

Studies of the Tour Guide Peer-to-Peer Platform on Ctrip App

by

Xiaotong Li

Doctor of Philosophy in Business Administration

2023



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PREVIEW

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Abstract

This dissertation is an empirical study on the peer-to-peer online tour guide booking platform on Ctrip App. Specifically, there is a sample of over 5,000 online profiles of tour guides in over 300 cities listed on Ctrip. Chapter 1 aims to identify the key determinants of consumers' purchase decisions in online tour guide service booking on the Ctrip platform in China. The results show that consumers' evaluation of certain attributes differs during the purchase stage. During the purchase phase, female tour guides, service lists, popular travel destinations and good ratings have a positive impact on the purchasing decisions of consumers. Price has a negative effect on the shopping choices of consumers. In addition, there also exists heterogeneity in different groups of tour guides in the influence of online profile clues on consumers' purchase decisions. Finally, this chapter confirms the effect of reputation formed by user reviews, including sub rating, review quantity, and review keywords, on tourists' purchasing decisions. Chapter 2 examines the impact of the tour guides' facial cues in their profile pictures, especially facial beauty, on the decision making of consumers at various stages. The results showed that facial beauty attractiveness and smiling significantly positively influence consumers' purchase decisions, but post service ratings are influenced only by service cues. In addition, this paper identifies the heterogeneity of the effect of the facial beauty premium on different groups of tour guides.

In Chapter 3, we study the impact of the COVID-19 epidemic on individual tourists' review scores based on the collection of all tourists' review information on the tour guide review page of the online tour guide platform on Ctrip App. We find that seven days after new COVID-19 cases appeared in travel destinations, the ratings of tour

guides rose by 8.3%. In addition, for tourists who choose popular travel destinations, family travel or couple travel, if there are new cases in the destination after the trip, they will increase the review scores. In addition, tour guides with lower overall review scores receive higher scores from tourists when new cases occur. Chapter 4 aims to analyze the impact of the sentiment tendencies of the text content displayed by the tour guide's personal background on the customer's decision-making at various stages. The research results show that the higher the probability of positive sentiment in the personal background text of the tour guide, the easier it is to attract consumers to purchase and rate higher after service. In addition, this paper identifies the heterogeneity of the impact of personal background sentiment tendencies on different groups of tour guides.

Keywords: Tour guide, Online profile, Beauty premiums, Sentiment, Ctrip, Peer-to-Peer

Declaration

I declare that the thesis here submitted is original except for the source materials explicitly acknowledged and that this thesis as a whole, or any part of this thesis has not been previously submitted for the same degree or for a different degree.

I also acknowledge that I have read and understood the Rules on Handling Student Academic Dishonesty and the Regulations of the Student Discipline of the University of Macau.

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Tour guides, as an integral part of group and individual tourism, are responsible for tourist satisfaction, making the destination interesting and representing the image of the destination (Tu et al., 2020; Weiler & Black, 2015). With the advancement of Internet technology, the tourism industry sales model has produced a shift from offline to online sales. In recent years, the pandemic of sudden-onset COVID19 has further accelerated the transformation of the tour guide sales model. As a result, in China, tour guides have a huge presence on the Ctrip.com peer-to-peer platform. Tour guides can register and receive orders on the online platform, and then provide travel services to their booking customers. The focus of this thesis is the impact of the online profiles of tour guides on the Ctrip platform on both tour guides and consumers.

