

The Effect of Consumer Innovativeness, Perceived Benefits, Perceived Risk, and Brand Image in the Decision to Buy Online

Jame Bryan L. Batara, Joanna Paula R. Mariblanca, Karlo Mar D. Kinaadman and Jandall Airon B. Go
University of San Carlos
jlblatara@usc.edu.ph

Abstract

With the advancing technology, online shopping is pacing fast. This calls for looking into factors that influence a consumer's decision to buy online. With this, the present study investigated four factors namely consumer innovativeness, perceived benefit, perceived risk, and brand image and its impact toward consumer's decision to buy online. To address this aim, four hundred eighty (480) participants were recruited online and randomly assigned into one of the sixteen treatment conditions with the presence and/or absence of the four variables being investigated. Results of two-way analysis of variance showed that, in an online selling platform, the presence of consumer innovativeness and perceived benefit, the presence of perceived benefit and perceived risk, and brand image had significant influence in one's decision to buy online. Findings provide implications towards improving an online website's shopping platform which may motivate the consumer to buy.

Keywords: online shopping, consumer innovativeness, perceived benefit, perceived risk, brand image

1.0 Introduction

People fulfill their needs and wants through buying – a behavior referred to as consumer behavior. In this digital age, buying can be done through internet (Garrett & Parrott, 2005). In deciding to buy, people are influenced by factors related to consumer innovativeness (e.g., opportunity to know more information about the product), perceived benefit (e.g., how they can benefit from the product), and perceived risk (e.g., whether the item purchased online has warranty and guarantee of being delivered) (Hsu & Bayarsaikhan, 2012). A product's brand image also gives confidence for consumer in deciding to buy

(Fianto et. al, 2014; Malik et al., 2013). The current study investigated the influence of these four factors toward an individual's decision to buy.

Review of Related Literature

Consumer behavior includes shopping and then decision to buy. Buying and consuming products is called shopping (Jeddi, Atefi, Jalali, Poureisa, & Haghi, 2013). One of the categories of shopping is referred to as window shopping – browsing at retail stores in order to see and feel the item of interest (Lepkowska-White, 2004). The second category of shopping is seeking items

through the use of the internet and purchasing them online before the item is seen and held in hand (Sproles & Sproles, 1990). Consumers who shop in stores are traditional shoppers and tend to thrive on the experience with the item that they may buy, something that consumers who shop online could not afford to do (Wolfenbarger & Gilly, 2001). Due to the rise of internet usage, consumers purchase goods faster online compared to buying them in retail stores (Schoenbachler & Gordon 2002; Garrett & Parrott 2005). This calls for an investigation of the factors that help consumers decide to buy online.

Consumers who shop online prefer to navigate through shopping websites, to seek information about an item and to decide to buy it (Ou, Shih, Chen, & Wang, 2011). Some indicated that online shopping provides flexibility and greater chances of looking into items with the free will to make transactions not within the bounds of time, distance or location (Stafford, Turan & Raisinghani, 2004). Even with that sort of convenience, the item is not yet directly at hand, so this makes decision-making the first step a consumer does prior to experiencing and evaluating the item.

Early studies look into influencing factors that facilitate a consumer's intention to buy (e.g., Ajzen, 1991; Davis, 1989). Hsu and Bayarsaikhan (2012) focused on the consumers' behavior in an online setting and were interested in looking into 1) consumer innovativeness, 2) perceived benefit, and perceived risk. First, consumer innovativeness refers to providing the consumer an opportunity to know more about the product (Hsu & Bayarsaikhan, 2012; McKnight et al, 2002). For example, the presence of online features that facilitate the consumer's need to know more information about a product facilitates favorable intention to buy online (Hsu

& Bayarsaikhan, 2012). Second, perceived benefit refers to shopping convenience, the pleasure one expects to get from the product, more opportunity for product selection, and the ease/comfort of shopping (Forsythe et al., 2006). The convenience in shopping online and the user-friendly features of an online selling platform served to increase an individual's intention to buy (Hsu & Bayarsaikhan, 2012). In line with this, the availability of the item's information, quality, and wide variety of options are what make the consumer's online shopping experience convenient (Santana & Loureiro, 2010). Third, perceived risk refers to the undesirable consequence and uncertainty involved in purchasing (Amin & Mahasan, 2014). This refers to the consumers' reluctance to buy due to the perception of possible money loss in an unsuccessful transaction or the item's failure to meet one's expectations. Online shoppers who cannot experience the item directly before they are able to purchase it feel the apprehension when met with no guarantee of success upon making the decision (Forsythe & Shi, 2003).

