

Driving Factors of the Intention to Purchase Travel Products Through Online Travel Agent (OTA)

Nia Budi Puspitasari, Ratna Purwaningsih, Nurul Fadlia, and Zainal Fanani Rosyada

Department of Industrial Engineering, Faculty of Engineering

Diponegoro University

Semarang, Indonesia

niabudipuspitasari@gmail.com, ratna.tiundip@gmail.com, nurulfadliaa29@gmail.com,
rosyada@gmail.com

Abstract.

The development of information technology has encouraged the emergence of the Online Travel Agent (OTA) in the world of travel agent business. The emergence of OTA's has caused Indonesian people to start using OTA's to order travel products when they are going to travel or vacation. The increasing number of Indonesian people who use OTA's doesn't guarantee that OTA's has provided the best service. This is evidenced by the existence of problems and complaints that can cause disappointment for OTA's consumers. Various problems that arise can affect consumers' intention to purchase travel products through OTA's. Therefore, the OTA's needs to know what factors can encourage consumers' intention to purchase travel products through OTA's, so they can make improvements. The results of data processing using the Structural Equation Modelling (SEM) method indicate that three factors can influence consumer purchase intentions. These factors consist of customer satisfaction, trust, and perceptions of pleasure. Based on this, the OTA's can make improvements to all three factors so that it can encourage the intention to purchase travel products through OTA.

Keywords:

Travel, Online Travel Agent, Purchase Intention, Structural Equation Modelling

1. Introduction

The rapid development of information technology makes everything can be done more easily and efficiently. Information technology is a combination of computer and telecommunications technology that has information flow so fast and dynamically that it demands readiness from all aspects of the industry (Sutabri 2012). The use of information technology can cause extraordinary changes in competition, production, marketing, HR management, and transactions between companies and consumers. In the field of marketing, information technology causes changes that are quite drastic in terms of operations in business by providing opportunities for service providers and consumers (Amaro and Duarte 2015). The use of information technology in marketing has become the most effective choice in the business world. Various types of businesses in Indonesia have used information technology to market their products or services, one of which is in the travel agent business.

According to Standing et al. (2014) in the last few years, travel agents have utilized the development of information technology such as the internet to market a variety of products. The emergence of the internet in the world of travel agent business encourages the emergence of Online Travel Agents or often called OTAs. OTA is a type of travel agent that carries out all its activities through an online process. OTA provides online reservation services that someone needs to travel (Antara et al. 2017). In Indonesia, various types of OTA have developed including Tiket.com, Traveloka, Agoda, Pegi-Pegi, Booking.com and so on. The emergence of OTA makes it easy for someone who will travel or vacation (Terblanche 2015). Because it doesn't require a lot of time, costs, and energy. Some Indonesian people have used OTA to order travel products such as airplane tickets, trains, hotels, and so on. Based on the Online Travel Agent survey report conducted by Daily Social it is known that 71.44% of people use OTA for their travel needs.

The increasing number of OTA users in Indonesia doesn't rule out the possibility of OTA related problems. It is known that there have been several cases of cyber-attacks in Indonesia that have occurred in OTAs (Aufar et al. 2018). The examples of cyber-attack problems that occur are transactions carried out by other parties via credit cards without the

knowledge of the owner, and the submission of refunds by unknown parties. In addition to the problems regarding cyber-attack, there are also complaints about other things such as the slow response to complaints, ignoring consumer complaints, system errors so that the information provided is not updated, etc.

Based on these problems, the OTA needs to know what factors make consumers want to order and purchase travel products through OTA. Understanding of these factors can be used as a reference for the OTA to improve or improve existing services. Based on previous research conducted by Wen (2012) it is known that there are factors that can influence a person in purchasing travel products through OTA. These factors include the quality of information offered, system quality, service quality, trust, customer satisfaction, and attitudes towards OTA. Meanwhile according to [8], in addition to the factors proposed by [9], there are other factors such as the perception of involvement (perceive flow) and perception of pleasure (perceive playfulness) that can influence the purchase intention of travel products with OTA.

