

# Customer Loyalty Analysis of Online Travel Agency App with Customer Satisfaction As A Mediation Variable.

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**Abstract**—In the current era, the internet plays critical roles in people's life. Several activities that used to be done traditionally (offline) have now enter the virtual world. This phenomenon brings a huge change in people's lifestyle who want something has done faster and easier than before. Just like a shopping behavior, customers' activity in travelling is also changed. Nowadays, a lot of people don't go to the traditional of physical (offline) travel agencies. They have switched them with online travel agency app. The concept of satisfaction and loyalty using a website or app based on technology is more popular with the terms E-Customer Satisfaction and E-Customer Loyalty. Some E-Customer Satisfaction determinants which will be examined in this research are app image, customer's inertia, app knowledge and innovativeness. This research conducted by distributing questionnaires to respondents who aged 17 years-old and/or above and they had had used OTA app to purchase travelling product. Questionnaires were distributed to 320 respondents, but only 310 that could be used for analysis. The data were analyzed with Regression Analysis. The results are the app image, customer's inertia, and app knowledge have a positive significant relationship in predicting e-customers satisfaction. Conversely, customers' innovativeness has negative significant relationship in predicting e-customers satisfaction. It means that with the increasing of app image, customer inertia, app knowledge can improve e-customer satisfaction. Also, e-customer satisfaction can be improved by the lack of customers' innovativeness. In the long run, e-customer satisfaction will increase e-customer loyalty.

**Keywords:** Online customer loyalty, online customer satisfaction, application image, customer inertia, online knowledge, innovativeness, lifestyle marketing

## I. Introduction

In the current era, the internet plays an important role in people's life. Some activities that used to be done traditionally (offline) have now enter the virtual world. This phenomenon brings a huge change in people's lifestyle who wants something has done faster and easier than before. One of the concept of lifestyle marketing successfully changes their habits so that they become more modern and more technology-savvy than they used to be. This phenomenon happens in almost every living activity, including shopping behavior<sup>[6]</sup>.

Just like a shopping behavior, customers' activity in travelling is also changed. Nowadays, a lot of people don't go to the traditional of physical (offline) travel agencies. They

have switched them with online travel agency apps which are easy to download from their smartphone. This changing over behavior is not only affected by the technology itself, but also the economical factor. As stated in infokomputer.com (2015), the economic growth from middle-class customers has brought a direct effect on the cost which they would like to pay for travelling and purchase travelling products and services. In the end of 2011, Indonesians have spent US\$6,4 Billions in average for their travelling activities. Further more, infokomputer.com (2015) predicts that this amount will increased by 4 times in 2020. This could be a huge opportunity for online travel agencies (OTAs). As a result, the number of OTAs and customers who download the apps has been growing rapidly.

In addition, this phenomenon occurs because the customers of OTAs app are satisfied with their decision to use the app. This is why they make a repurchase decision in the app, as in the long run they will loyal to the OTAs app they use. The concept of satisfaction and loyalty using a website or app-based technology is more popular with the terms E-Customer Satisfaction and E-Customer Loyalty. Some E-Customer Satisfaction determinants which will be examined in this research are app image, customer's inertia, app knowledge and innovativeness<sup>[8]</sup>.

Customers with a high inertia have gained a great deal of app knowledge of the best OTA app they use through the reviews and testimonies of many people. This makes them reuse the OTA apps that have been used often to minimize the cost and effort spent to change over to the other OTA app because they are already satisfied with their current OTA subscription. Conversely, if the customers have a high level of innovativeness, then they will try another OTA app as soon as they exposed to an advertising on the internet. This reduces the level of E-Customer Satisfaction, furthermore will resulting in the lower E-Customer Loyalty<sup>[8]</sup>.

