Mapping Online Buyer Behavior: A Critical Review of Empirical Studies

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Abstract

The world is changing tremendously and there has been a high growth in the technology. The World Wide Web (www) has brought a revolution in the world. The use of computers has increased in the last few decades and most of the computer users are familiar with the internet and interaction with websites. The use of internet has tremendously increased over the past years and has become a common means for information transfer, services and trade. The high involvement of people with the internet has brought out new dimensions in the business world. Online shopping has been observed to be growing across the world, in particularly those countries where the infrastructure for marketing facilities is highly developed. Internet is not restricted to networking platform; it also functions as a borderless transactional platform for consumers. Online consumer behavior is a bit different from that of the physical market where the consumers can feel and touch the desired product. Elliot and Fowell (2000) suggest that further research is urgently required to explore the nature of the groups of factors that determine Internet shopping behavior. The authors through this paper have tried to bring out results which will be helpful not only to the marketers but also the researchers.

Keywords:

Online Consumer Behavior, Online Shopping, Technology

Introduction

Technology driven changes in the world are all encompassing. In 2013 a total of 2.7 billion people worldwide were using internet (International Telecommunications Union, 2013).

Table 1: World Wide Internet Users

Year	Users (billion)	%age of total worlds' population
2005	1.02	15.8%
2010	2.03	29.4%
2014	2.92	40.4%

Source: Adapted from Internet Live Stats, 2014

The internet has given this world means where we exchange information and communicate through a series of interconnected computers. It provides us with fast and versatile communications capabilities (Belch & Belch. 2004). Internet has turned out to be an interactive media. And this interactive property of internet has made it powerful in the context of e-commerce. In a short span of time, internet has proved to be a very powerful platform that has given us a new path to communicate and do business. The internet, as no other communication medium has given globalized dimension to the world; we are just a click away from whatever we need. It has become the universal source of information for millions of people and has proved to be the most democratic of all media. Through internet a business can directly reach a very large market irrespective of its location.

There has been a rapid growth in the internet usage over the past years and interestingly it has become a common means for transferring information and trade & services. The worldwide B2C e-commerce sales were found to be more than 1.2 trillion US dollars in the year 2013 (Statista, 2014). The high involvement of people with the internet has brought out new dimension of online shopping in the context of business world. Online shopping has been a growing phenomenon all over the world, particularly those countries where the infrastructure for marketing is highly developed. Internet has proved not to be only a networking media but also a global means of transaction for consumers.

Table 2: World Wide E Commerce Sale

Year	Total sales (billion)	Growth
2011	\$857	
2012	\$1043	21.7%
2013	\$1233	18.2%
2014	\$1471	19.3%

(Source: e Marketer, 2013)

Internet shopping has received considerable attention in the popular press. The growth in online sales may impact the consumers in reflecting the compelling advantages of internet shopping. A number of benefits are promised to both the businesses and the consumers. From business perspective, internet has been visualized as a unique linkage between consumers and retailers using proprietary technology. On the other hand consumers can use internet as a valuable communication medium in facilitating controlled search for up-to-date information and assist themselves in comparison shopping and decision making (Hoffman, Novak & Chatterjee, 1996).

In terms of numbers, India has third largest online population in the world after China and United States. Currently there are 278 million internet users in India and they have grown by 32% from 2013 when there were

around 211 million internet users (IAMAI & IMRB, 2014). Three-fourth of the internet users in emerging economies like India is under 35 years of age, a number significantly higher than that for developed economies. According to Taylor & Cosenza (2002) this sector keeps on growing as a significant buying group and being consumers they "love to shop". The great size of the Y generation is having a profound effect on the retail industry (Kim and Ammeter, 2008). The earning capability of this generation is supposed to make them an important consumer group when they graduate and enter the work force. The long term success of the online retailers heavily depends on the 'ample purchasing power' and 'technological savy nature' of this consumer population (Hanford, 2005).

