



A LITERATURE REVIEW ON USE OF TECHNOLOGY ACCEPTANCE MODEL UNDER DIFFERENT BEHAVIORAL FACTORS: IN CONTEXT OF ONLINE SHOPPING

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Abstract

In India large number of consumer purchase products by online shopping, research on consumers and online shopping has been explain some factors that influence consumer behavior to shop online. This paper uses the frame of technological acceptance model (TAM) as a basis, enlarge by some other factors and use it for measuring online shopping behavior of consumers. The review represents that consumer behavior towards online shopping are not affected by ease of use and usefulness but also influence by some other factors such as brand trust, product description, website design and online shopping experience of consumers.

Key Words: Internet, Online Shopping, IT, Consumer Behavior

Introduction

The advent of new technology in the society, people are more aware toward online shopping (Chen and Hung, 2015), research focus on some new shopping orientation that affect consumers behavior towards a specific products. According to the current reports presented by ASSOCHAM-PWC the online purchase is expected to rise by rise 67% to Rs. 10000 next year. Currently online shopper spends around Rs. 6000 a year an average as revealed by the ASSOCHAM-PWC study. During 2014 approximately 40 million consumers purchased online products and the number of consumers is expected to grow in coming years, consequently number of investors is attracted in this sector. The study added that brand like Flipkart and Snapdeal are enjoying an edge over global players like Amazon in the country. Online shopping captures a greater market share in computer devices and electronic gadgets. Computer and consumer electronics along with apparel and accessories account for the bulk of India's online sales. Currently the E-commerce industry is contributing total market revenue of over \$17 billion. In the next five year it is estimated to grow at a compound annual growth rate (CAGR) of about 35% each year clocking \$100 billion in revenue. 50% of this phenomenal growth has come in last two years according to the study conducted by the internet & mobile association of India and KPMG. By 2020, it is expected to contribute around 4% to GDP.

This research present the new way of consumers thinking and engage in enjoy thinking. The study has been described as the need structure (verma and jain, 2015). This research focuses on a few risk factors and suggests that risk factors influence online shopping behavior and represent intention of consumers to shop online (Fan et al., 2015). Online shopping behavior of consumers related to decision making style of consumers and retailers determine the behavior patterns for market segmentations (Khan and Goswami, 2015). Website quality is also important factors that create trust of consumers towards online shopping (Koksal and Penez, 2015). It is also explain by (Flavian and Fwnaly'u, 2006) that consumers are more aware about their privacy and it create impact on trust in online shopping. After including some factors, frame the review of literature and information system. As well as these factors that influence consumers' behavior towards online shopping provide a structure for understanding consumers' intention to shop online. Throughout the whole paper we define the online shopping and their related concern.

The structure of the paper is as follow, the whole paper technically divided into four parts, in first part we introduce a structure including all shopping orientation that affect consumers' behavior towards online shopping. Second part we focused on basic factors of consumers' and ease of use, usefulness and trust. Third we argue that brand image, website design, product content and online shopping experience of consumers, more effective factors of consumer behavior towards online shopping and make a relationship between consumer attitude and intention to shop online. In fourth part we find out the similarities, differences, advantages and disadvantages of online shopping, we also discuss the theoretical implication and limitations of this paper.

Structure of Consumer Buying Pattern by Online Shopping

For understanding of consumer behavior towards online shopping, we define with a framework based on previous research for measuring consumer behavior towards IT and services in the context of online shopping. The main focus of our structure is use of technological acceptance model (TAM) by (Davis, 1989). The TAM model upgraded continuously, TAM 2 (Ventkatesh & Davis, 2000) TAM 3 also introduce in the context of online shopping with additional factors like effect of trust and perceived risk. Technological acceptance model is again reframed by (Ajzen and Fishben's 1991) theory of

reasoned action (TRA). TAM replace with some additional factors which represent strong behavior of consumers and intention to purchase online.

Technological acceptance model shows true behavior of consumers towards use of new technologies and system for this it is necessary to define some other motivational factors to made consumer user friendly. To enlarge the model of TAM we show some other factors in our research framework. Structure of consumer buying pattern by online shopping includes some additional factors that helpful to measure online consumer behavior. These factors are explained by conceptual model of online consumer behavior. It show that online consumer behavior is also influence by brand trust, product description, website design and online shopping experience of consumers.



Figure 1.1: A Conceptual Model of Online Consumer Behavior

These new factors describe a conceptual model of consumer behavior which creates more faith and reliability on online shopping. According to time consumers behavior and expectation is also changed so these factors describe current situation of online shopping for the better adoption of TAM, two extra factors add by Bagozzi (2007) consumer traits and situational factors to influence the consumer behavior. TAM is also supported by some previous studies (Roca et al. 2009; Kim & Sony, 2010; Liu et al. 2010; Yim, Jim & Lim et al. 2016; Syed et al. 2011; Srivastava & Thakur, 2014) in this paper we include four factors in our research framework for understanding online shopping behavior of consumers and use of internet for shopping in their life; brand image, product content, website design and online shopping experience. After examining all these factors in our research framework the next part of this paper to explain each factor independently that helpful for measuring consumer behavior towards online shopping. First of all we describe about the TAM factors than we will move on to discuss other factors that use in our research.

