"Mobile commerce - moving towards advanced technology."

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Abstract

The line between browsing & buying online and offline is burning issue of today's latest technology which is playing vital role in converting every physical touch point for consumes into digital services. E-Commerce is just a channel whose services helps the customer to stop anywhere and M-Commerce is small electronic gadget in this window in India. M-Commerce reach the rural & urban customers without making any differentiation . Once the rural customer were not reachable for priority products, now it is just a finger game to any layman in remote place. India is fatly moving towards advanced technology along with the population growth. Technology especially Smartphone penetration is not just the luxury of rich & wealthy people, the digital era is going & reaching every man informed about their due merits & getting access of mobile internet. Mobile apps are the innovation of latest technology where every business industry is making its way to create a platform for customer satisfaction. In this research article few popular mobile apps are considered for study and try to project its implication of use and merits and demerits form the consumer point of view.

Communication played always very important channel in every walk of human life. Wired telecommunication was the initial step, later steps gradually went with wired telecommunication t0 become wireless communication with the help of mobile now we can see even tab with SIM, which acts as laptop and mobile too. Still smart phone mean Mobile extended the general services like make call, receive call and SMS to Mobile Internet in the late 1990, the new technology introduced has enhanced the mobile phone from basic communication to more flexible tool for accessing extraordinary information and service. The WAP (Wireless Markup Language) approach was to use an XML based language, WML (Wireless Markup language), specially designed for small type devices, introduced in 1999. It has become very popular means of service. Mean while there was a revolution in mobile service industry and tough competition among the service provider lead to introduction of web based services which also gave platform for the introduction of smart phones to smartest phone. In last two decades, the electronic commerce has made tremendous changes in the business community & industry. Development of wireless and Mobile technologies, mobile commerce is expected to make greater impact on the worldwide business. The number of electronic gadgets, mobile phones subscribers are increasing in millions and billions. The reach & penetration of mobile phones are major features to deliver huge volume of services through speedy, cheap and seamless manner. Telecom Regulator Authority of India (TRAI) brought of new safe guidelines on unstructured supplementary service data (USSD) based mobile banking services.

Key words: *Mobile Apps, Mobile Commerce, E-Commerce*

<u>Purpose of the study</u>

The purpose of the research is to study and identify potential target consumer groups
for M-Commerce (mobile services) and to categorize each variables based on their demographics, business motivations, present usage patterns of M-Commerce (Mobile service), and intention to use the M-Commerce in the near future. This research also presents the factors that affect the intentions of business with consumer satisfaction and preference towards future use of Mobile-Commerce.

The researcher has tried to identify the core customer need in basic services , value added services and mobile Apps by customer often and study customer satisfaction based on certain parameters. As per the Taj Mary Mahfuz

&Subhenur Latif, there are various factors influencing mobile services to adopt 3G technology due to customer intention, awareness, attitude and their expectation. Customer satisfaction is associated with the quality service and service expectation from the service provider. The researcher has tried to discuss about the Mobile Services and Mobile Apps which are connected with M-Commerce.

The purpose of the study is to know the customer satisfaction in basic Mobile service and use of mobile Apps in order to understand the service satisfaction. Mobile services are classified into basic Mobile services, Value Added Services, Mobile Apps in general and M-Commerce Apps in specific. Here researcher to be more specific has considered five services of each which he finds most popular among the mobile service users at the time of research.

Customer satisfaction is a qualitative term and so can be measured in terms of index scores. measurement of customer satisfaction thus need to take number of services and service parameters into consideration. Indices consist of independent variables and dependent variables. Satisfaction as a dependent variable is measured through several independent variable. The independent variable considered in this study for Mobile service satisfaction are:

Basic Mobile Services	Make Calls
	Receive Calls
	Send Messages
	Receive Messages
	Attend Missed Calls
Value Added Mobile Services	Internet
	Mobile Banking
	E-Mail- Chat
	Entertainment
	Roaming Facilities
Mobile Apps in General	Whatsapp
	You tube
	True Caller
	Twitter
	Face book
M-Commerce Apps in specific	OLX
	Flipkart
	Amazon
	e-bay
	Big basket

Importance of the study

Adoption of mobile apps and mobile services by customer with preference and satisfaction.

