# The Impact of Perceived Risk on Online Purchase Behavior of Mongolian Consumers

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*Abstract:* International researchers argue that consumers are more likely to understand the buying habits of consumers. In particular, since the online trade has emerged, we have been exploring the risks faced by our customers during online purchases. This is because online purchasing has more risk than traditional purchases, and in recent years, online purchasing has been increasingly impacting the rapidly increasing risk of research. In the online trading sector, the USA and China account for most of the market. Compared to these countries, our consumers do not use online purchase. Considering the risks inherent to the online consumer trading of Mongolia, the online survey has shown that online surveys can help to increase the online purchases by looking at ways to reduce them. The results of the study show that product risk has significantly affected consumer online purchase satisfaction and online re-purchasing behavior with other risks, and satisfaction with operational risk and product risk. However, the risk of re-purchasing is affecting the individual's risk and product risk.

Keywords: Consumer Behavior, Online Purchase Behavior, Perceived Risk, Satisfaction, Repurchase Intention.

# 1. INTRODUCTION

Looking at the research of the world market of online purchase, it has been shown that online purchases are rapidly increasing every year. This is due to the international consumer's assessment, the opportunities and benefits of online purchases and in order to increase the sales of stores with traditional purchases, they are being introduced into online purchases. Therefore, in recent years, a lot of research has been done on the internal and external behavior of consumers in online purchasing.

But Mongolian online purchases are developing relatively slowly compared to the state of the world market of international online purchases, and this shows the impact of factors such as legal regulation, knowledge, trust in online purchases and the risk of customers. These factors negatively affect the online purchase behavior of Mongolian consumers, and the perceived risk by the consumer, in this study was conducted, the impact on online repurchase intention and consumers satisfaction.

### **Research objectives**

The main goal of our research work is to investigate the impact of online purchases on behavior of perceived risk by the consumer during the online purchase of the Mongolian consumers. To achieve this goal, I put forward the following several goals.

- To study the previous research works of foreign and domestic research about the perceived risk by the consumer, to determine the behavior of consumers at a theoretical level.
- Determine the current condition of online purchases of international and Mongolian conditions.
- Collect primary data using methods of examining the perceived risk by the consumer and conduct analysis.

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#### 2. LITERATURE OVERVIEW

Within the scope of the topic of studied the research work of foreign researchers on the perceived risk by the consumer, and in the following research a brief explanatory name and a brief conclusion of the research were made.

#### **Consumer behavior:**

The marketing goal is to provide demand and demand to the target consumer than competitors, and to provide consumer satisfaction. Marketers not only need to know the thoughts, feelings, actions of consumers, but also must offer the optimal prices for each consumer. Consumer is the Is an individual or a group of people who buy the product directly or indirectly. (Sandhusen, 2000)



Source: Kotler & Armstrong, 2014 p.154

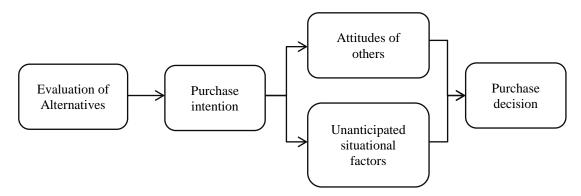
#### Figure 1: Consumer buyer decision process

Consumer behavior is the process of learning the mindset in the mind of consumers during the time between obtaining a marketing incentive and the final purchase decision. Consumer behavior: It explores the choices, purchases, need and refusal of the product and services provided for its satisfaction to the individual, groups of people and organizations. (Kotler & Keller 2015)

Marketing and other incentives, implementing in the consumer consciousness, a certain mental process is combined with the personal characteristic of the consumer, and as a result of this process, a decision and a decision to purchase will be created.

#### **Purchase decision**

After knowing the needs, searching for information, the consumer wants to buy this product. Between the desire to purchase and the adoption of a purchase decision, there are two main factors.



Source: Kotler & Keller, 2009 p. 172

#### Figure 2: Steps between evaluating options and making a purchasing decision

#### The consumer perceived risk:

Researchers repeatedly define fundamentals of perceived risk with respect to improbability and consequence. In the online purchasing background, the level of perceived risk may be exaggerated due to limited physical access to products and sales personnel (Forsyth & Shi, 2003).

Human perceptions are main deal behind the way any person behaves. Their choices, intentions and behavior are triggered by their perceptions. To study about the consumer behavior it is necessary to identify the perception of consumers. This way it will be a lot easier for vendors to satisfy and study the consumer insides. Perceived risk can be identified into two major types (Park, Kyung, & John, 2010) which are being discussed in our paper.

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#### The risk of being perceived by the online consumer:

Most of the work carried out in connection with the perceived risk by the consumer was conducted on the basis of the terms of traditional purchase than online purchases. But conducting an online purchase is completely different from the actual purchases in the store, and although online purchasing promises to consumers the benefits such as comfort, time and money saving but compared to traditional purchasing there are many risks (Noort, 2007).