Table 3: Internet Users in India

Internet Users (Million)	Source
243	Internet Live Stats 2014
278	IAMAI 2014
302	Wikipedia

The total number of digital buyers in India during 2013 grew by around 28% to 24.6 million from 19.2 million in 2012 (e-Marketer 2013). Google India successfully carried out the 3rd Great Online Shopping Festival (GOSF) from 10th to 12th of December 2014. According to google there were 1.4 crore visitors to the site during GOSF. In a report tech2 News Staff reported that 77% of the visitors were male and around 67% of the visitors were from Metros like Delhi, Bangalore and Mumbai.

Literature Review

Internet has transformed itself into a vast global market place where we have facilities of exchange of goods and services. Sinha (2010) found that internet is used for purposes like searching product features, comparing prices and reviews, selection and order placement, making payments, which is followed by delivery and sales services.

Forsythe and Shi (2003) have classified internet users as internet shoppers and internet browsers. Those who have made online purchases were internet shoppers whereas those who only searched products online but did not purchase were internet browser. Online shopping/buying behavior is a process of buying products or services through internet. This process includes five steps which are similar to those of traditional shopping behavior (Liang and Lai, 2000). Potential consumers when feels a need for some product or services, they search for the relative information on the internet. Li and Zhang (2002) defined online shopping attitude as consumers' psychological state in terms of transactions over the internet.

Kim & Ammeter (2008) and O'Donnell, 2006 found out that youths are more familiar with the e-commerce and they are five times faster than the older generation in processing the website information. The online population of older generations has increased as compared to the past but young people still dominate the online population, (Jones and Fox, 2009). There exists a section of the younger generation who do not feel secure in online purchasing hence they avoid shopping online (Sullivan, 2004). Shareef, U. Kumar & V. Kumar (2008) the main factors responsible for forming perceptions of trust are disposition towards an attitude of trust, perceived site security, operational security & local environmental security.

Online Consumer Behavior

Chen (2009) brought up that in the past decade the study of online buyer behavior has been one of the vital research agendas in e-commerce. Consumer behavior in online shopping is different from the consumer behavior in the physical market where consumer has the freedom to touch and feel the product.

Informativeness and Entertainment have been found to be important factors in evaluation of a website (Ducoffe, 1996; Richard, 2005). According to Katerattanakul (2002) consumers browsed internet for both information as well as enjoyment. A positive relationship exists between attitude towards online shopping and online purchase intention Shim, Eastlick, Lotz & Warrington (2001), Watchravesringkan & Shim (2003) and Kim & Park (2005). Hedonic and Utilitarian motivations play significant role in affecting online buyers purchase intention (Wolfinbarger & Gilly, 2001).

Aljukhadar and Senecal (2011) found that the three segments formed by the online buyers are: first, the basic communicators (consumers using the internet mainly to communicate via e-mail), second, the lurking shoppers (online consumers who navigate and shop heavily),third, the social thrivers (consumers who uses the internet interactive features to socially interact by means of chatting, blogging, video streaming, and downloading). Barnes & Guo (2011) formulated a conceptual model of online purchase behavior. The four factors of their model were external motivators (perceived value), instinct motivators (perceived happiness), social factors and consumers' habits.

Mc Quivery et al. (2000) found that the youths did not conduct online shopping because of the concern of credit card security. Other factors which hindered online shopping are inability to see and touch the product, doubt in smoothness of the process of online order, concerns about privacy of the shared personal information, and additional expense of delivery were found to be factors which hindered online buying (George, 2004; Swinyard & Smith, 2003; Zhou, Dai & Zhang, 2007). Rousseau, Sitkin, Burt & Camerer (1998) described trust as a psychological state. Online purchase intention also depends on trust of the consumers on the website (Yoon, 2002). Pavlou in 2003 confirmed that the trust in the electronic retailer do effect the consumer's intention to transact. The theory of perceived risk is being used since 1960s in explaining consumer's behavior in decision making process. Financial risks, social risks, psychological risks, physical risks time risks and product performance risks are the perceived risks whenever consumers transacts online (Boksberger, Bieger & Laesser (2007); Chang, 2008; Corbitt, Thanasankit & Yi, 2003; Lim, 2003; Mitchell, 2001; Smith and Sivakumar, 2004). Kim et al. (2007) defined perceived risk as the belief of online buyers about the uncertain negative outcomes from the online transaction. Cox (1967) proposed financial and psychological risk in internet shopping. Cunningham (1967) figured out financial, opportunity, safety, social and psychological loss as the

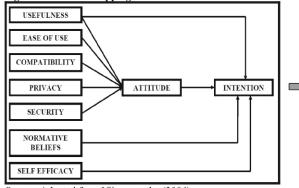
dimensions of perceived risk. Roselius (1971) added time risk as the sixth important perceived risk.