Mobile Services and Mobile Apps available through M-Commerce.

Objectives of research work

Out of the research will be beneficial to Mobile service provider, Customer as well as government to know the quality of services and various categories of services customer looking for with satisfaction from the service provider. This may help to update the set benchmarks and various Mobile services are in need by the customer which helps to improve the customer satisfaction level.
To Assess the Customer Satisfaction towards Basic mobile services.
To Assess the Customer Satisfaction towards Value Added Services.

Hypothesis :

H1: There is no association Between Basic Mobile Services and mobile users.
H2: There is no association Between Value Added Service and mobile users.

Scope of the Research:

- To conduct this research the target population was the mobile service users who are in 3G technology users.

- Geographical area targeted was South Bangalore city in Karnataka state with sample size of 350 mobile service users.

Research Methodology

The descriptive research methodology was applied. The method allowed for the assessment of customer satisfaction of mobile services of mobile telecom service brand.   This research study is taken up through a survey. It is said that to consider and understand the public opinion survey referred to the best research method for any public issue, Hence this survey can help to conclude the precise result.

1.   To get the above stated objectives and to prove theses hypothesis, the research study is done through survey method.
2.   Questionnaires are filled by researcher personally interviewing various customers using mobiles ranging from students, government employees, business man, home makers and from other profession.
Survey has helped the researcher to suggest with critical factor, which are important to customer, as the Mobile users perception varies from person to person and time to time based on the demographic factors like age, occupation, qualification, income , gender. The goal is to understand the mobile service users perception with reference to their expectation in service provider.

Sources of data:

This study is conducted based on goals set. For this research both primary and secondary data are used.

Primary Source: The primary data collected from the respondents who are mobile friendly. Based on the scope and objective of the study, Interview schedule/Questionnaire is prepared to collect the response and opinion from the mobile (Customer). The respondents comprises of rendering their economic activity through service (Government employee), Businessmen, Home makers, students and others (other categories of profession), who are using mobile services and also other value added services.

Basic Mobile services like make calls, receive calls, send messages, receive messages and attend missed calls. Value added services like Internet, Mobile banking, E-Mail - Chat, Entertainment and Roaming facilities are the factors consider to make consumer satisfied.

Secondary Source: Secondary data collected through e-Journals, Magazines and Information collected from published National & International articles and literature are also verified and collected the abstracts. Company profile and Broachers especially Airtel Companies and BSNL to do comparative study.

Tools of research:

Information collected through Primary and secondary source are analyzed and interpreted with the help of suitable statistical tools. Chi-square test method is used to test the hypothesis as the sample size was large and also to reach results to utmost accuracy. Appropriate parametric tests were performed with independent samples with t-test in order to establish the difference between two groups. Factor Analysis for the Demographic information of the primary information.

Sampling Methodology: Sampling is the process of selecting such set or group from bigger population, with which study can be performed. The sample size was fixed based on calculation after performing a pilot survey. A pilot survey was conducted on 40 customers to get the value of standard deviation σ. With 95% accuracy level the required sample size was 350. Total 475 samples were gathered. Out of which 350 valid samples were taken for data analysis. Random sampling technique is used for survey.

Sampling size: 350 respondents

Sample unit: Customers using mobile phone services through service among Government employee, Businessmen, Home maker, students and others who are using Mobile Services and Mobile Apps.

Sampling area and organization in study: South Bangalore of Karnataka state. Here researcher has taken study on the services provided by Airtel network and BSNL network.

Population of Bangalore is more than Crore and Bangalore is having large number of sectors. To discuss upon the population of south Bangalore also runs in lakhs and researcher cannot reach to 100% of customers. Hence this research has been done on convenient Random sampling technique adopting 350 customers using Mobile basic services and Mobile value added services in Mobile Commerce.

Literature review:

USSD which stands for unstructured supplementary service data is the numerical code (Mayer shetty 2014). Mobile and mobile commerce in India emerging issues (Dr. Sunil Batra &Dr Neenu Juneja 2013). M-Commerce driving the E-Commerce revolution in India (Manisha bapna 2013). Ten reasons why mobile commerce in India may get bigger than online commerce (Sugandha Dhawan 2013).

