

Comprehensive Approach towards M Shopper's Shopping Behaviour using Shopping Apps – TAM Model Analysis

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ABSTRACT

In current digital era, the mode of retail business is undergoing rapid change. Retailers are shifting their businesses from brick and mortar to e commerce especially m commerce i.e., business transactions via mobile phones because smartphones are turning to be one of the smart commercial channel. At the same time we see the lifestyle of people also has changed. People depend more on smartphones in their daily life, thanks to the internet. People are also choosing to shop over the mobile phones for convenience purpose. In order to grab this opportunity the e retailers are trying to adapt themselves to m commerce via mobile applications. The success of the m commerce companies depend upon the customer's willingness to accept the usage of technology (smart phone and applications). In this paper the attempt has been made to find the perception regarding the acceptance of technology by m shoppers and to assess the factors that influences the acceptance of usage of apps for m-shopping using TAM model. For this study Questionnaire was designed to find the factors influencing m shopping using apps. The questionnaire includes the variable such as Perceived usefulness, behavioural intention, Perceived ease of use, attitude, Perceived Risk, Perceived Enjoyment from TAM model. Likert scale was used to measure the variables. 102 responses from the shoppers who shop using shopping applications are used for this study. The findings of this study supports the hypothesis framed. High negative correlation is observed between perceived risk and perceived ease of use. Attitude and shopping intention has high positive correlation. From the variables under study with score ranging from 5 to 25, perceived ease of use has highest mean and perceived risk has the minimum mean. Finally, the study also finds that low internet connectivity, low quality of product, low clarity about authentication of product, return policies are the problems faced by shoppers while shopping using mobile apps.

KEYWORD: m- Shopping, Behavioural intention, Perceived ease of use, Perceived usefulness, Perceived Risk, Perceived Enjoyment, attitude

INTRODUCTION

The Technology acceptance model (TAM) is an information systems theory that models how users come to accept and use a technology proposed by Davis, 1989. This model is a foundation for examination of customers approval of online shopping (Stoel and Ha 2009; Umair Cheema et al). The major components of TAM model are perceived ease of use, perceived usefulness, attitude and intention. (Xiaoni Zhang & Victor R. Prybutok 2003). In this digital era, technology has a crucial function in lives of many people. Mobile devices, in particular, have become an important product to many individuals and have been expected to further increase in their usage (JatiKasuma, et.al 2020).

Mobile Apps:

With the increased popularity of mobile apps, there has been a consequential magnification in the number of mobile app developers. Mobile App is one of the paramount marketing implements for any product/service. It might build/eradicate the brand equity and brand adhesion,

according to its performance. (Venkata N Inukollu, et.al 2014). Mobile app includes native apps which live on the device and are accessed through icons on the device home screen. These are installed through an application store, Web Apps are not real applications. These are stored on a remote server and delivered over the internet through a browser interface (Gagandeep Kaur; Gagandeep Kaur 2016). Smartphone driven Apps has exciting spaces for today's online community, and India's young economy is no exception. India is world's third largest internet user, after US & China (K Lalitha; ArockiaRajasekar 2018). Compared to traditional mobile web sites, mobile apps provides several advantages for marketers because mobile apps offer greater security features as well as allow consumers bypass competitors' information and go directly to the marketer's self-contained environment (Taylor and Levin, 2014); (TsuangKuo et.al,2016). M commerce Companies are offering the favourite way of shopping through apps for the shoppers and getting equipped with better connectivity and

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trying to lure shoppers to download their mobile apps offering App-Only sale discounts and other great offers on purchases made through Mobile Apps. (Dr. Shankar Chaudhary 2017).

M Shopping:

The usage of mobile smart phones is rising along with the usage of various applications. The purpose of usage of phone has widened which was earlier used to speak and communicate for the people in distant as well as to disseminate the messages from one person to another. But today, the purpose is not same, people use smart phone not just to communicate but also to fetch knowledge, learn, take guidance, trade, social communications etc. All these are possible through a medium known as internet. The way of life has changed due to the internet. The shopping using various mobile platform has led to more business transactions due to the growing population of mobile users and the user-friendly mobile applications simply known as app (JatiKasuma, et.al 2020). Mobile shopping (M-shopping) has emerged as a new shopping channel for consumers in line with rapid technology migration towards mobile-mediated transactions (Ezlika M. Ghazali et.al 2018)

Shopping Behaviour:

A study done in UK finds that consumer motivations for m-commerce engagement regarding the utilitarian motivations "efficiency shopping" has highly important influence on customers' behaviour to shop on m-commerce retail apps and for hedonic motivations, "gratification" and "social shopping" were the most important determinants of m shopping (Christopher J. Parker and Huchen Wang 2016)

Objectives:

1. To assess the factors that influences the acceptance of apps for m-shopping using TAM model
2. To find the problems faced by the shoppers while using apps for shopping

For this study non probability sampling method technique is used for convenience purpose and the sample collected from working class and the users of mobile apps for shopping. For this study survey method was used to test the research hypothesis.

