The Influential Factors of Customer Experience in O2O E-commerce:

A quantitative study of what affects Chinese customers’ experience in online travel industry under the O2O e-commerce context

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Date: 22 June 2017
Subject: Degree Project
Level: Master
Course code: 5FE07E
Acknowledgments

I want to express my deepest acknowledgments to the individuals who contributed to this thesis. First of all, I would like to express my deepest gratitude to my tutor Soniya Billore at Linnaeus University, who has supervised me throughout this thesis process and supported with considerable valuable comments and advice to improve the quality of my project. Without your support, I could not have done this thesis.

Afterward, I also want to express my sincere appreciation to my examiner Saara Taalas for providing precious inputs on my projects.

Finally, I also would like to thank my fellow classmates and opponents who have given me valuable inputs as well as provided new insights into my project.

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23th of May, 2017
Abstract

Master thesis, Master of science in Innovation through Business, Engineering and Design with specialization in Business

Field of Research: Business Administration, School of Business & Economics
University: Linnaeus University, Växjö, Sweden
Course Code: 5FE07E
Semester: Spring 2017
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Tutor: Soniya Billore

Title: The Influential Factors of Customer Experience in O2O E-commerce:
Subtitle: A quantitative study of what affects Chinese customers’ experience in online travel industry under the O2O e-commerce context

Background: The development of the O2O market in China has been increasingly growing and will remain a steady growth in 2017 (iiMedia Research, 2016), but it is still an ambiguous phenomenon in the academic world and lack of relevant research, especially the influential factors to customer experience in the O2O business model.

Research question: What factors affect customer experience in China in the context of O2O business?

Purpose: The primary objective of this paper is to examine the influential factors of the customer experience in the context of O2O context, especially to the Chinese customers in the online travel industry. The purpose is to contribute to theoretical development on this topic.

Method: The research is a quantitative study with deductive reasoning which was carried out by the survey. The data collection was conducted through online questionnaires.

Conclusion: The findings of this study show that all five variables (reference group influence, perceived ease-of-use, sensory experience, brand association and spatial accessibility) are positively influential to Chinese customer experience in the context of O2O business. Perceived ease-of-use and Sensory experience are the most dominant influential factors followed by the Reference group influence and Spatial accessibility. The Brand association impacts customer O2O experience least.

Keywords: Online to offline; O2O; Customer experience; Statistical analysis
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1 Introduction

This section introduces the emergence and development of O2O e-commerce mode in the Chinese market. Since O2O mode involves many issues, the problem of scant research regarding customer experience under the O2O context has identified and discussed. Besides, purpose and outline of the paper have been presented.

1.1 Background

The accessibility of the Internet and Internet-enabled mobile devices, especially mobile Internet, has significantly promoted the development of electronic commerce (e-commerce) and mobile commerce (m-commerce) business in recent years (Bilgihan, Kandampully and Zhang, 2016; Laudon and Traver, 2016; Weng and Zhang, 2015). The Internet has been developed as a viable and essential tool of e-commerce (Chen, Wang and Jiang, 2015). Furthermore, the Internet has contributed to a unique approach for service providers to create the relationship with their consumers (Chen, Wang and Jiang, 2015).

The statistics data from Internetlivestats.com (2016) shows that around 45% of the world population has the Internet connection today. China, as one of the hugely populous countries in across the globe, has 0.7 billion Internet accessible population in 2016 (Internetlivestats.com, 2016). The China Internet Network Information Center (CNNIC) released the 39th China Statistical Report on Internet Development; it shows that about 467 million consumers had experience of purchasing online in 2016, of which the scale of mobile Internet users reached 441 million. Concerning the age structure, up to December 2016, 73.7% of netizens aged 10-39. Among them, 30.3% aged 20-29, 20.2% aged 10-19 and 23.3% aged 30-39 (CNNIC, 2017).

However, the concepts and business models of certain experiential service sectors, of which are incapable of operating online, have been unable to meet customer demands (Peng and Wu, 2014). Experiential services refer to the services mainly focus on the experience of the customer when interacting with the company or a brand, rather than the functional benefits from the delivered services (Voss and Zomerdijk, 2007).

Under this dilemma, an integrated e-commerce model named Online-to-Offline (O2O) emerges and rises in recent years. O2O business model refers to the integration of ‘online discovery’ and actual commerce in the physical marketplaces (Pasquier, 2015),
such as Airbnb and Uber. It meets the requirements for experiential service industries to operate online, such as beauty salon, hotels, and transportation, etc. (Yue, 2016). It enables service providers who are in experiential sectors to display and present their products and services online, to attract more customers to consume and experience (Peng and Wu, 2014).

The online travel industry is one of the large-scale experiential service industries with O2O activities, which have been developing and expanding rapidly and more maturely (Peng and Wu, 2014). As of the end of 2016, the amount of Chinese netizens with experience of booking air tickets, hotel rooms, train tickets or holiday travels on the Internet reached 299 million. Specifically, the number of Chinese Internet users having booked online travel industry service on the mobile Internet reached 262 million (CNNIC, 2017). In 2015, the tourism O2O industry got the largest O2O market share which was 48.3% (iiMedia Research, 2016).

iiMedia Research (2016) released the report regarding the Development of O2O Market in China in 2016-2017, it shows that China’s O2O market size has reached 665.94 billion yuan, with an increase of 42.7% in 2016. Besides, it also predicts that China’s O2O market will remain a steady growth by 834.32 billion yuan in 2017 (iiMedia Research, 2016). Pasquier (2015) discusses the reasons why China leads the O2O revolution. For instance, a few technology trends can explain the rise of the O2O concept in China (e.g. QR Code, Mobile payments). And O2O e-commerce has been a visible phenomenon which represents a tremendous market opportunity in China (Pasquier, 2015). Moreover, the government encourages service providers to develop this emerging e-commerce form which integrating the online and offline operations; it has become the direction of industry investment and future development (iiMedia Research, 2016).

In terms of the development of O2O business in China, firstly, the increasing consumption capacity of middle class boosts the development of O2O business (Zhang, 2015). O2O services have expanded in experiential service sectors from tourism, restaurants to local living services, such as real estate services, online medical and other industries in the Chinese market. The integration of online and offline channels can better meet customers requirements, which has become a new approach to experience product or services (iiMedia Research, 2016).
Secondly, the widely-used smartphones also contribute to the development of O2O business. The combination of these two main forces lead to a qualitative change of O2O business in China (Zhang, 2015). Chinese users’ habits of mobile online shopping are forming gradually (Weng and Zhang, 2015). The mobile online shoppers grew rapidly to 441 million; mobile online shoppers use online payment rather than cash or credit cards in restaurants, supermarkets. And the scenarios of online payment and mobile payment are diversified, and customers are developing a habit of Internet financing as well (CNNIC, 2017).

As predicted by iiMedia Research (2016), China’s O2O market will remain a steady growth in 2017. And the technology trends make contributions to the rise of the O2O concept in China (Pasquier, 2015). Due to severe homogeneity and similarity of O2O business models in one segment or lower user demand in some O2O segments (e.g. wedding trade segment), many enterprises which operate in O2O services have been out of the Chinese market (iiMedia Research, 2016). However, most published materials examine instruments in the west and focus on the western customers. Scant studies are concerning about the Chinese O2O market and Chinese customers. Therefore, it would be valuable to study what and how the Chinese customer reacts in O2O business in China. In this study, the author intends to reveal the O2O business and customer behavior in the Chinese market.

1.2 O2O business

The aim of O2O mode is to enhance the offline sales (Groeger and Buttle, 2013). It firmly and efficiently integrates and optimizes the application of online resources with offline business opportunities (Weng and Zhang, 2015) and makes the Internet become the interface of the offline transaction (Du and Tang, 2014; Ji, Sun and Liu, 2013; Wei Phang et al., 2014).

The entire business process of O2O starts from that the experiential service providers present the information of products or services to customers online, and then customers filter goods and services online. The next step for users maybe to order as well as process the payment online and finally, experience the services or products offline (Du and Tang, 2014; Yue, 2016).
The typical operation flow of O2O e-commerce is adopted in the market as shown in Figure 1-1. It presents that a customer places an order online and may pay to the website as well; the website processes the order to the selected service provider and then customer consume and experience the product or services offline (Ji, Sun and Liu, 2013; Weng and Zhang, 2015).

Figure 1-1. The business model based on O2O e-commerce, adapted from Ji, Sun and Liu (2013)

O2O model has an emphasis on physical experience. Hence, the customer experience is one of the crucial issues to both online and offline operations (Du and Tang, 2014). Newman (2015) also affirms the importance of customer experience to the future of the marketing.

“Experiential services are often designed from the perspective of the customer journey rather than as a single product or transaction” (Voss and Zomerdijk, 2007, p.2). Lemon and Verhoef (2016) also conceptualize the customer experience as a customer’s journey with a company or brand over an extended period of time during the purchase cycle across multiple touch points, which is consistent with Voss and Zomerdijk’s work in 2007. The process flows from prepurchase to purchase to postpurchase and it is iterative and dynamic (Lemon and Verhoef, 2016). Figure 1-2 illustrates a more detailed operation process in the O2O context from the customer perspective, which presented as a customer journey map.

A customer begins to discover and research experiential service information online, and then places an order and pay for it. Finally, it is to experience and consume the experiential service at the physical location of the experiential service provider and obtain feedback regarding the experiential service provider. A new action from the first stage usually occur again, and customers may operate and cycle the entire process many
times with the same experiential service provider or different experiential service providers.

