## ISSN 2303-1174 J. L. K. Bangkit., W. J. F. A. Tumbuan., M. V. J. Tielung ANALYSIS OF PERCEIVED RISK AND PERCEIVED BENEFIT INFLUENCING ONLINE SHOPPING BEHAVIOR IN MANADO

## ANALISIS TERHADAP PERCEIVED RISK DAN PERCEIVED BENEFIT MEMPENGARUHI PERILAKU BELANJA ONLINE DI MANADO

By: Josefine Lika Kartika Bangkit<sup>1</sup> Willem J. F. A. Tumbuan<sup>2</sup> Maria V. J. Tielung<sup>3</sup>

<sup>123</sup>International Business Administration, Management Department Faculty of Economics and Business Sam Ratulangi University, Manado

> E-mail: <sup>1</sup>josefinebangkit062@student.unsrat.ac.id <sup>2</sup>alfa.tumbuan@unsrat.ac.id <sup>3</sup>mariatielung@unsrat.ac.id

**Abstract:** Understanding the behavior of consumers' online shopping, especially factors that influence the online shopping is considered important for marketers in order to increase the volume of online shopping. In this research, the researcher focused on people who had experience on online shopping in Manado, so the researcher conducted research on variables that influencing online shopping behavior, in this case the variables are perceived risk and perceived benefit. The purpose of this study is to analyze perceived risk and perceived benefit influencing online shopping behavior in Manado. The quantitative method is used in this research. In order to collect data, questionnaires were distributed to 100 respondents in Manado. The result of this research shows that perceived risk and perceived benefit has significant influence on online shopping behavior.

Keywords: online shopping behavior, perceived risk, perceived benefit

Abstrak: Memahami perilaku konsumen dalam belanja online, khususnya faktor-faktor yang mempengaruhi belanja online dianggap penting untuk pemasar untuk meningkatkan volume terhadap belanja online. Dalam penelitian ini, peneliti fokus kepada orang-orang yang telah memiliki pengalaman berbelanja online di Manado, peneliti telah melakukan penelitian terhadap variabel-variabel yang mempengaruhi perilaku belanja online di Manado, dalam hal ini adalah perceived risk dan perceived benefit. Tujuan dari penelitian ini untuk menganalisis perceived risk dan perceived benefit mempengaruhi perilaku belanja online di Manado, dalam hal ini adalah perceived risk dan perceived benefit. Tujuan dari penelitian ini untuk menganalisis perceived risk dan perceived benefit mempengaruhi perilaku belanja online di Manado. Penelitian ini menggunakan metode kuantitatif. Untuk mengumpulkan data, kuisioner dibagikan ke 100 responden di Manado. Hasil dari penelitian ini menunjukkan bahwa perceived risk dan perceived benefit memiliki pengaruh yang signifikan terhadap perilaku belanja online.

Kata Kunci: perilaku belanja online, resiko, keuntungan

# INTRODUCTION

## **Research Background**

Online shopping in Manado is growing rapidly lately, especially with the PPKM implemented in Manado. Many choose to shop online as an alternative where people do not have to bother going out of the house or directly communicate with sellers. People also can buy goods that are not available in Manado on online shop. The increasing number of e-commerce has led to changes in people's shopping patterns, which initially shopped conventionally until now, turning to a modern way that is very practical and makes it easier to choose goods anywhere. In addition to changes in shopping patterns, online shopping also causes changes in consumer lifestyles, which at first shop only for daily needs, now consumers shop because they are tempted and want to try something new which they like.

Understanding the behavior of consumers' online shopping, especially factors that influence the online

shopping is considered important for marketers in order to increase the volume of online shopping behavior (Marza, Idris and Abror, 2018). Online shopping behavior can be seen from the process of purchasing products and services through the Internet. In this research, the researcher will focus on people who had experience on online shopping in Manado, so the researcher will conduct research on variables that influencing online shopping behavior, in this case the variables are perceived risk and perceived benefit. Javadi et al. (2012) stated that consumers shop onlinewhen they get convenience in shopping and the certainty of the products they need, as well as the minimal risk they feel when they do not see the shape of the product.

## **Research Objectives:**

Based on the research background above, the objectives of this research as follows:

- 1. To analyze the influence of perceived risk on online shopping behavior in Manado.
- 2. To analyze the influence of perceived benefit on online shopping behavior in Manado.
- 3. To analyze the influence of perceived risk and perceived benefit on online shopping behavior in Manado.

