

Consumer Behavior Towards Online Shopping During Covid-19: An Empirical Study from Mongolian Consumers

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Abstract

The Internet has become increasingly popular. As we know 91 percent of Mongolian total population is using the internet access. In 2006, Mongolian online shopping development had started, then it is an important transaction among entrepreneurs and customers. As a new channel for marketing, the online shopping played a significant role. It provides satisfaction for customers seeking convenience and speed when they purchase products. Therefore, the aim of the study is to determine the factors influencing on Mongolian consumers attitude, decision-making towards online shopping. The five main factors that are covid-19 effect, convenience, time-saving, web design and security were selected from the available literature. The collected data from Mongolian online shoppers, was analyzed by using SPSS, Smart PLS 3.3 software. The result indicates the hypothesis has been accepted.

Keywords: E-commerce, consumer attitude, decision-making, online shopping

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1. INTRODUCTION

Today, e-commerce is important and is here to stay. Internet marketing has become an integral part of marketing strategy. Marketers must understand how customers use the Internet to make decisions, select brands and transact with Internet providers. This special issue aims at developing new knowledge, models and theories on Internet customer behaviour (Laroche, 2010). Internet shopping, also known as online shopping, is an activity of buying goods and services over the internet (Faqih, 2016) and currently seen as one of the most important activities on the internet (Odell, Korgen, Schumacher, & Deluchhi, 2004). It is also considered to be a dominating alternative to traditional shopping (Mallapragada, Chandukala, & Ling, 2016). In general, internet shopping deals with some advantages and disadvantages, which are experienced by customers and retailers in the form of convenience, ease (Dennis, Fenech, & Merrilees, 2004; Huseynov & Yildirim, 2016), security concerns and fraud (Dennis, Fenech, & Merrilees, 2004; Mallapragada, Chandukala, & Ling, 2016). However, the benefits had an upper hand on the disadvantages, which resulted in a rapid growth of the popularity of online shopping (Bhagat, 2015).

Almost 91 percent of total population use the internet access, but Mongolian online purchases are developing relatively slowly compared to the state of the world market of international online purchases, for instance, about 30 online retailers (Apm.mn, Mmarket.mn, Emonos.mn etc.) is operating in the market (Khulan.M, Ichinkhorloo.S, 2018). Majority of researchers did analysis about the factors influencing on Mongolian consumer behavior is the perceived risk. Therefore, I tried to distinguish my study by taking the impact of factors as covid-19 effect, convenience, time-saving, web-design and security according to online shopping. The result shows the factors have a significant affection on the online purchase behavior of Mongolian consumers.

2. LITERATURE REVIEW

Technology acceptance model (TAM)

Technology acceptance model (TAM) is an extension to Theory of reasoned action proposed by (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), TAM is developed by (Fred Davis and Richard Bagozzi (Davis 1989,

Bagozzi & Warshaw 1992). TAM is basically information system theory that covers how a user accepts and uses a technology, TAM outlines number of factors that influence a user's decision and at the same time it deals with the how and when users will use it. The model deals with the acceptance of information technology. The external factors that influence users to make a decision are:

Perceived Usefulness (PU)

Perceived Ease of Use (PEOU)

In Davis (1989) words Perceived Usefulness (PU) is the "the degree to which a person believes that using a particular system would enhance his or her job performance" and Perceived Ease of Use (PEOU) is the "degree to which a person believes that using a particular system would be free from effort". The main purpose of the TAM is to explain how a user accepts a specific technology.

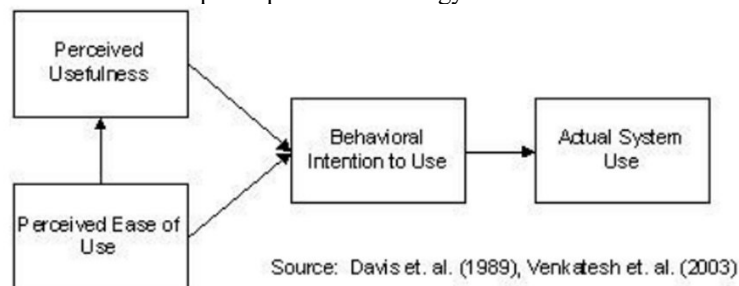


Figure 1 Technology Acceptance Model

Source: Technology Acceptance Model (TAM) by (Davis 1989, Bagozzi & Warshaw 1992)

As you can see in the above figure PU and PEOU are the external factors that influence the behavior intention to use and then finally it moves towards the actual system use, as you can see in the above figure author has explained that user will first consider that if he or she uses the particular system that would be free from effort and that is PEOU factor and then this factor leads to the one's thinking that particular system will increase one's job performance and that is PU factor, and then he or she will move forward to think about creating and intention to use that system and finally the will actually use the system.

