

# ANALYSIS OF CUSTOMER ACCEPTANCE OF ONLINE TRAVEL AGENT TECHNOLOGY USING UTAUT2 MODEL (A CASE STUDY ON E-COMMERCE TRAVELOKA IN INDONESIA)

Melisa<sup>1</sup> and Indrawati<sup>2</sup>

Information and Telecommunication Technology Business Management, Telkom University  
Bandung, Indonesia

[icha.butarbutar@gmail.com](mailto:icha.butarbutar@gmail.com)<sup>1</sup>, [indrawati@telkomuniversity.ac.id](mailto:indrawati@telkomuniversity.ac.id)<sup>2</sup>

---

## ABSTRACT

The growth of Internet users in Indonesia has increased rapidly in 2015. It became one of the good market for manufacturers to offer their products through the internet, especially through e-commerce. But when compared with countries in Asia Pacific, Indonesia still ranks second to bottom of the use of e-commerce. Research shows that online spending through e-commerce in Indonesia is dominated by tour and travel services, and Traveloka managed to be ranked first in e-commerce and travel tour. Therefore this study chooses Traveloka to become the object to see the factors that effect the consumer acceptance toward the service. The model used as a base of this study is Theory of Acceptance and Use of The Technology 2 (UTAUT 2) model. The valid data was obtained from 430 respondents . The descriptive and causal quantitative approaches were used to analyse the data. The results of this study show that variables of Performance Expectancy, Facilitating Condition, Hedonic Motivation and Habit have a significant positive effect on Behavioral Intention.

**Keywords:** *Online Travel Agent, UTAUT2, Behavioral Intention, Technology Acceptance, Traveloka*

---

## 1. Introduction

In the current era of globalization, Internet becomes one of the things that can not be separated from public life in Indonesia. Data obtained through the Indonesian Internet Service Provider Association (APJII) states that there are 139 million Internet users in Indonesia until March 2015. The score increased by 14% within 1 year, and it can be seen that Internet users in Indonesia already exceeded half of the total population of 250 million people.

Internet successfully dispel geographical boundaries that inhibit the interaction among citizens. It is aware that the internet is increasingly important to support the success of a company. According to Kotler and Keller (2012: 197), "purchase through online business offers several advantages such as cutting transaction costs for either buyers or suppliers, reducing the time between order and delivery, incorporating a purchasing system, and building a direct relationship between the partners and buyers".

In practice of online shopping in Indonesia, there are some medias that can be used. Marketeers (2015) explains that in making an online purchase, e-commerce websites became the most widely used by the people of Indonesia in 2015 if compared to social media such as messenger groups and branded online store. From these data, it is clear that the potential for business profit through e-commerce is huge. With the growth of Internet and technological sophistication, of course, it also triggers e-commerce competition which is getting more intense. E-commerce business which is one of the strategic media in doing online shopping is showing a positive trend. This is proven by data reported by marketeers.com which showed that in 2014, the number of sales through online stores in Indonesia reached 2.6 billion US dollars.

Positive developments in e-commerce sales in Indonesia have not made Indonesia become countries with good e-commerce. From the data reported by Wearesocial.sg, a social media research institute based in Singapore, it is confirmed that there are only 16% of the Indonesian people that do online shopping up to March, 2015. Year after year, e-commerce in Indonesia is progressing, so the number of producers use it as a sales media (Rizky and Retno, 2015: 1). The survey results of Nielsen Global Survey of E-Commerce, Q1 2014, stated that the desire to do online shopping in Indonesia in 2014 is mostfor the ticket reservations and reservations of tour or hotel.

When viewed from the e-commerce travel in Indonesia, Traveloka is one of e-commerce in the field of travel. ComScore, a company that provides data and analysis of market from United States, states that Traveloka ranks first for search services and booking of airplane tickets, out of the official website of each airline.

From this phenomenon, there are several factors which become the reasons for someone to use the services of a technological system. According to Venkatesh et al. (2012) who has conducted research about consumer usage behavior, there are indicators of Performance Expectancy, Effort Expectancy, Social Influence, Facillitating Condition, Hedonic

Motivation, Price value and Habit that can explain how a person's behavior towards acceptance of a technology services is. The seven indicators are described in a research model of Vankatesh et al. (2012) and known as the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2). These factors need to be known in order that Traveloka can improve service quality and attract more consumer interest in using the services, and it can be input for e-commerce doer in Indonesia to be able to make progress towards a better step.

## 2. Problem Statements and Research Objectives

Based on the background, the problem of this study are:

- Traveloka has been able to provide services that benefit consumers, but the rate of customers who uses this service is still relatively low when compared with countries in Asia.
- Factors that are considered by consumers in using e-commerce in Indonesia are not well understood yet. It is better to know the factors to create better services for the future. From the literature review results, these study has not found an article published on trend analysis of consumer behavior towards online travel agent in Indonesia.