2012, Anita D'souza, has presented research article on: A Comparative Study of SMS Package with Special Reference to AIRTEL, IDEA, VODAFONE and TATADOCOMO. In the research it has been discussed about the young consumers and their response towards the SMS as a very important communication technique. The research has been concluded with the positive acceptance by young consumers as a communication tool and seems to be integral part of their life. It is said that Indian Telecom industry is one of the fastest growing telecom markets in the world. In this study it has also been discussed about the consumer preferences and their satisfaction level towards the mobile phone service providers available in Hyderabad. Factors like mobile phone, call tariffs, network coverage and brand image were considered to reach the accuracy of article.

Research done by M.Sathish, K.Santhosh Kumar and V.Jeevanantham (2011) represents the customer will not only look at the call rates but also consider the other services provided by the service provider like network coverage, value added service, Consumer care and advertisement. It is found that there is a relation between switching the service provider and the factors (Customer service, service problem, usage cost, etc.). After analyzing the findings of the study, researchers suggest that cellular service providers concentrate more on increasing network stability and setting tariff rates competitively. The findings also suggest that managers of these mobile operators should shift focus on building corporate goodwill and try to know the reason for consumers to switch brands in this industry in order to increase loyalty among these consumers. Hypothesis tested in the research was on the factors are random and are independent of each other. Factors here are the call rates and the value added services.

Limitations of the study

- Study is conducted only to analyze the financial competitive pressure on service provider through M-Commerce.

- The results cannot be generalized as the sample size is too small compared to the overall population of South Bangalore city.

Data Analysis and Interpretation

VAS: value added service is the most sort after by consumer for any services or products brought. When the survey has been done to know about the knowledge of the consumer regarding value added services of the mobile commerce, it has come to the light that out of 350 mobile users of various brands and networks only 290 consumers are aware about value added services in which 90 consumers are found to be illiterate bout the services.Further investigated with the option to know about VAS, received various response out of the choice given in the questionnaire like:

Have seen the promos and know the intricacies of the services.

Have seen the promos but not really sure about the service details.

Haven't seen or heard of them.

Comparing Gender and opinion of Mobile service users about VAS

| Gender | Opinion of Value added services by consumer | | | Total |
	Have seen promos but not really sure	Haven't seen or heard of them	Have seen promos and know the intricacies	
Female	36	31	108	175
Male	44	37	94	175
Total	80	68	202	350

In the research it has found that 57.7% have seen the promos and the knowledge and intricacies of their services, 22.9% of the consumers have seen the promos but not sure about the service details and 19.2% of the customers have not even heard of such services. Before concluding it is noted that 80.57% of the consumers are having knowledge about the VAS but still only few of the services were used by them based on their needs and taste. 19.43% of them are not even heard of these services.

In the research survey it is made sure 80.57% of mobile users are aware about the Value added services in which 57.71% of mobile users know the intricacies of VAS. However only 19.43% of consumers deny to state that they are not using the value added services and least bothered about the VAS provided by the service provider.

Considering the Basic Mobile services like make calls, receive calls, send messages, receive messages and attend missed calls based on these question researcher tried to measure the consumer satisfaction with the help of 5-point liker scale
1. Strongly agree.
2. Agree.
3. Not sure.
4. Disagree.
5. Strongly Disagree.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.949	.949	5

With help of spss software researcher proved that Cronbach's Alpha is 0.949 which is projecting high internal consistency for researcher scale.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
5.3714	2.142	1.46371	5

Mean, variance and standard deviation of 5 number of basic Mobile services are positive and acceptable in nature.

Findings

1. Out 0f 202 respondents 108 female respondents have seen the promos and have the knowledge and intricacies of the Value Added services. This shows women is also very particular towards the electronic gadgets that is towards mobile phone services.

2. It is found that all most all the consumer using mobile phone are satisfied with basic mobile services irrespective of gender the services are accepted by them.

Conclusion. This research article contributes to the information technology about the consumer satisfaction towards basic Mobile service, Value added services, mobile Apps in general, Mobile apps in Specific and factors in which customer find faults in Mobile network services. This article is just to know about the basic Mobile services and consumer reaction and also tried to identify the value added services accepted by the consumer widely.

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