Factors influencing consumer to shop online

Though there are several factors that influence consumers to shop online, but as mentioned above researchers have selected four factors after reading literature in the field on consumer attitudes towards online shopping and these factors are discussed below in the light of previous literature.

Convenience

Convenience factor refers that it is easy to browse or search the information through online is easier than the traditional retail shopping. Through online, consumers can easily search product catalog but if the consumer look generally for the same product or item in a traditional store manually it is difficult to visit physically and time consuming also. Convenience has always been a prime factor for consumers to shop online. Darian (1987) mention that online shoppers carry multiple benefits in terms of convenience, such as less time consuming, flexibility, very less physical effort etc. Bhatnagar and Ghose (2004) claims for convenience as one of the most important advantage for online shopping. According to the Robinson, Riley, Rettie and Wilsonz (2007) the major motivation for online purchasing is convince in terms of shop at any time and having bundles of items delivered at door step. Rohm and Swaminathan's (2004) claims in "typology of online shoppers into": Convenience shoppers, balanced buyers, variety seekers and store-oriented shoppers, based upon their preset shopping motivation. Rohm and Swaminathan's (2004) findings about 'convenience and variety seeking' are major motivating factors of online shopping and this study is consistent with Morganosky and Cude's (2000) research findings. Webcheck's (1999) study shows that convenience factor is one of the biggest advantages of online shopping. Through online purchase consumers can easily compare the price than the traditional purchase. So price comparison is also another convenience factor of online shopping.

Time saving

Time savings is one of most influencing factors of online shopping. Browse or search an online catalogue can save time and patience. People can save time and can reduce effort by shopping online. According to Rohm and Swaminathan's (2004), one possible explanation that online shopping saves time during the purchasing of goods and it can eliminate the traveling time required to go to the traditional store. On the other side, some respondent think that it is also time taken for delivery of goods or services over online shopping.

Unexpectedly time saving is not the motivating factor for the consumers to shop online (Corbett, 2001) because it takes time receiving goods or delivery. But time saving factor can be seen through different dimensions i.e. "person living in Florida can shop at Harod's in London (through the web) in less time than it

takes to visit the local Burdines department store” (Alba et al. 1997, p. 41, emphasis added). Morganosky and Cude (2000) have concluded that time saving factor was reported to be primary reason among those consumers who have already experienced the online grocery buying. So the importance of the time saving factor cannot be neglected as motivation behind online purchasing. Additionally Goldsmith and Bridges (2000) emphasize that there is a discrimination between online shopper and non online shoppers, online shoppers are more worried about convenience, time saving and selection whereas non online shoppers are worried about security, privacy and on time delivery. A study by Kamariah and Salwani (2005) shows higher website quality can highly influence customers to shop online.

Website design, features

Website design and online shopping activity is one of the vital influencing factors of online shopping. Website design, website reliability/fulfillment, website customer service and website security/privacy are the most attractive features which influence the perception of the consumer of online buying Shergill & Chen (2005). Kamariah and Salwani (2005) claims the higher website quality, the higher consumer intends to shop from internet. Web design quality has important impacts on consumer choice of electronic stores, stated by Liang and Lai (2000). Website design one of the important factor motivating consumers for online shopping. Almost 100,000 on-line shopper’s surveyed by (Reibstein, 2000) shows that web site design was rated as important factor for online shopping. Another study conducted by Zhang, Dran, Small, and Barcellos (1999, 2000), and Zhang and Dran (2000) indicated that website design features of the website are important and influencing factors that leads consumer’s satisfaction and dissatisfaction with a specific website.

