

Effect of Online Product Demonstration on Customer ResponsesNijo Varghese¹, Kemthose P. Paul²¹Research Scholar, Kerala University of Fisheries and Ocean Studies (KUFOS),
Kerala, India²Professor, Sree Narayana Gurukulam College of Engineering (SNGCE),
Kerala, India.**ABSTRACT**

For e-tailers, the online store product demonstration is a matter of concern as studies have shown that it has an effect on the customer's cognitive and affective states, which in turn leads to online store loyalty. Various studies have also revealed that the product presentation is related to customer responses. However, not many studies have been conducted on the effect of online store product demonstration on the behavioural intentions (customer responses) through perceived ease of use and perceived usefulness as the cognitive states. Many customers believe that online shopping is insecure due to the lack of possibility to examine the product physically and the lack of personal contact. There is a high chance that the customers may switch the online stores if they don't like the product demonstration in the online. The purpose of this study is to find out how online product demonstration affects the behavioural intentions (customer responses) through cognitive states such as perceived ease of use and perceived usefulness. The survey was conducted among 342 online customers in India through online of whom 54.68% was male, 57.60% was younger than 30 years old and 60.82% respondents were employed. Analysis of the data was done using structural equation modeling and the results indicate that online product demonstration is positively related to customers' perceived ease of use, perceived usefulness and behavioural intentions. The results also indicate that perceived ease of use and perceived usefulness is positively related to behavioural intentions. This study will help the marketers of online stores to focus on the demonstration of products in their online stores in order to create positive behavioural intentions among its customers.

Keywords - Behavioural Intentions, Online Product Demonstration, Online Shopping, Perceived Ease of Use, Perceived Usefulness.

1. INTRODUCTION

Behavioural intentions is taken as the customer responses in this study, which is considered as one of the measures of online store loyalty and is acquiring more and more relevance in online buying. Behavioural intentions are the combination of repurchase intention and word-of-mouth intention, which determines the customer loyalty. Customer loyalty is the "degree to which customers are faithful to a firm's products or services and the strength of their propensity to choose one brand over the other competitor". The loyal customers are definitely an asset to any firm as they can attract more and more customers to the store but the disloyal customers may drag down the existing customers and can affect everything from sales to customer service and other critical areas of business.

The online stores faces many challenges like they don't have direct face to face contact with the customers and the lack of possibility to examine the product physically (Phau and Poon, 2000;

Goldsmith and Goldsmith, 2002). The online strategists/marketers should focus on the online store environment to overcome these challenges. There are several online store environmental factors that can make changes in the cognitive states and customer responses (behavioural intentions).

Online store product demonstration is one of the important factors that could influence the customer's cognitive states and the outcome of the cognitive states will lead to behavioural intentions. Online store product demonstrations include 2D display, 3D display, video display, enlarged view, whole view, mix and match of products etc. The customer cognitive states taken into consideration in this study are perceived ease of use and perceived usefulness. In order to fulfill greater level of customer responses, marketers/strategists must know the relationship between online product demonstration, customer cognitive states and behavioural intentions.

The present study is an effort to examine whether the online store product demonstration have an effect on behavioural intentions through perceived ease of use and perceived usefulness. This illustrates that the perception of customers towards online product demonstration can affect the behavioural intentions of the online customers and this effect can be through consumer cognitive states. Therefore this study tries to expose the influence of online store product demonstration and cognitive states (perceived ease of use and perceived usefulness) on customer's behavioural intentions.

We chose this research area because online shopping is increasing at an alarming rate and the online stores are trying to retain the existing customers and to attract new customers. Most of the online customers try different online stores as it is easy for them online. This may be because of the lack of possibility to touch and feel products online. Therefore we make an attempt to study the relationship between online product demonstrations to behavioural intentions through consumer's cognitive states because the behavioural intentions will lead to customer loyalty.

