

# WHAT ARE FACTORS AFFECTING CONSUMERS' PURCHASE INTENTION TOWARD OTA-DATA ANALYSIS WITH SmartPLS

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## Abstract

In recent years, Online Travel Agent (OTA) have played an increasingly important role in the travel industry. However, consumers still face uncertainties about which OTA to book with. Therefore, thisstudy aims to explore consumer choice behavior of OTA and applies Partial Least Squares Structural Equation Modeling (PLS-SEM) to conduct empirical research.

This study collected data from Taiwanese consumers on two of the most well-known OTA (Booking.com, Agoda.com). After data analysis, the main factors affecting consumers' choice of OTA were found to include: two-sided platform effects, platform heterogeneity, platform user-friendliness, habit, and advertising effectiveness. Among them, habit and platform user-friendliness had the most significant impact on consumer choice behavior. In addition, this study also found that OTA advertising effectiveness had a less significant impact than expected on consumers' choice of OTA. This study suggests that OTA should focus on cultivating member loyalty and improving platform user-friendliness to choose and use their websites.

In summary, this study explored the factors that consumers consider when choosing OTA and provided corresponding recommendations, which can provide practical reference for OTA operators. Inaddition, this study also provides a certain reference value for

future related research.

Keywords: Partial Least Squares Structural Equation Modeling (PLS-SEM), Online Travel Agent (OTA), Consumers' purchase intention, Habit

## Introduction

Online travel agencies (OTAs) are travel aggregators who interface with prospective travelers via the Internet to sell travel-related products such as flights, cruises, holiday packages, hotel rooms, and so on (Rezgo, 2019). Consumer adoption of OTAs is a global phenomenon. For instance, since their inception in he U.S. around 1995, the share of OTAs in the online travel booking market has risen to 39% (Feinstein, 2019). The rising popularity of OTAs and intensifying competition have prompted academic research on consumer behavior related to OTAs. For example, prior studies have analyzed different aspects of consumer behavior, such as satisfaction (Jedin and Ranjini, 2017), customer loyalty (Dwikesumasari and Ervianty, 2017), and innovativeness (Lee et al., 2017) in the context of OTAs.

Purchase intention is an important aspect of consumer behavior. Prior research has revealed the influenceof socio-demographic factors, perceived risk, attitude, and compatibility on intentions to book travel online (e.g., Amaro and Duarte, 2013, 2015). Another key antecedent of purchase intention is the perceived value that consumers may derive from the use of a product or service (Carlson et al., 2015; Lu and Hsiao, 2010). With regard to OTAs, users' value perceptions are critical in the choice of potential online modes for booking travel (Mohd-Any et al., 2014). Furthermore, the literature on OTAs suggests that price advantage, efficiency, system quality, and convenience need to be offered to attract customers (Ozturk et al., 2016; Jedin and Ranjini, 2017).

In recent years, both Booking .com & Agoda are most dominate OTAs on the global market. These twosided platforms have no differences in terms of business model as well as pricing. Therefore, why consumers choose one over the other remain an interesting question for marketing scholars.

There are a few differences between the two platforms:

- 1. Booking is stronger in EU with largest market share. Agoda is good in Asia.
- 2. Booking has everything paid at hotel as business model. They don't take any money at their platform. However Agoda has both models working with them, as payment at hotel & payment at their portal.
- 3. Booking .com has a login for corporate client. Agoda has login for Agents. This study aims to respond to the intriguing question: how consumer has a high intention to purchaseon a specific

# OTA while the other OTA has the nature of homogeneity

Methodology

In this study, Unified Theory of Acceptance and Use of Technology (UTAUT) (Viswanath Venkatesh et al., 2003), two sided platform competition (McIntyre, D.P., & Srinivasan, A. 2017; Parker, G.G. et al., 2005; Joost, Rietveld., & Melissa, A. Schilling. 2021), OTA industry practices (Alexander, Bleier., & Maik, Eisenbeiss. 2015) and habit of consumer (Gomaa Agag, Ahmed A. El-Masry. 2016) were used as an important research hypothesis framework, and path analysis was performed to explore the influence ofvarious variables. According literature review this study proposed the research model and hypotheses (H1 to H8), asindicated in Figure 1.

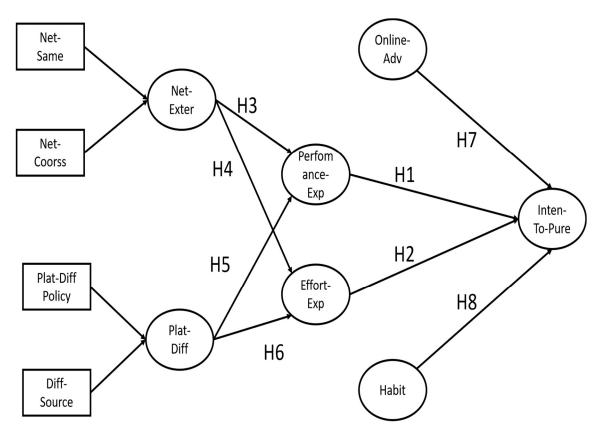


Figure 1. Research hypothesis structural model

This study uses data from electronic surveys that users receive through google tables distributed by personal Facebook and Line. Non-random snowball sampling method for cost effectiveness and respondents' distribution of questionnaires to friends with similar characteristics increase response rate. This study collects data from college students of different majors from undergraduate all the way up to thePhD program and their social acquaintances in Taiwan. The sample of participants has purchasing experience in at least one of the following OTA sites: Booing.com, Agoda.com, and Airbnb.com. Users with the experience of transaction on the three OTAs will most likely understand the concept"purchase intention on OTA". 297 samples were collected from 2022/12/01-30 with 44 indicators. Results fit predictability and generality.

