

ANALYSIS OF CONSUMER RISK PERCEPTION ON ONLINE AUCTION  
FEATURES

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*To my lovely wife*

*Erisa Viony Putri*

*Very thankfull and grateful of the strong support.....*

*To my beloved parents*

*Alm. Nelwati Army, Yustina and Halil*

*Thanks for your valuable sacrifice and compassion.....*

*To my dearest brother and sister*

*Ramadhanil Dwi Putra, Gusti Nur Ihsan, Nurul Putri Khairunnisa*

*Thanks for your support and always there for me in happiness and sadness.*

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*I am very proud to have all of you*

*~~~~~ Love you all ~~~~~*

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## ABSTRACT

This study examines consumer's perception related to perceived risk while the doing transaction in e-auction system. Previous research found there are some features in e-auction system recognize as unclarity features since they indicate having fraud or cheating. In the online auction environment perception could be categories in two types such as privacy and security. This study proposed a conceptual model based on perceived risks from consumer's investigation, associated directly with four cost features of e-auction system: payment method, auction fee, bidding fee and third party services that are combined with four perceived risk components: performance risk, psychological risk, financial risk, and time risk. Researcher has developed a questionnaire for collecting data from consumer's who has experience in using e-auction. Through statistical analysis using regression, this study found that payment method, auction fee, bidding fee has a positive impact on perceived risk. However, third party services have a significant effect upon consumer perceived risk on financial risk but not significant effect to time risk. Furthermore the online auction features is directly related on reducing consumers' risk perception. In summarize, online auction features associated with financial plays a crucial role in reducing consumers' perceived risk in online auction transactions. The results of the study can offer insights to e-transaction and researchers of e-auction about the role of online auction system features in transaction and e-commerce.

## ABSTRAK

Kajian ini mengkaji persepsi pengguna yang berkaitan dengan risiko dilihat semasa melakukan transaksi dalam sistem e-lelong. Kajian sebelumnya mendapati beberapa ciri-ciri di dalam sistem e-lelong mengiktiraf sebagai ciri unclarity kerana mereka nyatakan mempunyai penipuan atau kecurangan. Dalam persepsi persekitaran lelongan dalam talian boleh menjadi kategori dalam dua jenis seperti privasi dan keselamatan. Kajian ini mencadangkan model konsep berdasarkan risiko dilihat dari siasatan pengguna, dikaitkan secara langsung dengan empat ciri-ciri kos sistem e-lelong: kaedah pembayaran, yuran lelongan bidaan yuran dan perkhidmatan pihak ketiga yang akan digabungkan dengan empat risiko komponen dilihat: risiko prestasi, risiko psikologi, risiko kewangan, dan risiko masa. Penyelidik telah membina satu soal selidik untuk mengumpul data dari pengguna yang mempunyai pengalaman dalam menggunakan e-lelong. Melalui analisis statistik dengan menggunakan regresi, kajian ini mendapati bahawa kaedah pembayaran, yuran lelong, yuran bidaan mempunyai kesan positif ke atas risiko yang dilihat. Walau bagaimanapun, perkhidmatan pihak ketiga mempunyai kesan ketara ke atas risiko pengguna dilihat pada risiko kewangan tetapi tidak kesan yang ketara kepada risiko masa. Selain itu, ciri-ciri lelongan dalam talian secara langsung berkaitan mengurangkan persepsi risiko pengguna. Dalam ringkasnya, ciri-ciri lelongan dalam talian yang berkaitan dengan kewangan memainkan peranan penting dalam mengurangkan risiko pengguna dilihat dalam transaksi lelongan dalam talian. Hasil kajian boleh menawarkan wawasan ke e-transaksi dan penyelidik e-lelong tentang peranan ciri-ciri sistem dalam talian lelongan dalam urus niaga dan e-dagang.