Word of mouth (WOM) plays a vital role in online consumer behavior. Lee et al. (2008) craved out that negative word-of-mouth elicits a conformity effect. Romaniuk and Sharp (2003) studied that sources like consumer experience, marketing communications and word of mouth builds Brand image.

Young generation generally have positive attitudes toward online shopping and the unique purchasing behavior of this group make them an important consumer group to study (Arnaudovska, Bankston, Simurkova & Budden, 2010 and Cole, 2011; Xu and Paulins, 2005). Herna'ndez, Jimenez, & Martin (2011) in their research on experienced e-shoppers analyzed online buying behavior in the light of individuals' age, gender and income (socioeconomic characteristics).

Men and women show different attitudes toward shopping whether it's online or in retail stores. Studies have shown favorable attitudes of men toward both the internet and computers in general (Bimber, 2000; Jackson, Ervin, Gardner & Schmitt 2001), and they have been found to be using internet eagerly for many purposes, which also includes online shopping (Dennis, Morgan, Wright & Jayawardhena, 2010). The selectivity hypothesis suggests that the main reason of gender differences is because men are content with the overall message themes or schemas, whereas detailed elaboration of the message content is looked by women (Meyers-Levy, 1989; Meyers-Levy and Maheswaran, 1991; Meyers-Levy and Sternthal, 1991).

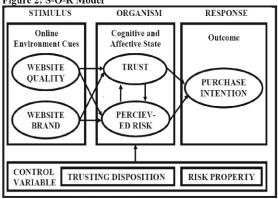
Figure 1: Internet Shopping Intention Model



This model is an amalgamation of three consumer behavior models (i.e. TAM, TRA and TPB) and takes into account various factors that play a significant role in predicting online consumer behavior.

Source: Adapted from Vijayasarathy (2004)

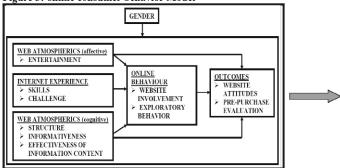
Figure 2: S-O-R Model



The research framework is based on the SOR paradigm (Eroglu, Machleit & Davis 2001, 2003). Stimulus has been defined as the cues that are tangib le and intangible to the users. It posits that consumers trust is positively affected and the perceived risk is negatively affected by website quality and website brand which ultimately affect consumers' online purchase intention.

Source: Adapted from Chang & Chen (2008)

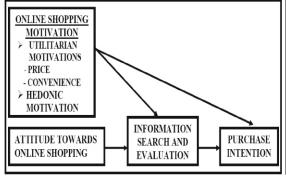
Figure 3: online consumer behavior Model



Meyers-Levy et. al (1991) observed gender differences as men look towards theme of the message, whereas females focus more on content of message. Efficient website design develops positive site involvement and attitudes for males which generate positive pre purchase evaluations. To encourage female buyers the website ought to provide detailed information, entertainment and attributes that stimulate both skills and challenge.

Source: Adapted from Richard et al. (2010)

Figure 4: Online Shopping Framework



Attitude towards online shopping, motivations and online information search are the three factors which affect online consumer behavior. The study brought out the relative influence of factors on decision making processes of internet buyers.

Source: Adapted from Delia & Xingang (2009)