2. LITERATURE REVIEW

ONLINE PRODUCT DEMONSTRATION

Product presentation helps the consumers in purchase decisions by offering different ways of sensory or aesthetic information (Jeong, Fiore, Niehm & Lorenz, 2009). The online product presentation affects the shopping experiences of consumer (Kim et al, 2009). One of the key online environmental elements, the online product presentation (Eroglu et al., 2003) influences consumer behaviors inetailing. Yoo and Kim (2012) explained how online visual product presentation as a retail environment influences consumers' affective/cognitive states, and in turn influences shoppers' purchase intentions. Yoo and Kim (2012) used product coordination as online product presentation to examine its effect on the purchase intention as consumer response. Wong et al. (2009) used product coordination, which is also called "mix-and-match" recommendations as one of the important strategies for up selling or cross selling in retailing. The product presentation such as "advanced zoom technology", "changing product color by click swatch", "viewing all color of products", or "view all at once" allow the online customers to check the product parts in detail (Jang and Burns, 2004). Allen (2000) analysed the websites and proposed that the lifestyle images, thick product information, product collections and

multiple photographs are required for online retailers to generate sales. Detailed product descriptions, product presentations and product usage suggestions can help consumers to make purchase decisions (Ji and Leslie, 2002).

PERCEIVED EASE OF USE AND PERCEIVED USEFULNESS

The basic idea of technology acceptance model (TAM) proposed by Davis (1989) is to find the effect of external variables on internal beliefs, attitudes, and intentions. The model (TAM) explains perceived ease of use and perceived usefulness are the two most important elements in determining the usage of system. According to Davis et al. (1989), the perceived ease of use is explained as "the degree to which the user expects the target system to be free of effort" and the perceived usefulness is explained as the user's "subjective probability that using a specific application system will increase his or her job performance within an organizational context". The two independent variables of TAM, perceived ease of use and perceived usefulness was used in different information and computer technologies such as internet, email, spreadsheets etc.

BEHAVIOURAL INTENTIONS

The theory of reasoned action (Fishbein and Ajzen, 1975) shows the attitude and behavior relationship. The theory explained that the behavior of an individual can be determined by behavioral intentions and the potential behavioral tendencies of a person can be termed as behavioral intention. According to Ajzen and Driver (1991), the behavioral intentions can predict the actual behavior. Behavioral intentions comprises of repurchase intentions and word-of-mouth intentions (Heung and Gu 2012). Warshaw and Davis, 1985 defined behavioral intention as "the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior". Patronage intentions are explained as the willingness to return to the store (repurchase intention) and the intention to convey positive word-of-mouth to other customers (WOM Intention) by Donovan and Rossiter (1982).

3. OBJECTIVES

- To know the effect of online product demonstration on the consumer cognitive states (perceived ease of use and perceived usefulness) and behavioural intentions.
- To understand the relationship between consumer cognitive states (perceived ease of use and perceived usefulness) and behavioural intentions.

THEORETICAL FRAMEWORK

The stimulus– organism–response (S-O-R) model of Mehrabian and Russell (1974) describe that environmental stimuli control the emotional state of an individual, which in turn influence the approach or avoidance responses. The S-O-R model has been conceptualized for a variety of environments, and the model has been applied in online retailing too. Ha et. al. (2007) described that product presentation on online stores are symmetrical to displaying products in offline stores, that both focus on creating a pleasant shopping experience.

Li et al (2003) and Schlosser (2003) researches in online advertising has shown higher buying intentions due to 3D virtual product demonstrations. In online shopping, the product

presentation can be a crucial factor in determining the consumer shopping outcomes as they cannot touch and try on products (Kim, Kim & Lennon, 2009). Online product presentation features such as the closest representation of the online product images, displayed in combination with similar items, and from different angles such as front, back, and side view can trigger higher purchase intentions for consumers (Then & DeLong, 1999). Park et al (2005) examined the influence of product movement (kinetic image) on purchase intention in apparel websites. Retailers should give accurate and complete product pictures and detailed product description especially for color, texture, and fabric description in order to reduce perceived risk for apparel products in catalog shopping (Kwon et al., 1991).