A preliminary survey was conducted on 44 OTA consumers in Indonesia. The preliminary survey aims to find out the advantages and complaints that have been felt by OTA consumers. The respondent addressed in this study is someone who is at least 18 years old and has income and comes from the middle class. The selection of respondents is based on the provisions of some OTAs that state that the minimum age for ordering is 18 years and has the financial capacity to complete payments.

The results of a survey conducted note that OTA has several advantages when compared to other travel product service providers. Some of the advantages of OTA include having many promos (27%), having many choices (23%), being cheaper (20%), more complete information (16%), convenience (9%), and having many payment methods (5%). Despite having several advantages, OTA consumers still complain about obstacles. Preliminary survey results show that 73% of OTA consumers have felt complaints. The types of complaints that have been felt by OTA consumers are quite diverse ranging from services (34%), information (21%), systems (14%), product choices (11%), and comfort (20%).

Based on the problems, research will be carried out on the factors that influence the intention to purchase travel products through OTA. The method used in this research is Structural Equation Modelling (SEM). This research is focused on someone who already has income, comes from the middle class and has purchased travel products through OTA.

2. Research Method

2.1. Data Collection

The object of this research is someone who has purchased a travel product through an Online Travel Agent. The intended respondents were at least 18 years old, had income, and came from the middle class. The reason for selection middle class as respondents because the number of the middle class in Indonesia has increased to 40% (Badan Pusat Statistik 2017). The increasing number of the middle class in Indonesia can be an opportunity for OTA to maximize market share. This is due to changes in consumption patterns of the middle class, from consumption fulfilment of needs become the fulfilment of desires such as holidays (Rusata 2015).

2.2. Measurement

The instrument used in this study was a questionnaire. The research questionnaire contained 33 question items. The research questionnaire is divided into three parts. The first part is an explanation of the questionnaire. The second part contains the identity or demographic profile of the respondent. The last part contains 33 items of questions relating to the intention to purchase travel products through the Online Travel Agent. The software that will be used in this research is SPSS and IBM AMOS 20. Data analysis will be carried out in two phases: Confirmatory Factor Analysis (CFA) and full Structural Equation Modelling Analysis (SEM).

2.3. Conceptual Model

The conceptual model that will be used is the research model from Wen (2012) and Hsu et al. (2011). In a study entitled an Empirical Study of an Online Travel Purchase Intention Model, Wen (2012) conducted a study of the factors that influence a person in buying travel products such as airplane tickets, hotel rooms, etc. online. These factors consist of the quality of the application or website (quality of information, systems, services), consumer attitudes, and customer satisfaction. The research model in this study is shown in Figure 1.

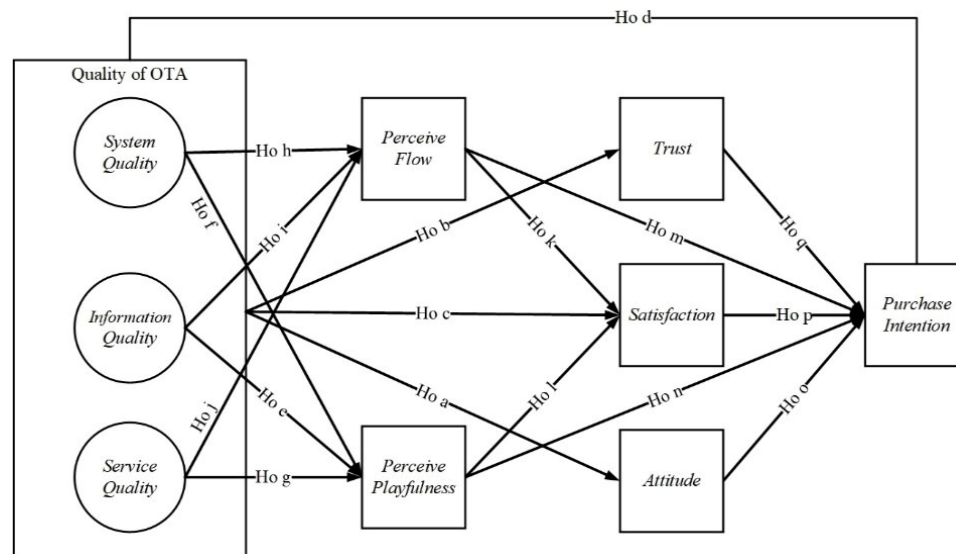


Figure 1. Research Model.