A study conducted by Yasmin and Nik (2010) shows a significant relationship between online shopping activity and website features. Website design features can be considered as a motivational factor that can create positive or negative feelings with a website (Zhang, et al 1999). A study by Li and Zhang (2002), if website is designed with quality features it can guide the customers for successful transactions and attract the customers to revisit the website again. However, worse quality website features can also hamper online shopping. According to Liang and Lai (2000), web design quality or website features has direct impact on user to shop online.

Moreover researchers such as Belanger, Hiller and Smith (2002) concluded that a large segment of internet users have serious concerns of security.

Security

Security is another dominant factor which affects consumers to shop online. However many internet users avoid online shopping because of credit card fraud, privacy factors, non delivery risk, post purchase service and so on. But transaction security on the online shopping has received attention. Safe and secured transaction of money and credit card information increases trust and decreases transaction risk. In 1995, UK has introduced Fraud free electronic shopping and later on Europe and Singapore introduced secured electronic transaction (SET). According to Bhatnagar and Ghose (2004) Security is one of the attribute 14 which limits buying on the web as they claim that there is a large segment of internet shoppers who don’t like to buy online because of their thinking about the security of their sensitive information.

Cuneyt and Gautam (2004) claims trust in the internet shopping with advanced technology, and frequent online shopping to the internet being secured as a trustworthy shopping channel.

3. METHODOLOGY

The online shopping is a quite popular in Ulaanbaatar comparing previous decades, as follows a rapid growth of the internet usage, the managers faced the challenge to increasing their sells revenue and gathering new consumers to their business accordingly. In other hand, the Mongolian retailers and entrepreneurs are competing with each other by using the online shopping platform, but on consumer side the recognition and knowledge about it is not enough, which can be effect on the online shopping development. Therefore, the findings the factors that influence on consumer attitude and decision-making towards online shopping is now important part for the online shopping platform developers and users.

The following research methodology has been developed by analyzing primary and secondary data, research materials of other international scientists and researchers. The technology acceptance model (TAM) used for identifying the consumer’s attitude to online shopping. The model consists of the five independent variables:

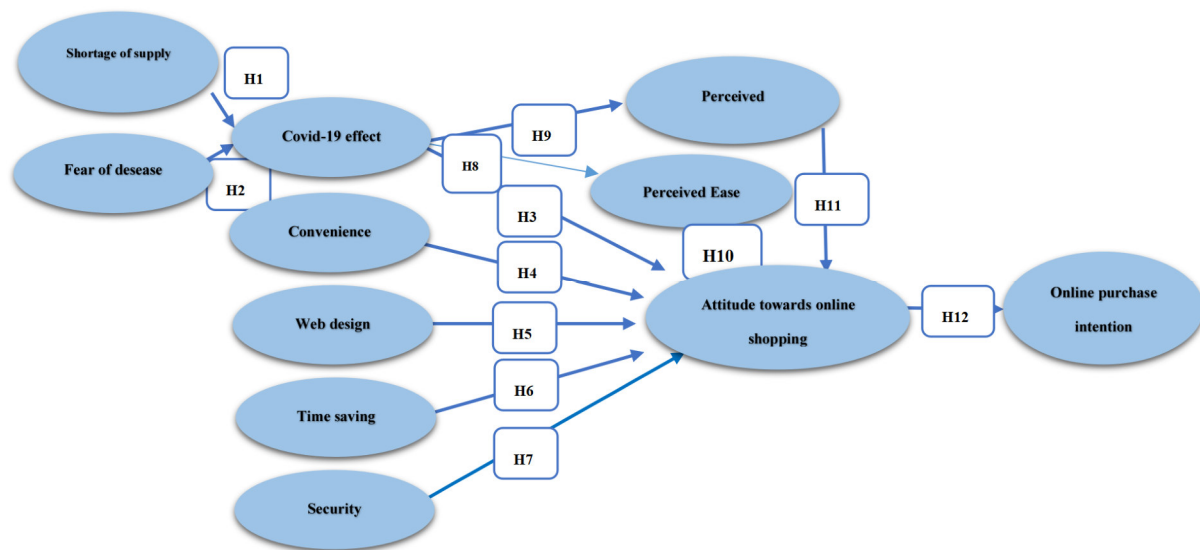


Figure 2. Conceptual model inspired by TAM

Hypothesis	Explanation
H1	There is a direct and positive influence of fear of disease on Covid-19 effect
H2	There is a direct and positive influence of shortage of supply on Covid-19 effect
H3	There is a direct and positive influence of the Covid-19 effect on attitude towards online shopping
H4	There is a significant and positive relationship exists between convenience and attitude towards online shopping.
H5	A substantial and progressive relationship exists between time saving and attitude towards online shopping
H6	There is a positive relationship exists between online web design and consumer buying-behavior towards online shopping.
H7	A major and affirmative relationship exists between established sense of security and attitude towards online shopping.
H8	There is a direct and positive influence of COVID-19 pandemic effect on perceived ease of use
H9	There is a direct and positive influence of COVID 19 pandemic effect on perceived usefulness.
H10	There is a direct and positive influence perceived ease of use on attitude towards .
H11	There is a direct and positive influence of perceived usefulness on attitude towards online shopping
H12	There is a direct and positive influence of attitude towards online shopping on online purchase intention.

The survey oriented a total of 434 online shoppers, and 432 respondents completed the questionnaires by paper-based, Facebook and e-mail. In order to analyze the data used MS Excel and Smart PLS, SPSS 27.0. The questionnaire consists of two parts, the first part has 26 questions are based on the 5 likert-scale (i.e. 1 = Strongly Disagree, 5 = Strongly Agree) were belongs to the 11 factors in order to collect the necessary data for the current study, the second part contains 10 questions designed to collect data on demographic surveys.

Table 1. Different sections of questionnaire along with number of items, measurement scale and Cronbach's alpha value

Section	Number of items	Measurement scale	Cronbach's alpha value
Personal and professional characteristics (age, gender, education)	-	Based on nominal and distance scales	-
Shortage of supply	2	5-point Likert scale (1= very low to 5=very high)	0.725
Fear of disease	2	5-point Likert scale (1= very low to 5=very high)	0.790
Covid-19 effect	4	5-point Likert scale (1= very low to 5=very high)	0.750
Convenience	3	5-point Likert scale (1= very low to 5=very high)	0.649
Web design	4	5-point Likert scale (1= very low to 5=very high)	0.797
Time saving	3	5-point Likert scale (1= very low to 5=very high)	0.792
Security	3	5-point Likert scale (1= very low to 5=very high)	0.673
Perceived Ease of Use (PEOU)	3	5-point Likert scale (1= very low to 5=very high)	0.602
Perceived Usefulness (PU)	7	5-point Likert scale (1= very low to 5=very high)	0.634
Attitude towards online shopping	27	5-point Likert scale (1= very low to 5=very high)	0.908
Online purchase intention	5	5-point Likert scale (1= very low to 5=very high)	0.840

According to Sekaran (2000) Cronbach's Alpha coefficient less than 0.6 are considered poor. Greater than 0.6 are considered acceptable and greater than 0.8 are considered good. Table 1 shows the Cronbach's alpha coefficient of the shopping customers towards purchase decision.

Table 2. Path coefficient results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Attitude towards online shopping__ -> Online purchase intention__	0.671	0.675	0.029	22.891	0.000
Convenience -> Attitude towards online shopping__	0.182	0.182	0.016	11.466	0.000
Convenience -> _Perceived Ease of Use (PEOU)__	0.262	0.260	0.057	4.584	0.000
Covid-19 effect -> _Perceived Ease of Use (PEOU)__	0.361	0.365	0.048	7.544	0.000
Fear of disease -> Covid-19 effect	0.631	0.631	0.039	16.310	0.000
Perceived Usefulness (PU)__ -> Attitude towards online shopping__	0.235	0.236	0.018	13.318	0.000
Security__ -> Attitude towards online shopping__	0.203	0.203	0.017	12.225	0.000
Shortage of supply -> Covid-19 effect	0.484	0.483	0.037	13.266	0.000
Time saving__ -> Attitude towards online shopping__	0.212	0.212	0.016	13.281	0.000
Web design__ -> Attitude towards online shopping__	0.296	0.294	0.017	17.090	0.000
_Perceived Ease of Use (PEOU)__ -> Attitude towards online shopping__	0.159	0.158	0.016	10.238	0.000
_Perceived Ease of Use (PEOU)__ -> Perceived Usefulness (PU)__	0.550	0.554	0.029	18.834	0.000

Having established the measurement model's validity and reliability, the next step was to test the hypothesized relationship by running the PLS algorithm and Bootstrapping algorithm in PLS 3. 3. As indicated in Tab. 2 all hypothesis was supported.