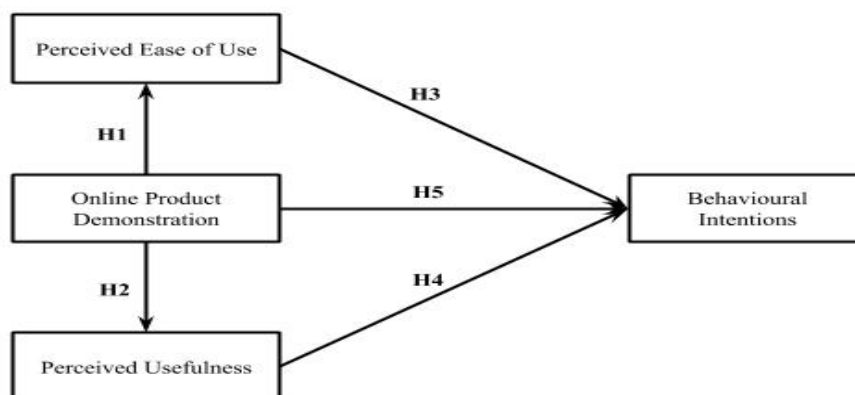
The e-marketer considers the image interactivity technology (IIT) which enables the manipulation of images like zoom or rotation (Kim et al., 2007a) and the collection of product information (Cyr et al, 2009) as the major benefits of interactivity. Clear and interactive product viewing through high levels of IIT such as a zoom feature or the ability to rotate (Kim et al., 2007a) allows the consumer/user greater levels of perceived control over their experience, which has a positive effect on both the perceived ease of use and usefulness of a website (Hernandez et al, 2009). The picture size affected the consumers' affective and cognitive attitudes when they were exposed to both small and large images (Kim and Lennon, 2008).

Fred Davis (1985) studied the mediating role of perceived usefulness and perceived ease of use in its relationship between the systems attributes (external variables) and the possibility of system use (a measure of system success) and proposed the technology acceptance model (TAM).

Hence, the researcher proposes the following five research hypotheses.

- **H1:** Online Product Demonstration is positively related to Perceived Ease of Use.
- **H2:** Online Product Demonstration is positively related to Perceived Usefulness.
- **H3:** Perceived Ease of Use is positively related to Behavioural Intentions.
- **H4:** Perceived Usefulness is positively related to Behavioural Intentions.
- **H5:** Online Product Demonstration is positively related to Behavioural Intentions.

BEHAVIOURAL INTENTIONS TO ONLINE PRODUCT DEMONSTRATION MODEL



(Source: Developed for the study)

FIG 1

4. METHOD

PARTICIPANTS AND PROCEDURE

Researchers collected data from 342 online customers, who responded to the online questionnaire sent through email, whatsapp, facebook etc. Out of this, 54.68% of the participants were male, 57.60% of the respondents were younger than 30 years old, 27.78% were between 30 and 40 years and 14.62% were above the age of 40 years. 47.37% of the respondents were married, 84.50% respondents were postgraduates or above, 35.09% were students and 60.82% were employed.

MEASUREMENT INSTRUMENTS

ONLINE PRODUCT DEMONSTRATION

Six-item scale was designed for this study to measure the customer perception of online product demonstration (Ha, Kwon, & Lennon, 2007; Katrandjiev & Velinov, 2014). Participant's perception towards the online store's product demonstration attributes were assessed through these items. The items used to measure online product demonstrations were "When I see products in 2D display, I tend to buy", "When I see products in 3D display, I tend to buy", "When I see products in video display, I tend to buy", "When I see products are shown in whole view, I tend to buy", "When I see the products are mix and match with other products, I tend to buy", "When the display can be enlarged, I tend to buy". Participants indicated their responses on a five-point Likert scale with (1) strongly disagree to (5) strongly agree. All of the online product demonstration items loaded 0.70 or higher with cross-factor loadings less than 0.30 and cronbach's alpha greater than 0.80.

PERCEIVED USEFULNESS

The six-item scale for measuring the perceived usefulness was developed from the perceived usefulness scale proposed by Davis (1989). The six items include "The online store work more quickly", "The online store increases my efficiency in buying online", "The online store increases my performance in buying online", "The online store increases my effectiveness in buying online", "The online store is useful in buying online", "The online store makes it easier to buy online". All six perceived usefulness items loaded 0.80 or higher with cross-factor loadings less than 0.20 and cronbach's alpha greater than 0.80.

PERCEIVED EASE OF USE

Five items from the scale proposed by Davis (1989) is used to measure the perceived ease of use of the online store. The five items we used are "Learning to operate the online store is easy for me", "The online store is user controllable", "The online store is flexible to use", "This online store is clear and understandable to use", "This online store is easy to use". The five perceived ease of use items loaded 0.80 or higher with cross-factor loadings less than 0.20 and cronbach's alpha greater than 0.80.