In this study, in addition to using the conceptual model from Wen (2012), there are two additional variables namely perceive playfulness and the perception of perceiving flow originating from the research of (Hsu et al. 2011). The research of Hsu et al. (2011) discusses the factors that encourage consumer purchase intention through an Online Travel Agent by using perceive flow and perceive playfulness as mediators. The addition of variables is due to perceive flow and perceive playfulness have important roles that can influence online purchase intentions.

Several studies have been carried out using the perceive playfulness variable, one of the studies conducted by Nysveen (2005). He has learned that perceive playfulness in the context of internet services has an important role in determining user acceptance of service. Besides, Ahn et al. (2007), Hausman and Siekpe (2009), Lu (2009), Alwahaishi and Snasel (2013), and Gao and Bai (2014) have researched the importance of perceived playfulness and perceive flow in influencing intention and adoption of purchasing travel products online. Based on the results of these studies it is known that the more someone feels happy when interacting with service providers, it will encourage intention to use and purchase. The variables and indicators used in this study are shown in Appendix A. Based on the explanation, this study builds 17 hypotheses which will be analysed using the SEM method:

- Hypothesis 1 : OTA quality has a positive effect on trust
- Hypothesis 2 : OTA quality has a positive effect on customer satisfaction
- Hypothesis 3 : Perceived magnitude of consequences will negatively affect attitudes
- Hypothesis 4 : OTA quality has a positive effect on purchase intention
- Hypothesis 5 : Information quality has a positive effect on the perceived playfulness
- Hypothesis 6 : System quality has a positive effect on the perceived playfulness
- Hypothesis 7 : Service quality has a positive effect on perceiving playfulness
- Hypothesis 8 : System quality has a positive effect on perceiving the flow
- Hypothesis 9 : Information quality a positive effect perceive the flow
- Hypothesis 10 : Service quality has a positive effect on perceiving the flow
- Hypothesis 11 : Perceive flow has a positive effect on customer satisfaction
- Hypothesis 12 : Perceive playfulness has a positive effect on customer satisfaction
- Hypothesis 13 : Perceive flow has a positive effect on purchase intention
- Hypothesis 14 : Perceive playfulness has a positive effect on purchase intention.
- Hypothesis 15 : Attitudes towards OTA have a positive effect on purchase intention
- Hypothesis 16 : Customer satisfaction has a positive effect on purchase intention

Hypothesis 17 : Trust has a positive effect on purchase intention.

3. Result and Discussion

The study involved 250 respondents from the middle class. Based on the results of data collection it is known that as many as 45.6% are women and 54.4% are men. As many as 54.8% have married status and 45.2% are single. Besides, the respondents in this study had the most income of 3-5 million per month (41.2%). Demographic characteristics of respondent in this research is shown in Table 1.

Table 1. Demographic Characteristics of Respondents.

No	Respondent Characteristic	Frequency	Percentage
1	Gender		
	(1) Female	114	45.6%
	(2) Male	136	54.4%
2	Status		
	(1) Married	137	54.8%
	(2) Single	113	45.2%
3	Income (Rupiah)		
	(1) 3-5 million	103	41.2%
	(2) 5-7 million	93	37.2%
	(3) 7-10 million	54	21.6%

3.1. Confirmatory Model Analysis

Based on the results of the confirmatory analysis model, it is known that two categories have marginal values fit. Categories that have marginal fit values are AGFI and GFI. Based on this, it is known that the model that has two marginal fit values is still acceptable, so the model in the study can be said to be feasible.