## II. LITERATURE STUDY

### *Application (App) Image*

App image is a very important determinat because it is a key element that has the ability to create customer satisfaction as well as strenghten the brand image. An app should be able to be used by the customers and at the same time be able to

retain them <sup>[11]</sup>. Overall, the image also contributes greatly to the sense of comfort experienced by the customers so that they will eventually perceive the quality of the app is good. Visual appearance of the app, zoom-in and zoom-out function, graphics, colors, links and other menus that are able to increase customers convenience will be printed in their mind. This will cause them to feel satisfied and they will re-use the app. If it is maintained, it will generate a customer loyalty <sup>[8]</sup> <sup>[3]</sup>. Thus,

*H<sub>1</sub>: App image has a positive significant effect on E-Customer Satisfaction.*

#### Customer's Inertia

The routine of doing something will make an activity a habit for the customer. If the activity has become a habit, then customer already has an automated cognitive process, not an elaborated process, called inertia. Inertia is a tendency to do nothing or to remain unchanged. Inertia exists in a straight line unless that state is changed by external force(s). For example, if the online transaction is routine, then there is a re-purchase activity by the customer. This state will not be change until there is external factor that has major force in customer's buying decision. <sup>[9]</sup> <sup>[7]</sup>.

Based on a psychological concept, over time, customers will try to minimize the cost of thinking. It helps customers to achieve satisfaction by simplifying the decision-making process and at the same time, they feel that they have made the retrenchments. It also said that an inertia will encourage them to behave according to their habits, comfort and retrenchments. All three of the elements are enough to make customers satisfied with their choice <sup>[10]</sup> <sup>[8]</sup>. Thus,

*H<sub>2</sub>: Customers' inertia has a positive significant effect on E-Customer Satisfaction.*

#### Application (App) Knowledge

Customers' knowledge of the app will add to their insights about possible purchasing alternatives. Some of the things that make them feel satisfied and loyal are their experiences with the app that has been used for both for information search and purchase, as well as their familiarity of the app <sup>[4]</sup>. Customers knowledge of the app will determine the level of their confidence in the app. Customers confidence is not something that is easy to get from a simple app view. But it can be done by improving the physical appearance of the app so that it becomes more colorful, more accesible, more informative and more convenient for customers <sup>[1]</sup>.

Customers' knowledge of an app has an effect on their satisfaction, especially on OTAs products, due to the increase of app familiarity level and customers convenience of the app <sup>[1]</sup> <sup>[8]</sup>. Based on the explanation above, this research proposes:

*H<sub>3</sub>: App Knowledge has a positive significant effect on E-Customer Satisfaction.*

#### Customer's Innovativeness

The customers' innovative behavior refers to the desire to make a purchase of a new product or brand at an early stage, rather than sticking with the choices of products and services

they have chosen as their previous consumption. Some of the things that make them behave innovatively are, among aother, due to functional, hedonic, social and cognitive aspects <sup>[13]</sup> <sup>[16]</sup>.

Innovative customers will be more involved in certain app. Customers also tend to have more knowledge about online products and services compared to those who are not innovative. Innovative customers tend to be more easily bored with new products and will spend time looking for a new outcomes. Consequently, the effect of this innovative behavior will fade over time and that it will negatively impact on sales trends, satisfaction and loyalty <sup>[2]</sup>. Based on the explanation above, this research proposes:

*H<sub>4</sub>: Customer's Innovativeness has a negative significant effect on E-Customer Satisfaction.*

#### E-Customer Satisfaction and E-Customer Loyalty

Customers satisfaction over a particular app refers to a positive navigational experience and a well-designed app. Satisfaction describes the essential ingredient for a business success. To be able to build and maintain trust and loyalty, online vendors should focus on e-service quality <sup>[8]</sup> <sup>[17]</sup>.

Customer loyalty is the ultimate goal for all electronic marketplace. The company will do its best to retain existing customers. Along with the technology development over time, e-customer loyalty has always been an interesting topic to research. Nonetheless, technology is not the only cause of the emergence of e-customer loyalty. Another reason is that the best customers' experience that have been consistently given by the company. It has something to do with the nature of loyalty which is a long-trem process of satisfaction <sup>[17]</sup> <sup>[15]</sup> <sup>[12]</sup> <sup>[8]</sup>. Based on the explanation above, this research proposes:

*H<sub>5</sub>: E-Customer Satisfaction has a positive significant effect on E-Customer Loyalty.*

