

“A COMPARATIVE AND TRANSFORMATION OF E-COMMERCE TO M-COMMERCE”

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ABSTRACT: Electronic commerce is a chain link with mobile commerce and it is probably going to merge in a business development around the worldwide. The revolution of the Mobile commerce is huge in recent years whereas electronic commerce was invented before mobile commerce. Commerce is all about trade the electronic commerce refers to electronically trading and mobile commerce refers to commercial transactions. Here in this research I have given a comparative statistical tool (chi-square) and the massive transformation of both practices. The statistical tools I have used here is chi-square, comparative chi-square, weighted average method, percentage method. Concluded with that there is no evidence between electronic commerce and mobile commerce. The main objective of inventing electronic commerce and mobile commerce is to interact with the organisations in worldwide, to invest, and to get information, etc.

KEYWORDS: E-commerce, M-Commerce, worldwide, Commerce, Trading.

INTRODUCTION

In ancient period people used barter system to get their needed goods or services. People exchange one thing to get their desired products still the same existing method has followed in modern era but the only one thing has been changed is giving money and getting their needed goods or services. Comparatively E-Commerce is old than the M-Commerce because the buying and selling goods and services is existing from the early 2000s but the M-Commerce had existed few years back and still there is a lack of awareness between people. The main thing is E-Commerce will not be use by old age people but the M-commerce plays a important role in the financial and banking sector. There is age category of people using the applications and the targeted audience will also be differing according to their taste and preferences. To maintain good relationship with customer's modern corporatist invest a lots of money for E-Commerce and M-commerce because their turnover of the company is truly based on applications their use. Shoppers don't travel physically to get their customers with the help of M-Commerce customers will approach the vendors. There is a chain link between E-Commerce and M-commerce both has functioned in a single

line like if there is E-Commerce there will be a market for M-Commerce.

REVIEW OF LITERATURE

India's internet user base grew over 17% in the first six months of the year 2015 to 354 million, according to the Internet and Mobile Association of India. The base had grown to 302 million by the end of 2014 after clocking its fastest rise of 32% in a year, as per IAMAI, which includes members such as Google, Microsoft, Face book, and eBay, IBM, Flipchart, Ola and LinkedIn (The Economic Times, Sep. 3, 2015).The number of Internet users in India is likely to cross 500 million by 2017 according to Ravi Shankar Prasad, minister for communications and information technology(Business Standard, May 5, 2016). In India, according to IAMAI report, the e-commerce market is expected to Rs. 2, 11,005 core by December 2016. Especially online travel is expected to grow around 40% to reach 1, 22,815 cores by end of 2016. Other than travel industry E-tailing is continued to remain dominant in which 57% growth was driven by mobile and its accessories. Computer and its accessories, apparels, fashion, online movie ticket booking, online grocery and food delivery

Etc. was also contributed significantly (The Economic Times, June 7, 2016). The increasing number of internet users and e-commerce business growth conclude that the graph of e-commerce in India will remain in exponential path. However the position of market is stiff competitive (Go swami, S. 2014). The factors like low brand loyalty, price sensitivity and services make this competition even severe. Hence e-commerce companies are striving to overcome these problems. And they are quite successful as we can find out e-commerce adoption in the market. According to Statist portal, the users of smart phones in India will touch 279.2 million by 2018. The article in The Indian Express (Feb. 4, 2016) said that according to the industry body of IAMAI the number of mobile Internet users in India is expected to grow over 55 per cent to 371 million by June this year. It also said that that this growth is driven by strong adoption in rural areas of the country. The IAMAI report further said that the mobile internet users from urban area and rural area use internet for e-commerce purpose is around 25% and 3% respectively. We know in India the internet is not accessible to maximum population like in Europe and America due to infrastructure unavailability but the above numbers supports that technology adoption is following exponential path. The 360round effect of e-commerce and technology adoption can help consumers to become technology literate. E.g. one can purchase technology and related products on e-commerce website. E-marketers can focus more on research measures to encourage the consumers to purchase online (Kiran, R., Sharma, A., & Mittal, K. C., 2008). E-commerce creates new business opportunities (Saini, B. 2014) by making their technology adoptive. Small business holders and entrepreneurs can start and expand their business by adopting technology innovations. Broadband, 3G, 4G etc. can help entrepreneurs and SMEs to do business online through e-process, e-procuring, e-payments etc.

AN ANALYSIS OF TRANSFORMATION FROM E-COMMERCE TO M-COMMERCE OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVE

To study the factors that motivates the transformation of E-Commerce to M-Commerce

SECONDARY OBJECTIVES

To analyze the utilization of E-Commerce to M-Commerce by the consumers. To identify the factors those are influencing the consumers to switch and the level of satisfaction of consumers in E-Commerce to M-Commerce to identify the problems faced by consumers while shopping. To put forward few recommendations in order to improve the E-Commerce and M-Commerce for continue usage of services.