### THEORETICAL FRAMEWORK

#### **Consumer Behavior**

Consumer behavior, according to Hawkins, Mothersbaugh and Best (2013), is the study of individuals, groups, or organizations, and the processes they use to select, secure, use and dispose of products, services, experiences or ideas to satisfy needs and the impacts that these processes have on the consumer and society. Based on the definition, it can be concluded that consumer behavior is a process where each individual or groups determines their perception to a products or services, before finally using the goods or services to satisfy their needs and desires of consumers.

### **Online Shopping Behavior**

During this pandemic, many people in Indonesia prefer to shop online rather than having to go directly tooffline stores. This is also supported by the rapid development of e-commerce in Indonesia. Online stores ensure the benefits that consumers get by providing all kinds of needs. This online shopping trend makes online marketers understand consumer behavior when shopping online. According to Li and Zhang (2002), online shopping behavior is a kind of perception and evaluation made by an individual of goods or services when shopping online which have good or bad results.

## **Perceived Risk**

Perceived risk can be defined as the trade-off between cost and benefits, the overall consumer assessment of the utility of the product or service based on what is received as compared to what is paid (Chiu et al, 2014). There are several factors of perceived risk when it comes to online shopping. Product risk is the probability of product failing to meet the performance requirements. Financial risk is the customer probability of losing money from a purchase. Time risk is often associated with the consumer's feeling of discomfort when experiencing delays in receiving the product which results in wasted time. Privacy risk is probability of customer personal information being stolen during online transactions. Social risk refers to the perception that a product purchased may result indisapproval by family or friends.

## **Perceived Benefit**

Perceived benefit is consumer's perception of the benefits obtained on a product or service. Consumer's perceived benefit are beliefs about the extent to which consumers will feel better in online transactions (Widyastuti, Hartini, and Artanti, 2020). The benefit can be physiological, psychological, sociological, or material in nature. Thekey benefit of online shopping is it can be done anytime and anywhere. Online shop provides details of product so consumers do not need much effort to find the information of product they desired to buy.

#### **Previous Research**

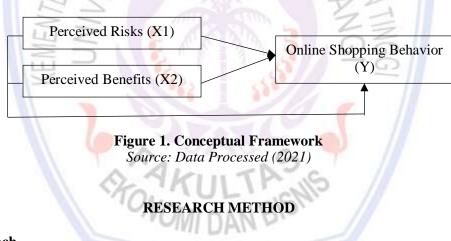
Selfia Marza, Idris and Abror (2018) aimed to reveal the influence of convenience, enjoyment, perceived risk, and trust on the attitude of Padang State University students toward online shopping. Online and field surveys are conducted to collect data. A total of 242 questionnaires were analyzed using Structural Equation Modeling (SEM). The results show that convenience has a significant effect on enjoyment, then enjoyment has

a significant effect on trust and attitude toward online shopping. Likewise with trust, this was found to have a significant effect on attitudes toward online shopping. However, the results of the analysis show that the perceived risk does not significantly influence trust and attitudes toward online shopping.

Heri Kuswanto, Wildan Bima Hadi Pratama, Imam Safawi Ahmad, and Mutiah Salamah (2019) investigated the factors influencing university students' online shopping behavior in Surabaya as one of the fastest-growing cities in Indonesia, an important issue that has never been explored. The survey dataset is analyzed by using Structural Equation Modeling-Partial Least Squares (SEM-PLS) as well as PLS Predictive-Oriented Segmentation (PLS-OLS) to group the students based on their online behavior. Both methods are applied due to the fact that the sample size is relatively small. The analysis shows that the students' online shopping behavior is significantly influenced by enjoyment, perceived risk, and social influence. Clustering with PLS-POS leads to three segments of students based on behavior: those mostly influenced by social influence and perceived risk, those influenced by enjoyment and website quality, and those influenced by website quality and trust and security.