#### Findings

In terms of the strength of purchasing motivation, customer habit is considered the most important, followed by the convenience of platform usage. Conversely, perceived usage benefits are generally believed to have a small impact on purchasing motivation, and the huge advertising effects of OTA platforms do not significantly affect consumers. The effectiveness of OTA platforms' massive advertising expenditures should be re-examined. In terms of using interests and advertising effectiveness, the impact may not be significant. The purchasing motivation, benefits of use, and ease of use have all been thoroughly explained, with all three factors having an R-value of greater than 0.36, as indicated in Tables 1 & 2.

#### Conclusions

Our study sheds light on gleaned through data analysis utilizing SmartPLS, after comparing two groups, the path coefficients show some differences, but the differences are not significant enough. In fact, there isnot much difference between the two groups in the minds of Taiwanese consumers. However, this finding is consistent with the market share in Taiwan and can be considered as an estimated model for market share.

Our findings highlight the paramount importance of user-friendliness and loyalty in shaping consumers'preferences for OTAs. The ease with which users navigate platforms and the establishment of trust and loyalty emerge as pivotal elements that drive consumers to choose one OTA over another. Contrary to initial expectations, the impact of advertising effectiveness on consumer choice was found to be less pronounced, suggesting that OTA operators should allocate resources judiciously to areas with higher impact. Two- sided platform effects and platform heterogeneity, while influential, exhibit a nuanced impact that varies among consumers. Recognizing these subtleties is crucial for OTA operators seeking to tailor theirstrategies to diverse consumer segments.

This research contributes to the broader understanding of consumer behavior in the digital travel landscape, offering practical insights for OTA operators and laying the groundwork for future investigations. As the industry continues to evolve, the adaptive strategies derived from this study caninform decision-makers in navigating the dynamic and competitive realm of Online Travel Agents.

In essence, our study serves as a stepping stone, contributing to the ongoing dialogue within academia and providing actionable insights for

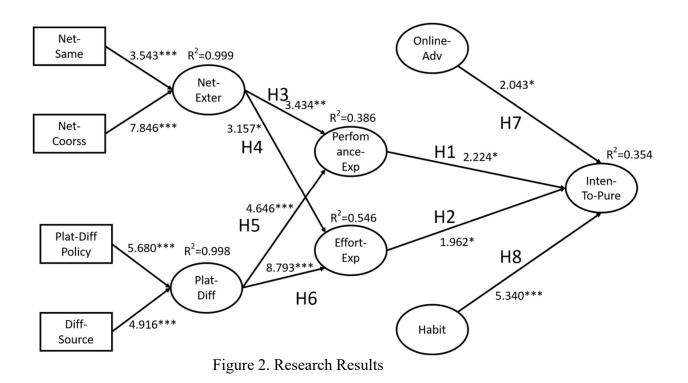
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## Table 1. Research Results

	Cronbach Alpha > 0.5~0.7	Composite reliability (rho_a)	Composite reliability (rho_c)	AVE > 0.5
Effort-Exp	0.917	0.917	0.938	0.752
Habit	0.893	0.894	0.926	0.758
Inten-To-Purc	0.572	0.615	0.819	0.695
Online-Adv	0.758	0.890	0.831	0.557
Performace-Exp	0.819	0.818	0.881	0.649

## Table 2. SmartPLS Model Fit

SmartPLS Model Fit (t > 1.96 ; p < 0.05)					
	t value	p value			
Diff-Source -> Plat-Diff	4.916	0.000			
Effort-Exp -> Inten-To-Purc	1.962	0.050			
Habit -> Inten-To-Purc	5.340	0.000			
Net-Cross -> Net-Exter	7.846	0.000			
Net-Exter -> Effort-Exp	3.157	0.002			
Net-Exter -> Perfformance-Exp	3.434	0.001			
Net-Same -> Net-Exter	3.543	0.000			
Online-Adv -> Inten-To-Purc	2.043	0.041			
Perfformance-Exp -> Inten-To-Purc	2.224	0.026			
Plat-Diff -> Effort-Exp	8.739	0.000			
Plat-Diff -> Perfformance-Exp	4.646	0.000			
Plat-Diff-Policy -> Plat-Diff	5.680	0.000			
SmartPLS Model Fit (R <sup>2</sup> )					
	R <sup>2</sup>	ADUJUSTED- R <sup>2</sup>			
Effort-Exp	0.549	0.546			
Inten-To-Purc	0.363	0.354			
Net-Exter	0.999	0.999			
Perfformance-Exp	0.391	0.386			
Plat-Diff	0.998	0.998			



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