One of the important factors of online purchasing is that this process is performed on the basis of trust because the seller and the buyer do not know each other. Therefore, the level of risk in the process of transferring online purchasing and when contracting.

With online purchasing, the consumer does not have the ability to touch, feel the product with their own hands, so the level of risk is much larger than traditional purchases (Hansen, Jensen and Solgaard, 2004). The perceived risk by the consumer becomes the main determinant of the desire for online purchase (Levin and Williams, 2006) and affects the probability of purchase (Vood and Shire, 1996). Therefore, with the beginning of 1990, when the use of internets was introduced, one of the most important topics for researching the consumer behavior of the trade and the level of the perceived risk became one. Most research work confirms that the use of internet purchase increases consumer's benefits (Pierson & Miller, 2001; O'Cass & Fenech, 2003; Park, Lee & Ahn, 2004; Shih, 2004).

#### The consumer perceived risk:

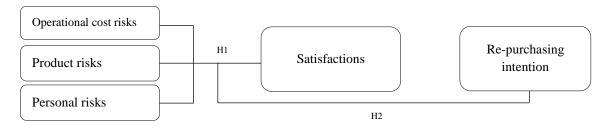
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#### 3. METHODOLOGY

#### Proposed Conceptual Framework / Research Model:

The design of this study has been developed based on a survey other researchers who studied the risks inherent in the online purchases in relation to consumer purchasing behavior. Based on these three studies, based on the three main categories of risk assessed by consumers, the risks inherent in Mongolian customers have influenced the online behavior of post-acquisition. In this study, nine different types of risk patients have been selected for the study and these risks were reclassified into three major risk theoretical frameworks. The following table illustrates the detailed risk breakdown.



#### **Figure 3: Framework**

#### **Hypotheses Assumptions:**

Based on this research design, the two main hypotheses have been examined as to how online acceptance risk affects online procurement satisfaction and online redemptions.

Table 1: The hypothesis of the research work

Hypothesis	Explanations
H1 A	Operation cost risk is negative effects to customer satisfaction
H1 B	Product risk is negative effects to customer satisfaction

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H1 C	Individual risk is negative effects to customer satisfaction
H2 A	Operational exposures risk is negative effects to customer's re-purchasing intention
H2 B	Product risk is negative effects to customer's re-purchasing intention
H2 C	Personal risk is negative effects to customer's re-purchasing intention

This includes each operational risk, product risk and personal risk within each assumption, and these 6 types of assumptions have been forwarded and tested.

#### Sampling design:

The target population is to collect information that interested researchers interested in explaining statistical conclusions. I was collect the data through distributing questionnaires in the area of Mongolia, Ulaanbaatar city.

#### Data analysis:

I explained the methodology and data analysis methods, but the results were shown. This chapter is based on analysis of results, reliability tests, factor, correlation analysis and regression analysis. Create all statistical results using SPSS 22 software.

#### 4. **RESULTS**

The survey covers the results of questionnaires received from 336 Mongolian consumers from September 15 to October 10, 2017, with the experience of online purchases for household needs, and the risks they receive during online purchases are satisfaction with online purchases and how they are influencing the re-purchasing trend online. Overall, this research will measure 5 items that derived from 12 variables and therefore our preferred sample size is 336 respondents.

#### Factor analysis:

One of the four factors involved in the analysis of group factors between these research variables is that these variables are able to express factors that influence the purchasing behavior of consumers. The table below summarizes the factor analysis of these factors.

Risks		Factors	5		
		1	2	3	4
Product risks	PRP1 - Quality risks	.865			
	PRP2 - Material risks	.745			
	PRP3 - Performance risks	.743			
Cost risks	PRC2 - Delivery risks		.782		
	PRC3 - Time risks		.765		
	PRC1 - Financial risks		.676		
Personal risks	PRI2 - Security risks			.770	
	PRI1 - Psychological risks	.722			
	PRI3 - Social risks	.69		.698	
<b>Re-purchasing intentions</b>	RPI2 - Integrity risks				.894
	RPI1 - Online re-purchasing probabilities				.801

#### **Table 2: Group Factor Analysis**

#### Correlation analysis:

The correlation analysis attempts to measure the correlation between the two forces studied and the correlation coefficients on how the factors relate to each other. The analysis used Spirman's correlation to calculate the average of the factors and use the scalable questionnaire.

If the correlation coefficient is positive, it is positively correlated, if the value of the coefficient is negligible, it is negative. Depending on the value of the correlation coefficient, the classification of the correlation coefficients is as follows:

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0.00 - 0.50 - weak relation

0.50 - 0.75 - significant relation

0.75 - 0.90 - closely related

0.90 - 1.00 - strongly related

When analyzing the relationship between the factors being studied, all coefficients are at the significance level and the correlation coefficient is summarized in the table below.

