Factors Determining the Disruption from Sharing

Economy: Evidence from Airbnb in China

Abstract

Airbnb is one of the most successful sharing platforms, providing informal, long-term accommodations globally. China is considered the fastest growing market in the domestic and global tourism industry. This study aims to explore the relationship between sharing economy and the traditional hospitality in China by identifying factors affecting such relationship. Interviews with 84 tourism and hotel executives in China are conducted, and the data is analysed with NVivo 11. This study recognized three types of relationship. In advance, it also identifies five factors that influence these relationships, namely, seasonality, target market, location, urbanization and type of hotel.

Keywords: Sharing Economy; High-end hotel; Seasonality; Urbanization level

Introduction

Airbnb, which was established in 2008, is one of the most successful peer-to-peer platforms (P2P) today. This platform allows hosts to rent and share their space online in three types: entire room, private room and shared room. The platform is considered as a suitable option for young people, families, long-term travelers and people with

lower income (Varma, Jukic, Pestek, Shultz & Nestorov, 2016). Airbnb has become a success because of several factors. Firstly, the platform offers users lower rates and more options than traditional hotels (Lehr, 2015). Secondly, the platform provides tourists with an opportunity to stay in a local house and experience living like a local resident (Tussyadiah & Pesonen, 2015). Thirdly, feeling at "home" and a sense of belongingness that one can experience when using the platform also counts as factors (Guttentag, 2015). Finally, the platform offers distinctive lodging experiences that are different from traditional hotel stays (Liu & Mattila, 2017). The sharing economy has assisted travellers to access a wide range of products and services at more affordable prices (Cheng, 2016), facilitated authentic relationships between hosts and guests and contributed to the employment and income of locals (Cheng, 2016). Sharing accommodation significantly affects tourists' behaviour, expansion in destination selection, increase in travel frequency, length of stay and a range of activities in tourism destinations (Tussyadiah & Pesonen, 2015).

China is one of Airbnb's key markets and one of the fastest growing countries. From 2015 to 2018, the share of revenue income generated by P2P accommodation in lodging industry increased from 2.3% to 6.1% (Annual Report on China's Sharing Economy Development, 2019). In 2015, Airbnb entered China's informal accommodation market and announced its Chinese name in 2017 as 'Abe Ying'. Airbnb adopted a localisation strategy to adapt to the Chinese market better. The platform also announced the establishment of a data science department in China. This department could help the platform to study the Chinese market further and increase the supply of

high-quality housing resources in all parts of the country by investing in residential hostel trusteeship platforms. Numerous people believe that China is expected to become the platform's largest source of customers by 2020. Nevertheless, Airbnb in China is under the developing stage. This study aims to analyse the impact of Airbnb on the traditional Chinese hotel industry by investigating the factors affecting the platform's disruption to the traditional Chinese hotel sector. The research findings not only enrich the literature of disruptive innovation theory in the Airbnb context but also provide valuable practical implications to the traditional hotel sector in understanding the relationship between hotels and the sharing economy platform and how to respond to Airbnb.

Literature review

Disruptive innovation

Disruptive innovation theory was proposed by Clayton Christensen (Bower & Christensen, 1995; Christensen & Raynor, 2003). This theory provides a framework in which disruptive products can possibly change or even dominate the current market. Compared with prevailing products, a disruptive product may offer a set of benefits, such as lower cost, convenience (Guttentag, 2015). Moreover, disruptive products always create a new market or are an appeal to the low-end of the market. At an early

stage, the market leader usually ignores this fact because of the small market size or low profit.

Faced with different types of innovation, existing enterprises respond differently. The case of Airbnb is different from the traditional accommodation industry. The former is only a rental trading platform, not claiming the ownership of the house. Airbnb earns its revenue by charging guests with a 6% to 12% service fee and hosts with a 3% service fee (Airbnb, 2013g; 2013h). Guttentag (2015) argues that Airbnb is a typical 'disruptive innovation' because it is attractive only for some segments of the market and has a limited impact on the accommodation industry.

Airbnb in the current research on related hotel industry

Existing studies on Airbnb focus on different areas, addressing a variety of issues. Ikkala (2014) focuses on the hosts' motivation for listing their properties on Airbnb. Host performance (Li et al., 2015), the Airbnb platform system (Fradkin et al., 2014; Ert et al., 2015), legal issues (Edelman & Geradin, 2015; Lee, 2016) Airbnb's branding strategies (Yannopoulou et al., 2013), price strategies (Wang & Nicolau, 2017), the impacts of Airbnb on the accommodation sector (Zervas et al., 2014; Guttentag, 2015) and tourism labour (Fang et al., 2015) are well explored.

These studies have broadly touched on different areas, with none exploring the

impact of Airbnb on the accommodation sector in Chinese context.

