

# Customer's Perceptions and Intentions on Online Travel Service Delivery: An Empirical Study in China

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**Abstract.** With the wide adoption of e-commerce in travel and tourism industry, the Internet has become an important travel service delivery channel, and traditional travel agency has been under severe disintermediation threat. This paper reports on a survey conducted to explore the Chinese consumer's current usage of the Internet as the channel to search travel information and to book travel services. It also investigates customer's future intentions on using the Internet to book travel services. This paper aims to examine whether there are difference between different consumer segments in terms of gender and age, and to find the hypothesis of disintermediation or intermediation in travel industry. The results indicates that online travel service delivery has grown as a popular direct distribution channel in travel industry, but more of the customers still turn to the traditional travel agencies, which support both the disintermediation and intermediation in travel industry. The results also reveal that online travel services provided by travel service providers still need to be improved since the number of online bookers is declined. This paper concludes by discussing the limitation of this study and highlighting areas for the future research in online travel service field.

## 1 Introduction

The rapid advance in information technology (IT) and the proliferation of technology-based systems, especially the Internet, are leading fundamental changes

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in how companies are performing business and interacting with customers [1-3]. Electronic commerce (e-commerce) has become an important business model with these great changes. In fact, travel and tourism industry has been particularly affected by the great advancement and the wide application of e-commerce in business, especially the way travel organizations deliver their travel products to the market and the customers [4-6]. The Internet, as a universal and interactive communication means, has resulted in great changes of customer's behavior and attitude. Consumers can conduct travel information searching and travel service booking online. They shifted from the traditional offline channels to online channels. Online travel service reservation has constituted one of the largest and fastest growing segments of e-commerce in B2C arena [7,8]. The Internet has become a new intermediary in travel industry and the traditional travel agencies or tour operators are threatened to be replaced by the Internet.

This paper is to examine the issue of the Internet as a travel service delivery channel and the issue of disintermediation or intermediation in travel and tourism industry. It explores these important issues building both on previous researches and empirical data collected in airline industry. The purpose of this study is to contribute toward an improved understanding of the current usage of the Internet as a travel information searching and travel service booking channel. This paper aims to examine whether there are difference between different consumer segments in terms of gender and age. This study is also to investigate the customer's future intentions on booking travel services online. This paper concludes by discussing the limitation of this study and highlighting areas for the future research in online travel service field.

## **2 Background**

### **2.1 Disintermediation in travel industry**

Malone et al (1987) first introduce the threatened intermediation or disintermediation hypothesis. They argue that the role of the traditional retailers, distributors, brokers, and other middlemen will be eliminated or reduced in business transaction between the producers and the customers [9]. In the context of Web, it comes to signify the disappearance of different intermediaries or middlemen and the creation of enhanced online sales – customers deal directly with service or product providers on the Internet [10]. Studies on disintermediation in the Internet and e-commerce field provide quite contradictory predictions about the impact both e-commerce and the Internet would have on intermediaries. Some suggest that the Internet and e-commerce would create efficiencies and lower transaction cost with fast and better service by eliminating the need for intermediaries in business transaction [10-12]. While some researchers raise criticism on the threatened disintermediation hypothesis. Evans and Würster (1997) argue that e-commerce requires a new creation of partnership for all the participants in the value chain [13]. Bailey and Bakos (1997, 1998) suggest that the need for intermediaries is not likely to be eliminated. Though some traditional roles of intermediaries may become less

important as a result of advance in IT, some new types of electronic intermediaries and new version of traditional intermediaries will appear in the electronic market because of the various needs for outsourcing services in e-commerce [14-16].

With the wide adoption of e-commerce in travel and tourism industry, the traditional travel agency has been under severe disintermediation threat. More and more travel service providers are conducting travel service distribution online without dependence on traditional intermediaries of travel agencies and without commissions paid to travel agents. Travel service providers allow their customers to access to their online booking system to book travel service directly [17,18]. Various studies have shown the direct fit of the Internet and travel products [6,7,19,20]. Travel and tourism industry is assumed to experience disintermediation on a large scale because of e-commerce. Thus, the traditional principle intermediary, tour agencies, in the travel distribution chain throughout the world are under threat of disintermediation [7,17,21,22]. Clemons et al. (2002) illustrate the following three reasons for disintermediation in travel industry: travel agencies' focus on the interest of themselves and customers, but not on the interests of travel service providers, travel agencies having strong power on information control in the distribution channel, and the Internet taking the place of travel agencies as a low cost distribution channel [23].

