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A STUDY ON FACTORS AFFECTING ADOPTION OF ONLINE SHOPPING: REFERENCE TO TAM

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ABSTRACT

This paper proposes a framework to increase researchers' understanding of consumers' attitudes toward online shopping and their intention to shop on the Internet with reference to Indian consumers. The study mainly uses the constructs of the Technology Acceptance Model (TAM) as a basis along with an addition of separate construct and applies it to the online shopping context. The study shows that attitudes toward online shopping and intention to shop online are not majorly affected by ease of use, usefulness, enjoyment and trust in online shopping. The conceptual study has been conducted through review of literature.

Keywords: *Online shopping, Technology Acceptance Model (TAM), Ease of use, usefulness, Trust, Enjoyment.*

1. INTRODUCTION

Tremendous increase in online retail is most discussed phenomenon, internet is being used for business purpose not only by the firms but by consumer as well (Wigand, 1997). As per the FICCI (2016) report in the last couple of years India has witnessed significant uptake of wireless internet services, led by operator initiatives to invest in spectrum acquisition and network upgrades. Increased number of smart phones and improvement of internet access have led to growth of virtual market (Borenstein and saloner, 2001). Increased Internet penetration, improved security measures, convenience of shopping in lives pressed for time, and of course dozens of retailers to choose from – these are a few factors that are attracting more and more consumers to shop online. While online shopping is an easy way for comparison of different products on the basis of their features and specifications—without going from shop to shop, many consumers do find it difficult to choose the best and safest sites for making purchases (e-commerce report 2014). According to NASSCOM (2016), the overall e-commerce market in India was estimated to be worth \$17 billion at the end of Financial Year (FY) 2016, with travel accounting for 61% of all online sales. Non-travel related transactions account for the remaining 39%, of which e-tailing accounts for 76%. Further, e-tailing has grown 93% year on year, with the top three e-tailing giants (Flipkart, Amazon and Snapdeal) accounting for over 80% of the segment in 2015. By 2020, e-commerce is likely to double to \$34 billion, mainly driven by the growth in the online retail space, as per the same NASSCOM report. As per the FICCI (2016) report with an estimated capex of INR160 billion, universal access to mobile connectivity seeks to increase network penetration and cover current gaps in mobile connectivity. It aims to cover remaining 42,300 villages by Financial Year 18. Same report suggests. As of September 2014, wireless accounted for ~92.6% of the country's total internet subscribers which are a boon for online retail. As per the IAMAI report, India already has the second-largest market for smart phones after China; it surpassed the US at the end of 2015, and now has more than 230 million Smartphone users. For the semi urban and rural population, the mobile phone is economical and easy to carry compared to other devices. By 2020, India will have an estimated 702 million smart phones in use and mobile phones will emerge as the preferred device for online shopping, accounting for 70% of total online shopping.

2. FRAMEWORK FOR CONSUMER'S INTENTIONS TO SHOP ONLINE

For developing an in-depth understanding of consumers' attitudes toward online shopping and their intentions to shop on the Internet, we built up a framework, based on previous research on consumer adoption of new technologies and services. The framework "online shopping" is defined as the use of online stores by consumers up until the transactional stage of purchasing and logistics. The basic constructs of our framework are adapted from the Technology Acceptance Model (TAM) by Davis (1989), an influential research model in the information systems field. The model has proven to be suitable as a theoretical foundation for the adoption of e-commerce as well (Chen et al., 2002; Moon and Kim, 2001; Lederer et al., 2000). Therefore, the TAM constructs are used as a basis for our

research framework. In TAM, behavioral intention to use a new technology is determined by the individual's attitude toward using this technology. To this, TAM originally identifies two, conceptually independent, determinants of a person's attitude toward using a new technology. The first determinant is "usefulness", and refers to the degree to which a person believes using the new technology will improve his/her performance or productivity. TAM also identifies a second determinant, "ease of use", referring to the extent to which a person believes that using the new technology will be free of effort. While "usefulness" refers to consumers' perceptions regarding the outcome of the experience, "ease of use" refers to their perceptions regarding the process leading to the final outcome.

More recent addition to the technology acceptance model is the "enjoyment" construct, or the extent to which the activity of using the new technology is perceived to provide reinforcement in its own right, apart from any performance consequences that may be anticipated (Davis et al., 1992). We have also considered Trust in online shopping as yet another construct other than these constructs.

3. REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

3.1 Ease of use

"Ease of use" is defined as the individual's perception about new technology that it will be free of efforts (Davis, 1989, 1993). Applying this to our case, "ease of use" is the consumer's perception that shopping on the Internet will minimize of efforts. "Ease of use" refers to their perceptions regarding the process leading to the final online shopping outcome. According to Selamat et al. (2009) easier technologies are always easily adopted by the consumers as compared to complex technology for online shopping. Usually consumers are not interested to use complex technology for buying any product or service online. Meanwhile website characteristics play a major role in determining perceived ease of use in online shopping (Beldona et al.2005). The direct effect of TAM is explained by the fact that in behavioral decision making consumers attempt to minimize effort in their behaviors, as is also the case with consumers' perceptions regarding the "ease of use": the perception that Internet shopping will be free of effort (Venkatesh, 2000).