BEHAVIOURAL INTENTIONS

Behavioural intention scale was measured by three items corresponding to customer's intention to repurchase again from the same online store, tell positive things about the online store to others and willingness to recommend the store to others (Zeithaml et. al., 1996). Participants indicated their responses on a five-point Likert scale with (1) strongly disagree to (5) strongly agree. All of the behavioural intention items loaded 0.80 or higher with cross-factor loadings less than 0.20 and cronbach's alpha greater than 0.80.

5. DATA ANALYSIS AND RESULTS

The structural equation modeling (SEM) developed using WarpPLS is given in Figure 2. Results of the model fit are given in Table I and the reliability and validity of the model found to be satisfying (Table I).

QUALITY CRITERIA AND OBSERVED VALUES

QUALITY INDICES	CRITERIA	OBSERVED VALUE
Model fit	Average path coefficient (APC)	APC=0.325, P<0.001
	Average R-squared (ARS)	ARS=0.287, P<0.001
	Average adjusted R-squared (AARS)	AARS=0.283, P<0.001
	Average block VIF (AVIF): acceptable if ≤ 5 , ideally ≤ 3.3	AVIF=4.765
	Average full collinearity VIF (AFVIF): acceptable if ≤ 5 , ideally ≤ 3.3	AFVIF=3.801
	Tenenhaus GoF (GoF): small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	GoF=0.485
	Sympson's paradox ratio (SPR): acceptable if ≥ 0.7 , ideally = 1	SPR=1.000
	R-squared contribution ratio (RSCR): acceptable if ≥ 0.9 , ideally = 1	RSCR=1.000
	Statistical suppression ratio (SSR): acceptable if ≥ 0.7	SSR=1.000
	Nonlinear bivariate causality direction ratio (NLBCDR): acceptable if ≥ 0.7	NLBCDR=1.000
Cronbach's alpha coefficients	>0.7	Satisfied
Composite reliability	>0.7	Satisfied
Average variance extracted	>0.5	Satisfied
Convergent validity	P values associated with the loadings be lower than 0.05; and the loadings to be equal to or greater than 0.5; cross loadings to be less than 0.5	Satisfied
Discriminant validity	The square root of the average variance extracted should be higher than any of the correlation involving that latent variable	Satisfied
Effect sizes for path coefficients	Effect sizes of 0.02, 0.15, and 0.35 are for small, medium and large effect	Satisfied

TABLE NO 1

TESTING HYPOTHESES

Fig.2 represents the SEM of behavioural intentions to online product demonstration. To create structural equation model, four latent variables (online product demonstration, perceived ease of use, perceived usefulness and behavioural intentions) were defined and they were connected by creating links among them. The scale scores were used as the input for each analysis. The hypotheses (H1 to H5) were tested using PLS regression analysis and results are shown in Table II.

RESULT OF HYPOTHESIS TESTING

HYPOTHESIS	STATEMENT	BETA VALUE	P VALUE	INTERPRETATION
H1	Online Product Demonstration is positively related to Perceived Ease of Use of the online store	0.39	<0.01	Supported Hypothesis
H2	Online Product Demonstration is positively related to Perceived Usefulness of the online store	0.42	<0.01	Supported Hypothesis
H3	Perceived Ease of Use is positively related to Behavioural Intentions towards the online store	0.40	<0.01	Supported Hypothesis
H4	Perceived Usefulness is positively related to Behavioural Intentions towards the online store	0.26	<0.01	Supported Hypothesis
H5	Online Product Demonstration is positively related to Behavioural Intentions towards the online store	0.16	<0.01	Supported Hypothesis

TABLE NO 2

Hypothesis 1 and 2 (H1 and H2) predicted a positive relationship of online product demonstration on perceived ease of use and perceived usefulness. The result explains that online product demonstration caused a significant amount of variance on perceived ease of use ($R^2=0.15$) and perceived usefulness ($R^2=0.17$). The online product demonstration has a positive effect on perceived ease of use (0.39, $p<.01$) and perceived usefulness (0.42, $p<.01$). Therefore the results supported the hypotheses H1 and H2.