John Lee Kean Yew and Yusniza Kamarulzaman (2020) investigated how personal factors, perceived benefits and shopping orientation affect consumer willingness to purchase online. Based on statistical analysis of a parsimonious sample drawn from the Klang Valley of Malaysia, this research found that online shopping orientations, perceived benefits and personal characteristics are positively associated with the attitude of purchase intention toward online shopping. This study reveals that shopper behavior mediates the relationship between online shopping orientations, perceived benefits, personal characteristics and purchase intention toward online shopping. The findings show that trust, innovativeness and perceived benefits are the most common factors motivating consumers to shop online. Though other covariates play a significant role, both utilitarian and hedonic shopping orientations negatively associated and were not significantly associated with attitude to shop online.

### **Conceptual Framework**



#### **Research Approach**

This research is using quantitative research methods. As stated by Proctor and Capaldi (2006), quantitative research is scientific investigation that includes both experiments and other systematic methods that emphasize control and quantified measures of performance. The type of this research is descriptive research.

#### Population, Sample, and Sampling Technique

The population in this research is people who are in productive age and have experience in online shopping. Roscoe (1975) in Sekaran (2003) suggests about the size of sample for research as follows: a. The sample size that is feasible in the study is between 30 to 500, b. If the sample is divided into categories, the number of sample members in each category minimum 30, c. If the research will perform analysis with multivariate, then the number of sample members is at least 10 times of the number of variables studies. This research use convenience sampling as sampling technique.

#### **Data Collection Method**

The questionnaire was used as the techniques of data collection. A questionnaire is the instrument for collecting the primary data (Cohen, Manion, and Morisson, 2013).

## **Operational Definition of Research Variable**

- 1. Perceived risk is consumer beliefs about the possibility of negative risk that occur when shopping online. (Indicators: Product risk, financial risk, privacy risk, time risk, and social risk).
- 2. Perceived benefit is consumer perceptions about the benefits that they will obtained when shopping online. (Indicators: Convenience, price, customer service, wider selection, and ease of search).
- 3. Online shopping behavior is consumer's overall perception and evaluation for something they buy during online shopping. (Indicators: Consumer prefer online shopping over conventional shopping and led to consumer purchase intention).

#### Data Analysis Method Validity and Reliability Test

The validity test is used to see the validity of the questions. According to Surucu and Maslakci (2020), validity is determined by the meaningful and appropriate interpretation of the data obtained from the measuring instrument as a result of the analysis. Meanwhile, reliability is the ability to measure instruments to give similar results when applied at different times.

#### **Multiple Regression Analysis Model**

Sarstedt and Mooi (2014) defined regression analysis as one of the most frequently used tools in market research, it allows market researchers to analyze relationship between one independent and one dependent variable. If researchers only have one independent variable, it is called bivariate regression. If researchers include multiple independent variables, it is called multiple regression. According to Montgomery, Peck, and Vining (2012), the equation of multiple linear regression is:

γ	$\gamma = \beta 0 + \beta_1 \mathbf{X_1} + \beta_2 \mathbf{X_2} + \mathbf{\mathcal{E}}$ = Online shopping behavior (dependent variable)
βο	= Constant
$\beta_1$ and $\beta_2$	= The regression coefficient of each variable
X1	= Perceived risk
X <sub>2</sub>	= Perceived benefit
3	$=$ Error $\leq$
	RESULT AND DISCUSSION

#### Result

#### Validity Test and Reliability Test

The validity test is carried out to test the validity of questionnaire items using SPSS version 26. The questionnaire is valid if rount  $\geq$  rtable, and if rount  $\leq$  rtable the questionnaire is not valid. The Pearson Correlation value of every indicator (r count) of variables Perceived Risk (X1), Perceived Benefit (X2), and Online Shopping Behavior (Y) have higher value than r table value that is 0.195. The significant level of each indicator of variables, also below than significant level of 5% or 0.05. It means every indicator in questionnaire in this research is valid and can be used for further analysis. Twenty-four indicators of three variables of Perceived Risk (X1), Perceived Benefit (X2), and Online Shopping Behavior (Y) have been tested for reliability. The higher the value of reliability coefficient to 1 and > 0.600, it means indicators that have been tested are more and more reliable. The Cronbach's Alpha value of these twenty-four indicators is 0.776. The finding shows, with the value of Cronbach's Alpha that is 0.776 and this value is greater than 0.600, it means that this measuring instrument is reliable and can be used for further analysis

## Classical Assumption Test Multicollinearity Test Table 1. Multicollinearity

Model	Colinearity S	Status	
	Tolerance	VIF	
Perceived Risks	0.997	1.003	No Multicolinearity
Perceived Benefits	0.997	1.003	No Multicolinearity

Source: Data Processed (2021)

Table 1 shows the result Multicollinearity Test using Variance Inflation Factor (VIF). The tolerance of two independents variable that are Perceived Risk (X1) and Perceived Benefit (X2) are same that is 0.997 and also the value of VIF is 1.003. That means there is no multicollinearity in this research because both of the variables have tolerance value >0.100 and VIF value <10.