Airbnb's impact on hospitality

The emergence of multisided technology platforms, collectively known as the 'sharing economy', has enabled individuals to make use of underutilised inventory collaboratively via fee-based sharing. Airbnb was founded in August 2008. The platform defines itself as 'a social website that connects people who have a space to share with those who are looking for a place to stay' and exemplifies a community marketplace. Airbnb hosts list their spare rooms or apartments; establish their own nightly, weekly or monthly price and offer accommodation to Airbnb guests. Airbnb derives revenue from both guests and hosts for this service. Since its launch, the Airbnb online marketplace has experienced rapid growth, with the volume of rooms reaching 3 million, far exceeding Marriott, Hilton, Intercontinental and other hotel groups (**Figure 1**).

Insert Figure1 here

Traditional hotel services provide more private rooms and accommodation services at well-known standards. Meanwhile, Airbnb offers diverse and uncertain standards of rooms and accommodation services, but it gives guests the opportunity to make new friends and experience local life (Henten & Windekilde, 2015). Airbnb has

made it clear that it aims to enter the hotel business and take a market share from the industry.

Airbnb is frequently discussed in terms of its current or future impacts on hotels (Guttentag & Smith, 2017). An empirical study of the hotel industry in Texas shows that for every 1% increase in the number of Airbnb-listed rooms, the quarterly profit of the local hotel industry will decrease by 0.05% (Zervas, et.al., 2014). The impact of Airbnb's presence on different levels of hotels is uneven, with the most evident impact on low-end hotels and hotels serving non-business travellers. Lower-priced hotels and non-commercial hotels are most affected (Zervas, Proserpio & Byers, 2017). These notions show that Airbnb is mainly competing with low-end and low-cost hotels in the same market segment. However, previous studies have shown that the impact of Airbnb on hotels is inconsistent. Dogru et al. (2017) believe that Airbnb seems to influence luxury hotels, not economy hotels. Guttentag (2013) has conducted a study on Austin Hotel, which shows a direct competitive relationship between Austin's budget hotel and Airbnb because of similar price levels. However, Mohamad (2016) has found that Airbnb's impact on Toronto's economy hotels is not statistically significant.

Edward (2017) has adopted a qualitative research method. Through interviews with 10 managers and an Airbnb employee from each of the two major budget hotel groups in Singapore, he concludes that Airbnb is not the main competitor to Singapore's economic hotels at present. Instead, its main competitors are other hotels of the same type. However, in terms of trend, with more small hotels and luxury hotels joining the sharing economy, the positive competition between shared accommodation and

traditional hotel industry is inevitable.

The perspectives about the impacts of Airbnb on hospitality are mainly divided into three categories. The first category is a niche player, which means that Airbnb is not considered a significant disruptor and/or competitor by the traditional hotels, and its impact on traditional players is almost negligible (Varma, Jukic, Pestek, Shultz & Nestorov, 2016) The second category is a competitor and a disruptor. Empirical research has found that a 1% increase in Airbnb listings coincides with a 0.05% decrease in hotel revenue. The third category is supplement, which means that the peak season of tourism is too apparent (Guttenttag, 2015). This type of sharing platform can improve the utilisation efficiency of tourism resources in the off-season and can also be an important supplement to traditional tourism products and services in the peak season (Cao, 2017). Airbnb rooms supplement hotel inventory during the peak season, such as extraordinary city-wide events. According to prior research, the impact of Airbnb on hotels is highly related to the types of hotels, target groups and marketing channels. Low-end hotels, hotels without business facilities and hotels not catering to business travellers are significantly shaken up by Airbnb than higher-end hotels (Nguyen, 2014) because of the high similarity in prices and targets.

Response to Airbnb

In practice, for hotel managers, the competition between hotels and sharing platforms differs among hotels, which is related to the characteristics of the sharing platform. Firstly, the marginal cost of the Airbnb platform is almost zero, as a new room can be added (or removed) on the platform, and the cost can be neglected. As a result, Airbnb can scale up quickly and meet the demand within a short time. In contrast, hotel room supplies are relatively stable after opening. A hotel will require a lot of money to expand, and it must be built in a specific location according to local planning requirements. Secondly, Airbnb offers a much broader range of products and services than hotels: Airbnb users can rent apartments, villas and even yurts according to their interests and preferences. As a result, Airbnb's competition may be harder for incumbents to adapt to than competition from other hotel companies.

Mohamad (2016) points out that qualitative research methods should be adopted to analyse hotel groups and brand hotels. He also points out that measures should be taken to maintain market share to cope with the competition with Airbnb. To deal with the impact of the shared accommodation industry, the traditional hotel chain industry should incorporate the concept of shared economy into its business model by developing or purchasing its own brand market. The platform extends its brand value and enables it to be supported by the brand, resources and professional knowledge of chain hotels. The platform also enables consumers to have more reliable, stable and high-quality experience instead of competing positively with the P2P leasing platform (Sigala, 2017). Will the brand platform strategy dilute the brand value and will it affect the core chain hotel products? Does the complementarity of brands negatively affect

the personalization of P2P accommodation? Further research is thus needed in the future (Cleveland, 2016).