Hypothesis 3, 4 and 5 (H3, H4 and H5) predicted a positive relationship between perceived ease of use and behavioural intentions; perceived usefulness and behavioural intentions; also online product demonstration and behavioural intentions. The result shows that perceived ease of use, perceived usefulness and online product demonstration caused a significant amount of variance on behavioural intentions ($R^2=0.54$). The perceived ease of use, perceived usefulness and online product demonstration has a positive effect on behavioural intentions (0.40, $p<.01$; 0.26, $p<.01$; and 0.16, $p<.01$ respectively). Therefore the results supported the hypotheses H3, H4 and H5.

BEHAVIOURAL INTENTIONS TO ONLINE PRODUCT DEMONSTRATION

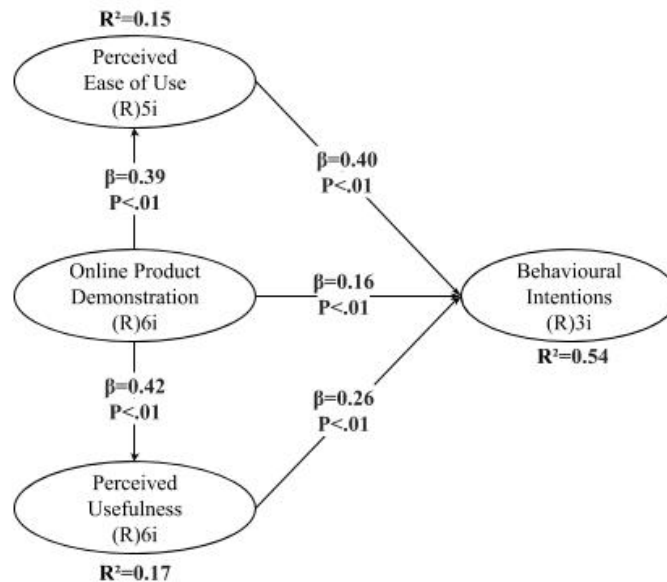


FIG NO 2

DISCUSSION

The stimulus-organism-response (SOR) is an unavoidable part of the consumer behaviour. The marketer has to change the environmental or marketing related stimuli in order to have a favourable customer response such as approach/avoidance behaviour or behavioural intentions towards their products or services. In this study, the online customers were studied to know the impact of online product demonstrations on the behavioural intentions through consumer cognitive states such as perceived ease of use and perceived usefulness.

As per the assumption the online product demonstration would predict the consumer cognitive states (perceived ease of use and perceived usefulness); the online product demonstration predicted both perceived ease of use and perceived usefulness. Also perceived ease of use and perceived usefulness is a strong predictor of consumer's behavioural intentions. The influence of online product demonstration showed a significant effect on the consumer's behavioural intentions. This indicates that the online product demonstrations such as 2D display, 3D display, video display, whole view, zoom view and mix and match of products have a significant bearing on the consumer's cognitive states (perceived ease of use and perceived usefulness) and behavioural intentions.

The study results based on the probability that consumers repurchase again from the e-tailers suggests that, the customers who like the online product demonstration has expressed a positive opinion about the perceived ease of use and perceived usefulness of the online store. Also, the perceived ease of use and perceived usefulness positively related to behavioural intentions. Hence, those who like the online product demonstration may exhibit positive behavioural intentions.

The result of the study will be beneficial for the online store marketers or strategists that the problem of switching online stores can be prevented to some extent if the marketers/strategists ensure that the online store has good demonstration/presentation of the products they sell through online. The study shows that the online product demonstration factors have a direct and significant effect on the consumer's behavioural intentions which can help to retain the customers. The researchers expect that the present study gave new insights in the various online store product demonstration elements and the proper management and control of it can improve the cognitive states of the customers and thus raise the chances of making them more loyal to the online store.

Even though the present study focused online product demonstration the variables such as web atmospherics, product related information, web advertisement etc. gives scope for future research on customer responses in online shopping. This study considered only the cognitive states of the customers as organism; the emotional/affective states were not taken into account.

6. CONCLUSION

The results of the study suggest the following:

- Online product demonstration helps to create a positive perception about the ease of use and usefulness of the online store among its customers.
- Online product demonstration, perceived ease of use and perceived usefulness will lead to positive behavioural intentions.

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