## Heteroscedasticity

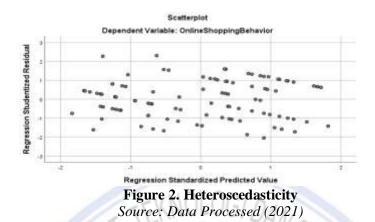


Figure display the result of heteroscedasticity test using scatterplot the dots in the scatterplot spread above and below 0 in Y axis and not form in a clear pattern. It means there is no heteroscedasticity in this regression model and can be used to predict the influence between dependent variable and independent variables. Normality Test

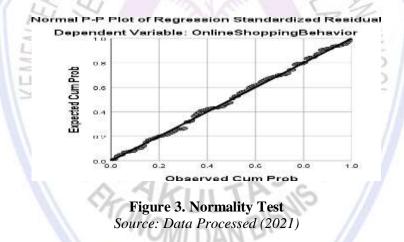


Figure 3 is the result of Normal Probability Plot of this research. This figure shows that the dots spread near the line and follow the diagonal line of Normal P-Plot. Therefore, it means the data in this research is normally distributed.

### Multiple Linear Regression Analysis Table 2. Multiple Linear Regression Analysis

	(	Coefficients <sup>a</sup>			
Model		Unstandardized Coefficients		t	Sig.
	В	Std. Error	Beta	_	
1 (Constant)	2.283	3.236		.705	.482
PerceivedRisks	.129	.063	.185	2.061	.042
PerceivedBenefits	.183	.039	.419	4.661	.000

a. Dependent Variable: OnlineShoppingBehavior *Source: Data Processed (2021)* 

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The result in the Table 2 can be shown through the regression equation as follows:

Y = 2.283 + 0.129X1 + 0.183X2 + e

Table 2 shows the result of Multiple Linear Regression Analysis, the influence of independent variables (X1 and X2) on dependent variable (Y). The unstandardized beta coefficient value will be explained below.

- 1. The constant value of 2.283 means that all the independent variables equal to zero then Online Shopping Behavior is 2.283.
- 2. Regression coefficient of Perceived Risk (X1) is 0.129 means that if there is one unit increase in Perceived Risk (X1), then the Online Shopping Behavior (Y) is increasing by 0.129 assuming the other variables are constant (ceteris paribus).
- 3. Regression coefficient of Perceived Benefit (X2) is 0.183 means that if there is one unit increase in Perceived Benefit (X2), then the Online Shopping Behavior is increasing by 0.183 assuming the other variables are constant (ceteris paribus).

## Table 3. R and R<sup>2</sup>

		Mo	del Summary <sup>D</sup>	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467 <sup>a</sup>	.219	.202	1.686
a. Predictors:	(Constant), Perc	eivedBenefits, Per	ceivedRisk	

b. Dependent Variable: OnlineShoppingBehavior

Source: Data Processed (2021)

The coefficient correlation (R) value is 0.467. It means the correlation relationship between all independent variables, Perceived Risk (X1) and Perceived Benefit (X2) with the dependent variable, Online Shopping Behavior (Y) is 0.467. If the coefficient correlation value tends to be close to 1, it means there is tightly relationship between independent variables and dependent variables.

The coefficient of determination  $(R^2)$  measures the ability of a model in explaining the variation of dependent variables. The value of  $R^2$  is 0.219 means that the 21.9% variation of Online Shopping Behavior (Y) as dependent variables is explained by the variation in Perceived Risk (X1) and Perceived Benefit (X2) as independent variables. The rest 78.1% is influenced by other variable which is not explained in this research.