As discussed above, some tourism researchers state that the traditional distribution system could be threatened by disintermediation because of the Internet as a cheaper distribution channel. Others, however, argue that although the volume of online travel distribution keeps increasing, some travelers still rely on the traditional travel agencies for customized and professional services or human touch, and disintermediation can be avoided by re-intermediation in travel industry [24].

## **2.2 Electronic travel service delivery**

The increased penetration of online service and home computing has resulted in more consumers' home-shopping. Consumers are able to search travel information through websites, to engage in the subsequent decision-making process, and to purchase travel services without leaving home. The Internet has greatly affected consumers' behavior, which makes it available for travel service suppliers to sell their products to consumers directly and omit the traditional travel retailer – travel agency [25]. With the change of consumers' behavior, travel service providers are implementing online travel service distribution to customers. As the travel industry is largely information-driven, the Internet has been considered ideally suited as a medium for travel service delivery [26], and it is hardly surprising that online travel services have developed into one of the largest e-commerce domains [23].

Online travel service delivery helps travel service providers to establish direct promotion to targeted potential customers and send them tailor-made information at the appropriate time. On the travel service provider perspective, they can gain channel control in the market by this way without dependence on traditional travel agencies. In addition, minimizing cost and maximizing marketing effectiveness can be achieved. Travel service providers can also obtain a broad customer base,

understand customers' needs better, and offer customized service to customers in online distribution [27].

Customers' switch from offline channels to online channels is related to their perceptions on online channels. On customer perspective, online travel service delivery offers them more benefits compared to traditional offline channels. Convenience, time saving and cheaper price are the most common motivations for customers to book travel service online [28]. Customers can search travel information online easily, including travel information, price information and so on. Online channels dramatically reduce customer's searching effort on travel information, including both searching time and searching costs. In addition, online channels offer customers with more information to support their decision based on their comparison of different travel products and prices. All these activities, including travel information searching, travel service booking, payment and service delivery, can be conducted online by customers without face-to-face meeting, and customized service according to their demand can be possible [29].

Indications in studies are that at present though online travel service delivery is growing in tourism, sales through traditional travel agents have accounted for a large percent of travel industry [25]. As Chircu et al (2001) and Gupta (2004) state that online travel service booking does not have the same appeal for travelers, despite numerous travel service providers have made effort to implement online direct sales to customers. Customers may have difficulties with online booking involving the significant complexity of travel service, for example, multiple destinations, international travel, travel involving mixed air carrier arrangements and so on, and channel risks to switch to online travel service delivery is also an obstacle for customers to adopt online channels in travel service distribution [28,30]

### 3 Method

In this study we conducted a consumer survey in airline industry to explore the general public's perceptions on online travel service distribution and their future intentions on travel service booking. In the survey a questionnaire was developed to collect empirical data. The investigated objects in this study are the Chinese passengers of an international airline company. Copies of the questionnaire were distributed to passengers onboard. Totally 190 copies were received in the survey, and 169 copies are usable.

The questionnaire includes some questions based on background studies and secondary research. At the beginning a brief narrative introduction of the study and an explanation of the purpose on the questionnaire are provided. Respondents are asked to indicate their current and perceived future use of online travel service booking. Some questions are demographic-related and others are related to travel service delivery, including online booking experience, travel information searching channels, and future intentions on travel service booking.

The empirical data was analyzed using SPSS14.0 program. In the survey respondents were clustered on the basis of their responses to some questions on their gender, age, Internet use and online booking experiences, and these groups were then

related to the scales on their current travel searching channel, their current use of online travel service booking, and their future intentions on travel service delivery.