Researcher (Country of study)	Journal	Year	Title	Constructs Studied	Comments
Terry L. Childers, Christopher L. Carr, Joann Peck and Stephen Carson (USA)	Journal Of Retailing	2001	Hedonic And Utilitarian Motivations For Online Retail Shopping Behavior	(a) Usefulness (b) Ease of Use (c) Enjoyment (d) Convenience (e) Navigation (f) Substitability of Personal Examinations (g) Attitude	Attitudes, expectations and preferences may differ in physical retail and interactive shopping environment for identical products
Christine Page & Elzbieta Lepkowska-White (USA)	Journal Of Consumer Marketing	2002	Web Equity: A Framework For Building Consumer Value In Online Companies	(a) Marketer and Non Marketer Communications (b) Web Design features (c) Vendor characteristics (d) Product & Service Factors	Developing a loyal consumer base is particularly important in online environments
Chung-Hoon Park & Young-Gul Kim (Korea)	International Journal Of Retail & Distribution Management	2003	Identifying Key Factors Affecting Consumer Purchase Behavior In An Online Shopping Context	(a) Information Satisfaction (b) Relational Benefit (c) Site Commitment (d) Purchasing Behavior (e) Interface Quality (f) Product Info Quality (g) Service Info (h) Security Perception (i) Site Awareness	The study demonstrated these factors to be key factors which affects online purchase behavior

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Philip J. Trocchia & Swinder Janda (USA)	Journal Of Services Marketing	2003	How Do Consumers Evaluate Internet Retail Service Quality?	(a) Performance (b) Access (c) Security (d) Sensation (e) Information	Through Hermeneutic logic the authors categorized different comments into five dimensions of internet service quality
Dina Ribbink, Allard C.R. van Riel, Veronica Liljander and Sandra Streukens (Europe)	Managing Service Quality	2004	Comfort Your Online Customer: Quality, Trust, And Loyalty On The Internet	(a) E Loyality (b) E Satisfaction (c) E Trust (d) Ease of use (e) E Scape (f) Responsiveness (g) Customization (h) Assurance	The study has specifically studied the mediating role of e-trust between e-quality and e-loyalty
Paul W. Ballantine (Australia & New Zealand)	International Journal Of Retail And Distribution Management	2005	Effects Of Interactivity And Product Information On Consumer Satisfaction In An Online Retail Setting	(a) perceived level of interactivity (b) perceived amount of information	Both variables have been found important in satisfying the consumers
En Xie, Hock-Hai Teo, Wen Wan (Singapore)	Market Lett	2006	Volunteering Personal Information On The Internet: Effects Of Reputation, Privacy Notices, And Rewards On Online Consumer Behavior	Independent Variables (a) Reputation (b) Privacy Note (c) Reward Dependent Variable (a) Willingness to provide personal information	The factors greatly influence consumers' intention to provide personal information but vary according to the sensitivity of the requested information
Hsin Hsin Chang and Su Wen Chen (Taiwan)	Online Information Review	2008	The Impact Of Online Store Environment Cues On Purchase Intention Trust And Perceived Risk As A Mediator	(a) Website Quality (b) Website Brand (c) Trust (d) Perceived Risk	The study is based on the stimulus-organism-response (S-O-R) paradigm (Eroglu et al., 2001, 2003
Juan Carlos Roca, Juan Jose' Garci'a and Juan Jose' de la Vega (Spain)	Information Management & Computer Security	2009	The Importance Of Perceived Trust, Security And Privacy In Online Trading Systems	(a) Behavioral intention (b) Perceived usefulness (c) Perceived ease of use (d) Perceived trust (e) Perceived security (f) Perceived privacy	The research is an extension of Davis' TAM, and includes perceived trust as an external variable affecting user acceptance of online trading services.
Sonia San Martı'n and Carmen Camarero (Spain)	Online Information Review	2009	How Perceived Risk Affects Online Buying	(a) Experimental Signals (b) Cognitive Signals (c) Company Characteristics (d) Satisfaction (e) Trust	There is a moderating role of the perceived risk on the online buying decision of the consumers
Ying-Hueih Chen, I- Chieh Hsu and Chia- Chen Lin (Taiwan)	Journal Of Business Research	2010	Website Attributes That Increase Consumer Purchase Intention: A Conjoint Analysis	(a) Security (b) Privacy (c) Usability (d) Convenience (e) Trust (f) Delivery (g) Product value (h) Merchandising	Attributes that companies building online shopping websites should focus on are: usability, delivery, security, trust, and convenience
Bo Xu, Zhangxi Lin and Bingjia Shao (America and China)	Internet Research	2010	Factors Affecting Consumer Behaviors In Online Buy-It Now Auctions	(a) Product Price (b) Product Type (c) Reputation (d) Risk Attitude (e) Perceived Risk (f) Buy it now Purchase (g) Risk Relief Adoption	The study explains how the transactional factors influence online buyer's perceived risk for the BIN transaction, and their decision-making on purchase and risk relief service adoption
Angeline G. Close and Monika Kukar-Kinney (USA)	Journal Of Business Research	2010	Beyond Buying: Motivations Behind Consumers' Online Shopping Cart Use	 (a) Current purchase intent (b) Price Promotions (c) Entertainment Purpose (d) Organization Intent (e) Research and Info Search (f) Online Cart Use (g) Online Buying 	The study reveals that the cart is not necessarily used as a place to store goods but as a wish list for possible future purchase
Rajagopal (Mexico)	Journal Of International Consumer Marketing	2011	Determinants Of Shopping Behavior Of Urban Consumers	(a) Logistics & Amenities (b) Marketplace Attraction (c) Shopping Preferences (d) Customer Relationship (e) Shoppers' Perception (f) Arousal and Merriment	The study observed that shoppers' perceptions of the retail environment, purchase motivations, and product quality mediate the emotions and shopping behavior.