Figure 1-2. Customer journey through an O2O business. Source: adapted from Lemon and Verhoef (2016)

1.3 Problem discussion

A few pioneers noticed and exploited the growth of O2O with high potentiality and promising momentum in China. It triggers that thousands of Chinese startups have dedicated to setting up its O2O business within various business fields in China (Huang, 2017). However, many companies have struggled to increase its share of user traffic significantly (Huang, 2017). Caused by serious homogeneity and similarity of O2O business models in one segment and vague profit models as well as lower user demand in some O2O segments (e.g. wedding trade segment) and other issues, many enterprises which operate in O2O services have been out of the Chinese market (iiMedia Research, 2016). For instance, in the online travel segment of O2O services, the similarity of the provided services are relatively high, and the competition is fierce. Besides, the market pattern of the industry has been formed, which causes difficulties for small and medium-sized enterprises to develop and compete in the segment. Therefore, how to establish and sustain the O2O business steadily has become the central issue for many O2O business operators to deal with (Li, Shen and Bart, 2016).
Customers are the subjects who make consumptions of products and services, should be recognized and involved in the research. Concerning the entire process of O2O business, customer experience is a vital concept for both clients and experiential service providers to take into consideration. Low price products have been unable to fulfill with customers needs, they have required unique experiences within the e-commerce environments (Bilgihan, Kandampully and Zhang, 2016). The success of creating remarkable or distinctive customer experience is a tough task to manage, and it also depends on many factors.

Many contemporary companies gradually have put emphasis and priority on the development and management of their customer experiences (Lemon and Verhoef, 2016). A few practitioners have identified the significance of customer experience firstly. For instance, superior customer experience can deliver tremendous values to companies (Pine and Gilmore, 1999). On the other side, it also could be costly for both consumers and firms (Verhoef et al., 2009). Concerning the academic world, it is an emerging and hot concept in the marketing field, which was identified and firstly highlighted in the offline circumstance (Verhoef et al., 2009), customer experience is a critical factor for the experiential service sector as well.

Verhoef et al. (2009) propose a holistic view of the conceptual framework regarding customer experience, which has developed in the offline setting. However, there lack follow-up studies to examine the proposed conceptual model. O2O business which mainly carries out in experiential service industries and involves the mixture of online and offline experiences in nature. Many proposed theoretical framework previously address either the online setting (e.g. Bilgihan, Kandampully and Zhang, 2016) or the offline environment (Verhoef et al., 2009). It indicates that previous conceptual models are not sufficient to study customer experience in the context of the O2O setting. It requires proposing a conceptual framework which enables to apply specifically to the O2O context.

Extant research regarding O2O model is mostly concerned with the conceptual design and prototyping of O2O mode (Wei Phang et al., 2014). Nevertheless, there are still many ambiguities regarding the prospects of O2O mode should be demonstrated (Weng and Zhang, 2015). O2O has come forth freshly, the perception of scholars have not been consistent with practitioners, the cognition of O2O mode remains many unknowns (Wu, 2012). A few pieces of research have discussed the customer experience in offline
or/and online context independently. However, scant literature has considered customer experience under the context of integrated channel O2O e-commerce model. Therefore, it would be arduous but valuable to have an in-depth understanding of the Chinese customer experience in the O2O setting. It is significant to examine and expand knowledge into a new market segment where requires sufficient attached importance from both scholars and practitioners.

1.4 Research question

What factors affect customer experience in China in the online travel industry of O2O business?

1.5 Purpose

The purpose of this thesis is to fill in the gap and develop a conceptual framework for studying customer experience in the O2O context and examine whether those factors are influential to the Chinese customer’s experience. Furthermore, it intends to provide both theoretical and managerial implications to contribute to the further development of the O2O business area in China.

1.6 Delimitations

Due to the limited competence and period, apart from the factors proposed in this study, there are many other factors which may influence customer experience in the O2O context as well. Besides, the research specifically focuses on the online travel industry, which is one of the most representative O2O industries and has been fully developed and adopted in China (iiMedia Research, 2016). The study mainly investigates customers living in Beijing and Shanghai, because O2O business has emerged and rapidly developed in these two megacities. According to the definition of mega-city by the United Nations (2014), a city with at least ten million inhabitants can be defined as a mega-city. Shanghai (with 23 million inhabitants) and Beijing (with slightly less than 20 million inhabitants) are two of the top ten most populous urban areas (Un.org, 2014).

1.7 Thesis Outline

The thesis follows the outline as presented in Figure 2.
Chapter 2
- Literature Review + Conceptual model
- This chapter presents the theoretical background regarding the customer experience as well as a collection of influential factors.
- This chapter also concerns with the proposed research model regarding hypothesized relationships among all variables. Besides, hypotheses will be developed in this chapter.

Chapter 3
- Methodology
- This chapter states how to set up and conduct the study as well as methods of collecting data.

Chapter 4
- Data analysis and Results
- It presents the interpretation of collected data.

Chapter 5
- Discussion
- This chapter discusses the findings regarding each hypothesis from the chapter four and ascertain the theoretical support

Chapter 6
- Conclusion
- In this chapter, the answers to the research question and implications to theoretical and managerial perspectives are presented.

Figure 2. The outline of the thesis
2 Literature Review

This chapter presents the main theory, i.e. customer experience and other relevant concepts engaged in this study, which are potentially influential factors towards customer experience. For instance, reference group influence, perceived ease of use, sensory experience, brand association and spatial accessibility.

2.1 Customer experience

In order to survive in fiercely competitive marketplaces, many companies have switched a stronger focus to the customer, which resulted in the development of customer relationship management philosophies (Gentile, Spiller and Noci, 2007). Verhoef et al. (2009) differentiate between customer experience management and customer relationship management. The former deals with the consumer’s current experience and the latter have a focus on recorded previous experience. Recently, since customers have an increasing number of contact points with companies, such attention to the customer disclosed the significance of monitoring the experiences which derive from those contact points (Gentile, Spiller and Noci, 2007).

2.1.1 Experiential marketing

Schmitt (1999) distinguish a new approach to marketing named experiential marketing from traditional marketing. Traditional marketing approach characterizes customers as rational decision-makers and concern about functional features and benefits (Schmitt, 1999). In contrast, the experiential marketing consider customers as both rational- and emotional-driven human beings and involve in achieving pleasurable experiences, which has an emphasis on customer experiences (Schmitt, 1999).

Carbone and Haeckel (1994) interpret the experience as the impressions generated through person’s encounters with a company, service or environment, i.e. perception formed when people strengthen sensory information. Schmitt (1999) indicates that experiences provide sensory, emotional, cognitive, behavioral and rational values which take over functional values. Experiential marketing is aiming to create holistic experiences which integrate personal experiences into a holistic Gestalt” (Schmitt, 1999). Gestalt theory affirms that “the whole is different from the sum of its parts” (Köhler, 1947). The holistic essence of these experiential designs disables other competitors to copy (Berry, Carbone and Haeckel, 2002).
Experiential marketers have been shifting from considering a single product along the socio-cultural consumption vector to the customer’s broader and deeper understanding of meaning (Schmitt, 1999). Schmitt (1999) proposes a five-module strategic experiential framework, in which involves sensory experiences (sense); affective experiences (Feel, emotional components); creative cognitive experiences (Think); physical experiences, behaviors and lifestyles (Act); and social identity experiences connected to a reference group or culture (relate), for practitioners to manage experiences. For instance, sensory experiences or sense marketing, addressing the senses with the objective of creating sensory experiences through smell, taste, touch, sound and sight (Gentile, Spiller and Noci, 2007). Besides, social-identity experiences or relational experiences, which expands beyond individual’s private feelings and his/her social context, and relates the individual to his/her external environment (e.g. reference group) (Gentile, Spiller and Noci, 2007; Schmitt, 1999).

2.1.2 Customer experience

“Customer always get an experience along with a product or service” (Carbone and Haeckel, 1994). The core issue is how effectively the firm manages the experience (Berry, Carbone and Haeckel, 2002). Verhoef et al. (2009) propose a holistic conceptual framework regarding that customer experience is a multidimensional concept, involving cognitive, affective, emotional, social and physical dimensions of experience. Moreover, Verhoef et al. (2009) underline the significance of customer experience by addressing its holistic essence in the offline environment with a particular focus on the retailing setting. The complexity of customer experience in nature is embodied in customer’s reaction regarding all encounters with an experiential service provider, both direct and indirect (Gentile, Spiller and Noci, 2007).

Both practitioners and scholars have come to increasingly appreciate the competitive and strategic role of customer experience acted in the contemporary companies development (Bilgihan, Kandampully and Zhang, 2016; Johnston and Kong, 2011). Many authors have presented that appealing customer experience enables to be a new access for contemporary firms to gain and sustain competitive advantages (Bilgihan, Kandampully and Zhang, 2016; Johnston and Kong, 2011; Pine and Gilmore, 1999; Verhoef et al., 2009). A superior customer experience may correlate with customer satisfaction, customer loyalty and customer expectations as well (Johnston and Kong, 2011).
Distinct definitions of customer experience have been generated by researchers. For instance, Gentile, Spiller and Noci (2007) interpret the customer experience as the evolution of the relationship between the company and the customer. They define customer experience as originating from a unit of interactions between a customer, a company or a company’s offer which generate a reaction (LaSalle and Britton, 2003). This experience is strictly individual and denotes the involved degree of the customer from different dimensions (LaSalle and Britton, 2003; Schmitt, 1999). It enables to be evaluated by comparing the gap between customer’s expectations and incentives coming from the interaction with the company and the company’s offering corresponding to the different occasions of touch points (Gentile, Spiller and Noci, 2007; LaSalle and Britton, 2003).

Besides, customer experience represents a customer’s internal and subjective responses to any direct or indirect interaction with a company (Meyer and Andre, 2007). In most cases, direct contact takes place in the process of purchase, use, and service which is initiated by the customer (Meyer and Andre, 2007). Indirect contact is usually concerned with unexpected encounters with representatives of a firm’s product or service and is presented as positive or negative word-of-mouth contents, advertising, online reviews, and so forth (Meyer and Andre, 2007).