Factors	Satisfaction	Repeated Purchasing Intentions	Activity Cost Risks	Product Risks	Personal Risks
Satisfactions	1				
<b>Re-purchasing intentions</b>	.641	1			
Operational cost risks	277	250	1		
Product risks	301	364	.376	1	
Personal risks	236	374	.337	.268	1

able 3:	Correlation	test	results
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Consequently, the satisfaction and repurchase intentions are positively correlated the satisfaction and re-purchasing intention is associated with weak opposition to the risks they expect. However, the risks the customers face are positively related to each other.

#### **Regression analysis:**

Linear regression analysis was based on the results of the correlation test and the impact of the study being studied. An analysis of the linear regression effect on customer satisfaction is shown as the risk of the individual is not significant and the result was:

Models	Beta coefficients	Standard errors	t	Sign.	Multi-collinear
<b>Regular numbers</b>	6.027	.251	23.965	.000	
<b>Operational cost risks</b>	177	.062	-2.845	.005	1.147
Product risks	279	.051	-5.482	.000	1.147

Table 4: Results of the linear regression analysis to which the customer's risk is satisfying

The results of this analysis show that Adjusted R2 is 0.14, indicating that two customer acceptance risks explain 14% satisfaction (Annex 4). The remaining 86 percent are explained by other factors. As a result, the VIF coefficient is lower than 2, therefore, the tolerance to multi-collinear and the Constant Variable is at the significance level, so the following satisfaction formulas are summarized as follows:

In addition, linear regression analysis, which affects the re-purchasing of customers' acceptance risk, shows that the risk of operating expense is insignificant, since this factor was removed from the analysis and the two risk effects were analyzed below.

Models	Beta coefficients	Standard errors	t	Sign.	Multi-collinear
<b>Regular numbers</b>	7.334	.277	23.965	26.472	
Products risks	353	.059	-2.845	-5.982	1.100
Personal risks	299	.065	-5.482	-4.627	1.100

#### **Summary result:**

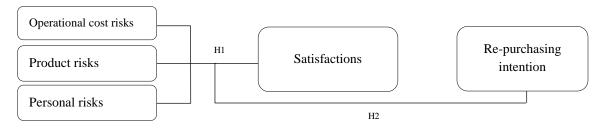
The results of the analysis show that Adjusted R2 is from 0.19 indicating that the two risks explain the repatriation trend of 19 percent (Annex 5) and the remaining 81 percent is due to other factors. Since the VIF coefficient is below 2, therefore, there is no multi-collinear and the Constant Variable is at the significance level, and the following satisfaction formulas are summarized as follows: The results of the research are checked by the linear regression analysis and the results shown in the table below.

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Hypothesis	<b>Exceptional variables</b>	Dependent variables	Sign.	Beta	Whether approved or not
H1 A	Operating cost risks	Customer's satisfactions	-0.177	0.000	Approved
H1 B	Product risks	Customer's satisfactions	-0.279	0.000	Approved
H1 C	Personal risks	Customer's satisfactions	-0.083	0.138	Not approved
H2 A	Operating cost risks	Re-purchasing intention	-0.074	0.333	Not approved
H2 B	Product risks	Re- purchasing intention	-0.353	0.000	Approved
H2 C	Personal risks	Re-purchasing intention	-0.299	0.000	Approved

#### Table 6: Results of the assumptions

As a result, the hypotheses H1 (c) and H2 (a) have not been verified because they are statistically significant. All the other assumptions have been statistically significant and have negative consequences, and the remaining four assumptions have been confirmed. The table below shows the results of the survey.



#### Figure 4: Results of research work

The findings shows that the re-purchasing intention does not affect the risk of operational risk unless the risk of operating costs is not affected. The risk of product risk is also adversely affected by customer satisfaction and re-purchasing.

According to the results of the survey, the hypotheses H1 (c) and H2 (a) have not been verified because they are statistically significant. All the other assumptions have been statistically significant and have negative consequences, and the remaining four assumptions have been confirmed. The risk of a person's risk (p > 0.05) does not affect the cost of repurchasing in terms of operating expense risk (p > 0.05). In addition, the product's risk is the greatest adverse effect on customer satisfaction (-0.279) and repurchase-seeking (-0.353).

#### 5. CONCLUSIONS

Theoretically, a lot of research work has been written on the theory of customer expectations, and has been through several theoretical steps since its earliest time. At present, the risks faced by consumers are being studied in online purchasing, but the authors of this theoretical definition and classification are unlikely to conclude that this theory has not been able to attract and consolidate this theoretical development.

However, in Mongolia there are very few researches on this subject, and this topic has been deeply studied in theoretical framework, which is a basis for further research in this type of research. According to the online trade survey, the US and China's major market share have grown rapidly in recent years. Therefore, comparing Mongolia's online trade sector with these two countries shows that Mongolia does not appear to be in the online trading market and consumers do not use online purchases so it is possible to investigate the possibility of increasing the level of risk that Mongolians receive during the online trading process, thereby increasing the market. Based on this study, the risk of the products received by Mongolian customers has been relatively high in comparison to the risks posed by the Mongolian consumers to the risks identified by this study.

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