Kenneth C. Gehrt, Mahesh N. Rajan, G. Shainesh, David Czerwinski and Matthew O'Brien (India)	International Journal Of Retail & Distribution Management	2012	Emergence Of Online Shopping In India: Shopping Orientation Segments	(a) Value Singularity Segment(b) Quality at any Price Segment(c) Reputation/Recreation Segment	The study analyses that two segments ready to be tapped in India are Quality at any Price and the Reputation/ Recreation Segment
Iuliana Cetina, Maria- Cristiana Munthiu and Violeta Radulescu (Romania)	Procedia - Social And Behavioral Sciences	2012	Psychological And Social Factors That Influence Online Consumer Behavior	 Psychological Factors Online Perception (b) Trust (c) Personality (d) Website's Aesthetics Social Factors Reference Groups (b) Family (c) Social Roles and Statuses 	Marketers cannot control the factors influencing Consumer behavior they must consider those factors
Dr. Ujwala Dange and Prof. Vinay Kumar (India)	Social Science Research And Network	2012	A Study Of Factors Affecting Online Buying Behavior: A Conceptual Model	1. Factors (a) External (Demographics, Socioeconomics, Culture, marketing, Technology, Reference Groups) (b) Internal (Attitude, Learning, Perception, Motivation, Selfimage and Semiotics) 2. Filtering Elements (a) Security (b) Privacy (c) Trustworthiness	factors, filtering elements and filtered buying behavior (FFF Model) have been used by the researchers to bring out the various factors affecting online Buying behavior
Jiyoung Kim and Sharron J. Lennon (USA)	Journal Of Research In Interactive Marketing	2013	Effects Of Reputation And Website Quality On Online Consumers' Emotion, Perceived Risk And Purchase Intention Based On The Stimulus-Organism- Response Model	 (a) Web site design (b) Customer service (c) Fulfillment/reliability (d) Security/Privacy (e) Reputation (f) Perceived Risk (g) Emotion (h) Purchase Intention 	A more comprehensive model of consumer experience in online retailing context has been developed by including reputation along with website quality
Sangeeta Sahney, Koustab Ghosh and Archana Shrivastava (India)	Journal Of Asia Business Studies	2013	Conceptualizing Consumer "Trust" In Online Buying Behaviour: An Empirical Inquiry And Model Development In Indian Context	(a) Security of online transaction(b) Data privacy and safety(c) Guarantee return policies(d) Perceived image of web site	This paper has attempted to conceptualize trust as a concept against backdrop online buying
Arun Thamizhvanan and M.J. Xavier (India)	Journal Of Indian Business Research	2013	Determinants Of Customers' Online Purchase Intention: An Empirical Study In India	 (a) Impulse Purchase Orientation (b) Quality Orientation (c) Brand Orientation (d) Online Trust (e) Prior Online Purchase Experience (f) Online Purchase Intention 	This research establishes that impulse purchase orientation, prior online purchase experience and online trust have significant impact on the customer purchase intention
Mahmud A. Shareef, Norm Archer, Wilfred Fong, Mir Obaidur Rahman and Inder Jit Mann (Canada)	British Journal Of Applied Science & Technology	2013	Online Buying Behavior And Perceived Trustworthiness	 (a) Behavioral Attitude (b) Cognitive Perception (c) Perceived Security (d) Perceived Privacy (e) Fulfillment (f) Perceived Trustworthiness (g) Purchase Behavior 	The scale was found to be reliable in Indian environment