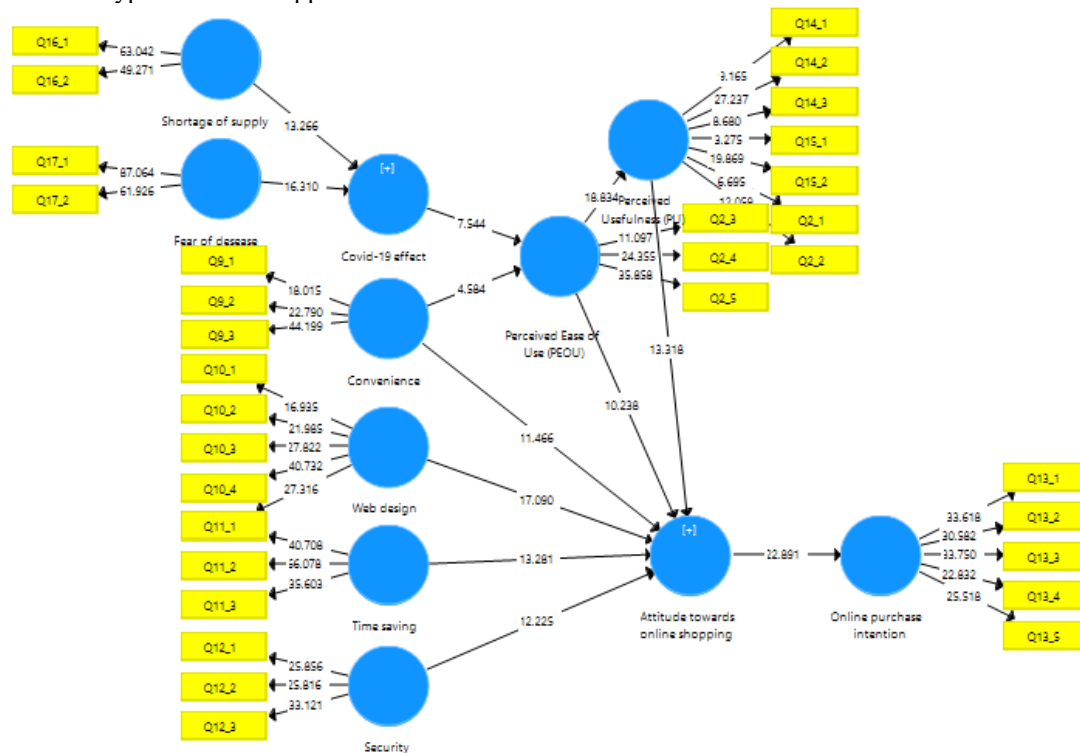


Figure 3. Smart-PLS Test Result

The result shows that correlation between coefficients of all variables is strongly positive and hypotheses (H1-H12) have positive effects. Therefore, the four factors that I have chosen for the study has a statistical significant influence on the online shoppers of Mongolia.

4.CONCLUSION

Online shopping is becoming more popular day by day with the increase in the usage of World Wide Web. Understanding customer's need for online selling has become challenge for marketers. Specially understanding the consumer's attitudes towards online shopping , making improvement in the factors that influence consumers to shop online and working on factors that affect consumers to shop online will help marketers to gain the competitive edge over others.

Mongolian retailers and entrepreneurs are competing with each other by using the online shopping platform, but on consumer side the recognition and knowledge about it is not enough, which can be effect on the online shopping development. Therefore, the findings the factors that influence on Mongolian consumers attitude and decision-making towards online shopping is now important part for the online shopping platform developers and users.

The findings of this study indicated that the 11 critical factors to accept online shopping. The researcher suggests that e-retailers practice these 11 factors on their online business in order to have more Internet user become online shoppers. In this study, the multiple analysis was employed to measure the relationship between 11 independent variables and receptivity to online shopping. The score of Beta weight presented that all 11 independent variables had positive statistical significant effect to attitude towards online shopping to accept online purchase intention.

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