As with other industries that are confronting disruptive innovations, the risk of being displaced in the hotel industry is real, if not immediate, and the need to reposition and revisit one's value proposition becomes urgent (Koh & King, 2017)(!!! INVALID CITATION !!!). In practice, major hotel chains have sought to acquire home rental businesses (Karmin, 2015). Marriot International announced its expanded home sharing initiative, 'Homes & Villas', which offers travellers 2,000 different 'premium and luxury homes'. Furthermore, in April 2016, Accor purchased Onefinestay, another room-sharing platform, and integrated home-sharing platforms Travel Keys and Squarebreak into its Onefinestay brand in 2017.

Methodology

Conducting an in-depth interview has been deemed appropriate because the respondent profiles and research purpose allow specific issues to be teased out. The study employees an inductive approach to identify key attributes. Therefore, the study avoids possible pre-figuring theories and hypotheses about possible experiences (Goddard & Melville, 2001).

As a prelude to interpreting the applicable benchmarks, we must note that the Chinese Hotel classification system consists of four levels. These levels include luxury, high-end, mid-range and budget. The main data sources for this study are semi-structured

interviews with 84 managers from the hotel industry in China. To achieve the goodness and trustiness of the research, the team followed principles proposed by Lincoln and Guba (1985). When the data is saturated and new useful information no longer appears, we stopped inviting new informants. To ensure the validity of the codes, team members have jointly worked on the coding. Member checking (Birt, Scott, Cavers, Campbell, & Walter, 2016) was used to ensure the credibility, we shared the materials and conclusions with hotel managers and got the identification of them.

In terms of the demographics of participants, 44 of the 84 respondents are male, accounting for 52.4%, and 40 are female, accounting for 47.6%. Among them, 55 participants are from the hotel industry. A total of 59 participants have at least 7 years of experience, accounting for nearly 70.2%. The participants all have a wealth of experience in the hospitality industry and can provide enough information for our research.

Insert Table 1 Here

Findings

Relationship between Airbnb and the hotel industry in China

Existing research related to this topic is inconsistent. Airbnb is widely recognised as a disruptive innovation in the tourism industry (Kevin Kam Fung So a , Haemoon

Oh b, & Somang Min, 2018). As a disruptive innovation, Airbnb acts as a home-sharing platform and has already called attention from practical and theoretical perspectives. Varma et al. (2016) points out that Airbnb is just a niche player, which will not be disruptive to the accommodation sector. Cao (2017) identifies that the Airbnb's attributes can contribute to the room supply and be a complement to traditional hotel, enlarge the supply volume and meet the demand, especially during the peak-season. Zervas et al. (2014) identifies Airbnb as a competitor and a disruptor to hotels because their empirical research finds that a 1% increase in Airbnb listings coincides with a 0.05% decrease in hotel revenue. In August 2015, Airbnb officially entered China. Since its emergence in China, Airbnb's business has been growing and has formed a certain scale. The volume of the listing in Beijing has already reached more than 33,000 (http://insideAirbnb.com/).

Through the analysis of interview data by coding, the relationship between Airbnb and China's hotels can be concluded to be divided into three modes. As shown in **Figure 2**, the coincidence of the two circles shows that they are competitive and can serve as substitutes. The greater the overlap is, the bigger the impact of Airbnb on hotels.

Mode 'a'

Mode 'a' means no overlap, no impact and no competitive relationship are present between hotel and Airbnb. This mode always exists among high-end hotels and business

hotels.

'The hotel is located in the Pudong Area of Shanghai, the future new CBD area ....
Not affected by Airbnb! Our hotel is mainly for corporate business and conference
needs. Airbnb has no evident advantage in terms of demand' (R2).

Airbnb poses only a small threat to the accommodation sector and only has limited
attraction to adventurous, undemanding leisure visitors or family travellers.

'There is no impact, the hotel is mainly based on business customers......' (R84).

Compared with family travellers, business travellers are the main target of hotels.
These travellers are not sensitive to price and focus on convenient transportation,
business amenities and loyalty to brand. '*Our hotel is a 5-star business hotel. Business*
travel accommodation is on the company's priorities. Airbnb is mostly attractive to
personal travellers, so the impact is not big' (R11).

Guttentag (2015) points out that Airbnb may hit B&Bs and hostels particularly
hard, as their markets may overlap considerably with that of Airbnb. STR, the hotel
performance tracking firm, compares the performance of The Manhattan Hotel with
Airbnb. STR finds no clear evidence that Airbnb reduces hotel customers or undermines
hotel pricing power even on very high occupancy nights (Haywood, 2016; Haywood et

al., 2016). According to STR, the hotel performance is in normal cyclical trajectory and Airbnb has no noticeable impact on hotels. The report also points out that, compared with Airbnb, the inventory of hotel is fixed. Kerry Ranson, chairman of the InterContinental Hotels Group Owners Association, says that he does not view Airbnb as a threat or a competitor (Weed, 2015). Chris Nassetta, the CEO of Hilton, expresses a similar idea, saying that Airbnb is not a major threat to them, and the effect of Airbnb is mixed across the accommodation sector (Bryan, 2015). In this mode, Airbnb compared with traditonal accommodation sector has different customers (Lawler, 2012). Instead of competition, Airbnb is in parallel with hotels and 'makes the pie bigger' (Shankland, 2013).