2.1.3 Online customer experience

Online customer service experience refers to “the customer’s mental perception of interactions with a firm’s value proposition value online” (Klaus, 2013).

Bilgihan, Kandampully and Zhang (2016) state that poor online customer experience will incur a significant loss to an e-commerce company. Besides, since technological development has resulted in smaller devices arose which are faster, more portable and efficient than PCs, desktop, etc.. With regards to contemporary customers, they have multiple online ‘touch points’ to interact with companies as well as other customers by using Internet-enabled devices, such as websites, Apps, social media (Bilgihan, Kandampully and Zhang, 2016). In consequence, customers can access a vast store of information from any place at any time, which must be fit to the constraints of diversified ‘touch points'. Therefore, it is crucial for companies to create a holistic customer experience across diversified channels in online environments (Bilgihan, Kandampully and Zhang, 2016)
The evolution of online shopping experience has been displayed through customer’s increasing dependence on opinions from reference groups, such as their social connections, opinion leaders, and online reviews or recommendations. Besides, it also has presented as the growth of adoption of mobile devices by customers to simplify their online shopping activities (Cheung, Liu and Lee, 2015). Understanding the antecedents factors of online customer experience is essential to design Apps, social media networking pages, (mobile devices friendly) Web pages, based on customers’ expectations and requirements, which enable firms to attract, create and maintain virtual interactions with their customers (Bilgihan, Kandampully and Zhang, 2016).

Contemporarily, customers have multiple ‘touch points’ and channels to interact with companies which make that customer experience is more social (Lemon and Verhoef, 2016; Voss and Zomerdijk, 2007). It is a complicated objective since it reveals consumers’ feedback to both direct and indirect interaction with a firm. For instance, the diffusion of information through the network is incredibly rapid and broad. Once negative feedback was generated and spread, the business of the experiential service provider could be ruined (Zhang, 2013). Uncontrollable negative feedback could indirectly impact the experience of the customer.

Scientific literature mainly concerns the importance of functional and hedonic elements of user experience design. For instance, Kim, Kim and Wachter (2013) recognize that user-friendly and intuitive characteristics of Apps enable to develop user value, satisfaction and engagement. Klaus (2013) identifies two main dimensions of online customer experience which are functionality and psychological factors. Besides, it reveals that e-service quality is primarily affected by efficiency, which refers to the ease of use of the interface between a Web site and user) and fulfillment (well-organized infrastructure) of the Web site (Parasuraman, Zeithaml and Malhotra, 2005). Bilgihan, Kandampully and Zhang (2016) design a theoretical-based framework regarding antecedent factors of a unified online customer experience, including easiness to find the Website/App, ease of use, perceived enjoyment, social interactions and multi-device compatibility and so forth.

2.2 Reference group influence

Hyman (1942) firstly proposes the concept of the reference group (White and Dahl, 2006). It refers to “an actual or imaginary individual or group conceived of having
significant relevance upon an individual's evaluations, aspirations, or behavior” (Park and Lessig, 1977, p.102). It presents groups or group members who are psychologically important to one’s behaviors and attitudes (Turner, 1991).

Two categories of reference group have been differentiated in the relevant literature: positive reference group including membership groups and aspirational groups, and negative reference group also named dissociative groups (White and Dahl, 2006). Membership reference groups refer to the groups that an individual currently belongs to, associates with, and feels psychologically integrated with (Turner, 1991). Past studies affirm that membership reference groups can influence person’s intentions, attitudes and behaviors (White and Dahl, 2006). Aspirational reference groups are groups that individual associates with and are attractive to the individual, and the individual also aspires to be a member of the group. People can be motivated and inspired by aspirational group members (White and Dahl, 2006). Dissociative reference groups refer to the groups that an individual tries to avoid being associated with (Turner, 1991).

Reference groups usually have different motivational influences to individuals, Park and Lessig (1977) propose and examine reference group influences from three aspects which are informational, value-expressive and utilitarian. The reference group influence is accepted (or internalized) if it is perceived as enabling to enhance an individual’s knowledge of his circumstance and his competence to deal with some aspects of this environment (Park and Lessig, 1977).

Park and Lessig (1977) propose that an informational reference group can be applied in two ways. One is to seek for information from people who possess appropriate expertise within certain areas, such as opinion leaders, the other way is to observe behaviors of significant people to make references (Park and Lessig, 1977). Besides, a value-expressive reference group influence is relevant to a person’s incentive to raise or support his self-concept. Such a person would suppose to associate self with positive referents and avoid being associated with negative referents (Kelman, 1961). Additionally, utilitarian reference group influence has similarity with the normative influence. A person’s action would be expected to follow the preferences or expectations of another individual or group (Park and Lessig, 1977).

Throughout the experience, customers are surrounded by voices from the external environment. The importance of views from reference groups, other customers, peer
influences, and circumstances have been recognized in the customer experience (Lemon and Verhoef, 2016). Verhoef et al. (2009) affirm that when a group of customers is in an environment simultaneously, the social environment would have impacts on customer’s experience. Moreover, customers often visit a physical space with friends or family members. The experience of each customer can mutually affect that of others directly or indirectly, either positive or negative effect of customer-to-customer interactions, which have been recorded in certain industries, such as tourism industry (Verhoef et al., 2009). For instance, a customer’s experience can be directly impacted by others disruptive behaviors (e.g. shouting during a movie) or offer assistance and advice.

Among the existing literature, most of the literature have focused on the interactions between the company or its employees with customers regardless of customer-to-customer interactions in the offline setting (Verhoef et al., 2009). “Groups can serve as points of reference for how customers think and behave” (White and Dahl, 2006).

2.2.1 Online reference group influence

Apart from the offline setting, customer-to-customer interactions also can occur in an online context by posting customer views on a firm’s website or social networking websites (Verhoef et al., 2009). Customer-to-customer interactions in an online context enable customers to perceive themselves as a part of a community. The social interaction dimension is regarded as the social experience in e-commerce (Bilgihan, Kandampully and Zhang, 2016).

The emergence of the third-party online information sources and social media also have an influence on customers (Lemon and Verhoef, 2016). This unique channel provides distinct possibilities and advantages for companies to enhance their customers’ experiences in an online setting. It offers companies an approach to interacting with their customers and also customers with customers, in which enable to generate a large scale of electronic word-of-mouth (e-WOM) contents. (Bilgihan, Kandampully and Zhang, 2016). Bilgihan, Kandampully and Zhang (2016) state that companies who operate with e-commerce websites should add social features to their online platform or add commerce features to their social networking platforms. For instance, they should create an own e-WOM space in which enable customers to post reviews, pictures and share experiences regarding the company’s products or services with other customers (Bilgihan, Kandampully and Zhang, 2016).
However, not all reviews are positive. Thus, companies have to operate with negative complaints or comments efficiently. The literature states that companies should respond to negative online reviews generated by customers, to create a better trust and customer experience to customers (Sparks, So and Bradley, 2016). Sparks, So and Bradley (2016) draw the conclusion that it would be wise for the company to respond to online complaints in a short time (not exceeding seven days). It would be useless to post responses after a month has passed, mainly aiming to create or restore trust among potential customers (Sparks, So and Bradley, 2016). It leads to the following hypothesis:

**H1. Customer experience is positively affected by reference group influence in the context of O2O business.**

### 2.3 Perceived ease-of-use

Technology adoption model (TAM) addresses the role of perceived usefulness and perceived ease-of-use which can predict consumer attitude towards adopting a new technology (Davis, 1989). TAM model has initially been adopted in research regarding IT use or intended IT use, subsequent studies have expanded its application to a broader scope of IT, for example, in the e-commerce study field (Gefen, 2003). Perceived ease-of-use refers to the degree to which a user believes that utilizing a particular system would be free of effort (Davis, 1989).

In the online service setting, the quality of the interactions between customer and computer outlines the website usability experience (Bilgihan, Kandampully and Zhang, 2016). Literature from Rose et al. (2012) indicates that excessively complicated navigation and overloaded information may disorganize user’s emotional state and weaken the likelihood of a re-purchase. Besides, websites that communicate service or product information efficiently in a way which is consistent with consumer’s browse process will contribute to creating a better experience (Rose et al., 2012). Therefore, an e-commerce website should be designed for customers is easy to use and should not make users feel too complicated to manage what they are trying to achieve (Bilgihan, Kandampully and Zhang, 2016). Perceived ease-of-use is one of the variables that are evaluating the website quality (Cao, Zhang and Seydel, 2005). An effective website enables to provide effective as well as efficient customer experience (Rose, Hair and Clark, 2011).
Ease of use has been interpreted as a representative that the company cares for and respects its customers (Bilgihan, Kandampully and Zhang, 2016). Hackbarth, Grover and Yi (2003) demonstrate the positive link between ease of use and system experience. Rose et al. (2012) state that advances in technology are not sufficient, which enable users to feel empowered, ease of use of the technology remains the most significant feature. This study intends to examine the relationship between the variables, through the following hypothesis:

**H2. Customer experience is positively affected by the perceived ease-of-use in the context of O2O business.**

2.4 Sensory experience

The five human senses are crucial to a person’s experience during the processes of different purchase and consumption (Hultén, Broweus and Dijk, 2009). For instance, Orth and Malkewitz (2008) affirm that the sense of sight is the most strong sense for identifying differences or changes in the circumstances as well as the most common sense of perceiving a product or service. Garlin and Owen (2006) demonstrate that the impression of sound is associated with emotions and feelings and it also enables to affect customer’s brand experiences and interpretations. The sense of smell is linked with pleasure and well-being and is related to emotions and memories as well (Fiore, Yah and Yoh, 2000). The impression of touch has tactile impressions regarding textures and feelings of a product or circumstance through physical or psychological interactions (Peck and Wiggins, 2006). The sense of taste is a unique emotional sense that often has interactions with other senses (Klosse et al., 2004).