First, the focus of this study is the tour guide. Unlike previous studies, a tour guide is not a physical product, but a service product. In the current study, there are still few investigations on the service products of tour guides on online platforms. Unlike the physical product, the service product is intangible, the service provider is highly involved, and the description of the service is vague. Therefore, the image of the service provider largely influences the marketing and sales of the service product (Rushton & Carson, 1989; Wirtz et al., 2021). Tour guides, as part of the service industry, not only sell the assets of the physical product, but they are themselves a necessary part of the service product offered (Rushton & Carson, 1989). During a trip, tour guides usually have intensive interactions with tourists as collaborators, entertainers, information providers, etc., and are responsible for tour satisfaction (Hwang & Lee, 2019). Therefore, we found that not only service cues are important, but also the image management of the tour guides themselves. Moreover, different

cues such as the face beauty of the tour guide and the sentiment tendency of the tour guide's self-presentation have different effects on pre- and post-service, which is also different from the results of previous studies on physical products.

Therefore, this thesis is divided into four parts. Chapter 1 describes the determinants of consumers' purchase decisions in online tour guide booking. Chapter 2 analyzes the tour guide's beauty premium effect on consumer's decision making. Chapter 3 confirms the impact of COVID-19 on review scores of individual tourists. Chapter 4 conducts a sentiment analysis of tour guide background self-presentation to investigate its effect on consumer decisions.

Chapter 1 Determinants of consumers' purchase decisions in online tour guide booking: the case of Ctrip

1.1 Introduction

In the tourism industry, tour guides are considered to be one of the most important input factors in practice, and they play a vital role in achieving tourist satisfaction (Cheng et al., 2017; Tsaur & Teng, 2017). With the advancement of Internet technology and the emergence of online travel platforms, the display and selling methods of travel services have been greatly changed, which in turn has also affected the purchasing behavior of tourists (No & Kim, 2015). In the past, research on the business model of online travel platforms has mainly focused on accommodation products in the tourism and hospitality industries, such as Airbnb (Zervas et al., 2017), or transportation service products, such as Uber (Z. W. Lee et al., 2018). In recent years, new platforms have emerged to connect tour guides and consumers directly where tour guides are listed for choosing. For instance, through the online

Ctrip tour guide platform, in addition to publishing itineraries such as traditional industry players, these tour guides can provide rich travel service product information. Consumers can easily compare existing information, such as tour guide personal information, service lists, prices, destinations, ratings and reviews of travel products. A large number of heuristic cues form a set of considerations that help consumers evaluate and make purchasing choices (Hu & Yang, 2020, Xiang et al., 2015; Zhou et al., 2014).

In the past tourism literature, most of the existing tour guide-related research has focused on the impact of the perceived professional competence of tour guides on tourist satisfaction and purchase behavior intention (e.g., Mak et al., 2011; Hwang & Lee, 2019). Recently, there has been an increase in the number of studies on the online profiles of tour guides in the travel literature (Banerjee & Chua, 2020; Kromidha et al., 2021; Fu et al., 2021). While these studies contribute to the tour guide literature, research gaps remain. First, existing studies mainly experimentally investigate the influence of tour guide-related attributes on users, such as facial expressions on online pictures, length of profile description, gender (Banerjee & Chua, 2020), and tourist complaint records (Fu et al., 2021). However, experiments may produce hypothetical scenarios that deviate from actual results (Falk & Heckman, 2009; J. Li et al., 2018). In recent years, studies using large-scale field data have mainly involved the application of online accommodation platforms (e.g., Zhu et al., 2019). Therefore, this study aims to examine how related attributes of online platform tour guides influence consumers' purchasing decisions by using a large amount of field data. Second, there are several papers that also employ field data to study tour guides. Kromidha et al. (2021) collected a large dataset of online

independent tour guide materials and studied the development of the authentic exchange of tour guide materials in the sharing economy through deduction and induction. However, current research has not yet comprehensively investigated the factors influencing the decision-making process of users using online tour guide bookings. The impact of various factors on online travel platforms, especially online tour guide platforms, is not fully understood. Therefore, it is necessary to understand the main factors that influence consumers' purchasing decisions so that the platform operator or tour guide can improve the marketing strategy, enhance the visual appeal of the website, and thus increase sales. In summary, this study contributes to the tour guide literature, especially online platform tour guide research, by analyzing the key determinants of tour guide transactions by using a large amount of field data obtained from online tour guide platforms.