Syed H. Akhter (US)	Journal Of Consumer Marketing	2014	Privacy Concern And Online Transactions: The Impact Of Internet Self-Efficacy And Internet Involvement	(a) Internet self-efficacy (b) Internet involvement (c) Privacy concern (d) Frequency of online transactions	Businesses will need to develop appropriate strategies to alleviate privacy concerns and motivate the use of the internet for conducting online transactions
Ilias O. Pappas, Adamantia G. Pateli, Michail N. Giannakos and Vassilios Chrissikopoulos (Greece)	International Journal Of Retail & Distribution Management	2014	Moderating Effects Of Online Shopping Experience On Customer Satisfaction And Repurchase Intentions	(a) Effort Expectancy(b) Performance Expectancy(c) Self-Efficacy(d) Trust(e) Satisfaction(f) Intention to Purchase	The findings suggest that the greater the users' experience, the more satisfied they are with their online purchases
Meng-Hsiang Hsu, Li- Wen Chuang and Cheng-Se Hsu (Taiwan)	Internet Research	2014	Understanding Online Shopping Intention: The Roles Of Four Types Of Trust And Their Antecedents	(a) Trust in the website (b) Trust in the Vendor (c) Trust in the auction initiator (d) Trust in group members (e) Perceived Risk (f) Attitude toward Online Shopping (g) Intention to Purchase (h) Security & Privacy (i) IT Quality (j) Reputation (k) Size (l) Interaction (m) Feedback Mechanism (n) Identification (o) Shared Vision	The online market solely depends on the Trust of the consumers. The marketers need to work in enrichment of the trust building factors

Discussion

The research on online buyer behavior has been conducted in different disciplines like information systems, marketing, management science, psychology and social psychology, etc. (Hoffman & Novak, 1996; Koufaris, 2002; Gefen, Rao & Tractinsky, 2003; Pavlou, 2003, 2006; Cheung, Chan & Limayem 2005; Zhou et al, 2007). It has been observed that customer behavior keeps on changing over the period of time because of the change in perception from past purchases (Taylor and Todd, 1995; Yu, Wu, Chiao & Tai, 2005). Motivational forces plays an important role in the explaining the shopping behavior (Wallendorf & Brucks 1993). It has been argued that motives for shopping influences the attitude towards a store as well as the perception of retail store attributes (Morschett, Swoboda, and Foscht 2005). If we analyze things from consumer's perspective, we find that online transactions is psychologically and procedurally different from other internet-related activities such as exchanging emails, sharing pictures & videos, chatting or reading newspapers. The need to share personal and financial information in conducting online transactions raises a concern about privacy and misuse of personal information among the consumers (Biswas and Biswas, 2004).

Theoretical Models

The online consumer behavior models have generally been derived from the models of the consumer behavior. The few models which have been used frequently in the literatures are discussed below.

Technology Acceptance Model (TAM)

The TAM is one of the most successful theories for examining technology acceptance (Lee et al., 2003; Sun and Zhang, 2006). It analyzes user behavior by establishing two key variables: perceived ease of use (PEOU) and perceived usefulness (PU). Recently, some studies have extended the TAM by including other concepts which permit more precise explanations of individuals' behavior. Most of this research introduces perceptions which act either in a similar way to PEOU and PU (Childers et al., 2001; Ha and Stoel, 2009) or as intermediaries between them and the dependent variable (Van DerHeijden and Verhagen, 2004; Roca et al., 2006).

Theory of Reasoned Action (TRA)

Ajzen and Fishbein in 1980 formulated the theory of reasoned action after trying to estimate the discrepancy between attitude and behavior. The theory regards consumer's behavioral intention as the determinant of consumer behavior, where behavioral intention is a function of 'attitude toward the behavior' (i.e. the general feeling of favorableness or unfavorableness for that behavior) and 'subjective norm (SN)' (i.e. the perceived opinion of other people in relation to the behavior in question) (Fishbein and Ajzen, 1975; Chang, 1998).