Basic Factors of TAM

Internet and IT used by the consumers in their daily life, they live advance lifestyle. Internet rapidly changed life of everyone, now people are more connected with internet to learn more, work and live (Gate, 2000). Online shopping is a big change in way of marketing and purchasing (Wang & Jiang, 2006). The main reason to shop online is advance lifestyle of people and some leading online retailers provide shopping application to make online shopping easily and fast. Consumers feel fun and enjoyment with online shopping. For measuring consumer behavior in depth our framework defines some factors that influence consumer behavior towards online shopping.

Usefulness

“Usefulness” is firstly defined by Davis in TAM for measuring consumer perception towards use of new technology in their life. It is defined as a power factor that force to people to interact with new technology. Perceived usefulness is a external variable that represent attitude towards using a technology and also connected with behavioral intention to use of a particular system (Davis 1989) in second part of model PU is also connected with perceive ease of use (PEOU) to represent the



consumer behavior towards online shopping. "Usefulness" is more supported by PEOU to make more understanding of new technology (Venkatesh, 2000; Dabholkar, 1996; Davis et al., 1989). We also include the dimension of usefulness such as technological awareness, information provider, site information, multimedia capacity (Cao et al., 2015). PU define motivated factors towards online shopping and helpful to changing consumer behavior (Nittala, 2015).

Perceive Ease of Use

Ease of use define consumer perception towards use of internet services with minimum efforts. (Venkatesh, 2000) In TAM, ease of use defines as a behavioral determines factors that create intention to shop online (Davis 1989; Yu et al. 2005). PEOU is also defining as mediating factors between technological system and potential e-shopper (Ramayah & Ignatius, 2009). It consider both technological acceptor and online shopper (Koufaris, 2002), and focus on PEOU factors for better understanding of behavior of online consumers. PU and PEOU are basic factors of TAM and create positive attitude towards online shopping (Akhlay and Ahmed, 2015). Both factors affected by online shopping experience (Messegem & Courbet, 2013). PEOU and PU are most effective online retail attributes that attract more consumers towards online shopping. It is also important antecedents for online investors; motivate them to provide online dealers and stockholders services (Roca et al., 2009).

Our Dimension

Brand Trust

Brand image creates trust of consumers on a specific brand and influence consumer to create intention to shop online (Yasin et al. 2010). Consumers are more loyal if they build online trust by strong brand image and consumers freely share some information regarding their taste, habits, lifestyle and behavior (Horppu et al. 2006). Brand image create brand communication like packaging advertising, promotion, word of mouth and other aspects of brand experience, consumer satisfaction and trust is important variable for making positive brand image (Esch et al., 2006; castaldo, 2003) define a conceptual framework explain the relationship between brand image and customers loyalty and create new factors brand satisfaction. Trust is a core value to develop strong brand image (Berry, 2000). Trust creates customer's loyalty and build strong brand image that create repurchase intention in online shopping. Many studies are conducted on trust factors for both online and offline shopping (Lee et al., 2011; Reichheld et al., 2000; Chaudhuri & Holbrook, 2001). Some studies are preferred trust is most influencing factors in case of online shopping (Jarvenpaa, Tractinsky, & Vitale, 2000) and others found trust is less influencing factors than ease of use and usefulness (Bélanger, Hiller, & Smith, 2002; McKnight et al., 2002).

Product Description

Product content includes details information about product for creating consumer faith on purchasing. It is important for both online and offline sales of product but in case of online product description, it should be clearer for gaining consumer faith on online shopping. Some factors are intrinsic and others are extrinsic factors. Intrinsic factors include inner forces and self motivated factors which influence consumer towards shop to online. In extrinsic factors retailers create some influencing power to motivate consumers towards online shopping (Bagga & Bhatt, 2013). Online consumer takes decision regarding product and from where they want to purchase it. Products detail information helpful to take right decision for choosing products and website detail provide information from where they purchase (Mallapragada et al., 2016). Knowledge based online system make better decision power of consumers that include all information regarding online shopping activities for build strong brand image and increase online shopping (Huseynov et al., 2014).