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**LIST OF ABBREVIATION**

AF	-	Auction Fee
ATM	-	Automated Teller Machine
BF	-	Bidding Fee
B2B	-	Buyer to Buyer
CAS	-	Consumer Authentication Service
C2C	-	Consumer to Consumer
C2B	-	Consumer to Buyer
G2B	-	Government to Buyer
NCSA	-	National Center for Supercomputing Application
PM	-	Payment Method
RFQ	-	Request for Quote
Std Deviation	-	Standard Deviation
TPS	-	Third Party Services
XML	-	Extensible Markup Language

**LIST OF SYMBOLS**

$H_0$	-	null hypothesis
$H_1$		alternative hypothesis
$x_1$	-	values of independent variable
$x_2$	-	values of independent variable
$Y_i$	-	dependent random variable
$x_k$	-	values of independent variable
$\beta_0$	-	model parameters (regression coefficient)
$\beta_1$	-	model parameters (regression coefficient)
$\beta_k$	-	model parameters (regression coefficient)
$\epsilon_i$	-	a supporting element, or a random error which has normal distribution, zero mean and constant variance
$\alpha$	-	cronbach's alpha

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

E-auction is an auction online system where buyers bid on auction goods based on the specifications. The number of people interacting with the world of internet is increasing; it will make it easier to run electronic auction system. E-auction popularity was introduced in 1990s, and E-Bay is one of the notable success stories of e-auction founded in September 1995 by Pierre Omidyar. He created a website called Auction Web in his spare time to bring online auction as a mechanism for buyers and sellers to do transaction in online marketplace (Eu-Gené, 2010). Currently, there are multi-billion dollar businesses doing operations over thirty countries. Malaysia, for instance, has auction website called Lelong.com.my. It was launched in 1999 and has become one of the top C2C auction sites. The website layout and the principle are similar to the eBay (Eu-Gené, 2010). There are many potential issues will occur in transactions using e-auction; the problem of the transaction can cause big problem for beginner in general.

This chapter presents a number of risk problems that underlie this research. It is divided into several sections. The first section is background of the problems to be solved, followed by problem statements and objectives of the research. Finally, it describes the scope of the research and significance of the research.

## 1.2 Background of the Problem

The use of e-auction system in selling auction goods increases significantly which cause the risk level of fraud to skyrocketing as well. According to Suriati *et al.* (2011) about A Syariah Compliant e-Auction Framework, their research found eight features that do not comply with Syariah principles, do not have clarity and have fraud or cheating factors. The eight features are identification verification, product description, payment method, bidding fee, closing period, starting price, auction fee, and payment by third party service.

According to Abdul-Ghani (2009), a consumer in an online auction faces at least two risks: the seller might defraud them by taking their money but fail to deliver the goods, or the delivered goods may not meet expectations on important dimensions product quality for example.

According to Wang and Tian (2005), situation-specific risk perception is an individual concern towards the Internet's reliability as a transaction medium. They concluded that there are two types of risk, namely predominant in the online auction environment on perceived risk associated with privacy and security. Some surveys showed that Internet's users are increasingly worried about unauthorized collection, improper storage, and inappropriate use of their personal data by online marketers.

There are three familiar samples of a well known publicly for trading, namely website Amazon, eBay and Yahoo. These three websites have extraordinary ability to draw a large number of buyers and sellers for one common market. Therefore, the three websites can be used as a view or perception risk by consumers in using e-auction system features.



### **1.3 Statement of the Problem**

The main problem in this study is “What is the consumer perception on relation between e-auction features and perceived risk?”

Thus, based on the main questions, several sub-questions can be derived from the main research question as follows:

- What are the features of e-auction system influence by consumer perceived risk?
- What is the most influent factor of perceived risk?
- How to understand the perception of consumer perceived risk when using e-auction system?

### **1.4 Objectives of the Research**

The objectives of this research are as follows:

- To identify the features of e-auction system influence by consumer perceived risk.
- To identify the most influential factors of perceived risk.
- To understand perception of consumer perceived risk when using e-auction system.

### **1.5 Scope of the Research**

This research focuses on:

- Four cost features of e-auction system; payment method, auction fee, bidding fee, and third party services.
- Four dimensions perceived risk; performance, psychological, financial, and time.
- Consumer perceived risk in cost features of e-auction system.
- The respondent of research is Faculty of Computing students, Universiti Teknologi Malaysia.

## **1.6 Significance of the Research**

The significances of this research are as follows:

- This research can be used by other researchers to overcome the risk of online auction system problem.
- This research will have great impact for developing e-auction system in order to get trust from customer.
- This research is very useful for e-auction system makers to improve the security of the online auction features.

## **1.7 Summary**

This chapter discussed about the overview of this research, background of the problem, and problem statements. There are three main objectives of this research to be successfully achieved, and then, scopes and significances of this research have also been explained.

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