SUGGESTIONS OF THE STUDY

The scope of the study deals with the E-Commerce to M-Commerce by the consumers. It also identified the influencing strategy towards products and it mainly concentrated on people's usage E-Commerce and M-Commerce. The study is to evaluate the problems faced by the consumers. The users can identify and achieve the efficiency to develop a good work behind wireless technology. The present study has been conducted among users or respondents to find out the comparison between E-Commerce and M-Commerce. Through this study, users' expectations toward E-Commerce and M-Commerce would be identified.

PURPOSE OF THE STUDY

Provide a brief content about E-Commerce and M-Commerce. Understand between E-Commerce and M-Commerce. Show the categories of mobile consumer applications. Comparing E-Commerce and M-Commerce to identify the transformation growth.

METHOD OF STUDY

To analyze the transformation of consumer from E-Commerce to M-Commerce was conducted to collect data from public.

SAMPLE AND SAMPLING METHOD

The present research is purely based on the questionnaires method using Google forms which is circulated to different age groups through social media platform. The study is conducted on 50 consumers.

SOURCES OF DATA

The primary data is collected from the general public by the form of questionnaire and the secondary data is collected through various websites and journals.

DATA ANALYSIS AND INTERPRETATION

TABLE 1: SHOWING GENDER USAGE IN E-COMMERCE AND M-COMMERCE

OPINIONS	NO.OF PERSONS	PERCENTAGE
MALE	30	60%
FEMALE	20	40%
TOTAL	50	100%

O	E	O-E	(O-E)	(O-E) ² / E
30	25	-5	25	1
20	25	-5	25	1
20	25	-5	25	1
30	25	-5	25	1
				4

SOURCE: PRIMARY DATA

INFERENCE: The above table shows that 60% of the respondents are male and 20% are female.

CHI-SQUARE:

Objective 1: To find out the association between satisfaction employee and gender.

$$x^2 = \sum (O-E)^2 / E$$

$$x^2=4$$

$$\text{Degree of freedom} = (r-1) (c-1) \\ =ndf=1$$

Table value of x^2 for 1 df at 5% level = 3.84

STEP 5:

Since the calculated value of $x^2 <$ then the table value of x^2 , Ho is accepted. There is no evidence of significant association between the response and the gender.

RESPONSES	GENDER		TOTAL
	MALE	FEMALE	
IN FAVOUR	30	20	50
NOT IN FAVOUR	20	30	50
	50	50	100

TABLE 2: FACTORS MOTIVATES THE TRANSFORMATION OF M-COMMERCE TO E-COMMERCE

STEP 1:

Ho: There is no evidence of a significant association between response and gender.

H1: There is evidence of a significant association between response and gender.

STEP 2: Observed Frequencies

PARTICULARS	NO.OF RESPONDENTS	PERCENTAGE
TRUST	32	64%
SECURITY FRAUD AND HACKING	6	12%
AWARNESS AND PERCEIVED USEFULNESS	6	12%
ACCESSIBILITY	4	8%
ROLE OF GOVERNMENT	2	4%
TOTAL	50	100%

RESPONSE	MALE	FEMALE	TOTAL
IN FAVOUR	30	20	50
NOT IN FAVOUR	20	30	50
TOTAL	50	50	100

INFERENCE: The above table shows that 64% of the respondents say that trust motivates the transformation of M-Commerce to E-Commerce, 12% of the respondents say security fraud and hacking motivates the transformation of M-Commerce to E-Commerce, 12% say that awareness and perceived usefulness, 8% say that Accessibility, 4% of the respondents say that role of government motivates the transformation of M-Commerce to E-Commerce.

STEP 3: Expected Frequencies

FIGURE 2

RESPONSE	MALE	FEMALE	TOTAL
IN FAVOUR	25	25	50
NOT IN FAVOUR	25	25	50
TOTAL	50	50	100

STEP 4:

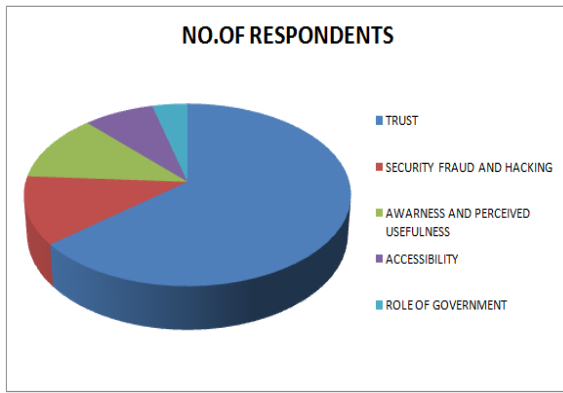


TABLE 3: SATISFACTION LEVEL IN ONLINE SHOPPING (E-COMMERCE) AND TRANSACTION (M-COMMERCE) COMPARISION CHI-SQUARE

OPINIONS	NO.OF RESPONDENTS	PERCENTAGE
SATISFIED	25	50%
VERY SATISFIED	20	40%
NEUTRAL	3	6%
DISSATISFIED	2	4%
VERY DISSATISFIED	-	-
TOTAL	50	100%

SOURCE: PRIMARY DATA.