Mode 'b'

Mode 'b' denotes the competition of the accommodation sector and Airbnb, but only in the off-season or for attracting leisure travellers. '*For the off-season of business hotels, in the past, tourists can make up for the difference in this period. But now with the emergence of Airbnb, this part of the source is seized for business hotels. The difference in the peak season will be more evident' (R14).*

Different from traditional hotel industry, Airbnb allows its hosts to rent their vacant rooms freely. In addition to affecting the traditional accommodation sector's occupancy

levels, Airbnb may also force reductions in room rates by rapidly adding a new and extensive supply of rooms (Yglesias, 2012b). '*Airbnb has little impact on Shenzhen's business hotels. It will divert some of the leisure travel FITs, which greatly reduce the barriers to entry for the market supply*' (R71).

Zervas et al. (2014) estimates that a 1% increase in Airbnb listings causes a 0.05% decrease in hotel revenues in Texas. Zervas et al. (2015) examines the relation between the changes in Airbnb listing volume and hotel revenues in Texas. They conclude that a 10% increase in Airbnb listings corresponds with a 0.37% decrease in hotel revenues. The authors also find that the impacts are greater at lower-end hotels, independent hotels and hotels that did not cater to business travellers.

Mode 'c'

From Mode 'c', the hotel is influenced by Airbnb in both service apartment and low-end hotels. '*The most affected are some low-end service apartments and serviced apartments*' (R22). '*Airbnb has a great impact on low-end hotels. In addition to the same price, Airbnb offers a variety of room options and allows guests to cook their own food. It is the most favourable competition*' (R11). '*Airbnb can produce positive competition mainly for small or limited service hotels. These hotels are mainly budget hotels and small family hotels in China*' (R56).

In addition, Airbnb appeals to families, travellers and the young generation. '*Airbnb is*

still popular among the young customers. It is also more suitable for family guests'
(R44).

Insert Figure2 Here

Factors affecting the relationship

Apparently, the views on the relationships between Airbnb and the the accommodation sector are inconsistent. This phenomenon urges us to explore the influencing factors deeply. As shown in Figure 3, we identify five main factors that affect the relationship.

Insert Figure3 Here

Seasonality

By understanding the above relationships between Airbnb and hotels, we find that seasonality plays an important role. *'Airbnb has a small impact on the hotel's weekend holiday leisure market' (R28). 'It will definitely impact some holiday hotels in the holiday market' (R70). 'Nanjing's tourism market is evidently off-peak, dividing some of the leisure sources during the peak season is possible' (R50).*

'The impact of Airbnb on the hotel....... as Sanya is a typical holiday destination, with the peak season from October to March of the following year, especially during the Spring Festival Golden Week.......the price of the high-end hotel standard room is

around 5,000 yuan a night in the Spring Festival Golden Week, some guests choose Airbnb' (R80). Airbnb can improve the utilisation efficiency of tourism resources in the off-season, which can also be an important supplement to traditional tourism products and services in the peak season (Cao, 2017). Airbnb rooms supplement hotel inventory during the peak season, such as extraordinary city-wide events.

Urbanization

In addition, the development of Airbnb in China is regionally imbalanced, and hotels located in second- and third-tier cities are less affected. Roblek, Stok & Mesko (2016) point out that urbanisation is one basis for the development of a sharing economy. *'The hotel is located in the third- and fourth-tier cities. The local hotel supply is sufficient and the competition is fierce. Entering the market with suitable prices is difficult for Airbnb' (R56). Comparatively, underdeveloped cities have fewer demand for Airbnb and other accommodations, so traditional hotels in the market can meet that demand'.*

Target market

In general, the target markets of the accommodation sector are business travellers, leisure travellers, family travellers and so on. Airbnb offers low-cost, local experience, and can meet the need of different kinds of travellers (Tussyadiah & Pesonen, 2016).

These attributes appeal to families, leisure travellers and the young generation with limited budget. *'Not affected by Airbnb! Mainly for the company's business passengers and team guests meeting needs, Airbnb has no obvious advantage in terms of demand'* (R2). *'Given that the hotel I am currently working in is located in the airport economic circle, most of the guests are transit guests, staying for 1.2 days. Airbnb has no effect on my hotel for the time being'* (R70).