Consumer innovativeness, perceived benefit, and perceived risk shape the consumers' attitude toward the item being intended for buying (Hsu & Bayarsaikhan, 2012). However, an item's reputation (i.e., brand image) may also influence one's decision. Brand image is the mental image of the product in the consumers' minds (Lamba, 2013). Companies use the brand's identity to express a visual and/or verbal message to consumers in such a way that it distinguishes itself from other kinds of competition (Aaker, 2004; Berens, Riel, & Bruggen, 2005). When consumers know little about an item, they are likely to rely on its brand image (DeLong et al., 2004), giving them confidence in buying (Fianto et. al, 2014). Most consumers have a strong

preference for items that have been branded, with the perception of having more quality, and are likely to buy them than items without a brand (Malik et al., 2013). If applied in an online setting, consumers tend to purchase branded items by thinking that it lessens the risk they may experience in buying (Tan, 1999).

Although there have been already studies using consumer innovativeness, perceived benefit, perceived risk, and brand image in one's decision to buy online (e.g., Aldas-Manzano, Lassala-Navarre, Ruiz-Mafe, & Sanz-Blas, 2009; Cui, Lin, & Qu, 2018; Hirunyawipada & Paswan, 2006), there have been no attempts yet in directly comparing the effect of these four variables in an individual's decision to buy online. Hence, this study looked into how the presence and/or absence of consumer

innovativeness, perceived benefit, perceived risk, and brand image affect an individual's decision to buy online.

2.0 Methods

Research Design

Researchers utilized a 2 (consumer innovativeness: presence or absence) x 2 (perceived benefit: presence or absence) x 2 (perceived risk: presence or absence) x 2 (brand image: presence or absence) factorial design. There are sixteen conditions with an image of an online selling platform containing the absence and/or presence of the four independent variables. The dependent variable is one's decision to buy.

Below is the matrix of the 2x2x2x2 Factorial Design.

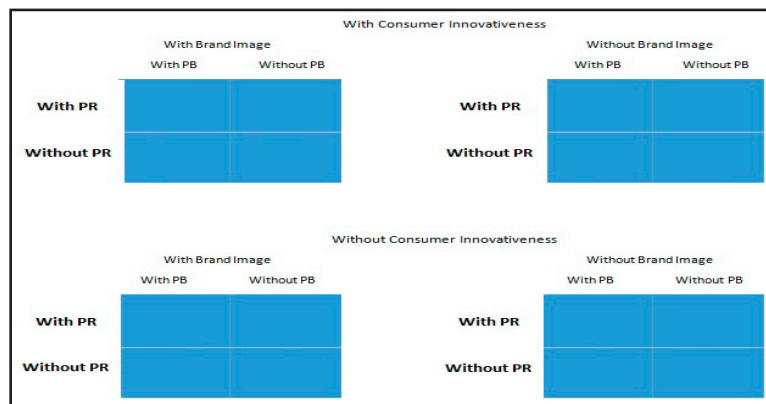


Figure 1. Matrix of the 2 (consumer innovativeness) x 2 (perceived benefit) x 2 (perceived risk) x 2 (brand image) Factorial Design

Sixteen conditions were constructed regarding the presence and/or absence of the 4 variables. For example, for the first condition, the participants were subjected to an image with the presence of all of the independent variables. In the second condition, the participants were subjected to an image with the presence of consumer

innovativeness, perceived benefit, perceived risk, but with the absence of brand image. All treatment conditions were based on the factorial design.

Participants

Four hundred eighty (480) participants who were young, working adults from ages 20 to 30

from the middle class socio-economic status in Cebu City. Respondents were recruited online through convenience sampling. To make sure that same respondents were not able to participate twice, their name's initials and birthdate (month, date, year) were asked as part of the demographics (e.g., JPR01051989)

Measures

A 5-point Likert Scale was used to measure decision to buy. Responses include from 1 = I don't want to buy you, 2 = I'm having second thoughts of buying you, 3 = There is a slight chance that I want to buy you, 4 = I want you, and 5 = No matter what, I am going to buy you.