INFERENCE: The above table shows that 50% of the respondents are strongly agreeing with the satisfaction level in online shopping. , 40% are agreeing, 6% are neutral and 4% are disagreeing with the satisfaction level in online shopping.

SATISFACTION LEVEL	NUMBER OF RESPONDENTS
SATISFIED	25
VERY SATISFIED	10
NEUTRAL	5
DISSATISFIED	5
VERY DISSATISFIED	5
TOTAL	50

X	Y	XY
25	5	125
10	4	40
5	3	15
5	2	10
5	1	5
ΣX=50		ΣXY=195

X= Observed frequencies

Y= Weight frequency

$$X = \frac{\sum XY}{\sum X} = \frac{195}{50} = 3.9$$

The average weight is 3.9. It lays between 3&4 hence the satisfaction level in online shopping and transaction is satisfied.

TABLE 4: FACTORS MOTIVATING E-COMMERCE AND FACTORS AFFECTING M-COMMERCE

FACTORS MOTIVATING E-COMMERCE

Competitive pricing- 25

Product quality- 15

Shipping time and cost- 5

Online Reviews- 5

FACTORS AFFECTING M-COMMERCE

Constraints of mobile device- 36

Small screen- 4

Payment troubles- 7

Security- 3

$$25 \quad 36 = 61$$

$$15 \quad 4 = 19$$

$$5 \quad 7 = 12$$

$$5 \quad 3 = 8$$

$$50 \quad 50 \quad 100$$

O	E	O-E	(O-E) ²
25	30.5	5.5	30.25
15	30.5	15.5	240.25
5	9.5	4.5	20.25
7	9.5	2.5	6.25
36	6	30	90
4	6	2	4
7	4	3	9
3	4	1	1
TOTAL=100	100		401

$$(O-E)^2 / E = 401/100$$

$$= 4.01$$

$$Df = (1-r) (1-c)$$

$$= (1-4) (1-2)$$

$$= 3$$

Ho is accepted since the calculated value= 401 are lesser than the table value.

H1 is no significant relationship between factors motivating the E-Commerce and factors affect M-Commerce.

TABLE 5 SHOWS THAT THE SATISFACTION LEVEL OF DIGITAL USAGE OF COMMERCE

OPINIONS	NO.OF RESPONDENTS	PERCENTAGE
STRONGLY AGREE	25	50%
AGREE	20	40%
NEUTRAL	3	6%
DISAGREE	2	4%
STRONGLY DISAGREE	-	-
TOTAL	50	100%

SOURCE: PRIMARY DATA.

INTERPRETATION: The above table shows that 60% of the respondents strongly agreeing with the satisfaction level of digital usage of commerce, 20% of the respondents are agreeing, 22% of the respondents are neutral, 18% of the respondents are disagreeing with the satisfaction level of digital usage of commerce.

WEIGHTED AVERAGE:

Strongly agree	5	×	25	=	125
Agree	4	×	20	=	80
Neutral	3	×	3	=	9
Disagree	2	×	2	=	4
Strongly Disagree	1	×	0	=	0
	<hr/>				<hr/>
	15				218
	<hr/>				<hr/>

X=Observed frequencies, Y= Weight frequency

$$X = \sum XY / \sum X = 218 / 15$$

Mean Value ($\sum X$) = 14.533.

FINDINGS OF THE STUDY

- There is no evidence between gender and usage of E-Commerce and M-Commerce.
- 60% of the respondents strongly agreeing with the satisfaction level of digital usage of commerce.
- There is no relationship between factors motivating the E-Commerce and factors affect M-Commerce.
- 64% of the respondents say that trust motivates the transformation of M-Commerce to E-Commerce.

CONCLUSION

The both methods are falling under digitalisation of the commerce industry whereas E-Commerce is an older than M-Commerce and for E-Commerce there must be internet facility but M-commerce doesn't need internet accessibility (Not Mandatory). Therefore I had given a conclude that both are unique and needed for different age group categories but still M-Commerce awareness has to be created to avoid frauds and get to know more about it. Resulted as M-commerce is a part of E-Commerce.

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