## 4 Data analysis

### 4.1 The current usage of the Internet in travel information searching and travel service booking

Of the respondents in the questionnaire, 104 (61.5%) are males, and 65 (38.5%) are females, and 97.2 % are Internet-users, only 2.8% of the respondents have never used Internet. As regards online travel service booking experience, 58.8% of them reported that they had purchased travel service online, and 41.2% had not. The data revealed that there are significant difference between groups with different gender (Chi-square: 9.639/df 1, Sig. = .002) and in different ages (Chi-square: 94.377/df 5, Sig. = .000) on the variable of online travel booking experience. The male respondents had adopted online travel service booking more extensively than the female respondents (See Table 1). The respondents in 26-35 ages group has the greatest online booking experience, and the respondents in 55-65 age group has the least (see Table 2). The results are in consistent with the current condition of Internet use in China. In China males use the Internet more than female, and the young generation between 18-35 years old is the main Internet users in China [31].

**Table 1.** Online travel service booking experience of respondents by gender

	Total Resp.	Gender	
		Male	Female
Online experience	58.6 ( 99)	36.1 (61)	22.5 (38)

**Table 2.** Online travel service booking experience of respondents by ages

	Total Resp.	Age				
		18-25	26-35	36-45	46-55	55-65
Online experience	58.6 (99)	18.3 (31)	23.1 (39)	8.9 (15)	6.5 (11)	1.8 (3)

*Note: All values are illustrated in the following way Percentage (Number of respondent).*

The survey also empirically investigated the customer’s current travel information searching channels. The respondents are instructed to express their preference of travel information searching channels on a five point scale where one represents most important channel and 5 represents the least important channel. According to the means comparison, the data implies that travel agency is still the most popular channel to search travel information and advertisement has lost its power in travel product promotion. Surprisingly, even friends, experiences and habits are more important than the Internet (See Table 3). That can partly be explained by the fact that most Chinese rely strongly on their experiences and good

social relationship in their life. The statistical tests for difference between means reported that there are no significant differences between female and male respondents, or between the respondents in different ages on the perception of travel information searching channels (See Tables 3 and 4).

**Table 3.** Reported perception of travel information searching channels by gender

	All Resp.	Gender		Sig. (2-tailed)
		Male	Female	
Travel agency	1.99	1.91	2.18	.331
Friends	2.04	2.20	2.77	.104
Experience, habit	2.29	2.51	1.94	.360
Internet	2.31	2.09	2.78	.038
Advertisement	3.24	3.13	3.52	.082

**Table 4.** Reported perception of travel information searching channels by ages

	All Resp.	Age					Sig. ANOVA
		18-25	26-35	36-45	46-55	55-65	
Travel agency	1.99	2.38	2.12	1.75	1.67	1.00	.547
Friends	2.04	1.88	2.32	1.82	2.00	1.00	.496
Experience, habit	2.29	2.15	2.37	2.27	2.36	1.50	.364
Internet	2.31	2.60	2.28	2.40	1.70	-	.501
Advertisement	3.24	3.67	2.92	3.44	3.17	3.00	.823

#### 4.2 Customer's future intentions on travel service booking

To investigate customers' future intentions on travel service booking is also one of the main objectives of this study. All the respondents were asked to report on their intended ticket booking channel selection in related to their future trip, including booking channel, payment method and ticket delivery.

**Table 5.** Reported future ticket book channels

	All Resp.	Use of Internet		Online booking experience	
		Non-user	User	Non-booker	Booker
Travel agency	45.6	1.2	44.4	21.3	24.3
Internet	33.1	.6	32.5	9.4	23.7
Airline office	14.8	-	14.8	6.5	8.3
Others	6.6	-	6.6	3.0	3.6

The results reveal that the dominant ticket booking channels are travel agencies and the Internet. Among the respondents, 45.6% of them reported they primarily will use travel agency to book travel service. Even a large part of the Internet users

(44.4%) and online bookers (24.3%) will not use the Internet (See Table 5). And 33.1% of the respondents will use the Internet to book their future trips, most of them are Internet-users (32.5%) and online bookers (23.7%) (See Table 5).