Demographic information of the participants included their monthly income: (1) 9,000Php (lower class); (2) 9,001Php (middle class); (3) 37, 001Php (upper class). In the final analysis, only those in the middle class were included in order to make sure that the capacity to buy and pay for the item are similar across conditions. This eliminated income as a variable that may affect the participants' decision to buy.

In addition to their decision to buy, a close-ended question was also asked: "How much do you like the item/product?" through a 7-point Likert Scale. Those with ratings that range from 3 – 5 were included in the analysis. Through this, we were able to make sure that the respondents' interest in the product are approximately similar across all conditions. This eliminated varied liking of the item/product as a variable that may affect the participants' decision to buy.

Procedure

Online survey forms were administered to the young adult work force of Cebu City. An

informed consent was given, as an opportunity for respondents to choose to proceed or decline. Those who chose to proceed had their personal information and results kept confidential. After having read the informed consent as well as filling up their basic information, respondents proceeded to answering the questions of the survey under randomly assigned treatment condition. A short statement was provided for debriefing. No deception was used in gathering the data.

Sixteen conditions in the form of posters were constructed regarding the presence of and absence of certain variables, and via the internet, the researchers simultaneously sent out the 16 conditions of the experiment and randomly assigned one treatment condition to one participant. After looking at the poster and reading the presented information, the participants then proceeded to an online survey which recorded their level of buying decision, socioeconomic status, and level of liking the product.

3.0 Results

This study aimed to look into how the presence and/or absence of consumer innovativeness, perceived benefit, perceived risk, and brand image affect an individual's decision to buy online. With this, a two-way analysis of variance was used in analyzing the data (see table 1).

Results indicated significant interaction effect between consumer innovativeness and perceived benefit [$F(1, 464) = 27.351, p < .001, partial eta squared = .056$]. Specifically, the presence of both consumer innovativeness and perceived benefit increased the decision to buy ($M = 2.68, SD = 0.95$).

Significant interaction effect between perceived benefit and perceived risk was also observed [$F(1, 464) = 5.425, p = .020, partial eta$

squared = .012]. This means that the presence of both perceived benefit and perceived risk increased the decision to buy ($M = 5.85, SD = 1.13$).

Main effect was also found for consumer innovativeness [$F(1, 464) = 6.723, p = .010, partial eta squared = .014$], indicating that the presence of consumer innovativeness ($M = 7.25, SD = 0.075$) increased decision to buy compared to its absence ($M = 2.04, SD = 0.064$).

Main effect for perceived benefit [$F(1, 464) = 9.736, p = .002, partial eta squared = .021$] was

also observed, indicating that the presence of perceived benefit ($M = 2.31, SD = 0.073$) led to more decision to buy compared to its absence ($M = 2.02, SD = 0.066$).

Finally, main effect for brand image was also found [$F(1, 464) = 7.187, p = .008, partial eta squared = .015$]. This suggests that brand image of the product ($M = 2.29, SD = 0.072$) led to more decision to buy compared to its absence ($M = 2.04, SD = 0.067$).

Table 1. Summary for two-way ANOVA results

Source	SS	df	MS	F
Main effects				
Consumer Innovativeness (CI)	7.252	1	7.252	6.723*
Perceived Benefit (PB)	10.502	1	10.502	9.736**
Perceived Risk (PR)	0.052	1	0.052	0.048
Brand Image (BI)	7.752	1	7.752	7.187**
Interaction effects				
CI * PB	29.502	1	29.502	27.351**
CI * PR	0.919	1	0.919	0.852
CI * BI	1.102	1	1.102	1.022
PB * PR	5.852	1	5.852	5.425*
PB * BI	0.602	1	0.602	0.558
PR * BI	0.469	1	0.469	0.435
CI * PB * PR	0.169	1	0.169	0.156
CI * PB * BI	0.002	1	0.002	0.002
CI * PR * BI	0.102	1	0.102	0.095
PB * PR * BI	0.052	1	0.052	0.048
CI * PB * PR * BI	3.169	1	3.169	2.983*
Within Groups	500.5	464	1.079	
Total	567.998	479		

* $p < .05$, ** $p < .01$

4.0 Discussion

Advanced technology entails advanced ways of purchasing goods and services. The present study investigates the four factors that influence a consumer's decision to buy online. Results showed significant interaction of consumer innovativeness and perceived benefit as well as perceived risk and perceived benefit towards influencing decision to buy.

