing must be product return policy because they want change the product. Where multiple users are agree with e-commerce where 8% people are neutral from that.

5. CONCLUSIONS AND FUTURE SCOPE

Mobile Commerce and Electronic Commerce

M Commerce - Takes a survey of the 100 people for the M-Commerce and the E-commerce.

The analysis of the first objectives reveals that the knowledge for the consumer regarding method of mobile-commerce. It is concluded from the result that the user have a good knowledge regarding the mobile-commerce the 87% of the survey of the mobile-commerce.

The only 5% user has poor knowledge about the m-commerce.

According to the finding of present study in accordance with second objective is, it is recapitulated that the variable (Age, Gender, Occupation and Education Qualification) Have positive effect on knowledge of the user.

E-Commerce The analysis of the first objectives reveals that the knowledge for the consumer regarding method of E-commerce.

It is concluded from the result that the user have a 89% good knowledge about the e-commerce and only 6% poor knowledge about the e-commerce. At last we say that e-commerce is better from M-commerce.

As wireless network grows, it is expected that wireless and m-commerce will create new trade for mobile-user and provide new avenues for growth in M-Commerce, offer new applications to consumers and business in India.

5.1 Conclusion –In the M-Commerce and E-Commerce from the survey response e-Commerce is Better from M-Commerce. Within the M-Commerce, People using the e-commerce. Beside Nowdays Multiple people are connected with M-Commerce like as,

So many people are connected with E-Commerce. Where 87% people using the M-Commerce Where 89% people are using the E-Commerce.

5.2 FUTURE SCOPE-
• Similar study can be replicated on a large sample in different settings.

• Study can be done to assess the impact of educational on knowledge regarding M-commerce and E-commerce.

• Some people are less knowledge about the M-Commerce because the less using Mobile –Commerce.

• Similar study can be done for the using of Mean, Mode, Median.

The future will certainly gave the indication about how the wireless internet on going to be positioned and how the wired internet on going to be positioned and what are the application of m-commerce and e-commerce. How do Analyse the data which collected through the survey from those people which using the m-commerce and e-commerce. M-commerce application area will be very helpful for the m-commerce user for the using of m-commerce. In this study our main purpose to present the m-commerce and gave the explaintion of the m-commerce its application, its using, need and scope of the M-commerce.

VII. REFERENCE


[3] DING Xiaojun IJIMA Junichi HO Sho- “Unique Features of Mobile Commerce (Graduate School of Decision Science and Technology, TITECH, Tokyo, 152-8552, Japan)


ANNEXURE-I

Survey on mobile-commerce and electronic-commerce

(MOBILE-COMMERCE)

1. Are you a mobile user?
   - Yes
   - No

2. Are you using the mobile-commerce?
   - Yes
   - No

3. Are you using the mobile-commerce because the process is save time?
   - Yes
   - No

4. Are you using the mobile-commerce because the search cost is lower?
   - Yes
   - No

5. The service charge for the mobile-commerce is acceptable?
   - Yes
   - No

6. Are you using the mobile-payment system?
   - Yes
   - No

7. Are you using the mobile-commerce for the bill-payment system?
   - Yes
   - No

8. Are you using the mobile-commerce for the entertainment?
9. Are you using the mobile-commerce for the online shopping?
   - Yes
   - No

10. Mobile-commerce is better from the electronic-commerce?
    - Yes
    - No

11. Any online payment done by you?
    - Yes
    - No

12. Is the mobile-commerce websites is successful?
    - Satisfied
    - Very satisfied
    - Dissatisfied

13. Are you using the mobile-commerce for the personal purpose?
    - Satisfied
    - Very satisfied
    - Dissatisfied

14. Are you using the mobile-commerce for the business purpose?
    - Satisfied
    - Very satisfied
    - Dissatisfied

15. Are you satisfied with mobile-commerce?
    - Satisfied

16. Do you think mobile-commerce is a secure system for the consumer?
    - Agree
    - Disagree
    - Neutral

17. Do you agree with online delivery?
    - Agree
    - Disagree
    - Neutral

18. Do you agree the mobile-commerce services will be costly for the customers?
    - Agree
    - Disagree
    - Neutral

19. According to you m-commerce is fast from the e-commerce in online delivery?
    - Agree
    - Disagree
    - Neutral

20. Do you trust in online trust?
    - Yes
    - No

21. According to you e-commerce is helpful in the e-business?
    - Yes
    - No
<table>
<thead>
<tr>
<th>Question</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Is the similar item to product you purchase?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>23. Would you like to offer Coupons/discount?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>24. Would you recommend this websites to relatives/friend?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>25. Is the e-commerce is profitable?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>26. Do you think it is a secure system?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>27. Access to product, Services and information at any time in day or night?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>28. Is the e-commerce gave the allow to consumer to save a lot of money?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>29. Is the make consumer easy to pick/choose product according to her/his wish?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>30. Is there no guarantee of product quality?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Cannot easily return item?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>32. Cannot see or feel the product before making a decision?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Are you satisfied with the product in your order?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Are you satisfied with your past purchase/services?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Do you agree e-commerce is helpful in the e-business?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Do you agree the product delivered on time?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
37. Do you agree return policy is important after purchasing product?
   - Agree
   - Disagree
   - Neutral

Thank you for taking the time to fill out this survey. We appreciate your feedback.