This study forms a new dataset based on the online tour guide platform operated by Ctrip. By collecting online data from the Ctrip online tour guide platform, we obtained data on 5623 tour guides and identified 14 explanatory variables in total. These explanatory variables were further grouped into personal information, price, service list, destination, and rating. This study builds a comprehensive regression model to analyze the determinants of tour guide service demand. Furthermore, due to the heterogeneity of the tour guide market, we further segment the tour guides to understand the characteristics of online consumers. Finally, it is necessary to explore how the demand for tour guide services is affected by the reputation formed by past user reviews. After using a product or service, some users tend to leave their opinions on the product or service on the review page (Meng & Han 2018). Research shows that up to three-quarters of travelers refer to ratings as a source of information

to make travel decisions (Mauri & Minazzi, 2013). Therefore, the ratings and reviews left by the user after the experience may further influence the purchase decision of tourists.

Overall, this paper contributes to the literature in several ways. First, this study uses large-scale field data from online platforms to better understand the importance of tour guide profile attributes in consumer purchasing decisions in an online platform environment. In previous literature on tour guides, tour guide profile clues were collected primarily through experimentation or surveys (Banerjee & Chua, 2020; Fu et al., 2021). This study uses tour guide field data on online platforms to compensate for small sample sizes or inadequate area coverage of experimental and survey data.

Second, this study examines the influence of the tour guide attributes and listing characteristics of the Ctrip online platform on consumers' purchasing experience. A comprehensive understanding of tour guide service demand and its determinants expands the literature on tour guides, focusing on the online profile of Chinese tour guides (Tsaur & Teng, 2017; Wong & Lee, 2012; Hwang & Lee, 2019). Unlike the purchase of traditional Chinese tour guide services assigned by service travel agencies, the new online tour guide platform provides detailed tour guide information at the consumer's discretion. According to our research, tour guide information clues such as personal information, prices, services, destinations, and ratings have a positive impact on consumers' purchasing decisions.

Finally, this study further investigates the determinants of consumer purchasing decisions by segmenting the tour guide market. We analyze the purchasing decisions

of consumers under different tour guide groups and under different tour guide service products. Our research shows that the listing cues of online platforms have different effects on different groups of tour guides. In addition, we collected clues on the tour guide review page, such as subitem ratings, positive, neutral, and negative reviews, and review keywords, and analyzed the impact of online review impression characteristics on consumers' purchasing decisions. As the online platform model evolves, research into the factors that influence this nontraditional tour guide services purchase provides stakeholders with important insights to improve revenue and grow their business.

1.2 Literature review

1.2.1. Peer-to-Peer online platform

With the advent of the Internet, tourism literature to date has featured a variety of studies on sharing economy platforms focused primarily on accommodation and transportation sectors such as Airbnb and Uber (Zhu et al., 2019; S. Y. Park et al., 2021). To facilitate the trading of strangers on the platform, the platform usually requires operators to disclose personal information to promote mutual trust (Ert et al., 2016). In addition, platforms often encourage visitors to leave comments after the experience, which ultimately demonstrates consumer satisfaction with their experience and forms part of the operator's image (Bridges & Vásquez, 2018). Similarly, China's Ctrip online tour guide platform has adopted a similar operating model, connecting local tour guides and tourists through the online platform. Tour guide personal information, service product information, service prices, tourist reviews, destinations, etc., on the platform are all open and transparent.