The first interesting finding indicates that when consumers are provided with opportunity to know more about the product (i.e. consumer innovativeness) and are given the opportunity to conveniently buy such product online, they exhibited increased decision to buy. This is in line with studies suggesting that consumer innovativeness leads to positive influence in online shopping and ultimately the consumer's decision to buy online (Bigne-Alcaniz, Ruiz-Mafé, Aldás-Manzano, & Sanz-Blas, 2008). Receiving some information about the product aids consumers to evaluate the benefits they may acquire upon purchasing the product (Wang et al., 2005). Coupled with the presence of perceived benefit in terms of providing easy access and convenient online transaction can lead to buying and even repurchase intention (Pham et al., 2018). Hence, online selling platform that features buttons related to providing the consumer the freedom to explore more about the product and the convenience of easy transaction may increase the likelihood that the consumer will decide to buy the product online.

Another finding is the interaction between perceived benefit and perceived risk. This interaction contrasted with previous studies (e.g., Forsythe & Shi, 2003) suggesting that the presence of uncertainty (i.e. perceived risk) can lead to lesser buying decision is expected. Instead, our results showed that the absence of perceived risk increased buying decision compared to when

assurance of protection (i.e., without perceived risk) was provided. However, the results showed that the presence of perceived risk interacted with the presence of perceived benefit to increase decision to buy. This may indicate that when uncertainty is presented in buying a product together with the benefit of buying such product, online shoppers still push through with achieving their goal in purchasing the product as it brings satisfaction to the shopper through meeting his/her need (Wolfenbarger & Gilly, 2001).

The goal to buy the product covered the impression of uncertainty (i.e., fear of loss in purchasing, the perception of failure of meeting expectation) that happens when purchasing the product. Consumers can do something to increase or reduce their perception of risk. One way is by selectively attending to the important information beneficial to them (Oishi, 2007). Another by believing in the idea of benefiting from the decision to buy as more important than the risk involved in the purchase – a classic example of justification (Festinger, 1957). Even with the perceived risk, the shopper may put more thoughts to the potential benefits he/she might experience in purchasing the product (Ringold, 2002). Thus, online selling platforms can make use of optimizing features related to how the shoppers may benefit from the product and features that simplify the steps for online transaction. Even with the perceived risk of buying online, these perceived-benefit features may outweigh perceived risk and lead to increased decision to buy.

Brand image also had significant effect towards decision to buy. Brand image gives confidence to the consumer when considering making a purchase (Fianto et. al., 2014). This is what consumers trust to decide to purchase when the product is not at all well-known to them, because quality and reputation is tied up to the brand. Some consumers are attached to the brand that

they are well-acquainted with in previous positive buying experiences. Brand image is the essential driving force of purchase decision and shaping customer loyalty (Zhang, 2015). Even in an online setting, as the present study found, the impact of brand image on consumer decision and customer loyalty remain significant.

The present findings help us understand that product information (i.e., consumer innovativeness) along with the given convenience in making a purchase (i.e., perceived benefit) motivate the online consumer to purchase the product (Hsu & Bayarsaikhan, 2012). Yet, perception of failure hinders one's decision to purchase (Mitchell, 1998). However, the present study indicates that the presence of perceived benefit outweighs the perceived risk in purchasing the product. Thus, even when perceived risk is there, consumers still engage in actual purchase due to the other variables such as consumer innovativeness, perceived benefit and brand image.

Although the present study provides interesting results and implications, several limitations should be noted for future research directions. The study is limited to an online setup that makes use of one common product for both males and females. It only focuses on working adults in the middle class with ages ranging from 20-30 years old. Future research need to focus on a larger section of consumers and a more experimental set up than the simulation survey used in the study to collect results that capture almost an actual behavior of online shopping.

Nevertheless, the results of the present study will benefit companies in establishing marketing strategies on how they will present their products to online consumers. Taking into consideration the influences of consumer innovativeness, perceived benefit, perceived risks, and brand image, product presentation methods may benefit from it, as well as the process of purchase found in the website's

design.