Location

Location is one of the most important factors that determine the success of the hotel industry. Location is also an important element in Airbnb's development. When the accommodation is located in the landscape, it always attracts traditional travellers. *'Hotels in ancient towns do suffer from homestays, but hotels in cities are less affected'* (R27). *'The guests of hotels located in this location are diverted in some degree'.*(R12)

Airbnb entered the China market in 2015, and only four years has passed since its emergence. Compared with the traditional accommodation sector, Airbnb is still at an early and initial stage. *'As Airbnb's development is in its infancy in China, the understanding of Airbnb culture may not be in place due to the uneven background of the owners (operators), resulting in high-end consumers' concerns about their safety, reliability and privacy. As far as I know, the proportion of five-star hotel customers who choose Airbnb is not high'* (R44).

'At present, in Haikou, Hainan, the development of Airbnb is not as fast as that of other cities in China.......

......No threats area present to some of HNA's high-end business hotels and resort hotels.

Such threats only affect a few cheap hotel chains' (R59)

Type of hotel

Based on customers, hotels can be divided into business hotel, conference hotel, vacation hotel and serviced apartment. *'At present, the impact of Airbnb on this hotel is not evident because the hotel I work for is a business hotel in the city' (R3). 'No big impact is present because the hotel I am working for is a business hotel, which is mostly for guests travelling for business' (R73). 'Given that Airbnb's target market is mainly aimed for the leisure and holiday market, it has little impact on business hotels like ours' (R70). 'As a high-end business hotel, the main sources of the hotel's business are guests travelling for business and a small number of guests travelling for leisure' (R15).*

Response from the incumbent perspective

When responding to Airbnb, one should take the relationship between Airbnb and hotels into consideration. Existing research shows that hotels may embrace new business strategies (Guttentag, 2015) and focus on the higher end of the market, such as business travellers and wealthy leisure travellers (Christensen & Raynor, 2003). *'In view of the rising Airbnb options, I think hotels should pay attention to the platform because Airbnb mostly appeals to the young generation, advocating personality. I hope*

that hotels will be more life-oriented' (R81).

In practice, some hotel groups have announced their home-sharing initiatives and offered economic benefits and local experiences. Owyang (2013) and Sigala (2015) propose that hotel chains must develop or purchase their own branded marketplace platforms. *'The strategy of the hotel is to seek cooperation with Airbnb, join the platforms of Airbnb, Tujia and XiaoZhu short-term rental service and participate in the competition to obtain guest flow' (R22).*

Conclusion and Discussion

In-depth interviews are applied in this research to explore the relationship between Airbnb and the traditional hotel sector. Compared with previous studies, the influence of Airbnb on the traditional accommodation sector is inconsistent. Mode 'a' means that Airbnb has no impact on high-end hotels and hotels attracting business travellers. Airbnb is a niche player and is not considered a significant disruptor and/or competitor by traditional hotels; thus, its impact on traditional players is almost negligible (Varma, Jukic, Pestek, Shultz & Nestorov, 2016). Mode 'b' denotes the competition between the accommodation sector and Airbnb, but just in the off-season or for attracting leisure travellers. As shown in Mode 'c', Airbnb influences both serviced apartments and low-end hotels. In summary, the three types of relationships between Airbnb and traditional hotel sectors are influenced by determining factors: seasonality, urbanisation, target market, location and type of hotel.

This study analyses the impact of Airbnb on hotels in the Chinese market and complements existing research on this topic. In practice, as a hotel manager, we should objectively analyse the level of urban development of a hotel, examining whether Airbnb and the hotel's positioning have conflict and then take targeted measures. For example, Airbnb can be developed as a sales channel. *'The strategy of the hotel is to seek cooperation with Airbnb, join the platforms of Airbnb, Tujia and XiaoZhu short-term rental service and participate in the competition to obtain guest flow' (R22).* Based on the current findings of five influencing factors, further studies may consider using quantitative approaches to investigate different cities of China and other countries.

References:

Airbnb. (2013g). What are guest service fees? Airbnb. Retrieved June 6, 2013, Retrieved from https://www.Airbnb.com/help/question/104

Airbnb. (2013h). What are the host service fees? Airbnb. Retrieved June 6, 2013, Retrieved from https://www.Airbnb.com/help/question/63

Biber, E., Light, S. E., Ruhl, J. B., & Salzman, J. (2017). Regulating business innovation as policy disruption: From the Model T to Airbnb. *Vand. L. Rev.*, *70*, 1561.

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member Checking: A Tool to Enhance Trustworthiness or Merely a Nod to Validation? *Qual Health Res, 26*(13), 1802-1811. doi:10.1177/1049732316654870

Bower, J. L., & Christensen, C. M. (1995). Disruptive technologies: catching the wave.

Bryan, B. (2015). One hotel CEO's assessment of Airbnb should keep everyone in the

industry up at night. *Business Insider*.

Cao Dan. (2017). On the Impact of Shared Economy on Tourism Development and Its Countermeasures. Journal of Sichuan Normal University (Social Science Edition), 44 (1), 56-66.

Cheng, M. (2016). Current sharing economy media discourse in tourism. *Annals of Tourism Research*, *60*, 111-114.