Arnould and Thompson (2005) define sensory experience as a person’s perception of a product or service or other components in a service process as an image which challenges the human minds and senses. The context where the sensory contents generated is important for customers to create emotional connections (Hultén, 2011; Zomerdijk and Voss, 2010). It involves the physical and relational features of the circumstance where the product or service is consumed and the components which the customer has interactions in the circumstance (Gupta and Vajic, 1999; Zomerdijk and Voss, 2010). Carbone and Haeckel (1994) state that stimuli seem to be created by the sight, sound, touch, and smell of the physical environment. In the relational circumstance, stimuli may originate from other individuals and their behaviors (Carbone
and Haeckel, 1994). “The more effectively an experience engages the senses, the more memorable it will be” (Zomerdijk and Voss, 2010, p.69).

Hultén (2011) affirms that the emergence of interactions through customer’s sensory experiences in the process of generating values will trigger the value of service as, for example, a brand image. An individual’s impressions and perceptions about both products and service parts, as well as other components, generating an image in the human’s mind which is associated with the brand name (Grönroos, 2008). It likewise stated by Schmitt (1999) regarding experiential marketing, in which contexts, emotions and aesthetic perspectives of customer experiences are critical.

### 2.4.1 Online sensory experience

Usually, customers who purchase online would encounter various sources of sensory data from a collection of stimuli on the company’s e-commerce website, which may present as text-based information regarding the product or service, visual imagery, video, or audio delivers (Rose et al., 2012).

Sensory enabling technologies (SETs) refer to technologies offering sensory data in the online shopping context as a substitute for sensory experiences which encounter face-to-face contacts in offline context (Kim, 2006). Kim and Forsythe (2008) affirm that SETs can deliver more sufficient and appealing information about the products or experiential services to customers than one simple static picture or standard descriptors can. Besides, the delivered product information is similar to the information gained through direct examination of the product, which is able to reduce product risk perceptions (Kim and Forsythe, 2008). In addition, SETs also can create a further interactivity and customer involvement which contribute to enhancing the value of online shopping experiences, for instance, “the 3D rotation view served both functional and hedonic roles” (Kim and Forsythe, 2008, p.901).

Increasing amount of companies, (e.g. hotels, restaurants, and shopping centers) are creating and building emotional linkages to attract the human senses through sensory experiences (Hultén, Broweus and Dijk, 2009; Zomerdijk and Voss, 2010). Contemporary designers manipulate sensory design to develop the experiential services and emerge a desired emotional reaction (Mullet, 2003; Zomerdijk and Voss, 2010). Therefore, the hypothesis is developed as:
H3. Customer experience is positively affected by the sensory experience in the context of O2O business.

2.5 Brand association

Aaker (1991) defines the brand as a distinctive name or symbol which is enabled to identify goods and services. The potential value of a brand name is its associations, i.e. its meaning to individuals (Aaker, 1991). A brand association is one of five underlying assets of brand equity which defined by Aaker (1991) as any links to a brand in memory. A stronger relationship is based on numerous experiences or exposures to communications or connection with other links (Aaker, 1991). For instance, the connection between McDonald’s and children will be stronger when involving birthday-party experiences at McDonald’s than simple ads showing children at McDonald’s (Aaker, 1991). Associations enable to create positive feelings during the process of experience. Besides, Aaker (1991) states that the association also can support an extension (i.e. new product) by building “a sense of fit” between the brand name and the extension or by giving reasons to buy the new product.

According the extent to which information is involved in the association, the brand association can be categorized into three groups, that is brand attributes, brand benefits and brand attitudes (Keller, 1993). Keller (1993) defines brand benefits as the customer’s perceived outcomes of the service or product can provide to them, which can be further classified into three categories by the underlying motivations to which they correlate, they are functional benefits, experiential benefits, and symbolic benefits. Experiential benefits involve the feelings of consuming a product or service which can satisfy experiential needs such as sensory pleasure and variety (Keller, 1993).

In the service industry, the brand seems to be more closely connected with the reputation of a company rather than service itself (Selnes, 1993). Brand reputation refers to the perception of quality related to the name (Aaker and Keller, 1990). Delgado - Ballester and Luis Munuera - Alemán (2005) state that trust is regarded as one of the most desirable features in any relationship. Possessing experiences with or knowledge of a product or similars may be the determinant of how customers evaluate product or service performance (Selnes, 1993). Delgado - Ballester and Luis Munuera - Alemán (2005) also reveal that brand trust derives from the results of experience with the brand.
and also maintains a positive association with brand equity. This leads to the following hypothesis:

*H4. Customer experience is positively affected by brand association in the context of an O2O business.*

2.6 Spatial accessibility

The service delivery often involves the service environment, for instance, the distance between the customer and the service provider (Lovelock, 1983), and the accessibility of a company’s services (Grönroos, 1984). Accessibility refers to the relative convenience with which an individual can reach the locations of activities, such as work, shopping, or health care, from a residential area (Hart et al., 2007; Luo and Wang, 2003). Spatial access highlights “the importance of the spatial/distance variable (as a barrier or a facilitator)” (Luo and Wang, 2003, p. 865). Heinonen (2004) proposes that the spatial dimension is related to the customers’ perception of a company’s core service. The spatial dimension is spatially driven and related to the usage location (Heinonen, 2004). It presents how a customer perceives the spatial flexibility linking to the situation where the service interaction takes place (Heinonen, 2004).

Spatial accessibility has mainly emphasized in the literature regarding the customer’s experience in the context of shopping malls or health care services (e.g. Hart et al., 2007; Luo and Wang, 2003; Sit, Merrilees and Birch, 2003). For instance, the locations and ease of movement for pedestrians have the influence on their enjoyment of the shopping experiences (Hart et al., 2007). Furthermore, Sit, Merrilees and Birch (2003) distinguish accessibility into macro-accessibility and micro-accessibility in a shopping center context. They define macro-accessibility as transport connections between the residential location to the shopping mall, and micro-accessibility as parking facilities and convenience of navigation from the shopping area to other facilities within the shopping location (Sit, Merrilees and Birch, 2003). Customer will have more enjoyable experience if service providers pay attention to both aspects of the accessibility (Hart et al., 2007). Léo and Philippe (2002) likewise reveal that poor directional indicators for travelers to a shopping area will trigger a dissatisfied and disappointed shopping experience.

Technology-based self-services which deliver services through technological interfaces,
such as Internet services and mobile services, have enabled customers to implement the service process independently without the need of involving direct service employees (Heinonen, 2004; Meuter et al., 2000). For technology-based service options, Dabholkar (1994) states that the service delivery may perform at different sites. It may occur at a neutral site, or at the customer’s site which may involve home or work (Heinonen, 2004). The occurrence of technology-enabled services is often fixed to a location (e.g. computers), it also can be spatially flexible, such as on customers’ mobile phones (Heinonen, 2004). Most of the O2O based platforms demands and correlates with geographical positioning service. Therefore, the location property and portability of the mobile devices decisively promote the development of O2O platforms (Du and Tang, 2014). Therefore, the hypothesis is proposed as:

\[ H5. \text{Customer experience is positively affected by the spatial accessibility in the context of an O2O business.} \]

2.7 Conceptual model

Given the scant research scrutinizing regarding the customer experience in the context of O2O business in China, a theoretical framework was designed to guide and carry out the study of examining the influential factors to Chinese customer experience in an O2O setting (e.g. online travel industry) (Figure 3). Prior research primarily study the customer experience either in the offline environment or the online setting independently, this developed integrated research model extends the research scope to the new e-business form, that is the O2O business, and takes the online travel industry as one of the representatives of experiential service industries.

In this section, the developed research hypotheses which have been presented before and the formulated research model (Figure 3) intend to interpret the essential components of customer experience for the selected experiential service (i.e. online travel business activities) in the Chinese market. This model enables the researcher to examine the relationships between Chinese customer experiences in an online travel setting and (1) reference group influence, (2) perceived ease-of-use, (3) sensory experience, (4) brand association, and (5) spatial accessibility.

As illustrated in the delimitation, due to the limited time, not all underlying elements can be stressed in this study. Regarding the characteristics of O2O setting that the
integration process of both online operations and offline operations, three components of the proposed research model, that is (1) reference group influence, (3) sensory experience and (5) spatial accessibility, which have been interpreted in the literature review are from both online and offline settings.

Reference group influence can occur at both online and offline operations directly or indirectly, which may be presented by word-of-mouth contents from friends or family members, or by other customers’ behaviors, or online reviews from opinion leaders or people who you even do not know. Positive reference group influence is supposed to lead a superior experience to the customer. Sensory experience involves both partly online and offline settings, the form or sensory enabling technologies of presenting information regarding services online as well as the Chinese customers’ perceptions of filtering websites and real sensory impressions created in the offline environment may also impact a customer’s experience. It seems that a satisfying sensory experience will lead to an appealing customer experience to Chinese customers as well. Besides, spatial accessibility is explained from both online and offline operations as well. In this study, the offline unit (i.e. the physical location convenience) and online unit (e.g. accuracy of the provided location information on the website) are emphasized. It is assumed that the easier access with the lower travel cost to reach the place will create the better customer experience for Chinese customers.