5.0 Conclusion

People purchase to satisfy their needs and wants. The present study found that the presence of consumer innovativeness and perceived benefit in the online selling platform, as well as the presence of perceived benefit and perceived risk increase one's decision to buy. Brand image also holds significant influence in one's decision to buy online. This implies that selling online needs to creatively provide features of the online shop that serve to incorporate consumer innovativeness, perceived benefit, perceived risk, and brand image in order to increase the likelihood of the consumers to buy online.

Reference

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179 – 211.
- Amin, S., & Mahasan, S. S. (2014). Relationship between consumers' perceived risks and consumer trust: A study of Sainsbury store. *Middle-East Journal of Scientific Research*, 19(5), 647 – 655.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 318 – 339.
- Delong, M., Bao, M., Wu, J., Chao, H., & Li, M. (2004). Perception of US branded apparel in Shanghai. *Journal of Fashion Marketing and Management: An International Journal*, 8(2), 141 – 153.
- Fianto, A. Y., Hadiwidjojo, D., Aisjah, S., & Solimun. (2014). The influence of brand image on

- purchase behavior through brand trust. *Business Management and Strategy*, 5(2), 58 – 76.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55 – 75.
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in internet shopping. *Business Research*, 56(11), 867 – 875.
- Garrett, G., & Parrott, G. (2005). E-business: Understanding key trends and applying best practices. *Contract Management*, 45(7), 34 – 42.
- Hsu, S. H., & Bayarsaikhan, B. E. (2012). Factors influencing online shopping attitude and intention of Mongolian consumers. *The Journal of International Management Studies*, 7(2), 167 – 176.
- Lepkowska-White, E. (2004). Online store perceptions: How to turn browsers into buyers? *Journal of Marketing Theory and Practice*, 12(3), 36-47.
- Malik, M. E., Ghafoor, M. M., Iqbal, H. K., Ali, Q., Hunbal, H., Noman, M., & Ahmed, B. (2013). Impact of brand image and advertisement on consumer buying behavior. *World Applied Sciences Journal*, 23(1), 117 – 122.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334-359.
- Midgley, D. F., & Dowling, G. R. (1978). Innovativeness: The concept and its measurement. *Journal of Consumer Research*, 4(4), 229 – 242.
- Mitchell, V. W. (1998). A role for consumer risk perceptions in grocery retailing. *British Food Journal*, 100(4), 171 – 183.
- Oishi, H. (2007). Selective attention in information processing: A review of brain science in SLA. *Review of Economics and Information Studies*, 8(1), 183 – 195.
- Ou, W. M., Shih, C. M., Chen, C. Y., & Wang, K. C. (2011). Relationships among customer loyalty programs, service quality, relationship quality and loyalty: An empirical study. *Chinese Management Studies*, 5(2), 194 – 206.
- Ringold, D. J. (2002). Boomerang effects in response to public health interventions: Some unintended consequences in the alcoholic beverage market. *Journal of Consumer Policy*, 25(1), 27 – 63.
- Santana, S., & Loureiro, S. (2010). Assessing benefits and risks of online shopping in Spain and Scotland. *Portuguese Journal of Management Studies*, 15(2), 161 – 172.
- Schoenbachler, D. D., & Gordon, G. L. (2002). Multi-channel shopping: understanding what drives channel choice. *Journal of Consumer Marketing*, 19(1), 42 – 53.
- Sproles, E. K., & Sproles, G. B. (1990). Consumer decision-making styles as a function of

- individual learning styles. *Journal of Consumer Affairs*, 24(1), 134 – 147.
- Stafford, T. F., Turan, A., & Raisinghani, M. S. (2004). International and cross-cultural influences on online shopping behavior. *Journal of Global Information Technology Management*, 7(2), 70 – 87.
- Tan, S. J. (1999). Strategies for reducing consumers' risk aversion in Internet shopping. *Journal of Consumer Marketing*, 16(2), 163 – 180.
- Wang, C. L., Ye, L. R., Zhang, Y., & Nguyen, D. D. (2005). Subscription to fee-based online services: What makes consumer pay for online content? *Journal of Electronic Commerce Research*, 6(4), 301 – 311.
- Wolfenbarger, M., & Gilly, M. (2001). Shopping online for freedom, control and fun. *California Management Review*, 43(2), 34 – 55.
- Zhang, Y. (2015). The impact of brand image on consumer behavior: A literature review. *Open Journal of Business and Management*, 3, 58 – 62.