#### Hypothesis Testing Table 4. F-Test

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	77.128	2	38.564	13.560	.000 <sup>b</sup>
	Residual	275.862	97	2.844		
	Total	352.990	99	312,		

a. Dependent Variable: OnlineShoopingBehavior

b. Predictors: (Constant), PerceivedBenefits, PerceivedRisks

Source: Data Processed (2021)

The result shows that 13.560 > 3.09, Fcount > Ftable. Based on the result, it means the Perceived Risk (X1) and Perceived Benefit (X2) as independent variables have significant influence on Online Shopping Behavior as dependent variable simultaneously. The third hypothesis (H3) that states Perceived Risk (X1) and Perceived Benefit (X2) have significant influence toward Online Shopping Behavior (Y) simultaneously is accepted.

#### Table 5. T-Test Т Model T Table Sig. Status 0.705 0.482 1 (Constant) 0.042 Perceived Risks 2.061 1.984 Accepted Perceived Benefits 4.661 1.984 0.000 Accepted

a. Dependent Variable: OnlineShoppingBehavior Source: Data Processed (2021)

Table 5 shows that:

- 1. The toount of Perceived Risk (X1) is 2.061 and ttable of Perceived Risk is 1.984, which indicates that toount > ttable. This confirms the Perceived Risk (X1) has significance influence on Online Shopping Behavior (Y) partially. Thus, the first hypothesis (H1) is accepted.
- 2. The tcount of Perceived Benefit (X2) is 4.661 and ttable of Perceived Benefit is 1.984, which indicates that tcount > ttable. This confirms that Perceived Benefit (X2) has significance influence on Online Shopping Behavior (Y) partially, thus, the second hypothesis (H2) is accepted.

#### Discussion

#### Perceived Risk on Online Shopping Behavior

Based on the results of hypothesis testing and multiple regression analysis, partially Perceived Risk have a positive and significant effect on Online Shopping Behavior. The t-test result shows that the first hypothesis of this research is accepted. This variable in this research has five indicators which are: product risk, financial risk, privacy risk, time risk and social risk. A product risk is the risk that the product does not live up to the expectations. Financial risk refers to the loss in monetary term associated with buying. During online shopping, customers must provide some information about themselves so perceived risk refers to possible loss of personal information. Time risk is the perception that time may be wasted during product purchased is delivered. Social risk talks about the risk when product purchased being rated by others.

### Perceived Benefit on Online Shopping Behavior

The result of this research shows that perceived benefit positively and significantly influencing the online shopping behavior in Manado. The t-test result shows that the second hypothesis of this research is accepted. Perceived benefit are the benefits that consumers feel when they decide to shop online. The higher the benefits felt by customer, their behavior shown will be more positive. Also, from the perspective of business strategy, perceived benefits reflect dynamic strategic capabilities that are vital for competing in the online market industry.

### Perceived Risk and Perceived Benefit on Online Shopping Behavior

Based on table 4 through one-way variance analysis (ANOVA) identified Perceived Risk (X1) and Perceived Benefit (X2) together with Online Shopping Behavior as dependent variable was significant. This shows that these independent variables influencing Online Shopping Behavior in the multiple linear regression research model. Based on this, the statement in the hypothesis which says that Perceived Risk and Perceived Benefit has positive and significant influence on Online Shopping Behavior is proven

# CONCLUSION AND RECOMMENDATION

#### Conclusion

Based on the result of this study conducted, the researcher found some conclusions as follows:

- 1. There is significant influence of perceived risk with indicators such product risk, financial risk, privacy risk, time risk and social risk toward online shopping behavior in Manado.
- 2. There is significant influence of perceived benefit with indicators such as convenience, price, customer service, wider selection and ease of search toward online shopping behavior in Manado.
- 3. Perceived risk and perceived benefit have a significant influence toward online shopping behavior in Manado.

#### Recommendation

Based on the result of the research conducted, it shows the tendency of consumers to choose an online shopping system compared to shopping directly at the offline store. Online vendors are expected to maintain and improve services in order to increase consumer trust when conducting online shopping. This can be done by providing accurate and up to date information to avoid misunderstandings, improving the security, and creating trust by maintaining good relationships with consumers. To reduce uncertainty in online purchasing activities, after-sales services, such as a money back guarantee, need to be provided. While suggestion that can be given for further research are recommended to conduct research about online shopping behavior at the age

of 30 years and over in Manado. Also, recommended to conduct research of online shopping behavior by using another independent variable for the better research.

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