Perceived ease of use, which is usually applied to examine user’s attitude towards using technology, is mainly aiming to examine the process of online customer experience. Besides, brand association is illustrated in general, which positive associations with a brand in a customer’s mind may bring great feelings during his/her experience process. Scant research associates the experience with a brand image that held by customers (Xu and Chan, 2010). A stronger association is expected to create a further superior experience. All these five independent variables are expected to impact the dependent variable customer experience when they involve in an O2O setting with a particular focus on the Chinese online travel industry in this study.
Figure 3. Proposed conceptual model of examining the influential factors to customer experience in the O2O context
3 Methodology

This section presents the methodological decisions related to this study, involving research design, survey development, and sampling design as well as data collection, etc. The ethical consideration is discussed with regards to survey administration and data collection.

3.1 Epistemological issues

Epistemological considerations involve the query of what is or what should be viewed as acceptable knowledge in a field of study and how to execute knowledge transfer (Bryman and Bell, 2015; Saunders, Lewis and Thornhill, 2016).

Realism is one of the epistemological positions that advocates “what the senses show us as reality is the truth” (Saunders, Lewis and Thornhill, 2008, p.114). Realism has two contrasted forms; one is direct realism that states what we experience through senses represents the world precisely. The other form is critical realism which argues that what we see is the sensation, which are the denotations of the real world, in other words, “what we see is only part of the bigger picture” (Saunders, Lewis and Thornhill, 2008, p.115). Critical realism is concerned with a “two-step” process to experience and understands the real world. The first step is to see the observable event and experience sensations it brings, and the next stage is the mental processing that maintains sometime after the sensations meet the senses (Saunders, Lewis and Thornhill, 2008).

In this case, the critical realism position is adopted. The key to this study is the customer experience; it involves a customer’s both direct and indirect interactions with a service provider. Direct sensations or interactions are not sufficient to represent the entire customer experience with regards to the service; indirect interactions are also part of the customer experience. Besides, associations or links with the service provider will continue sometime. It is hard for someone to claim that he/she have perfect knowledge of what influences the customer experience.

3.2 Ontological issues

Ontology concerns about the essence of social existence (i.e. reality) (Bryman and Bell, 2015; Saunders, Lewis and Thornhill, 2008). It deals with the questions of what researchers assume regarding the way of how the world runs (Saunders, Lewis and
Thornhill, 2008). The discrepancy between the objectivism and constructionism (or subjectivism), which are two dominant ontological aspects, is mainly based on how to perceive the relationship between social entities and social actors (Bryman, 2016; Saunders, Lewis and Thornhill, 2008). Critical realists regard reality as external and independent to its actors, which is consistent with the objectivist’s opinion. Since explanations and experiences of social actors (i.e. customers in this study) do not impact the existence of the social world, an objectivist in the most extreme stance believes that all social actors experience one and only one social reality (Saunders, Lewis and Thornhill, 2016).

In this study, the researcher intends to generate generalized findings rather than emphasize specific variety which is common for objectivists. Social reality refers to the O2O business context in this study, and social actors are customers who have experience with O2O context. The purpose of this study is to examine if some aspects of O2O business will have the impact on them, especially on their experiences.

3.3 Research approach

Three major approaches have presented in the scientific literature to conduct social science research, of which are the deductive approach, inductive approach and abductive approach (Alvesson and Sköldberg, 2009). Ghauri and Grønhaug (2005) interpret the deductive research approach as examining the proven theories by formulating a list of relevant hypotheses, which may receive confirmation or rejection. Alvesson and Sköldberg (2009) describe the deduction as the procedure of applying a general rule to test within a particular case. The results obtained from deductive approach would be more reliable since it based on known statements or knowledge. Inductive approach is the application of generalizing a rule from a single case to generally validated situations (Alvesson and Sköldberg, 2009). It proceeds from operating with empirical materials which have gathered from the reality (Dubois and Gadde, 2002). It is riskier since it would draw universal conclusions based on limited observations.

Abductive approach is aiming to fill in the gap regarding the limitations of deductive and inductive approaches (Bryman and Bell, 2015). Abductive approach links some characteristics of both deductive approach and inductive approach (Alvesson and Sköldberg, 2009). During the process of applying abductive research approach, it
strengthens the reliability of empirical observation and adjusts as well as improve proven theories (Alvesson and Sköldberg, 2009).

In this study, the deductive approach is employed. This study proceeds from a few proposed influential factors to customer experience which have been presented in scientific articles, and then examined selected factors in a new situation by testing the proposed hypotheses (Bryman and Bell, 2015). That is to say, factors (e.g. reference group influence, perceived ease of use, sensory experience, etc.), which have been proven to impact customer experience in an online environment or offline environment independently, are employed to examine the application in the O2O context through examining five developed hypotheses in the previous section. Finally, in order to examine the relationship between selected independent variables with customer experience. Regarding the empirical settings, this study takes online travel industry as the typical representative of the O2O business model. The conclusions regarding the proven influential factors will be able to generalize to other industries that provide O2O services as well.

3.4 Research strategy

Bryman and Bell (2015) state that the next step of conducting research is to consider appropriate research strategy regarding the differences between quantitative and qualitative research. In this study, quantitative research approach was utilized.

The quantitative research strategy is more suitable for conducting studies with a large-scale survey which intends to represent the overall population by samples (Bryman and Bell, 2015). Quantitative research is concerned with analyzing numbers rather than words (qualitative), or collecting answers to close-ended questions (through hypotheses or questionnaires) rather than open-ended questions (through interview questions of qualitative research) (Bryman and Bell, 2015; Creswell, 2014).

Creswell (2014) states that in quantitative research, a variable is defined as a feature of a person or an organization that can be measured and that differs among the objects of study. It relates to answer a research question or make predictions (i.e. hypotheses) regarding the researcher’s expectations of the results (Creswell, 2014). Moreover, Creswell (2014) also presents that the quantitative researchers usually verify theories by forming predictive statements (i.e. hypotheses) which are derived from the theory and
then testing them. Hypotheses testing involves statistical procedures in which researchers draw inferences with regards to the population from a research sample (Creswell, 2014).

Besides, variables can be classified into different types, such as independent variables, dependent variables, mediating variables and moderating variables and so forth (Creswell, 2014). Independent variables refer to factors which may cause or impact outcomes, and dependent variables refer to the results of the independent variables (Creswell, 2014).

Furthermore, the choice of research strategy is also relevant to the developed research questions (Creswell, 2014). Quantitative research questions examine the relationships among variables that the researchers intend to know (Creswell, 2014). When the research problems are about identifying factors to an outcome, quantitative research would be an appropriate research strategy (Creswell, 2014).

The purpose of this research is to examine what factors affect Chinese customer experience in an O2O context, which requires a large-scale sample to represent the population living in Beijing or Shanghai. The research question of this paper is to examine the relationship between those relevant variables which are likely to influence the customer experience. Therefore, in this study, (1) reference group influence, (2) perceived ease of use, (3) sensory experience, as well as (4) brand association and (5) spatial accessibility are defined as five independent variables to be measured whether they can influence or affect the dependent variable (i.e. customer experience). In this study, the author proposed five hypotheses based on five independent variables and collected first-hand data through questionnaires which measure Chinese customers’ experiences in order to test proposed hypotheses would be confirmed or rejected.

3.5 Research design

The research design is the foundation of a research project. It formulates the framework of data collection and analysis and also enables to imply the external validity of empirical findings and researcher’s capability of imputing causality to the findings (Bryman and Bell, 2015). Experimental design, cross-sectional or social survey design, longitudinal design, case study design and comparative design comprise main types of
research design. In this study, a cross-sectional (social survey) design is mainly adopted (Bryman and Bell, 2015).

A cross-sectional (social survey) design collects empirical data from multiple cases (e.g. people, organizations, etc.) almost simultaneously in order to gather a body of empirical evidence relating to two or more variables, which enable be tested to detect relationship among variables (Bryman and Bell, 2015). The motivation behind applying social survey design is interested in variation, which can be only built when multiple cases are being tested (Bryman and Bell, 2015). When a respondent completes a questionnaire including a group of variables, the answers are obtained at almost the same time. (Bryman and Bell, 2015)

The aim of this thesis is to examine the relationship between selected factors (independent variables) with customer experience (dependent variable). The sampling process necessitates larger quantities of samples (Bryman and Bell, 2015) since a broader understanding of customer experience is required.

### 3.5.1 Survey Design

Researchers employ survey as a method to collect data by questioning respondents. A structured-direct survey involves the execution of a questionnaire (Bryman and Bell, 2015). Malhorta (2010) defines the structured-direct as how much are standardized implementation on the data collection procedure, and respondents are aware of the real purpose of the project. Researchers intend to collect respondents’ answers to the questions regarding, such as attitudes and awareness, etc. (Malhotra, 2010). During the process of collecting data, formally, a structured questionnaire is formulated with a series of questions which have been orderly set up by the researchers. Typically, a questionnaire involves several questions which are mostly fixed-alternative, which requires a sample of the population to make options among a prearranged unit of questions (Malhotra, 2010).

The questionnaire is one of the most prominent methods of collecting primary data (Bryman and Bell, 2015; Malhotra, 2010), due to characteristics of the convenience and ease of operation. Moreover, gathered data are with high reliability since responses are limited to the prearranged alternatives. The utilization of fixed-alternative questions enables to decrease the variability of results which unable to overcome actually in
structured interviews (Bryman and Bell, 2015; Malhotra, 2010). However, no one can interpret further if respondents have questions regarding the questionnaire (Bryman and Bell, 2015). Moreover, respondents may not provide accurate answers since they lack conscious awareness of their motives or attitudes (Malhotra, 2010). Besides, respondents may be unwilling to respond to a questionnaire because sensitive or personal information are requested. The internal validity and reliability of the research could be influenced by fixed-alternative questions regarding the theme of beliefs and feelings, as well as the structure of the questionnaire (Malhotra, 2010; Saunders, Lewis and Thornhill, 2016).