#### Conceptual Framework and Research Method

The variables used in this research are app image, customer's inertia, app knowledge and customer's innovativeness as the independent variables; e-customer loyalty as the dependent variable; and e-customer satisfaction as the mediation variable. Based on the hypotheses stated previously, therefore the conceptual framework as follows (Fig.1):

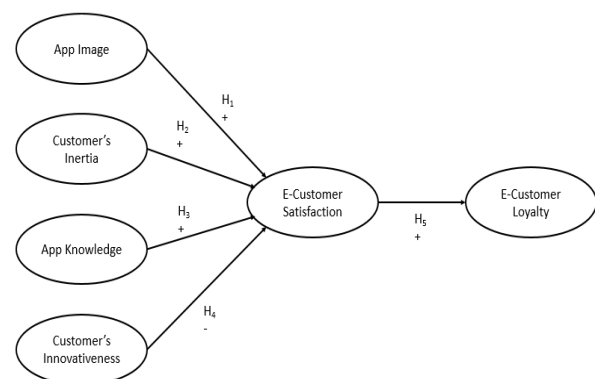


Fig. 1 Conceptual Framework

The operational definitions and questions items of each of the variables are shown at Table 1.

This quantitative research conducted by gathering primary data which were obtained by distributing questionnaires to respondents who aged 17 years-old and/or above and they had had used OTA app to purchase travelling product, e.g book rooms or flights, buy tickets etc. This research was conducted by a non-probability sampling method<sup>[5] [14]</sup>. The summary of respondents' characteristics is shown in Table 2. Questionnaires were distributed to 320 respondents, but only 310 could be used for further analysis. The data were analysed with Multiple Regression Analysis (MRA).

All measures used a response scale from 1 was "strongly disagree" to 4 was "strongly agree. App Image (B1) was measured by Pereira et al.'s (2016) four items ( $\alpha=0.758$ ). Customers' inertia (B2) was measured by Pereira et al.'s (2016) three items ( $\alpha=0.717$ ). App knowledge (B3) was measured by Pereira et al.'s (2016) five-items ( $\alpha=0.781$ ). customers' innovativeness was measured by Pereira et al.'s (2016) three-items ( $\alpha=0.600$ ). E-customers satisfaction (B5) and E-customers' loyalty (B6) were measured by Pereira et al.'s (2016) four and two-items ( $\alpha=0.760$  and  $\alpha=0.771$ ).

### III. results and findings

According to the results of the survey, 310 respondents' characteristics are defined as stated in Table 2 (next page).

To summarize the results, most of the respondents were female (185), aged 17 to 22 years old (167). Most of them had a highschool diploma (149) which means that most of them were still in school but they already had a steady income although their income were considered as a low-level income.

The most common OTA app used that were used by respondents was Traveloka, which was still the biggest OTA app provider that dominated Indonesia's OTA market. Then it followed by their potential competitor: Agoda. Since most of the respondents only used the app in holidays, their interval of usage was uncertain with low average amount per transaction (under Rp.1,000,000). This was consistent with their low-level income.

We first tested hypothesis 1-4 with a single ordinary least square (OLS) regression in which we regressed app image (B1), customers' inertia (B2), app knowledge (B3), and customers' innovativeness (B4) on the antecedents respectively. Then we tested hypothesis 5 with moderated regression analysis. We used the centered score to create interaction in order to improve interpretation of interaction or moderating effect.

Table 1 Variables, Indicators, Operational Definitions and Questions Items

Variables	Operational Definitions	Questions Items
App Image (B1)	The image that attached to the OTA	B1.1 The app has a high technology (e.g zoom-in, zoom-out, inter-gadget sync, etc.)