Perceived usefulness:

This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". It means whether or not someone perceives that technology to be useful for what they want to do. The usability and usefulness of technology help in attracting and retaining the online shoppers (Davis 1989; Daniel Ofori, Christina Appiah-Nimo 2019). There exists a positive correlation between perceived usefulness and both the satisfaction of consumers and their trust and it also includes the various external factors that will affect the expectation of online shopping usefulness negatively (Chang et al 2001; Irfan Butt 2016). Perceived usefulness of a new technology also has a direct influence on their behavioural tendencies and new technology acceptance (ZeinabSheikhi 2012).

H1: Perceived usefulness has a positive effect on Behavioural intention.

H2: Perceived usefulness has a positive association with attitude.

Perceived ease-of-use:

Perceived ease of use deals with the degree to which a person believes that using a given system will be less costly in terms of effort or that the activity will be free of effort (Daniel Ofori, Christina Appiah-Nimo 2019).

H3: Perceived ease of use (PEOU) has a positive effect on Behavioural intention.

H4: Perceived ease of use (PEOU) has a positive effect on perceived usefulness.

Behavioural Intention:

The degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour (Warshaw & Davis, 1985; Uwe Konearding 1999). The intention of online shopping deals with the user's likelihood to engage in online transactions in the future (Wu, Yeh, & Hsiao, 2011; Daniel Ofori & Christina Appiah-Nimo 2019). It is evident that an increase in purchase intention reflects an increase in the chance of making actual purchase. Anytime a consumer has a positive purchase intention, then a positive brand engagement will promote the actual usage. In relation to the context of online shopping, one needs to consider purchase intention as the desire of consumers to make a purchase through an online application (Chen, Hsu, & Lin, 2010; Daniel Ofori & Christina Appiah-Nimo 2019). A study also observed that there is presence of moderating effects of device types and age on the intention to use mobile shopping applications (Thamaraiselvan Natarajan et al. 2018)

H5: There is a significant positive relationship between Attitude and Online Behavioural intentions

H6: Perceived Ease of Use has significant impact on Attitude

Perceived Risk:

An assessment of uncertainties or a lack of knowledge about the occurrence of potential outcomes and how one cannot control the outcome can be defined as the Perceived risk (Vlek & Stallen, 1980; Daniel Ofori, Christina Appiah-Nimo 2019). It is normal that the customers are anxious about the possible risk associated with new technology and this perception of risk influence their adoption of new technology (Keeney 1999; Ubaid Ur Rehman et al 2013). Though internet provides online consumers with additional channel for searching information of products and services, it still has some problems such as watch, touch and feel factor is missing. (A. Bhatnagar, S. Misra, and H. R. Rao, 2000; Yong-Hui Li and Jing-Wen Huang 2009)

H7: Perceived Risk negatively affects the online shopping intentions

Perceived Enjoyment:

The perception of the individual that the adoption of a new system or technology will make him/her have pleasure. If the use of a technology or system excites a person, it will motivate him/her to make use of that technology. (Keswani Sarika, et.al 2016). The online shopping is also enjoyable activity for many customers and it has a significant effect on online shopping intentions ((Jarvenpaa and Todd, 1997; Ubaid U R Rehman et al., 2013).

H8: Perceived enjoyment is positively related to behavioural intentions

Attitude:

As per the transactional definition of TRA, the attitudes of an individual towards a particular behaviour are determined by

the individual beliefs and evaluations about the results of exhibiting that particular behaviour (KeswaniSarika et al., 2016). Attitude towards mobile shopping were predicted by perceived enjoyment, perceived usefulness, and service attributes. Attitudes toward mobile shopping and subjective norms were the most important predictors of the shopping intentions (Sung, Heewon 2013).

Analysis:

H1: PU has a positive effect on shopping intention.

The present study shows $B = .308$, standard coefficient $\beta = .337$, $t = (101) = 3.581$, $p < 0.05$ and hence the Perceived usefulness has positive effect on shopping intention. Based on this study we accept the H1.

H2: Perceived usefulness has a positive association with attitude.

Here, $B = .472$, standardised coefficient $\beta = .410$, $t = (101) = 4.498$, $p < 0.05$, and hence perceived usefulness has positive association with attitude and we accept the H2.

H3: Perceived ease of use (PEOU) has a positive effect on shopping intention.

$Beta$ is $.339$, $t = (101) = 3.607$, $p < 0.05$, hence perceived ease of use has positive effect on shopping intention, and we accept the H3.

H4: Perceived ease of use (PEOU) has a positive effect on perceived usefulness (PUSF).