3.2. Structural Equation Modelling

Based on the results of hypothesis testing it is known that there are 8 hypotheses accepted, and 9 hypotheses rejected. OTAs that have a good quality such as being able to present reliable information, satisfying services, and a good system can influence attitudes, trust, and intentions to purchase travel products through OTA. Therefore, hypothesis 1, 2, and 3 are accepted. Also, the quality of an OTA system such as being able to solve problems quickly and seeing transaction status influences perceived playfulness and perceived flow (Ho h and Ho f accepted). The results of research known that three variables have a direct influence on the intention to purchase travel products through OTA. These variables include perceived playfulness, customer satisfaction, and trust. When consumers have good experience with OTA, for example, feeling satisfactory service and needs can be met, it will lead to the intention to make purchases through OTA. This is because consumers have perceived playfulness when interacting with OTA and feeling satisfaction. Satisfaction with a service can have a positive impact on behavioural intentions, especially on willingness to make purchases. Result of full model confirmatory and AMOS is shown in Table 2 and Table 3.

Table 2. Result of Full Model Confirmatory.

Goodness of Fit Index	Acceptable Level	Result	Fit classification
CMIN/DF	\leq 3.00	1.415	<i>Good Fit</i>
GFI	\geq 0.90	0.870	<i>Marginal Fit</i>
RMSEA	\leq 0.05	0.041	<i>Good Fit</i>
AGFI	\geq 0.90	0.847	<i>Marginal Fit</i>
TLI	\geq 0.90	0.913	<i>Good Fit</i>
CFI	\geq 0.90	0.921	<i>Good Fit</i>

Table 3. AMOS Results.

No	Hypothesis	Result
1	H ₀ 1	Significant
2	H ₀ 2	Significant
3	H ₀ 3	Significant
4	H ₀ 4	Not significant
5	H ₀ 5	Not significant
6	H ₀ 6	Significant
7	H ₀ 7	Not significant
8	H ₀ 8	Significant
9	H ₀ 9	Not significant
10	H ₀ 10	Not significant
11	H ₀ 11	Not significant
12	H ₀ 12	Not significant
13	H ₀ 13	Not significant
14	H ₀ 14	Significant
15	H ₀ 15	Not significant
16	H ₀ 16	Significant
17	H ₀ 17	Significant

In addition to the satisfaction and perceived playfulness, consumers will also consider trust as a driver to make purchases through OTA. Trust is important as a reason for consumers to make purchases through the internet. Consumers are more likely to make purchases through trusted service providers. This is because to avoid the risk of fraud, security of personal data and transactions carried out. OTAs that always provide accurate information, clear statements regarding security, and good service will encourage consumer purchase intentions. Therefore, the increased trust in OTA can increase the intention to purchase travel products through OTA.

Figure 2 show that factors directly influence the intention to purchase products through Online Travel Agents (OTA) are customer satisfaction, trust, and pleasure perception. Although customer purchases through online travel agents are service package purchases, these results are not too different from the findings of online purchases for products. Research in online shopping of product found out that factors affect to consumer interest in online shopping are (1) Perceived Concentration, (2) Perceived Enjoyment and (3) Perceived Ease of Use (Purwaningsih and Adison 2016). We can say Perceived Enjoyment as pleasure perception. Not only examining the factors influence consumers on online shop, also website design is important aspect because it affects customer satisfaction. Website development needs to pay attention to usability aspect, because well-designed website will help users to search the information they needed. Good website design will make it easier to find information through the website will increase user satisfaction through easy of use website (Purwaningsih and Yenifi 2015; Ratna et al. 2018).

