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**Revisiting “Disintermediation” in Travel Product Distribution of Airline Industry in Mobile Technology Era**

Disintermediation, which refers to dealing with customers directly through the e-booking platform, has been gradually embraced by travel product suppliers in recent years to avoid high distribution costs of the intermediaries. Additionally, the ever-increasing number of mobile users has encouraged suppliers to develop mobile-friendly websites to satisfy the needs of this growing sector. However, in the previous research, disintermediation has only been studied in the desktop technology context, while the impact of disintermediation in the mobile technology era still remains largely unknown. This study aims at filling this gap by revisiting the topic of disintermediation in the mobile technology context. 502 travellers from Hong Kong with Internet air ticket purchase experience participated in this study.

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## **Introduction**

“In 2007, 20.3% of the world’s populations was Internet users; this exceeded the 19.01% of the world’s population who were fixed-line telephone owners” (Soltysik, 2013, p. 33). The Internet has gradually become a popular medium for travellers to access information, while mobile devices, which allow users to access the Internet without using bulky computers, have become the market leader among all devices.

However, most prior studies related to disintermediation in travel product distribution were mainly concerning about how “disintermediation” is perceived in the context of desktop computers; whereas the perception of disintermediation in mobile Internet Technology still remains unknown. Law, Leung, Lo, Leung, and Fong (2015, p. 447) also identified that the “research gap exists between the available mobile technology and the adoption of the technology by tourism industry practitioners”.

In order to fill in the gap, this study focuses on one airline industry in Hong Kong - to conduct a study on the phenomenon of disintermediation in the mobile technology era. The research objectives of this study are:

- To investigate air ticket consumers’ perception of disintermediation in air ticket distribution in mobile Technology era
- To investigate air ticket consumers’ perception of using mobile devices in air ticket online purchase in mobile Technology era

## **Literature Review**

### *The Mobile Device Usage in Hong Kong*

According to the data of Go Globe (2014), using smartphone is the most popular way to access the Internet in Hong Kong. Around 70% of the population in Hong Kong can be

counted as smartphone users and 48% of the mobile users highly rely on their smartphones to access the Internet instead of desktops, laptops computers and the tablets (eMarketer, 2017).

### *Mobile Technology Implication in Travel Product Distribution*

Google (2013) stated that 56% of mobile device users in Hong Kong use mobile devices to search for travelling information. These users are the potential customers to purchase travel products from online travel agencies or product suppliers by using their mobile devices.

### *“Disintermediation” in the Airline Industry*

Disintermediation in travel product distribution has been widely studied by scholars. The Internet Technology has posted a great impact on tourism, especially in the process of redefining the travel product distribution channel from the travel product suppliers, such as airlines and hotels, to the travelers (Law & Leung, 2000)

## **Methodology**

This study adopts the convenience sampling method, with target sample size of 500 participants. The targeted population is the followers of the social media fan page of OTAs and travel referral sites in Hong Kong. The researchers invited the participants to join the survey by sending out a hyperlink to the online questionnaire. The questionnaire used in this study was adapted from prior studies on disintermediation (Law & Lau, 2005), in total, 502 completed questionnaires received.

## Findings

A qualifying question was used to filter the respondents who are not the target participants of this study. Overall, 502 respondents answered that they had online air ticket purchase experience in the past 12 months; therefore, they were qualified. The primary device preference was categorized into three groups. In general, 136 respondents used mobile devices as the primary device, 151 respondents used desktop computer, and 215 respondents used both evenly.

### *Perception of Disintermediation for All Qualified Respondents (N=502)*

**Table 1. Arguments for Support disintermediation**

	Question	Mean	Standard Deviation
1	Technology enables travellers to perform most functions from the convenience.	4.16	0.82
2	Online air ticket reservations are boundary free.	4.15	0.678
3	The additional rewards from airlines encouraged me to book from the airline websites.	3.99	0.81
4	Commissions to travel agents increase the price of air tickets.	3.89	0.713
5	Experienced travellers are more knowledgeable than travel agents.	3.88	0.743
6	Air ticket prices that airline websites offer are lower than the prices that travel agents offer	3.88	0.899
7	Travel agents are more eager to sell air tickets that offer higher commission than cater to the needs and interest of customers.	3.76	0.94
8	Travel agents add little value to air ticket booking.	3.01	0.908
9	Personnel in travel agencies are often inexperienced.	2.69	0.771

18 attributes are used in the study to investigate consumers' perception of disintermediation. The respondents answered their level of agreement of each question through a five-point Likert scale where 5 implies strongly agree and 1 implies strongly disagree.