This study aims to identify the factors that influence consumer intentions in using technology of online travel agent (Traveloka) in Indonesia by using the model of Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2).

## 3. Literature Review

Model UTAUT has identified the critical factors used to predict Behavioral Intention to use technology. UTAUT is formed of several factors on eight previous theories. The eight theories are Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), Combined TAM-TPB (C-TAM-TPB), Model of Personal Computer Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). However, in 2012, Venkatesh et al. began developing the UTAUT models. There are three types of development of integration models of UTAUT. The increasingly rapid technology development becomes one of the reasons of the need for a new development model UTAUT. UTAUT model which was originally developed to explain the acceptance and use of technology will be developed for other contexts such as consumer technologies where many industries develop applications and services of technologies, that target consumers. The results of the model development of UTAUT is called model of UTAUT 2 (Venkatesh et al. 2012).

## 4. Research Model

This research will modify the model by eliminating variables of the Price Value because each product in an online travel agent definitely has various prices and services. The study also restricts the research up to Behavioral Intention in accordance with several previous studies that also examine how consumer acceptance of a technology services is, namely Gaffar, Kemuel et al. , 2013 and Indrawati, 2014. The research time used in this study is cross-sectional so that the experience moderator variable was not involved in the research model. Therefore, this study as a whole uses seven constructs and two moderator variables, as shown in Figure 1.

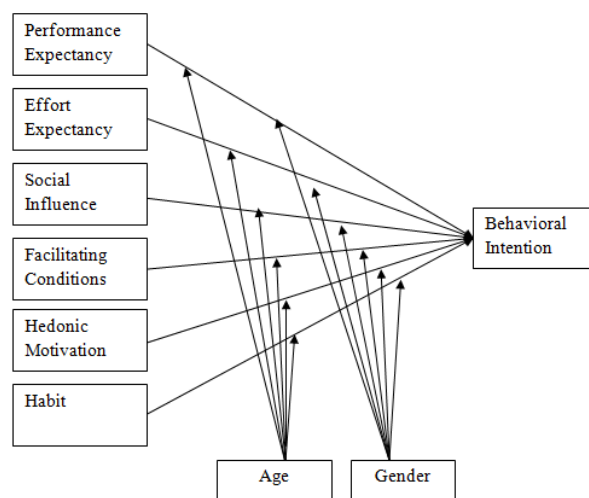


Figure 1 Research Model



## 5. Research Methodology

This research uses descriptive and causal method with quantitative approach. Data analysis techniques in this study using the technique of SEM (Structural Equation Modeling) with the tools of Partial Least Squares (PLS) namely SmartPLS 2.0. To choose respondents, this study uses a non-probability sampling technique namely, purposive sampling. The valid data were collected from 430 respondents.

## 6. Discussion

### 6.1 Descriptive Analysis Result

The characteristics of respondents in this study are viewed from four aspects that are gender, age, employment status, and income. If viewed from the gender, women are by 61% and men by 39%. From age category, the respondents less than 24 years old are at 88% and over 24 years of 12%. From the status of jobs, the respondents are dominated by students.

### 6.2 Partial Least Square (PLS) Result

In testing using PLS, two test models were conducted, which are test of measurement model (outer model) and structural models (inner model). For the outer model test, the test was done on the validity and reliability to the indicators used in the study. All of the indicators of research have factor loading values  $> 0.05$ , so it can be said to have met convergent validity. When viewed from the reliability, the entire construct of research has composite reliability value  $> 0.07$  and Cronbach's alpha values  $> 0.06$ , so we can say that the whole construct in this study had good reliability.

Furthermore, the model inner test was conducted by observing the value of  $R^2$  on endogenous latent constructs and t-value for each exogenous construct to the endogenous construct of bootstrapping results. Figure 2 is the results of inner model test in this study:

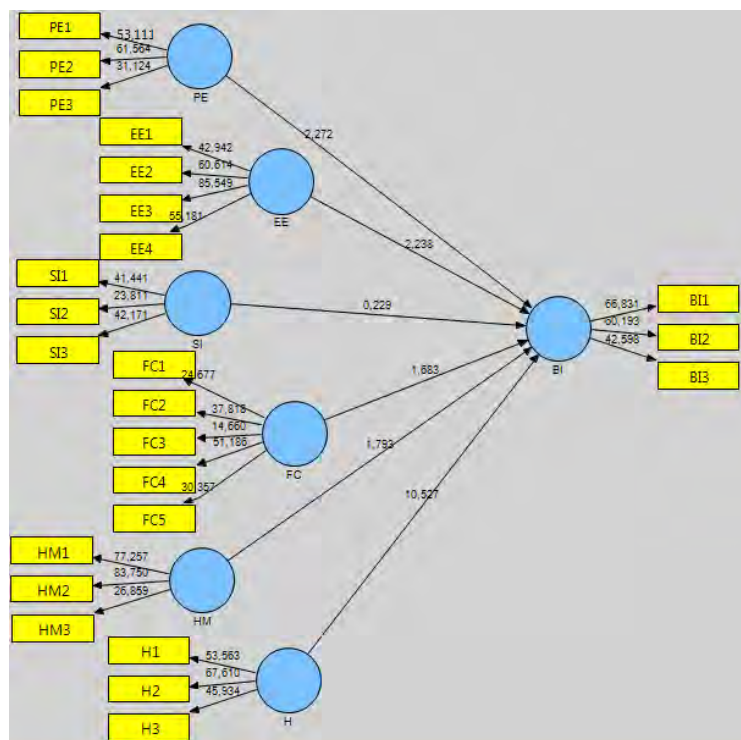


Figure 2. The Result of Inner Model Test

The hypothesis test in this study requires two values to be considered, namely path coefficient obtained from the PLS Algorithm and t-value obtained from the bootstrapping. This study revealed that path coefficient and t-value of the constructs in the research model are shown in Table 1.

Tabel 1 Path Coefficient and T-value of Research Construct

Construct Connection	Path Coefficient	T-statistic
H → BI	0,5238	10,5268***
PE → BI	0,1193	2,2724**
EE → BI	0,1106	2,2382**
HM → BI	0,1026	2,2724**
FC → BI	0,0819	1,6829*
SI → BI	-0,0076	0,2288

\* 0,1 significant level; \*\* 0,05 significant level; \*\*\* 0,01 significant level

As it can be seen from Table 1, all independent variables have significant positive influence to Behavioural Intention, except SI which has no significant effect to Behavioral Intention. The independent variables which have positive significant influence to Behavioral Intention from the highest to the lowest respectively are Habit, Performance Expectancy, Effort Expectancy, Hedonic Motivation, and Facilitating Condition.

The magnitude of the overall effect of exogenous latent constructs to the endogenous latent constructs or the R square of the research model is 0.65, as it is shown Table 2.

Tabel 2 Value of R-square

Endogenous Latent Constructs	Value of R-square
BI	0.65

This study also uses two moderating variables namely, Age and Gender, to see if the influence of independent to dependent variable will vary depends on age and gender. To test the effect of moderating variables, this study used group comparison approach. In term of age as moderating variables this study divided the respondents into two groups, namely respondents with less than 24 years old and over 24 years old. The result of PLS algorithm can be seen at Table 5.

Tabel 5 Bootstrapping Result by Involving Gender Variabel

Construct Connection	T-value of Male	T-value of Female	T Value	Explanation
PE → BI	0,4357	1,0482	-1,3794	Insignificant
EE → BI	2,3825	0,0692	1,4616	Insignificant
FC → BI	1,258	9,8312	1,0602	Insignificant
HM → BI	1,3212	1,5086	-0,0457	Insignificant
H → BI	4,2005	2,8538	-1,2482	Insignificant

Using the same process with Age as moderating variable, to test Gender as moderating variable, this study also divided the respondents into two groups, men and women group. Table 6 shows the result of PLS algorithm.

Tabel 6 Bootstrapping Result by Involving Age Variabel

Construct Connection	T-value < 24 years old	T-value < 24 years old	T Value	Explanation
PE → BI	2,2183	1,4908	1,5076	Insignificant
EE → BI	0,8118	2,2222	-0,8332	Insignificant
FC → BI	10,712	1,3474	-1,4034	Insignificant
HM → BI	2,173	1,7995	-0,9045	Insignificant
H → BI	2,643	1,0505	1,2756	Insignificant



Based on Table 5 and Table 6, it is known that t-value of each variable correlation is not greater than the level of significance determined or required. Therefore it can be concluded that Age and Gender do not moderate influence among the constructs tested.

## 7. Conclusions and Suggestions

### 7.1 Conclusions

Based on the results of research and analysis conducted, the conclusion that can answer the formulation of the problem in this study was obtained:

- Descriptively this study explains that consumers' assessment to Performance Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit regarding technology of online travel agent Traveloka is at a good level while on Effort Expectancy variables, consumers' ratings are in the very good category.
- Based on the model of UTAUT 2, the factors that influence the behavior of consumer acceptance to the technology of online travel agent Traveloka in Indonesia are Performance Expectancy, Effort Expectancy, Facilitating Conditions, Hedonic Motivation, and Habit. Those five factors also influence Behavioral Intention significantly. The magnitude of the effect of these factors on Behavioral Intention is 65% which means that the model of this study has a good predicted power toward behavioural intention of customers of Traveloka. But, this study also revealed that moderating variables of Age and Gender did not influence the effect between independents and dependent variables in the proposed model.