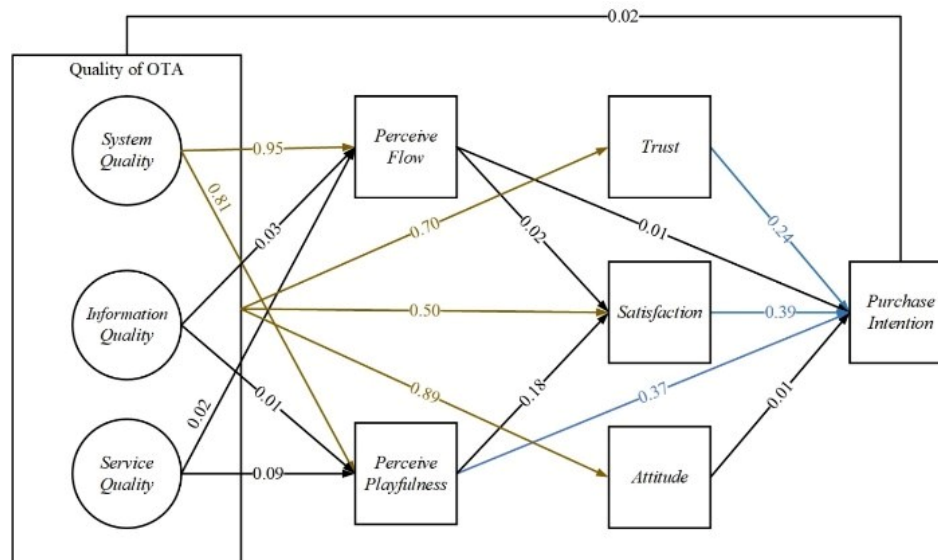


Figure 2. Hypothesis testing results.

- : Affect positively between factors
- : Factors that positively influence purchase intention

The research conducted only focuses on three quality dimensions of OTA which include the quality of information, systems, and services. In future research, the dimensions of the quality of OTA can be more specific so that its scope is broader. Also, the research carried out only focuses on knowing the purchase intention of travel products in the middle class only. The results of this study cannot be used to analyse factors that encourage purchase intention in all circles.

4. Conclusion & Future Research

Based on the results of the study, factors that directly influence the intention to purchase products through Online Travel Agents (OTA) are customer satisfaction, trust, and pleasure perception. The greater the satisfaction, trust, and perception of pleasure received by consumers, the more the intention to buy travel products through OTA. The results of the study also show that the quality of OTA can affect attitude, trust, and customer satisfaction to OTA.

The more quality of information, the systems, and services that OTA has, the consumers will be more confident and satisfied, forming a positive attitude towards OTA. The good system quality can also influence perceptual playfulness and perceived flow. Consumers will feel happy with the activities carried out and concentrate when OTA has a good system as if there are problems that can be easily fixed, and do not cause difficulties for consumers.

References

Ahn, T., Ryu, S., and Han, I., The impact of web quality and playfulness on user acceptance of online retailing, *Information & Management*, vol. 44, no. 3, pp. 263-275, 2007.

- Alwahaishi, S., and Snášel, V., Consumer's acceptance and use of information and communications technology: A UTAUT and flow based theoretical model, *Journal of Technology Management & Innovation*, vol. 8, no. 2, pp. 61-73, 2013.
- Amaro, S., and Duarte, P., An integrative model of consumers' intentions to purchase travel online, *Tourism Management*, vol. 46, pp. 64-79, 2015.
- Antara, M., Astuti, L. S., and Madiun, I. N., E-Marketing Pemasaran Villa Menggunakan Online Travel Agents, 1st ed., Pelawa Sari, Denpasar, 2017.
- Aufar, H., Kusyanti, A., and Aryadita, H., Analisis faktor-faktor yang memengaruhi niat berperilaku pengguna dalam bertransaksi pada online travel agent XYZ, *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, vol. 2, no. 3, pp. 988-997, 2017.
- Badan Pusat Statistik, Available: <https://bps.go.id/>, Accessed: 2017.
- Gao, L., and Bai, X., An empirical study on continuance intention of mobile social networking services: Integrating the IS success model, network externalities and flow theory, *Asia Pacific Journal of Marketing and Logistics*, vol. 26, no. 2, pp. 168-189, 2014.
- Hausman, A. V., and Siekpe, J. S., The effect of web interface features on consumer online purchase intentions, *Journal of Business Research*, vol. 62, no. 1, pp. 5-13, 2009.
- Hsu, C. L., Chang, K. C., and Chen, M. C., The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators, *Information Systems and e-Business Management*, vol. 10, no. 4, pp. 549-570, 2012.
- Lu, H., and Yu-Jen Su, P., Factors affecting purchase intention on mobile shopping web sites, *Internet Research*, vol. 19, no. 4, pp. 442-458, 2009.
- Nysveen, H., Intentions to use mobile services: Antecedents and cross-service comparisons, *Journal of the Academy of Marketing Science*, vol. 33, no. 3, pp. 330-346, 2005.
- Purwaningsih, R., and Adison, B., Path analysis method to identify factors affecting consumer interest on online shopping, *2nd International Conference on Science in Information Technology*, pp. 20-25, 2016.
- Purwaningsih, R., and Yenifi, I., Usability assessment of international office website of Diponegoro University with scenario based usability evaluation method and wammi method, *ComTech: Computer, Mathematics and Engineering Applications*, vol. 6, no. 3, pp. 329, 2015.
- Purwaningsih, R., Prastawa H., and Anggita, H. P., Usability measurement of telecommunications testing website PT. Telkom Indonesia using user centered design, *E3S Web of Conferences*, vol. 73, pp. 08008, 2018.
- Rusata, T., The new middle-class society and its challenge towards tourism in Indonesia, *Jurnal Kepariwisata Indonesia*, vol. 10, no. 1, pp. 19-30, 2015.
- Standing, C., Tang-Taye, J-P., and Boyer, M., The impact of the internet in travel and tourism: a research review 2001–2010, *Journal of Travel & Tourism Marketing*, vol. 31, no. 1, pp. 82-113, 2014.
- Sutabri, T., *Konsep Sistem Informasi*, Andi, Yogyakarta, 2012.
- Terblanche, N., Selection of travel agents for service: A study of benefits for customers, *The Business and Management Review*, pp. 457-467, 2015.
- Wen, I., An empirical study of an online travel purchase intention model, *Journal of Travel & Tourism Marketing*, vol. 29, no. 1, pp. 18-39, 2012.