The opening questions of the questionnaire concerning about the background information of those surveyed, such as gender, age, residence city and main occupation, etc. Bryman and Bell (2015) state that these fundamental questions are significant for researchers to acquire an overview regarding the respondents’ characteristics, which may correlate with their answers. Besides, the author also asks whether the respondent has had experience with O2O services before (Q5, see Appendix A-Questionnaire). A 'jump logic' was set that if a respondent’s answer to the question is never, then it will skip to the end of the questionnaire, and their responses will be discarded.

Moreover, most of the questions are rating questions, which is used to collect opinion data (Saunders, Lewis and Thornhill, 2016). Likert Scale is a widely employed scale to evaluate respondent’s rating of the level of agreement or disagreement towards proposed statements in the questionnaire. The author adopted the five-point Likert Scale, ranging from “Strongly disagree” (1) to “Strongly agree” (5) to evaluate the influential factors to customer experience in the context of O2O. The author examined the relationship between five independent variables and one dependent variable in the O2O context. In order to increase the validity of answers and measurement process, the author designed multiple questions that measure the same factor (Fowler, 2014). In this case, each variable, such as customer experience, reference group influence, perceived ease of use, sensory experience, brand association and spatial accessibility, was examined by at least three questions.

The last question in the questionnaire was to let respondents rank the extent to which variable affects their trust towards O2O service most. The ranking question asks the
respondent to rank alternatives in an order which enables researchers to investigate the relative importance to the respondent (Saunders, Lewis and Thornhill, 2016).

3.6 Data sources

Primary and secondary data are the two type sources of empirical materials (Bryman and Bell, 2015). Primary data mainly gathers by researchers from interviews, case studies, surveys, and experiments, etc.. Secondary data refers to materials which have been collected by other organizations and scholars, which mainly is acquired from documents which have published by other researchers (Bryman and Bell, 2015). Creswell (2014) state that the selection of literature should follow a set of guidelines. For instance, starting with broad syntheses of the literature and looking for literature have published in scientific journals, recently published conference papers (Creswell, 2014). Besides, relevant books should also be taken into consideration. Moreover, online sources may also provide useful information, whereas, online resources should be carefully screened for quality (Creswell, 2014).

In this study, the author collected primary data from the results of questionnaires answered by respondents, in order to examine the formulated hypotheses and facilitate the measurement of the validity and reliability of this research. Secondary data which are collected by literature review complements the necessary knowledge of selected concepts. Literature review enables a researcher to identify what have been studied and written by other scholars within the same research area. It also enables to address the significance of the researcher’s study and the foundation of formulating research questions (Bryman and Bell, 2015). Literature regarding the topic of the O2O business and customer experience, starting from the experiential marketing and then such as offline customer experience and online customer experience, as well as factors which are likely to affect customer experience have been investigated through several pieces of scientific literature. For instance, reference group influence, sensory experience as well as brand association and spatial accessibility.

3.6.1 Online social surveys

Since the popularity and convenience of the Internet, increasing growth of online surveys have been executed; two major methods can administer online social surveys by email or the Web (Bryman, 2016). Web surveys usually proceed by inviting selected
samples to visit a website and fill in questionnaires online (Bryman, 2016). Furthermore, mobile devices have been growing employed to conduct self-completed questionnaires due to the increased ownership of mobile devices, especially the smartphones (Bryman, 2016). On the other hand, smaller screens may create difficulties for respondents to fill in questionnaires (Bryman, 2016).

In this study, the author adopted SoJump.com to design and hand out the online self-completion questionnaires that respondents answer closed questions on the questionnaire by themselves (Bryman and Bell, 2015). The questionnaire starts with a brief presentation and clear purpose statement regarding the study in order to improve response rates (Bryman and Bell, 2015). The target group of Chinese customers who reside in Beijing and Shanghai has also been clarified. Moreover, emphasis on all actions should be done by the respondent him-/herself was also stated. The ethical consideration regarding anonymous is also stated and promised to all respondents. In order to avoid repeated answering by the same individual, it was regulated that user from the same IP (Identification of Position) address can only fill the questionnaire out once. Moreover, respondents were allowed to complete the survey once from the same computer or mobile phone.

3.7 Sampling

When involving population, sample refers to a group of respondents which are selected for a specific purpose (Bryman and Bell, 2015). Concerning social survey research, sampling is a vital step which connects with the data collection during the research process (Bryman and Bell, 2015). Sampling refers to the process of selecting qualified sample groups, which can represent the whole population, from a broader scope of the population for the particular purpose of research (Singh, 2007). Sampling is done by a unit of the population who do some things or go to certain places that enable them to be sampled (Fowler, 2014).

The sample frame refers to the listing of all entities in the population which samples can be selected for a survey (Bryman and Bell, 2015; Singh, 2007). Probability sampling refers to that each person in the population has a known chance of selection set by the sampling procedure (Fowler, 2014). Non-probability sampling means that random selection is not involved in the sample selection process (Bryman, 2016; Singh, 2007).
Four techniques can be applied to carry out a probability sampling; they are simple random sampling, systematic random sampling, stratified random sampling and cluster sampling (Saunders, Lewis and Thornhill, 2016). Cluster sampling (also known as one-stage cluster sampling) refers to categorize the target population into discrete sets before sampling (Saunders, Lewis and Thornhill, 2016). These sets “can be based on any naturally occurring grouping,” such as geographical area (Saunders, Lewis and Thornhill, 2016, p.291). Area probability sampling is a useful sampling strategy; it can sample any population that can be defined geographically (Fowler, 2014). Besides, the sampling frame of cluster sampling approach is constituted by the entire list of clusters within the population (Saunders, Lewis and Thornhill, 2016). Cluster sampling to some extent which may weaken the accuracy of the representativeness of the samples.

In this study, all samples should be selected from Chinese population who permanently reside in Beijing and Shanghai, with the age of 18 years old and higher and have access to the Internet. Since the researcher does not have access to all population of this study, therefore, in this study, cluster sampling was mainly used, and snowball sampling approach was also involved.

The sample frame of this study is mainly formed by two clusters (as shown in Figure 4). Cluster 1 consists of individuals who are known by the researcher and living in Beijing or Shanghai. Cluster 2 is constituted by people who are not known by the researcher but residing in Beijing or Shanghai; they also have access to SoJump.com’s online survey community.

First, the researcher sent the link to the survey to the cluster one. Then, the snowball sampling was also used in which these respondents help the researcher to spread the questionnaire to their colleagues or friends. Snowball sampling is one of non-probability sampling methods, and researchers initially contact with a group of the population who are known as samples of the research project and then let them expand to others (Bryman, 2016). Thirdly, the questionnaire was posted on SoJump.com survey community where people can post and answer each other’s questionnaire. Since SoJump.com is open access to the whole population, it is unable to calculate the response rate.

Through these two methods, the researcher collected 546 responses in total in 21 days, resulted in 303 usable responses.
3.8 Data collection instruments

3.8.1 Operationalization

<table>
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<tr>
<th>Concept</th>
<th>Theoretical Definition</th>
<th>Question</th>
<th>Operational definition</th>
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<tr>
<td>Customer experience</td>
<td>Customer experience originates from a unit of interactions between a customer, a company or a company’s offer which generate a reaction (LaSalle and Britton, 2003)</td>
<td>6. How often (how many percent) do you get satisfied experiences with airline companies or hotels?</td>
<td>It aims to get an overall understanding from respondents’ perceptions regarding the services provided in an O2O setting.</td>
</tr>
<tr>
<td>Reference group influence</td>
<td>Reference group refers to “an actual or imaginary individual or group conceived of having significant relevance upon an individual's evaluations, aspirations, or preferences”</td>
<td>7. I use mobile devices (e.g. smartphone, iPad) to book flight tickets and hotels online more than desktops and laptops.</td>
<td>8. I would like to recommend the service (from the hotel or airline companies) I have experienced to my friends.</td>
</tr>
</tbody>
</table>
behavior” (Park and Lessig, 1977). It usually have different motivational influences to individuals.

<table>
<thead>
<tr>
<th>Perceived ease-of-use</th>
<th>Perceived ease-of-use refers to the degree to which a user believes that utilizing a particular system would be free of effort (Davis, 1989).</th>
<th>14. It is easy to become confident when I book flights or hotels online. 15. All websites or Apps are easy to use while make bookings. 16. It is not difficult for me to learn how to navigate websites or Apps to make bookings of plane tickets or hotels. In order to test whether the features of websites will have influence on customer when they browse and filter alternatives online.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory experience</td>
<td>Arnould and Thompson (2005) define sensory experience as a person’s perception of a product or service or other components in a service process as an image which challenges the human minds and senses.</td>
<td>17. These websites, which I can book plane tickets or hotels, provide various types of information, such as videos, images and texts. 18. I prefer to make bookings from websites which have more videos or images. 19. The information presented on the websites is always consistent with the physical operations. To test the extent to which senses can affect customer experience in both online and offline operations.</td>
</tr>
<tr>
<td>Brand association</td>
<td>A brand association defined by Aaker (1991) as any links to a brand in memory.</td>
<td>20. I believe that a hotel or airline companies with better reputation always can provide better service and environment. 21. I always search and book the same brands of flights or hotels since I had positive experiences with the service provider before. 22. My impressions about To examine if any association or link to the brand will affect customer experience.</td>
</tr>
</tbody>
</table>
39

one airline or hotel is associated with the impressions about the whole brand or group.

23. Opinion leaders/celebrities ideas affect my association with the brand.

24. The location information presented on the websites is always accurate.

25. It is worth to experience appealing service or environment of a hotel no matter how far the distance between my position and the hotel is.