1.2.2. Consumer decision making in online environments

Evaluating alternatives is an important step in the decision-making process. Given that consumers must face multiple options at the same time, they tend to form a set of considerations, including a set of options that can achieve the goals of careful evaluation and final choice (Woodside & King, 2001). The information list of the online tour guide platform is similar to providing consumers with a consideration set. All information is clear and public, helping consumers weigh the product attributes of the various alternatives and make the final purchase decision. In addition, studies show that decision makers prefer key attributes for evaluation at an early stage and may be excluded if their needs cannot be met on key attributes (C. Li et al., 2016; Laroche et al., 2003). Studies on consumer purchasing decision models have existed in past tourism literature and have been applied primarily to destination selection (C. Li et al., 2016; Seddighi & Theocharous, 2002) and hotel selection (Hu & Yang, 2020) but in limited application in the tour guide industry. In previous travel literature, some researchers have identified the main attributes that influence consumers by tracking consumers' decision-making processes on web pages using eye-tracking techniques (K. Park et al., 2017) or consumer experiments (Jones & Chen, 2011). Although little research has been done on online tour guide attributes, the literature has identified the main hotel attributes that influence consumer purchasing decisions, including hotel class, image, accompanying text, hotel name, price, and hotel size (Masiero et al., 2016). However, the key factors driving consumers to buy tour guide services remain underexplored. This study attempts to analyze the key factors influencing consumers' purchasing decisions by collecting attribute lists of online tour guide platforms. In the remainder of this section, we discuss these informative clues and propose hypotheses.

1.2.3. Tour guide service demand determinants

Personal information-gender

Personal information describes personally identifiable information (i.e., gender, age) in connection with the disclosure of other sensitive and highly personal information (Nosko et al., 2010; Jönsson, & Devonish, 2008). Since the platform does not currently disclose the tour guide's age information, we collect the gender information of tour guides as personal identification information by identifying the tour guides' portrait photos. Gender was one of the important factors in investigating how a tour guide's online profile affects a user's buying intent. Previous literature has shown that travel facilities are often influenced by gender relations (Ferguson, 2018; Guimarães & Silva, 2016; Lin et al., 2008). However, thus far, the role of the tour guide's gender on the intent of the tourist's booking behavior is unknown. Although the traditional tourism industry is dominated by males, the number of females represented by tour guides is increasing (Lin et al., 2008; The Boston Globe, 2019). Due to the narrowing gender gap of web users in recent years (Wasserman & Richmond-Abbott, 2005; Losada et al., 2016; Y. Zhang & Hitchcock, 2017), both male and female tour guides can access Internet platforms and register as tour guides. In a study of European tour groups, the gender of the tour guide did not seem to be important to tourists, but when expressing their tastes, tourists chose female (Quiroga, 1990). Studies have shown that female tour guides are more popular than males in meeting consumer needs (Lin et al., 2008). Therefore, if the female and male tour guide profiles are displayed together on the platform, are consumers more likely to choose a female tour guide? Therefore, this paper proposes the following assumptions:

Hypothesis 1: Female tour guides have a positive influence on tourists' purchase decisions.

Price

There are many factors that influence consumer decisions in travel and tourism services, and price remains one of the key factors (Lockyer 2005). Price, as an external cue faced by consumers, can influence consumers' initial decisions, including their willingness to book hotel rooms online (Noone & Mattila, 2009). Furthermore, price is an informative cue for consumers (Theysohn et al., 2013). Previous literature has documented the relationship between price and consumer perceptions of quality and value (Eggert & Ulaga, 2002). Consumers often associate price declines with corresponding value increases, creating a negative relationship between the two (Eggert & Ulaga, 2002). Studies have shown that quality and value perceptions have a direct impact on consumers' buying intent (Tanford et al., 2011). In addition, the price sacrifice effect shows the relationship between price (or price level) and probability, and the higher the purchase price (or sacrifice price), the lower the purchase probability (Bornemann & Homburg, 2011). This study therefore proposes the following assumptions:

Hypothesis 2: The price of tour guide services has a negative influence on tourists' purchase decisions.