Understanding that "ease of use" affects consumers' attitude and intention toward online shopping, it is important to identify the latent dimensions of this construct in the Internet setting. According to TAM, "ease of use" is particularly of influence in the early stages of user experience with a technology or system (Davis, 1989, 1993). The constructs of Ease of use as suggested in TAM by different researchers are computer playfulness, site Characteristics and enjoyment. "Computer playfulness", is the degree of cognitive spontaneity in computer interactions. Playful individuals may tend to underestimate the difficulty of the means or process of online shopping, because they quite simply enjoy the process and do not perceive it as being effortful compared to those who are less playful (Venkatesh, 2000). In addition to th, "site characteristics" like search functions, download speed, and navigation, also play a role in shaping "ease of use"(Zeithaml et al., 2002). But since these site characteristics merely influence A more recent addition to the technology acceptance model is the "enjoyment" construct, or the extent to which the activity of using the new technology is perceived to provide reinforcement in its own right, apart from any performance consequences that may be anticipated (Davis et al., 1992).

3.2 Usefulness

"Usefulness" is defined as the individual's perception that using the new technology will lead to improved performance (Davis, 1989, 1993). "Usefulness" referred to consumers' perceptions about the outcome of the online shopping experience. In simple words, it can be stated that "usefulness" is how effective shopping on the Internet is in helping consumers to accomplish their task. Then, "usefulness" can be understood as consumers' perceptions that using the Internet as a shopping medium enhance the outcome of their shopping experience. According to Zhou et al. (2007) it's the consumers' expectation towards increased shopping efficiency that has positive effect on the entire online purchase process. These perceptions influence consumers' attitude toward online shopping and their intention to shop on the Internet. TAM advocates a weak direct link between "usefulness" and attitude, and a strong direct link between "usefulness" and intention (Davis et al., 1989). This was explained as originating from consumers intending to use a technology because it was useful, even though they did not have a positive affect toward using.

Apart from this, “usefulness” is also linked with “ease of use” to determine consumers’ attitude toward online shopping. According to TAM, “usefulness” is influenced by “ease of use”, because the easier a technology is to use, the more useful it can be (Venkatesh, 2000; Dabholkar, 1996; Davis et al., 1989).

3.3 Enjoyment

Internal motivation for Internet shopping is captured by the “enjoyment” construct in present framework. Intrinsic value or “enjoyment” derives from the appreciation of an experience for its own sake, whatever other consequence may result (Holbrook, 1994). Applying this to our research context, “enjoyment” results from the fun and playfulness of the online shopping experience, rather than from shopping task completion. The purchase of goods may be incidental to the experience of online shopping. Thus, “enjoyment” reflects consumers’ perceptions regarding the potential entertainment of Internet shopping. Childers et al. (2001) found “enjoyment” to be a consistent and strong predictor of attitude toward online shopping. If consumers enjoy their online shopping experience, they have a more positive attitude toward online shopping, and are more likely to adopt the Internet as a shopping medium. Enjoyment in shopping can be two-fold: enjoyment from the product purchased as well as the process of shopping itself (Forsythe & Bailey, 1996; Kunz, 1997; Taylor & Cosenza, 1999). If consumers are exposed initially to pleasing and arousing stimuli during their Internet shopping experience, they are then more likely to engage in subsequent shopping behavior: they will browse more, engage in more unplanned purchasing, and seek out more stimulating products and categories. (Menon and Kahn, 2002)

3.4 Trust in online shopping

Lack of trust is one of the most frequently cited reasons for consumers not shopping on the Internet (Lee and Turban, 2001). Since this shopping medium is relatively new and most of them have only little experience with it, shopping on the Internet provides a challenge to many consumers. Rotter (1971) has found that in novel situations, people rely on their general disposition to trust. The most salient source of trust in a retail setting is the salesperson, where consumer trust is dependent on the salesperson’s expertise, likeability, and similarity to the customer (Doney and Cannon, 1997). However, with online shopping this physical salesperson is replaced by help buttons and search features, thus removing the basis of consumer trust in the shopping experience (Lohse and Spiller, 1998). Furthermore, online shopping also contains a level of risk. Consumers cannot physically check the quality of a product or monitor the safety and security of sending sensitive personal and financial information while shopping on the Internet (Lee and Turban, 2001). Lack of touch & feel philosophy in the online environment make it very difficult to create trust among the consumers. Creation of the trust in online shopping has become a difficult task for the online retailers, on which they need to work upon (Gustavsson & Johansson, 2006). This condition creates a sense of powerlessness among online shoppers. One of the main reasons for customers not purchasing online is lack of trust. Therefore trust has an important moderating effect on the relationship between consumers’ attitude toward Internet shopping and intention to shop online.

4. CONCLUSION

In this study, we examined the perceived importance of various constructs of adoption of online retail by Indian customers. It is found that ease of use, usefulness, enjoyment and trust factors have significant influence on customers’ attitude towards adoption of online retailing. It is concluded that ease of use is perceived as strongest influencer and trust in online retailer is least influencing factor by customers. This study helps in understanding the mind set of Indian customers towards online shopping. The study also helps online retailers to frame strategies on the basis of customers’ preferences.

This study also suffers from some limitations like a limited number of respondents are taken for the study in a specific region. Time and financial resources also acted as a limiting factor.

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