26. I would like to pay the travel cost which incurred by getting to the hotel.

Spatial accessibility

Accessibility refers to the relative convenience with which an individual can reach the locations of activities (Hart et al., 2007; Luo and Wang, 2003). The spatial dimension presents how a customer perceives the spatial flexibility linking to the situation where the service interaction takes place (Heinonen, 2004).

It intends to examine if the convenienve of accessing to the physical location will impact customer experience.

<table>
<thead>
<tr>
<th>Spatial accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility refers to the relative convenience with which an individual can reach the locations of activities (Hart et al., 2007; Luo and Wang, 2003). The spatial dimension presents how a customer perceives the spatial flexibility linking to the situation where the service interaction takes place (Heinonen, 2004).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 1. Operationalization of questions</th>
</tr>
</thead>
</table>

3.8.2 Pre-test

In an interviewer-administered survey, the question-and-answer process is conducted orally. In contrast, the question-and-answer behaviors occur inside a respondent’s head in self-administered questionnaires (Fowler, 2006). Respondents have to understand questions in line with expectations by researchers and enable to accomplish the response task (Aaker et al., 2011; Fowler, 2006). In order to validate prearranged questions in the questionnaire are unambiguous to all respondents, a pretest is executed to make sure that the task is clear and reasonably easy to do (Aaker et al., 2011; Fowler, 2006).

One way to pretest an online survey is to replicate the same procedure that is sending questionnaires out by emails to individuals who can fill out and return by emails (Fowler, 2006). At the end of the implementation, researchers may ask respondents to identify any questions that they had difficulty in understanding or answering (Fowler, 2006). Another appropriate approach to evaluating self-administered questions is to do observation when people fill out the questionnaire, which can offer assistant information about question problems (Fowler, 2006). For instance, if a pretest
respondent spends a long time to answer one question, it may present that the question is difficult to either understand or answer (Fowler, 2006). Besides, the most common approach to make evaluations regarding questionnaire questions is to let pretest respondents to complete it first and then conduct a brief interview with them individually or in groups (Fowler, 2006). A good practice of pretest would be, during the entire procedure, at least to provide opportunities for pretest respondents to identify questions which are not consistently and reliably understood (Fowler, 2006).

In this study, before the pre-testing, the pilot test was adopted first. Two professors from the marketing department in Linnaeus University were invited to review the questionnaire and give their comments in order to strengthen the content validity. A few questions were revised and restructured according to professors’ comments. Then, six individuals were selected to pre-test and fill out the questionnaire. Due to the limitation of geographical location, the researcher cannot directly observe pre-test respondents. Therefore, a short individual interview was carried out to each pre-test respondent after they completed the questionnaire. The researcher asked each respondent if they identified any questions were difficult to understand. After all six interviews had been done, the researcher identified that ambiguous problem focused on a few specific questions. Therefore, the researcher made changes based on those questions and sent the revised questionnaire back to those six pre-test respondents to make sure everything was understandable and answerable.

3.9 Data analysis strategy

The data collection of this study is based on survey and employed SPSS program to analyze the collected data.

3.9.1 Data coding

Coding refers to “assign a code, generally a number to each possible answer to each question” (Malhotra, 2010, p.454). Precoding mainly involves assigning codes to structured questions prior to sending out the questionnaire, and subsequent to receive responses, post-coding is carried out to code unstructured questions (Malhotra, 2010).

In this case, responses to question 5-26 were pre-coded, from 1 to 5. For instance, answer with strongly disagree was pre-coded as 1, strongly agree as 5. Answers to question 1-4 were post coded since it concerns about particular responses. For instance,
‘male’ was coded as 1, ‘female was coded as 2’, ‘prefer not to say’ was coded as 3. In the SPSS file, in order to save space, reference group influence was post-coded as RGI, perceived ease-of-use was coded as PEOU, sensory experience as SE, brand association as BA and customer experience as CE.

3.9.2 Data cleaning

Data editing is the process of reviewing all responses of the questionnaire which aims to increase accuracy and precision. It is a preliminary check for consistency (Malhotra, 2010). Furthermore, data cleaning consists of further consistency controls and operation of missing responses which is operated by the computer (Malhotra, 2010, p.461).

Subsequent to completing the data collection through SoJump.com, an SPSS file including all responses to the questionnaire was downloaded. 546 respondents in total completed this survey. Since all questions should be answered before the submission, therefore, missing responses were not involved in this study.

In this case, preliminary criteria of editing data were listed. First of all, due to the set logic of question No.5, all answers with “no experience” were regarded as the invalid statistic and were discarded. Secondly, since cluster two involves the open access of geographic location, which means that any individual can complete the questionnaire even if he/she does not live in Beijing or Shanghai. Hence, the IP address was set as a criterion to discard inadequate responses. The researcher makes sure that all responses were from respondents who are living in Beijing or Shanghai.

Finally, SoJump.com also provides each respondent spent how much time to answer the questionnaire, excluding responses ended at question No.5, the researcher checked all the answering time and found the average time consuming was about 130-200 seconds. The researcher also checked each of these questionnaires which were completed less than 90 seconds, most of them were chosen with “neutral” or “agree” to all questions. Therefore, responses which were completed less than 90 seconds were discarded. 33 responses to the completed questionnaires were discarded since he/she chose “never” to the Q5, and 210 responses were discarded due to incorrect location identification.
3.9.3 Descriptive statistics

Saunders, Lewis and Thornhill (2016) state that researchers can describe and compare variables numerically by descriptive statistics. Researchers usually focus on two aspects of statistics to interpret a variable; they are: (1) the central tendency and (2) the dispersion. Mean is the mostly adopted measure in terms of the central tendency, which involves “all data values in its calculation” (Saunders, Lewis and Thornhill, 2016, p.529). Moreover, it is also significant to interpret how data values are spread around the central tendency. When researchers describe and compare the dispersion by the extent to which values vary from the mean (i.e. standard deviation) (Saunders, Lewis and Thornhill, 2016).

3.9.4 Correlation analysis

As Hair et al. (2010, p.156) defined, the Pearson correlation coefficient (r) presents the strength of the association between two numeric variables. The symbol (+)or (-) prior to the value of r displays that the direction of the relationship is positive or negative. And r should range from -1.0 to 1.0, with -1.0 representing a perfect negative relationship, 0 showing no relationship and +1.0 indicating a perfect positive relationship (Hair et al., 2010, p.157).

Hair et al. (2003) denote the different strength of correlations between two variables by numeric range (Table 2). For instance, if the absolute value of the correlation coefficient ( | r | ) lies in the range between 0.00 - 0.20, it shows the pair of tested variables are not correlated with each other.

<table>
<thead>
<tr>
<th>Range of</th>
<th>r</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 - 0.20</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>0.21 - 0.40</td>
<td></td>
<td>Weak</td>
</tr>
<tr>
<td>0.41 – 0.60</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td>0.61 - 0.80</td>
<td></td>
<td>Strong</td>
</tr>
<tr>
<td>0.81 – 1.00</td>
<td></td>
<td>Very Strong</td>
</tr>
</tbody>
</table>

Table 2. Strength of correlations (Hair et al., 2003)

In multivariate data analysis, it is useful for researchers to examine the simple correlation between each two variables; the results are usually shown in the correlation matrix (Hair et al., 2010).
Multicollinearity is a common phenomenon involved in testing the correlation between independent variables. It defines as “the extent to which a variable can be interpreted by other variables when conducting analysis” (Hair et al., 2010, p.2). It concerns with the correlation among at least three independent variables. Multicollinearity enables to impact the predictive power of any single independent variable. That is to say, when multicollinearity increases, it will make the interpretation of the variance more complicated since it enhances the difficulty in examining the effect of any single variable due to their interrelationships (Hair et al., 2010). Hair et al. (2010) also state that the correlation value lower than .70 between any two independent variables is acceptable.

In this research, the author will use correlation analysis to test the relationship between dependent variable and independent variables as well as to ascertain the multicollinearity between independent variables.

3.10 Hypotheses testing

Hypotheses testing originates from an assumption that concerning a population parameter. The aim of hypothesis testing is to make a judgment regarding the difference between a predicted population parameter and the sample statistic (Aaker et al., 2011).

3.10.1 Multiple regression analysis

Hair et al. (2010) affirm that a dependence technique is one of the multivariate techniques which refers to a variable, or a group of variables is identified as a dependent variable to be predicted or interpreted by other independent variables. Regression analysis is widely applied in the business world, such as forecasting sales and understanding attitudes or behaviors, and determinants of individual activities, etc. (Hair et al., 2010).

This paper aims to evaluate the important level of five independent variables: (1) reference group influence, (2) perceived ease-of-use, (3) sensory experience, (4) brand association, and (5) spatial accessibility toward a dependent variable (customer experience).

Hair et al. (2010, p.16) state that multiple regression analysis is appropriate to adopt “when the research problem is concerned with a single metric dependent variable
presumed to be related to two or more metric independent variables.” It aims to predict the variations in the dependent variable if the independent variables make changes. Moreover, the regression coefficient (b) denotes the relationship between the dependent variable to an independent variable which is not limited in range (Hair et al., 2010).

The significance level (alpha, \( \alpha \)) indicates the extent to which the researcher’s willingness to set of being wrong concerning “whether the estimated coefficient is different from zero.” Typically, the value is set as .05 or even smaller (e.g. .01 or .001).

In agreement with Hair et al. (2010), the Variance Inflation Factor (VIF) denotes the impact that “the other independent variables have on the standard error of a regression coefficient. It is also an appropriate indicator to ascertain multicollinearity further. The higher value of VIF denotes a greater degree of multicollinearity. A typically acceptable value of VIF should be lower than 10. In some case, the value of VIF ranges from 3 to 5 also could be considered as too high (Hair et al., 2010).