Cheng, M., & Jin, X. (2019). What do Airbnb users care about? An analysis of online review comments. *International Journal of Hospitality Management*, *76*, 58-70.

China National Information Center (2019). China Sharing Economy Development Annual Report.http://www.sic.gov.cn/News/79/9907.htm.

Christensen, C. M., & Raynor, M. E. (2003). The innovator's solution: Using good theory to solve the dilemmas of growth. *Harvard Business School Press, Boston*.

Dogru, T., Mody, M., & Suess, C. (2017). Comparing apples and oranges? Examining the impacts of Airbnb on hotel performance in Boston. Retrieved from http://www.bu.edu/bhr/2017/06/07/Airbnb-in-boston

Edelman, B. G., & Geradin, D. (2015). Efficiencies and regulatory shortcuts: How should we regulate companies like Airbnb and Uber. *Stan. Tech. L. Rev.*, *19*, 293.

Edward Koh & Brian King (2017) Accommodating the sharing revolution: a qualitative evaluation of the impact of Airbnb on Singapore's budget hotels, Tourism Recreation Research, 42:4, 409-421,

 DOI: 10.1080/02508281.2017.1314413

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the sharing economy:

The role of personal photos in Airbnb. *Tourism Management*, *55*, 62-73.

Fang, B., Ye, Q., & Law, R. (2016). Effect of sharing economy on tourism industry employment. *Annals of Tourism Research*, *57*, 264-267.

Fang, Y., Qureshi, I., Sun, H., McCole, P., Ramsey, E., & Lim, K. H. (2014). Trust, satisfaction, and online repurchase intention: The moderating role of perceived effectiveness of e-commerce institutional mechanisms. Mis Quarterly, 38(2), 407–427.

Fradkin, A., Grewal, E., Holtz, D., & Pearson, M. (2014). Reporting bias and reciprocity in online reviews: Evidence from field experiments on Airbnb. *Retrieved on March*, *20*, 2015.

Gutiérrez, J., García-Palomares, J. C., Romanillos, G., & Salas-Olmedo, M. H. (2017). The eruption of Airbnb in tourist cities: Comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona. *Tourism Management*, *62*, 278-291.

Guttentag, D. (2015). Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. Current issues in Tourism, 18(12), 1192-1217.

Guttentag, D. A., & Smith, S. L. (2017). Assessing Airbnb as a disruptive innovation relative to hotels: Substitution and comparative performance expectations. *International Journal of Hospitality Management*, *64*, 1-10.

Hansen Henten, A., & Maria Windekilde, I. (2016). Transaction costs and the sharing economy. *info*, *18*(1), 1-15.

Haywood, A. Hoyt, C. Wilson, S. Hennis, C. Alvarado STR: Airbnb's Impact Minor on Manhattan Hotels Hotel News Now (2016) Retrieved from

http://www.hotelnewsnow.com/Articles/29639/STR-Airbnbs-impact-minor-on-Manhattan-hotels (2016, February 9)

Haywood, J. (2016). New Airbnb data sheds light on 13 global markets. *Hotel News Now*, *11*, 2016.

Haywood, J. (2016). STR: Airbnb's impact on Manhattan compression. *Hotel News Now*.

Heo, C. Y., Blal, I., & Choi, M. (2019). What is happening in Paris? Airbnb, hotels, and the Parisian market: a case study. *Tourism Management*, *70*, 78-88.

Heo, Y. (2016). Sharing economy and prospects in tourism research. *Annals of Tourism Research*, *58*, 166-170.

Ikkala, T., & Lampinen, A. (2014, February). Defining the price of hospitality: networked hospitality exchange via Airbnb. In *Proceedings of the companion publication of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 173-176). ACM.

Karmin, C. (2015). Airbnb crimps hotels' power on pricing. *The Wall Street Journal*.

Karmin, C. (2015, May 21). Hyatt invests in home-rental firms. The Wall Street Journal. Retrieved from

https://www.wsj.com/articles/hyatt-invests-in-home-rentals-firm-1432232861

Koh, E., & King, B. (2017). Accommodating the sharing revolution: a qualitative evaluation of the impact of Airbnb on Singapore's budget hotels. *Tourism Recreation Research, 42*(4), 409-421. doi:10.1080/02508281.2017.1314413

Lawler, R. (2012). Airbnb: Our guests stay longer and spend more than hotel guests,

contributing $56 m to the San Francisco economy. *TechCrunch. Powered by http://techcrunch. com/2012/11/09/Airbnb-research-data-dump*.

Lee, D. (2016). How Airbnb short-term rentals exacerbate Los Angeles's affordable housing crisis: Analysis and policy recommendations. *Harv. L. & Pol'y Rev.*, *10*, 229.

Li, J., Moreno, A., & Zhang, D. J. (2015). Agent behavior in the sharing economy: Evidence from Airbnb. *Ross School of Business Working Paper Series*, *1298*, 2015.