$Beta = .297$, $t = (101) = 3.106$, $p < 0.05$, hence perceived ease of use has positive effect on perceived usefulness. And we accept the H4.

H5: There is a significant positive relationship between Attitude and Online Shopping Intentions

$Beta = .524$, $t = (101) = 6.149$, $p < 0.05$, there is a significant positive relationship between attitude and online shopping intention. We accept the H5.

H6: Perceived Ease of Use has significant impact on Attitude

$Beta = .522$, $t = (101) = 6.127$, $p < 0.05$ and hence perceived ease of use has significant impact on attitude. We accept H6

H7: Perceived Risk negatively affects the online shopping intentions

$Beta = -.243$, $t = (101) = -2.504$, $p < 0.05$, and hence perceived risk negatively affects the online shopping intentions. Hence we accept H7.

H8: Perceived enjoyment has significant impact on behavioural intentions

$B = .281$, $t = (101) = 2.930$, $p < 0.05$, hence online shopping enjoyment is positively related to behavioural intention. We accept the H8.

High negative correlation is observed between perceived risk and perceived ease of use.

$R = -0.307$, $p < 0.01$. Attitude and behavioural intention has high positive correlation with $r = 0.524$, $p < 0.01$. Amongst these variables under study with score ranging from 5 to 25. Highest mean was obtained for perceived ease of use 20.07 with SD of 2.71 and perceived risk has the minimum mean of 16.57 with SD of 3.69. Reliability of the multi-item scale for each dimension was measured using Cronbach alpha and it was above 0.6 which is above the minimum acceptance level.

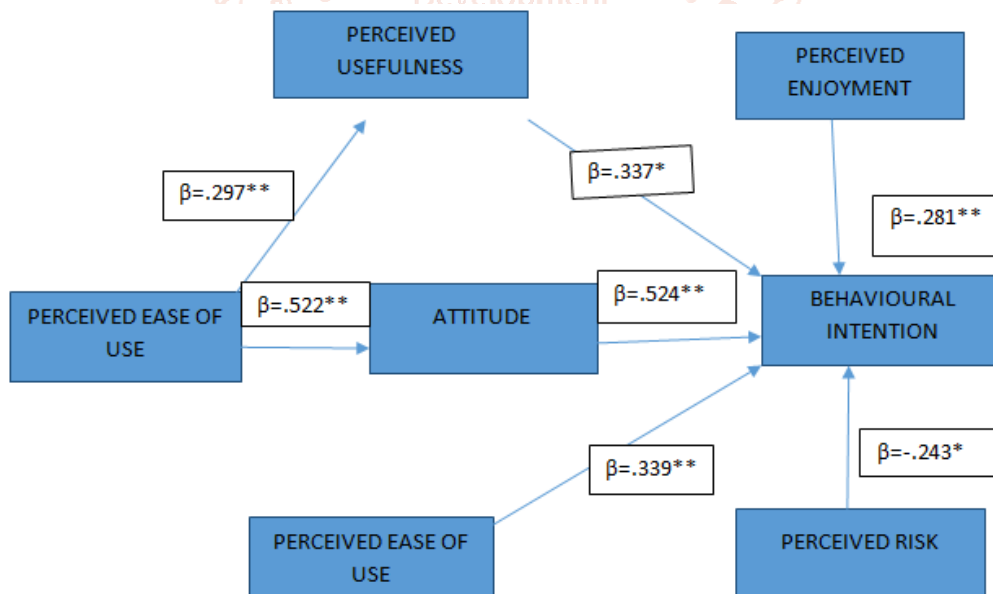


Figure no 1. Model Result

Conclusion, Limitations and Future Study:

The level of technological advancements, internet accessibility, socio-economic patterns and popularity of retail formats is different in emerging economies. Thus, the scale developed for western countries would find limited relevance and may not be applicable in studying consumers' shopping behaviour in emerging economies (Park et al., 2012; ArpitaKhare, Subhro Sarkar 2020). The result strongly accepts the TAM model as all the hypothesis are supported.

However, limited research has examined the applicability of TAM and shopping motivation in the context. Smart phones are considered to be one of the important and reliable device to consumers. Lately, Smart phones are acting as the convenient channel of retailing. And therefore, if the m retailers need to be successful in m commerce especially through the apps then the m retailers need to strongly pay close attention and dedication towards the consumers motivating factor. This study has provided the idea about

factors that affect online buying behaviour specifically through apps, based on which the m retailers can craft their e marketing strategies.

For the purpose of study convenience sampling was used and survey was conducted through online pools on m shoppers who shop using shopping app this limits the generalisation. The study was done with the intention of finding the factors that affect the shopping behaviour using mobile phone apps without any specific product category and therefore, the future study need to be done on different product categories that needs different level of involvement. Further, study can also be done to find whether these observed relationships will be similar with different gender, education or age groups categories.

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