Service

Online platforms often provide pretransaction services with information aimed at helping customers make travel decisions. Good online services satisfy and even

delight customers and increase their patronage (Rust & Oliver, 2000), resulting in desirable behaviors such as word-of-mouth promotion, willingness to pay premiums, and repurchases (Reichhold et al., 2000; Reichhold & Schefter, 2000). Based on the classification of tourism services by Grönroos (1984), technical quality, functional quality and image are identified as the basic set of quality dimensions. Technical quality refers to the customer's actual use of the service, which is easy for customers to perceive and has a significant impact on customers' perception of service quality (Grönroos, 1984). Therefore, in this section, the service primarily represents the technical quality of the online tour guide platform, that is, the objectively perceptible content. For example, the list attribute clearly indicates that the available services include vehicles, travel equipment, rewards, etc. Functional quality refers to the delivery method of the service, such as the behavior and attitude of the service personnel during the travel duties depending on the subjective feelings of the customer, making objective evaluation difficult. The image of a service organization refers to the overall impression of a service provider in the minds of consumers in the public, which is difficult to quantify. For online tour guide platforms, this study presents the key attributes of ratings and reviews as explanatory variables, which to a certain extent reflect consumers' perceptions of the image and functional quality of tour guides in the past. In this section, service refers to technical quality. This structure provides an easy way to measure customers' evaluation of service performance, and service quality leads to customer satisfaction (Kang & James, 2004). Therefore, this paper proposes the following hypothesis:

Hypothesis 3: There is a positive correlation between service and tourists' purchase decisions.

Rating

Consumers are in goal-oriented mode when making purchase decisions and tend to use simple information processing methods (Van Schaik & Ling, 2009). Ratings provide easy-to-access references to information that influences product selection (Chen & Xie, 2008). A composite rating derived from the evaluation of a product or service represents social impacts, including the acquisition of information or advice from strangers, and online ratings have become an important source of information for consumers (Book et al., 2018). Research shows that up to three-quarters of travelers use ratings as a source of information when making travel purchase decisions (Mauri & Minazzi, 2013). Customers' trust in online ratings and reviews has increased over the years and is just as important as face-to-face advice when making purchasing decisions (BrightLocal, 2014). Although there are few studies in the field of tour guide platforms, many studies support the relevance of online ratings in consumer behavior (Noone & McGuire, 2014; Sparks & Bradley, 2017; L. Zhang et al., 2016). For example, studies have shown that ratings of hotels, related products and services influence potential customer preferences through their (S. Lee & Ro, 2016), and consumers tend to list hotels with higher ratings (Gavilan et al., 2018). Dellarocas et al., (2007) found that adding online movie ratings to a revenue forecasting model significantly improved the predictive power of the model. This study expands the impact of tour guide ratings on consumers' purchase decisions. Therefore, this paper proposes the following assumptions:

Hypothesis 4: Tour guide ratings have a positive influence on tourists' purchase decisions.

Destination

In the age of online information, a large amount of carefully selected travel information influences the choice of tourists for popular and mature destinations (Jacobsen, & Munar, 2012). In the tourism market, popular destinations tend to have certain advantages over other destinations (Leung & Baloglu, 2013). According to previous literature, popular travel destinations usually have relatively stable external factors, such as political stability, and better internal factors, such as culture, transportation, and tourism infrastructure. (Du Plessis et al., 2015; Blanke & Chiesa, 2013). These favorable factors help consumers choose popular travel destinations. Therefore, this paper proposes the following assumptions:

Hypothesis 5: Popular destinations have a positive influence on tourists' purchase decisions.

Based on the above literature, we focus on various types of determinants, including tour guide personal information, service information, price, ratings, and destination. Online materials are more objective because they are used naturally by users without the intervention of researchers. This article uses the tour guide's online profile as a proxy for factors that influence tourists' purchasing decisions, giving insights into the impact of tour guide attributes and tour guide service characteristics on consumer buying behavior. Figure 1.1 shows the theoretical framework of consumer purchasing determinants on an online travel guide platform.

[Insert Figure 1.1 here]