Liang, L. J., Choi, H. C., & Joppe, M. (2018). Exploring the relationship between satisfaction, trust and switching intention, repurchase intention in the context of Airbnb. *International Journal of Hospitality Management*, *69*, 41-48.

Lin, P. M., Fan, D. X., Zhang, H. Q., & Lau, C. (2019). Spend less and experience more: Understanding tourists' social contact in the Airbnb context. *International Journal of Hospitality Management*, *83*, 65-73.

Lincoln, Y. S. (1985). Naturalistic inquiry Beverly hills, ca: sage publications, 1985, 416 pp. *International Journal of Intercultural Relations, 9*(4), 438-439.

Liu, S. Q., & Mattila, A. S. (2017). Airbnb: Online targeted advertising, sense of power, and consumer decisions. *International Journal of Hospitality Management*, *60*, 33-41.

Lutz, C., & Newlands, G. (2018). Consumer segmentation within the sharing economy: The case of Airbnb. *Journal of Business Research*, *88*, 187-196.

Markides, C. (2006). Disruptive innovation: In need of better theory. *Journal of product*

innovation management, *23*(1), 19-25.

Melville, S., & Goddard, W. (2001). Research methodology: An introduction.

Mohamad, H. (2016). *Estimating the impact of Airbnb on hotels in Toronto* (Doctoral dissertation, Massachusetts Institute of Technology).

Nguyen, Q. (2014). A Study of Airbnb as a potential competitor of the hotel industry.

Oskam, J., & Boswijk, A. (2016). Airbnb: the future of networked hospitality businesses. Journal of Tourism Futures, 2(1), 22-42.

Pizam, A. (2014). Peer-to-peer travel: Blessing or blight? International journal of hospitality management, (38), 118-119.

Richard, B., & Cleveland, S. (2016). The future of hotel chains: Branded marketplaces driven by the sharing economy. *Journal of Vacation Marketing*, *22*(3), 239-248.

Shankland, S. (2013). Airbnb founder: Banning private rentals as silly as banning cars. CNET.

Sigala, M. (2017). Collaborative commerce in tourism: implications for research and industry. *Current Issues in Tourism*, *20*(4), 346-355.

So, K. K. F., Oh, H., & Min, S. (2018). Motivations and constraints of Airbnb consumers: Findings from a mixed-methods approach. *Tourism Management*, *67*, 224-236.

Tussyadiah, I. P., & Park, S. (2018). When guests trust hosts for their words: Host description and trust in sharing economy. *Tourism Management*, *67*, 261-272.

Tussyadiah, I. P., & Pesonen, J. (2016). Impacts of peer-to-peer accommodation use on travel patterns. Journal of Travel Research, 55(8), 1022-1040.

Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. (2016). Airbnb: Exciting innovation or passing fad? Tourism Management Perspectives, 20, 228–228. doi:10.1016/j.tmp.2016.09.002

Wang, D., & Nicolau, J. L. (2017). Price determinants of sharing economy based accommodation rental: A study of listings from 33 cities on Airbnb. com. *International Journal of Hospitality Management*, *62*, 120-131.

Weed, J. (2015). Airbnb grows to a million rooms, and hotel rivals are quiet, for now. *The New York Times*, *11*.

WU Xiaojun, QIU Jialu. A study of Airbnb listing price determinants: Based on data from 36 cities in China[J]. *Tourism Tribune*，2019，34（4）：13-28.

Yannopoulou, N., Moufahim, M., & Bian, X. (2013). User-generated brands and social media: Couchsurfing and Airbnb. *Contemporary Management Research*, *9*(1).

Yglesias, M. (2012). Legalize Airbnb! Slate.

Yu, D., & Hang, C. C. (2010). A reflective review of disruptive innovation theory. *International journal of management reviews*, *12*(4), 435-452.

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *Journal of marketing research*, *54*(5), 687-705.

Zervas, P., Alifragkis, C., & Sampson, D. G. (2014). A quantitative analysis of learning object repositories as knowledge management systems. *Knowledge Management & E-Learning: An International Journal*, *6*(2), 156-170.

Table 1 Demographic profiles of the interviewees (N = 84)

Demographic	Description	Number	Percentage (%)
Gender	Male	44	52%
	Female	40	48%
	Less than 1 year	8	10%
	1-3	30	36%
Length of employment in current enterprises	4-6	19	23%
	7-10	17	20%
	11-20	10	12%
	Over 21	-	-
	Hotel industry	55	65%
Industry	Tourism industry	17	20%
	Other tourism-related industry	12	14%
	Less than 1 year	3	4%
Length of employment in tourism and hospitality industry	1-3	13	15%
	4-6	9	11%
	7-10	19	23%