Theory of Planned Behavior (TPB)

TPB (Azjen, 1985, 1991) is an extension of the theory of reasoned action (Azjen and Fishbein, 1980). According

to TPB, an individual's performance of a certain behavior is determined by his or her intent to perform that behavior. This theory has been a successful model in a wide range of behavioral disciplines to empirically predict and understand behavior in a variety of situations (Bansal & Taylor, 2002; Barnett & Presley, 2004; Kang, Hahn, Fortin, Hyun, & Eom, 2006; Werner, 2004).

Expectation Confirmation Theory (ECT)

It is a cognitive theory explains post purchase adoption satisfaction as a function of expectations, perceived performance and disconfirmation of beliefs (Oliver, 1977, 1980). It considers satisfaction as a key variable for customers' continuance intention. According to Giannakos et al., 2011 a high amount of variance of intention to repurchase is explained by the satisfaction of consumers. The customer retention is high with higher levels of customer satisfaction Ittner and Larcker (1998). Anderson and Srinivasan (2003) added that a less satisfied consumer is hard to be retained.

Social Cognitive Theory (SCT)

The theory of SCT explains how people acquire and maintain certain behavioral patterns, while it provides the basis for intervention strategies (Bandura, 1986). SCT (Bandura, 1986) and TPB (Schiffer and Ajzen, 1985) included a perceived self efficacy. Bandura defined self efficacy as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances". Experience is considered as the strongest generator of self-efficacy (Bandura, 1986).

The research models of online consumer behavior are combination of theories of social psychology and consumer behavior. Decomposed Theory of Planned Behavior (DTPB) was formulated by Taylor & Todd in the year 1995 for the purpose of analyzing technological behavior. It draws upon theory of planned behavior (TPB) (Ajzen, 1991) by proposing a decomposition of attitude, subjective norm, and perceived behavioral control into attitudinal, normative, and control beliefs. In the year 2003, Venkatesh et al. proposed the unified theory of acceptance and use of technology (UTAUT) which explains the intentions of the users to use an information system and subsequent usage behavior. Pappos et al. (2014) drew a research framework using the constructs of UTAUT, SCT and ECT models. Shareef et al (2013) used TRA, TPB and DTPB to work on consumer behavior and trustworthiness. Kotlers' buyer behavior model has also been adapted by Iuliana et al. (2012) for the online consumer behavior with the addition of web experience to the factors affecting consumer behavior. Kotler (2003) added Web experience as an additional input in the traditional buying behavior frameworks. Researchers

have also used S-O-R model (Kim and Lennon 2013, Chang and Chen 2008) to work on online consumer behavior. FFF model (Factors, Filtering Elements and Filtered Buyer Behavior) have been used by Ujwala and Kumar (2012) to work out a conceptual model on factors affecting online consumer behavior.

Factors Determining Online Consumer Behavior

The online shopping is growing with a rapid pace and it is a bit different from the traditional shopping where we have the products in front of us and we can touch and feel before we finally purchase the products. But in online atmosphere we are deprived of this. A lot of factors have been studied in the literatures but below are the few important factors which determine the online consumer behavior:

Trust: Perceived trustworthiness in online retailing has been found as one of the most significant factors leading customers to interact with and purchase from specific websites (Balasubramanian et al, 2003, Darley WK et al. 2010, Tsikriktsis 2002, Wolfinbarger et al. 2003). Online purchase is considered as a risky affair and trust is considered as an essential factor for consumers making decisions on electronic purchases, it can have a direct or indirect impact on consumer purchasing intentions (Ribbink et al. 2004, Chang and Chen, 2008, Carlos et al. 2009, Martin and Camarero 2009, Cehn et al 2010, Iuliana et al 2012, Dange and kumar 2012, Arun and Xavier 2013, Shareef et al 2013, Pappas et al 2014, Hsu et al 2014).