Table 1 shows the respondents agreed that the travel agencies increase their cost of travelling. The respondents believed that the airline's website is offering a lower price compared with travel agencies.

Overall, the respondents expressed that travel agencies somewhat cannot add value during the travelling. Although the respondents agreed that the travel agencies have rich experiences, they also indicated that a frequent traveller for a specific destination is even more experienced. Furthermore, the respondents agreed that the development of the Internet Technology allows them to perform most functions anywhere.

**Table 2 - Arguments for Against Disintermediation**

	Question	Mean	Standard Deviation
1	Travel agents offer a human touch to their customers.	3.95	0.716
2	Travel agents use their expertise to save time for travellers.	3.85	0.664
3	Travel agents add value by offering free counselling services	3.75	0.657
4	Travel agents offer more choices than the airline websites.	3.74	0.837
5	Travellers are computer illiterate and therefore may not be ready for online purchase.	2.76	0.792
6	The more complex the Internet becomes, the more expertise people need to make purchase	2.75	0.776
7	Travel agents can offer lower prices when buying in bulk.	2.61	0.895
8	Online reservations are not reliable.	2.45	0.898
9	Visiting a travel agency is convenient.	2.42	0.71

Table 2 presents the responses for the nine attributes which are against disintermediation. The respondents strongly agreed that travel agencies provide human touch service to travelers and it is important to assist in making right decisions. Hence, the respondents agreed that the expertise of the travel agencies can save the time. The respondents believed that the air ticket options provided by travel agencies are more than those provided by airlines websites. The rest of the five attributes received the value below mean. It indicates that the respondents disagreed on the attributes which are against

disintermediation. First, the respondents believed that visiting the travel agencies is inconvenient. Additionally, the respondents disagreed that the travel agencies can offer lower air ticket price compared with the airlines' direct sale. Furthermore, the respondents strongly disagreed that the online air ticket reservation is not reliable.

### *Perception of Using Mobile Devices in Air Ticket Online Purchase*

In order to investigate the trends in perception and level of adoption of the respondents in mobile devices, the data of respondents' spending in purchasing via mobile devices during the past 12 months was collected. 464 respondents agreed that they had increased the usage of mobile devices in the past few years, while 38 respondents disagreed. 386 respondents agreed that mobile devices would be their primary device for online purchase in the future, while 118 respondents disagreed. These two questions identified that the adoption of performing online purchase via mobile device is increasing compared with the past few years as the majority of the respondents agreed that their usage is increasing.

### **Conclusion**

This study successfully identified the perception of 502 Hong Kong travellers who have had online air ticket purchase experience towards disintermediation. The overall result of this study indicates that the majority of the travellers is using both computer and mobile devices to make their online air ticket reservations. Additionally, the annual spending on the mobile device have been increasing during the past few years. It indicated that mobile device would become the primary device for travellers to make their air ticket purchase in the future.

This study provides several recommendations and implications to the stakeholders in the entire air ticket distribution chain. For the airlines, given that travellers are price sensitive, airlines can continue the current strategies in pricing and additional reward to directly engage

with the travellers. For the traditional offline travel agencies, they are popular among some travelers who have a preference for human services. The advantage of the OTAs' websites is that they provide information of multiple airlines. Most importantly, the investment in mobile application is recommended for all the stakeholders because mobile purchase will become the primary channel in the future.

This study is successful in identifying the Hong Kong travellers' perception towards disintermediation after the emergence of mobile Internet technology. The results indicate that the level of disintermediation is increasing in mobile Internet era, and that the emergence of mobile Internet Technology is encouraging the customer to make a booking directly with the airlines. As this study only focuses on air ticket distribution in mobile Internet Technology, it is suggested that future study can extend to compare the perceptions of travellers who use mobile devices to make hotel reservations.

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