### 7.2 Suggestions

- Suggestions for the Company

In the development process, the factor which becomes the main priority should be habit. It can be stated that in order to make Traveloka become an online reservation technology that continues to be used by consumers, it is important for the company to make an online reservation using Traveloka become a habit. Therefore Traveloka should do some research on the behavior patterns of consumers in the online reservation so that Traveloka can provide services that fit consumer needs. Hence, consumers will feel the need to use the service of Traveloka repeatedly and get used to it. Other factors such as Performance Expectancy, Social Influence, Facilitating Conditions, and Hedonic Motivation should also be consideration factors of Traveloka in the development process.

- Suggestions for The Next Research

In the model of UTAUT 2, there are variables which are not included in this study, namely Use Behavior as dependent variable, and Experience as moderating variable. To be able to produce the more representative research results. The next research can view the habits of consumers in making online reservations and see the impact of experience factor will have an impact in using this service as for example per three months. In this case, it is assumed that every period, consumers get new experience in using the Traveloka services.

## References

- Chaffey Dave. (2013). *E-Business & E-Commerce Management*. England: Pearson.
- Cosseboom, Leighton. (2015). Mengapa Traveloka bisa menjadi startup unicorn pertama di Indonesia, [online]. <https://id.techinasia.com/traveloka-startup-unicorn-analisis-pasar> (Accessed 21 December 2015).
- Dhaha, I.S.Y dan Ali, Y.S.A. (2014). *Behavioral Intention and Satisfaction with 3G Technology among Student in Somalia: A Structural Equation Modeling Study*. *World Applied Sciences Journal* 32 (2): 243-252.
- Gaffar, Kemuel., Troy.D.T, Lenandlar Singh. (2013). *The utility of the UTAUT model in explaining mobile learning adoption in higher education in Guyana*. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, Vol. 9, Issue 3, pp. 71-85.
- Hawkins, Del I dan Mothersbaugh, David L. (2010). *Customer Behavior Building Market Strategy Elevent Edition*. New York: McGraw –Hill/Irwin.
- Indrawati and Marhaeni, I. (2015). Measurement for Analyzing Instant Messenger Application Adoption Using a Unified Theory of Acceptance and Use of Technology 2. *International Business Management*. 9 (4) : 391 – 396.

- Kempt, Simon. (2015). *Digital, Social & Mobile in APAC in 2015*, [online]. <http://wearesocial.net/blog/2015/03/digital-social-mobile-apac-2015/> (Accessed 17 September 2015).
- Kotler, Philip and Kevin Lane Keller. 2012. *Marketing Management 13*. New Jersey: Pearson Prentice Hall, Inc.
- Lubis, Miladinne. (2015). *Konsumen Indonesia Mulai Menyukai Belanja Online*, [online]. <http://www.nielsen.com/id/en/press-room/2014/konsumen-indonesia-mulai-menyukai-belanja-online.html> (Accessed 8 October 2015).
- Marketeers. (2015). *Online Shopping: Lewat Media Sosial atau Situs E-Commerce?*, [online]. <http://marketeers.com/article/online-shopping-lewat-media-sosial-atau-situs-e-commerce.html> (Accessed 17 September 2015).
- Putra, Dimitri Dwi. (2015). *Trend Digitalisasi Global dan Dampaknya Terhadap Indonesia*, [online]. <http://inovasiptar.com/trend-digitalisasi-global-dan-dampaknya-terhadap-indonesia/> (Accessed 8 October 2015).
- Setyorini, Retno dan Rizky.P.N. (2015). *The Effect of Trust Toward Online Repurchase Intention with Percieved Usefulness as an Intervening Variabel (A Study on KASKUS Marketpalce Customers)*. Telkom University.
- Shu-xian JI, Xiaolin Zheng, and Deren Chen. (2012). *Perceived Risk and Its Impact on Customer Intention to Online Shopping Based-on Different Products*. *Advances in information Sciences and Service Sciences(AISS)*. vol4.issue17.1.
- Sopiah dan Sangadji,E.M. (2013). *Perilaku Konsumen: Pendekatan Praktis*. Yogyakarta: Andi Yogyakarta.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F.D. (2003). *User Acceptance of Information Technology: Toward A Unified View*. *MIS Quarterly*, 27(3), 425 – 478.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). *Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology*. *MIS Quarterly*, 36(1), 157 – 178.