The respondents reported on their payment methods of ticket booking for their future trip. Online payment and pay in cash are the dominant methods. Among the respondents, 43.8% of them reported they primarily will pay online. Most of them are Internet users (43.3%) and online bookers (29.0%) (See Table 6). Still 31.4% of the respondents will pay in cash, including some Internet-users (29.6%) and online bookers (18.4%) (See Table 6). These findings are in line with the report from China Internet Network Information Center (CNNIC). In China pay in cash is still preferred by customers though online payment is getting more and more popular than before [31].

**Table 6.** Reported payment method in future ticket booking

	All Resp.	Use of Internet		Online booking experience	
		Non-user	User	Non-booker	Booker
Online payment	43.8	.5	43.3	14.8	29.0
Bank transfer	23.7	-	23.7	16.6	7.1
In cash	31.4	1.8	29.6	13.0	18.4
With a check	1.1	-	1.1	.5	.6

The respondents were asked to report on their likely ticket delivery channels as well. More than half of the respondents (63.3%) will use e-ticket. Most of them are Internet users (62.8%) and online bookers (41.2 %) (See Table 7). Some Internet users and online bookers still will use paper tickets delivered by post or picked up by them (See Table 7).

**Table 7.** Reported ticket delivery in future ticket booking

	All Resp.	Use of Internet		Online booking experience	
		Non-user	User	Non-booker	Booker
E-ticket	63.3	.5	62.8	22.1	41.2
Paper ticket by post	11.3	-	11.3	2.4	8.9
Paper ticket picked up in person from ticket office	25.4	1.1	24.3	16.5	8.9

## 5 Discussion and conclusion

Travel industry has been quite fit with the new interactive media – the Internet, and has developed as the main sector in e-commerce field [23,26]. The results in this study support the view since nearly half of the respondents have used the Internet to book travel services and still about one third of the respondents will use the Internet to book travel services for their future trip. But the current use of online travel

service booking is not equally spread in the groups of different gender and age, and online booking services still need to be improved. Since there is a decline in the numbers of respondents who are intended to book travel service online, and even some online bookers are not complete e-commerce adopters. Some online bookers will not pay online, but turn to pay in cash or in other ways, and some of them will not accept e-ticket during their online booking. It is obvious in the results that there are still a fraction of respondents rely on the traditional travel agencies both to look for travel information and to book travel services. The results indicate that travel service providers still need to depend on travel agencies in order to keep competitive.

As expected, the results reveal that online travel service delivery has been a growing trend, but travel agency still keeps the main travel service delivery channel in travel industry with the increase of adoption of online booking service in travel industry, since travel agency is still the most preferred channel for customers to obtain travel information, and nearly half of the respondents still rely on travel agency for their future trip.

As insight into the disintermediation hypothesis, as above discussed, the adoption of online travel service delivery has attracted wide customers, and travel agency is facing the disintermediation threat. But the results also indicate that currently travel agency is an even more important channel than the Internet for customers to book travel service, and about 24.3% of online bookers would like to turn back to travel agencies in travel service booking. The results imply that though disintermediation exists in travel industry, but travel agency still has strong market share in travel industry. Disintermediation or not depends on travel agencies' competitive capability in the travel market.

In summary, the results support the following conclusions. First, online travel service delivery has grown as a popular direct distribution channel in travel industry. Second, customers has intentions to book travel service online, while still more of them prefer to the traditional travel agency. There are quite contradictory arguments on the disintermediation hypothesis in the travel industry. It implies that though the phenomenon of disintermediation exists in travel industry, intermediaries are still important for travel service providers to keep competitive. Third, online services provided by travel service providers still need to be improved since the number of online bookers is declined.

This study has offered some valuable insight into studies on the online travel service delivery. A number of limitations of the study need to be acknowledged when we interpret the results. First, the empirical study was conducted just in one country, China. The results are not applicable for most other countries. Second, only airlines were chosen as case in our empirical study. More cases in different travel service organizations will better support the assumptions in the study. In the future further empirical studies on how to evaluate online travel service quality and to meet customer's needs need to be conducted to examine the dimensions of online travel service quality.

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