11-20	32	38%
over 21	8	10%

Airbnb — 3M
Marriott International — 1.1M
Hilton Worldwide — 774k
Intercontinental Hotels Group — 717k
Wyndham Worldwide — 677k
AccorHotels — 519k
Choice Hotels International — 511k
Best Western Hotels & Resorts — 296k
Carlson Hospitality Group — 177k
Hyatt Hotels Corporation — 168k
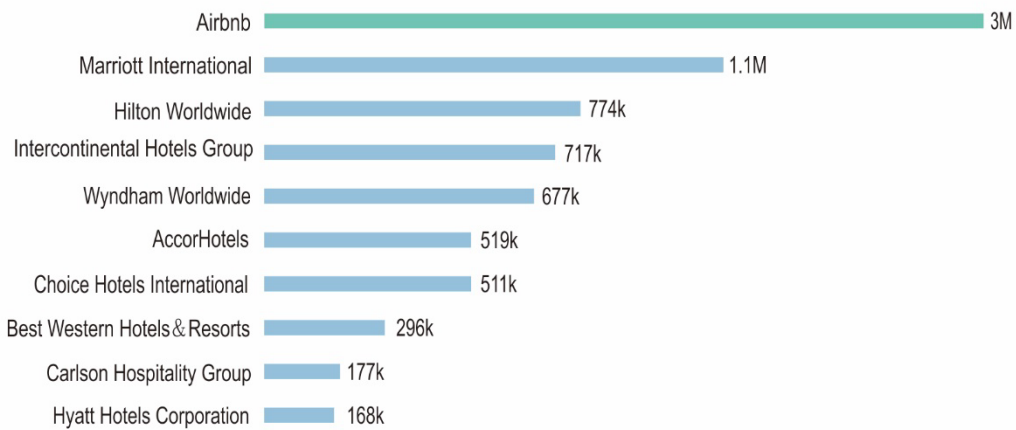
Figure 1. Largest lodging companies by rooms/listings

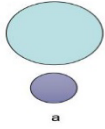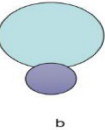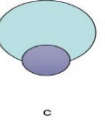Source: STR: Airbnb & Hotel Performance: An analysis of proprietary data in 13 global markets

Relationship	Visualization	Description	Factors and Literature
Mode a	a	No overlap occurs between traditional hotels and Airbnb. Thus, no direct competition is present between traditional hotels and Airbnb	Business travelers(Grant ,2013;Mayock,2013;); Business hotel(Zervas, G., Proserpio, D., & Byers, J. ,2016;); High-end hotel(Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. ,2016;); **Conference hotel**; **Third or fourth tier cities**
Mode b	b	Little overlap occurs between traditional hotels and Airbnb. Thus, direct competition exists between traditional hotels and Airbnb to some degree	Seasonality(Zervas, G., Proserpio, D., & Byers, J. ,2016); **Urbanization level;**
Mode c	c	More overlap occurs here than in Modes a and b. Thus, the direct competition is fiercer than in Mode b	Family travellers(Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. ,2016); Young generation(Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. ,2016); Budget hotel(Guttentag, D. ,2015; Guttentaga,Smith,2017); low-end Hotel(Zervas, G., Proserpio, D., & Byers, J. ,2016;Nguyen, Q.,2014;Fang, B., Ye, Q., & Law, R.,2016); Service apartment(Jonas, A.,2015); Long-stay travellers(Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. ,2016;Tussyadiah, I. P., Pesonen, J.,2016)

Figure 2. Relationship between Airbnb and the hotel industry in China

Note:

1. ⬭ denotes the hotel industry in China

2. ⬤ denotes Airbnb in China

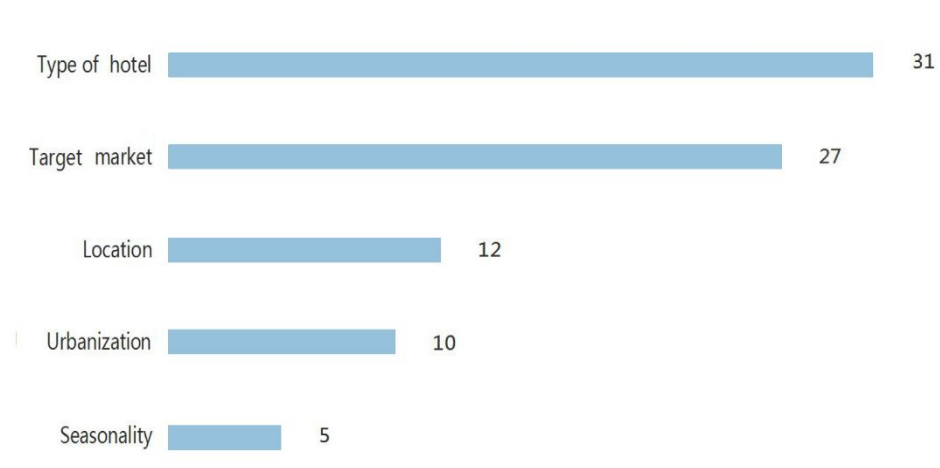3. a/b/c denote the three types of relationships between Airbnb and the hotel industry in China

Fig. 3. Factors determining the disruption in the hotel industry in China