Appendix A

Table A1. The Model Variables and Indicators

No	Variable	Indicator
1	Perception of Convenience	Shopping for travel products (planes, hotels, trains, etc.) through an online travel agent is more convenient
		agent is more convenient.
		Shop for travel products using the Online Travel Agent faster
2	Perception of Merchandise Option	I feel the stages of payment transactions at the Online Travel Agent are fast
		Online Travel Agent provides a wide selection of travel products
		Online Travel Agent provides high-quality travel products.
3	Perception of Value	Online Travel Agent provides many services that I need with just one purchase.
		I can get cheaper rates through an Online Travel Agent
		Online Travel Agent can provide more value to the transactions that I do.
4	System Quality	When there are problems related to booking, the Online Travel Agent can fix it quickly
		Quickly
		Online Travel Agent provides access to check the status of transactions made
5	Information Quality	Online Travel Agent provides information that can be tailored to the wishes of consumers
		Consumers
		Online Travel Agents provide detailed descriptions of the products offered
6	Service Quality	Online Travel Agent provides accurate information about the products offered
		Online Travel Agents have a fast response if there are questions
		If there are problems with booking, the Online Travel Agent shows concern for consumers.
7	Trust	Online Travel Agents have strict procedures that ensure the security of user transactions.
		I feel Online Travel Agent is more trusted.
		There is a clear statement on the Online Travel Agent to guarantee the safety of consumers' data.
8	Customer Satisfaction	I am satisfied with my decision to purchase the product through an Online Travel Agent
9	Perceived Flow	When I use an Online Travel Agent, I feel very enticed
		When I use an Online Travel Agent, time feels so fast
		When I use an Online Travel Agent, I often forget the tasks that I have to do.
10	Perceived Playfulness	I enjoy activities when using an Online Travel Agent because it's not boring
		I feel comforted by the content and photos available on the Online Travel Agent
		I feel happy when interacting with an Online Travel Agent
		Using an Online Travel Agent aroused my curiosity
		Using an Online Travel Agent encouraged me to explore
		Using an Online Travel Agent awakens my imagination

11	Purchase Intention	<p>I am willing to provide personal information to the Online Travel Agent to serve my travel needs.</p> <p>My intention to buy travel products from Online Travel Agents is higher than that of other accommodation services</p> <p>I feel that buying travel products from Online Travel Agent has more benefits</p>
----	--------------------	--