Website Quality & Aesthetics: A variety of atmospheric cue, such as application of colors, illustration of products, complexity of display which directly or indirectly affect consumers' cognitive and affective responses in the online transactions (e.g., Eroglu et al., 2001; Chebat and Michon, 2003; Pons and Laroche, 2007). Different online consumers have different motivational orientations and they respond to web aesthetics in different ways (Babin and Darden, 1995; Kaltcheva and Weitz, 2006). The website appeal has emerged as an important cue to attract both the hedonic and utilitarian online consumers (Page and White 2002, Chang and Chen 2008, Rajgopal 2011, Iuliana et al 2012, Kim and Lennon 2013).

Perceived Ease of Use and Usefulness: These two variables of Technology Acceptance Model (Davis, 1989; Davis et al., 1989) with other two factors named Trust and Perceived Risk has been used to formulate TAM for e-commerce (Venkatesh and Bala 2008). These four factors combined together are the online motivators for consumers to purchase products and services online (Childers et al 2001, Ribbink et al 2004, Roca et al 2009).

Perceived Security/ privacy: It is the overall amount of

uncertainty which is perceived by a consumer when he is involved in a purchase situation (Cox et al. 1964). Egger, 2006 stated that online trust must be there when personal financial information and personal data is shared while making a purchase online. The transaction security (Financial Information) and the consumer privacy (Personal Information) has a significant role in building consumers trust in an online purchase (Park and Kim, Trocchia and Janda 2003, Xie, Teo and Wan 2006, Carlos et al 2009, Chen et al 2010, Dange and Kumar 2012, Sangeeta et al, Shareef et al 2013, Hsu et al 2014, Akhter 2014)

Purchase Intention: Customer online purchase intention is defined as the construct that gives the strength of a customer's intention to purchase online (Salisbury et al., 2001). A number of studies have brought forward that Purchase intention is a significant factor in determining online consumer behavior (Angela and Monika 2010, Kim and lennon 2013, Arun and Xavier 2013). Purchase Intention shows a positive response with higher online trust (Verhagen et al., 2006; McKnight et al., 2002; Lim et al., 2006; Ling et al., 2010, Ilias et al 2014, Hsu et al 2014).

Indian Scenario

Significant literature on online consumer behavior exists but majority of this research pertains to developed economies. However, published research is relatively scant with regard to Indian consumers. According to Dewan & Kraemer (2000) and Clarke (2001) because of the economic differences in developed and developing countries findings from developed countries are not directly transferable to developing countries and vice versa. With India being the 3rd largest internet using nation has an immense potential for online shopping. Kenneth et al (2012), Ujwala & Vinay (2012), Sangeeta et al (2013), and Arun & Xavier (2013) in their respective studies have discussed online consumer behavior and their determinants in India. Similarly, the concept of online shopping is in its initial stage and the constructs of TAM posited by Davis (1989) are relevant for the Indian consumers.

E-commerce in India is growing with scorching pace and we now have leading online retailers like Flipkart, Snapdeal, e-Bay, Myntra etc. According to Technopak, organized retail which is currently \$46 billion in India is expected to expand to \$182 billion in 2020 while e-tailing is expected to expand to \$32 billion by 2020 from \$2.3 billion now (Reuters, 2014, 18 Nov). The Indian e-commerce is attracting billions of foreign dollars too: Japan's SoftBank Corp invested \$627 million in Snapdeal. Flipkart.com also raised \$1 billion from Singapore sovereign wealth fund GIC, along with existing investors Tiger Global Management LLC and

South African media company Naspers Ltd. The portal has also attracted funds from eBay Inc and Indian billionaire Ratan Tata. After SoftBank's Masayoshi Son and Amazon's Jeff Bezos pouring of billions of dollars into India's racing e-commerce, Reliance Retail has taken its first steps into the crowded sector (Forbes Asia). In the Indian Economic Summit the government of Andhra Pradesh has decided to tie up with Google and Facebook to help the entrepreneurs and the farmers migrate to trade online (ET Bureau, 2014, 7 Nov). A significant percentage of business is expected to migrate to Ecommerce platforms. Keeping this trend in mind the Indian government is working in strengthening the cyber security and hence Data Privacy and Protection Act is actively being considered besides the existing Information technology Act 2008 so as to address the demands of present times (PWC, 2015).

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