	app	B1.2 The information on the app is displayed attractively B1.3 I can easily download and access the app B1.4 I can easily find any information that i need in the app
Customer's Inertia (B2)	The tendency to not change the usage habits of the app	B2.1 I will not use another app, unless i find something that i don't like about the current app B2.2 It is difficult for me to dissappointed in the app B2.3 If i have to change over to another app, I will make an extra effort
App Knowledge (B3)	Customers' knowledge about the app	B3.1 I am familiar with the functionality of the app (e.g buy tickets, book rooms or flights) B3.2 If i want to make a purchase in the app, I don't need to gather more information to justify my decision B3.3 I feel confidence in my capabilities to differ the current app with the other app B3.4 I can easily navigate myself in finding the products or services I need B3.5 I am familiar with the design and layout of the app
Customers' Innovativeness (B4)	Customers' innovative nature	B4.1 I really careful to make a purchase decision in new app B4.2 I prefer to use the app that I already know than use another unfamiliar app B4.3 If I like an app, I barely change over to the new app just for finding a new experience
E-Customer Satisfaction (B5)	Customers' satisfaction in using OTA app	B5.1 I consider my choice in the app is right B5.2 Making purchase decision in the app exceeds my expectation B5.3 I believe that the app has the characteristics that I need B5.4 Overall, I am satisfied with the app
E-Customer Loyalty (B6)	Customers' loyalty in using OTA app	B6.1 The app is my first choice if I intend to buy or book a travelling product or service B6.2 I prefer the current app than another similar app B6.3 I will not hesitate to reccommend the app to friends or families

**Table 2 Respondents' Characteristics**

Characteristics	Result	Characteristics	Result
Gender	Male: 125 Female: 185		
Age	17-22: 167 23-28: 77 29-34: 39 35-40: 16 >40: 11		
Degree	High school: 149 Diploma: 131 Bachelor: 29 Post-graduate: 1		
Salary per month	< Rp.1,000,000: 94 Rp.1,000,001- Rp.2,500,000: 80 Rp.2,500,001- Rp.4,000,000: 77 Rp.4,000,001- Rp.5,500,000: 25 > Rp.5,000,001: 34		
Most used OTA app	Traveloka: 244 Agoda: 20 Bookings.com: 7 Hotels.com: 10 AirBnb: 5 Others: 24		
How often they made transactions in OTA app	Once a week: 6 Twice a month: 27 Once every 3 months: 14 Only for holiday: 263		
Average amount per transaction	< Rp.1,000,000: 223 Rp.1,000,001- Rp.2,500,000: 67 Rp.2,500,001- Rp.4,000,000: 14 Rp.4,000,001- Rp.5,500,000: 4 > Rp.5,000,001: 2		

Table 3 shows the results for all hypotheses. The beta weight for the antecedents B1, B2 and B3 were statistically significant and positive in predicting e-customers satisfaction ( $p < 0.01$ ), supporting hypothesis 1, 2, and 3. The beta weight for the antecedents B4 was statistically significant and negative in predicting e-customers satisfaction ( $p < 0.01$ ), supporting hypothesis 4. Also, the results for e-customers satisfaction was statistically significant and positive in

predicting e-customer loyalty ( $p < 0.01$ ), supporting hypothesis 5.

**Table 3 Regression Results**

	Dependen Variable : B5	Dependent Variable B6
<b>B1</b>	0.148*	
<b>B2</b>	0.0918*	
<b>B3</b>	0.330*	
<b>B4</b>	-0.244*	
<b>F</b>	77.263*	
<b>R2</b>	0,503	0.758*
<b>B5</b>		
<b>F</b>		
<b>R2</b>		252.728*
*sig at $p < 0.01$		

#### IV. discussion

The results of this study contributes in management science, especially to predict e-customer satisfaction with more varied variables. Based on these results, all hypotheses supported and in accordance with existing theory. It means that with the increasing of app image, customer inertia, app knowledge can improve e-customer satisfaction. In the long run, e-customer satisfaction will increase e-customer loyalty.

Also, e-customer satisfaction can be improved by the lack of customers' innovativeness. This innovativeness would be more difficult to be suppressed by the leading OTA app due to increasing number of domestics and foreign OTA app, economic growth and modernization of customers' lifestyle.

This research used four variables in predicting e-customers satisfaction. But if we look at the increasingly prevalent phenomenon in the OTA industry, the further research should be more focused on customer innovativeness. it can be seen from the personal side as well as from other situational factors that may be able to define the customers innovative behavior.

In addition, it would be more interesting if the further research would like to compared customers' value in using OTA, whether if it's utilitarian or hedonism value. This could be an important study to better understand the phenomenon in lifestyle marketing.

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