Website Design

Attractive website design is most influencing factor in online shopping for changing consumer behavior. Today displaying and website design is important for any retail business to gain attention of consumer in particular way of shopping (Treiblmaier et al., 2011). Some global player used attractive website design to gain consumer's faith towards online shopping. Consumers faith that website best meet their needs, no matter how fulfill their expectation (Belanger et al., 2006). Web site makes a bridge between customers satisfaction and repurchase intention of online shopping. it provide flow of information to customer regarding products and services and helpful to take right decision (Fan & kim 2013). Flow of information is most influencing factors for consumer towards online shopping and it is possible through attractive website design (Ding et al., 2010; Nah et al., 2010; Rose et al., 2012; Zhou, 2012; Zhou and Lu, 2011). Now consumers can search more suitable source for shopping that are having more transparency in their dealing (Akroush & Ashouri, 2015). Introduce of website design with more advance features create positive attitude of consumers towards online shopping (Zhou, 2011). Sometime consumer write some comments to online retailer about their products and services if product appealing and product performance is high and it information search source is more powerful and capable to provide detail information (Al-Maghrabi et al., 2011).



Online Shopping Experience

Online shopping experience is based on past purchasing and satisfaction level of consumers that show repurchase intention to shop online. Internet shopping experience is considered as factors that make relationship between product information and repurchase intention (Acosta et al., 2014). Consumers past experience is important in understanding customers perception, lifestyle, attitude, habits and behavior towards online shopping (Nsyveen & Pedersen, 2004). Some online retailers used consumers retention strategies for repurchase intention to shop online (Kim, 2012; Lo et al., 2013; Ozok and Wei, 2010; Suki, 2013; Ulbrich et al., 2011). In this factor focus on the consumer's lifestyle, habits, experience, perception and decision making style and attitude towards online shopping (Zhou, 2014; Hsu et al., 2014; Chen and Chou, 2012; Al-Maghrabi and Dennis, 2010; Al-Maghrabi et al., 2011; Ahmad et al., 2010; Liu and Forsythe, 2010; Chen et al., 2009; Bhattacharjee, 2001).

Current Competition between Online Shopping and Traditional Shopping

Now online shopping growing very fast and consumer give more preference to online shopping rather than traditional way of shopping and this is a big challenge for traditional retailers for surviving themselves in high competitive environment. Consumers are purchase products by online and get services by offline, consumers give more preference both economics and technology attributes. Consumer's offline experience and combination of both are most important for measuring consumer behavior (Yang et al., 2016). Consumers first go on physical store to find out their best fit product with their need touch and see it but don't purchase form stores, they purchase from online retailer on less price with best discount so store formulates strategies to best fit of product with consumers need and retain them (Mehra et al., 2014). Last few years online sell growing very fast and create problem for traditional retail stores. And recent recession hurt to all physical stores sale, online retail growing more quickly. Deloitte estimates this shift to be approximately \$175 billion annually by 2015. As a result, retailers will need to understand the implications for their physical stores, reevaluate their overall store strategy, and adjust their physical footprint accordingly. Physical store also change their selling strategies and convert it into modern retailing by increasing store space with more variety of products under one roof but still they are face high discount selling strategies of online retailers (Dhillon et al., 2012). Discount is always a big issue for creating crowd in retail and shopper want to purchase product with high discount rate. Online retailing model based on discounting strategies of sale. Online retailers are managing their consumers with a single strategy of discounting and they attract consumer attention by social media (report presented by PWC 2014). Offline shopping is expensive and complicated but online shopping is more convenient for modern shopper (Cavall, 2016). Some situations are in favor of online shopping like time and distance, distance to store and pressure of time factors probability to shop online (Chocarro et al., 2013). Online brand loyalty is more popular than offline brand loyalty, consumers depend on online brand than in offline environment (Horppu et al., 2008). Offline brand power transferred towards online environment (Harvin, 2000).

Implication for Researchers

This paper explain TAM model with basic factors and also introduce some other factors that highly influence online shopping behavior of consumers. According to time and consumers requirement some new factors are created and influencing online consumer behavior so researchers need to identified that new variable and focus on current problem. We also try to find out some new factors that related with current situation through our theoretical framework that have most significant effect on consumer behavior towards online shopping. We do not believe that a general answer to this question is realistic, since the context of online shopping deals with different consumers that have different needs and goals in different situations. However, an attempt could be made to filter out the relatively less significant factors and/or determine relevant situational differences and set up a new conceptual framework.

Limitations

Our model base on conceptual model has a limitation of our study. We have try to find out those factors that influence consumer to shop online. We make our study with combination of result from many studies on online shopping, TAM and internet; these are also based on many factors that influence consumer behavior towards online shopping. We are confident that our studies include more relevant factors in this context. In second limitation our study main focused on a conceptual framework that is the result of literature review and has never been tested and based on empirically evidence. Finally by selecting a particular structure for our review may be some other concept are left that are not discussed in this paper.

Conclusion

While a large number of consumers in India that are frequently to shop online, need for more research on find out some new factors that influence online shopping behavior of consumers. In this paper, we frame a structure to create more understanding of consumer behavior toward online shopping and their intention to shop online. The framework uses the constructs of TAM as a basis, extended by some other factors that based on current situation of consumers and applies it to online shopping context. Our review show that attitude towards online and intention to shop online are not only influence by ease of use and usefulness but also other factors like brand trust, product description, website design and online shopping experience.



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