3.11 Quality criteria

Reliability and validity enable researchers to evaluate the quality of research scales (Bryman and Bell, 2015).

3.11.1 Reliability

“Reliability refers to replication and consistency” (Saunders, Lewis and Thornhill, 2016, p.202), it concerns about the coherence of a measure of a concept (Bryman and Bell, 2015). Generally, the consistency of answers over time is regarded as an assessment of reliability (Bryman and Bell, 2015).

It is common to evaluate reliability by internal consistency which aims to make sure the consistency through the stages of a research project (Saunders, Lewis and Thornhill, 2016). The frequently adopted approach to measure internal reliability is Cronbach’s alpha. It computes “the average of all possible split-half reliability coefficients” (Bryman and Bell, 2015, p.169). The calculated alpha coefficient, which indicates homogeneity among a unit of items, should vary from 1 (representing perfect internal reliability) to 0 (no internal reliability). Typically, the result with 0.80 is regarded as an acceptable level of internal reliability. Besides, 0.7 is also suggested to be minimally acceptable in some cases (Bryman and Bell, 2015).
3.11.2 Validity

It is also significant to evaluate whether the responses to questions are appropriate and accurate assessments of what researchers intend to measure, as well as whether can generalize the findings (Bryman and Bell, 2015; Saunders, Lewis and Thornhill, 2016). Regarding survey questions which are designed to examine subjective phenomena, it is unable to observe subjective states of people directly (Fowler, 2006). Therefore, the results for how well assessment has been generated to some extent which has to be indirect (Fowler, 2006).

The content of this study was validated by selecting the variables which have been stated in the existing literature (Churchill and Iacobucci, 2015). In this case, variables were reviewed regarding the marketing literature, which presents the relationship or association between variables. Besides, the pilot test which was mentioned in the 3.8.2 enables to improve the content validity.

3.12 Ethical consideration

Bryman (2016) states that social researchers execute researches should consider and respect some principles pertaining to the ethical aspects. For instance, the executed research cannot harm participants (Bryman, 2016). In this study, it will not have any harmful effects on the respondents as they are neither obligated to do something nor situated in dangerous situations in which are prejudicial to their safety or health.

In this case, the online social survey is the major method to collect data. In order to expand the scope of samples and increase their comfortability, the questionnaire was translated into Chinese for respondents to answer. In the questionnaire, the purpose of this study is informed to participants, and the promise of protecting participant's privacy has been made as well (Bryman, 2016). However, since the Internet has been used as an approach to collect data, some specific ethical issues raised by Internet research are difficult to overcome (Bryman, 2016). For instance, anonymity protection is not able to completely accomplished in Internet research.

The author does not believe that the website or tool used to collect data can ideally ensure the protection of privacy information to all participants even the researcher's as well, to some extent which is out of researcher's control based on this issue.
4 Data Analysis and Results

This chapter displays the results of the collected quantitative data. The results derived from 303 valid respondents and their answers to the 27 questions in the self-administrated questionnaire.

4.1 Demographic characteristics of the respondents

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>123</td>
<td>40.6%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>177</td>
<td>58.4%</td>
</tr>
<tr>
<td></td>
<td>Prefer not to say</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>Resident city</td>
<td>Beijing</td>
<td>166</td>
<td>54.8%</td>
</tr>
<tr>
<td></td>
<td>Shanghai</td>
<td>137</td>
<td>45.2%</td>
</tr>
<tr>
<td>Age</td>
<td>18-25 years</td>
<td>102</td>
<td>33.7%</td>
</tr>
<tr>
<td></td>
<td>26-35 years</td>
<td>151</td>
<td>49.8%</td>
</tr>
<tr>
<td></td>
<td>36-45 years</td>
<td>40</td>
<td>13.2%</td>
</tr>
<tr>
<td></td>
<td>Over 45 years</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>Profession</td>
<td>Student</td>
<td>65</td>
<td>21.5%</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>198</td>
<td>65.3%</td>
</tr>
<tr>
<td></td>
<td>Self-employed/</td>
<td>25</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>Own business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>8</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>7</td>
<td>2.3%</td>
</tr>
<tr>
<td>Experiences with</td>
<td>1-3 times</td>
<td>79</td>
<td>26.1%</td>
</tr>
<tr>
<td>O2O business in</td>
<td>4-6 times</td>
<td>118</td>
<td>38.9%</td>
</tr>
<tr>
<td>past three years</td>
<td>7-9 times</td>
<td>68</td>
<td>22.5%</td>
</tr>
<tr>
<td></td>
<td>&gt;10 times</td>
<td>38</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Table 3. Respondents demographic features

In the sum of 303 valid respondents of this study, concerning the gender, female respondents (177) account for 58.4% of the total samples, and male respondents occupy 40.6% of the total samples. Besides, respondents who did not state their gender account for 1%. Concerning the gender structure of Chinese Internet users, as of December 2016, the male-to-female ratio was 52.4: 47.6 among Chinese netizens (CNNIC, 2017).
In terms of the residence city, around 55 percent of respondents (166 samples) are living in Beijing, and the rest of samples (137 respondents) are living in Shanghai. As of December 2016, 16.9 million netizens reside in Beijing, and 17.91 million Chinese Internet users live in Shanghai (CNNIC, 2017).

With regards to the different age group, 253 respondents are from the age group ranging from 18 to 35 years old which accounting for 83.5%. This result is consistent with the report released by CNNIC (2017) concerning the age structure, which presents, the age group of 10-39 was still the largest part of Chinese netizens, 73.7% aged 10-39.

The majority of samples (198) are employees in different companies or organization, the second largest group of the sample professions are students (65). 25 respondents are self-employed individuals. According to the report released by the CNNIC (2017), up to December 2016, 25 per cent of netizens were students, 21.1% of Chinese Internet users were self-employed businessmen or freelancers, 14.7% were employees. The constitute of samples in this study did not strictly correspond to the occupational structure of Chinese Internet users.

Concerning the valid responses to experience with O2O business in the online travel industry, 106 respondents, who made more than seven bookings through the O2O setting in the past three years, have extensive experiences with the O2O online travel industry, 118 samples have a relatively wealth of experience with O2O business activities. Compared with the 33 discarded samples among all 546 responses, owing to no experience with the O2O online travel industry, most of the individuals have particular experience with O2O business in the online travel industry. The samples of this study corresponding to the statements in CNNIC report (2017), 299 million Chinese Internet users had experience with online travel industry in 2016.

4.2 Descriptive analysis

Table 4 presents the mean value or average value of the dependent variable and five independent variables. The mean value indicates the central tendency, “with most of the responses distributed around the mean” (Malhotra, 2010, p. 486). For instance, the average value of reference group influence is 3.60, perceived ease-of-use 4.07, sensory experience 3.81, brand association 3.96, spatial accessibility 3.56 and customer experience 3.76.
Construct | Mean | Std.deviation | N  
---|---|---|---  
Customer experience | 3.7591 | .69337 | 303  
Reference group influence | 3.5967 | .68734 | 303  
Perceived ease-of-use | 4.0726 | .68076 | 303  
Sensory experience | 3.8141 | .64214 | 303  
Brand association | 3.9571 | .54154 | 303  
Spatial accessibility | 3.5578 | .81348 | 303  

Table 4. Descriptive analysis of variables

It also shows the standard deviation of each variable in Table 4. When the data points are more clustered around the mean, it indicates that the variation is smaller. The standard deviation is calculated by the square root of the variance (Malhotra, 2010). For example, reference group influence’s standard deviation is 0.69, perceived ease-of-use 0.68, sensory experience 0.64, brand association 0.54, spatial accessibility 0.81 and customer experience 0.69. The lower standard deviation represents, the less deviation among responses. Data points regarding the responses to spatial accessibility are more varied and scattered than other variables in this study.

4.3 Reliability

All constructs from theoretical framework were involved in measuring their reliability. According to the table shown below (Table 5), the Cronbach's alpha coefficient of the six variables in this study was measured. It ranges from 0.754 to 0.841 which are all higher than 0.7, indicating that all variables in this study have adequate reliability. Each variable was measured by multiple items (i.e. at least three items, which is regarded as a minimized amount to measure a variable) (Fowler, 2014).

<table>
<thead>
<tr>
<th>Construct</th>
<th>N of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference group influence</td>
<td>5</td>
<td>0.801</td>
</tr>
<tr>
<td>Perceived ease-of-use</td>
<td>3</td>
<td>0.833</td>
</tr>
<tr>
<td>Sensory experience</td>
<td>3</td>
<td>0.761</td>
</tr>
<tr>
<td>Brand association</td>
<td>4</td>
<td>0.754</td>
</tr>
<tr>
<td>Spatial accessibility</td>
<td>3</td>
<td>0.841</td>
</tr>
<tr>
<td>Customer experience</td>
<td>3</td>
<td>0.765</td>
</tr>
</tbody>
</table>

Table 5. Internal reliability analysis
4.4 Correlation analysis

Based on the correlation matrix, a measured relationship between the dependent variable and independent variables was shown below (Table 6). Besides, the result of Sig. The 2-tailed level is .000 which denotes that there is significance between any pair of variables in this study. The Pearson correlation coefficient r, between the dependent variable and five independent variables, positively ranges from .422 to .524 in this study. It means that as one independent variable increases (or goes down) the dependent variable will also go up (or down).

<table>
<thead>
<tr>
<th></th>
<th>RGI</th>
<th>PEOU</th>
<th>SE</th>
<th>BA</th>
<th>SA</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RGI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.429**</td>
<td>.420**</td>
<td>.433**</td>
<td>.431**</td>
<td>.469**</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
</tr>
<tr>
<td><strong>PEOU</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.420**</td>
<td>.409**</td>
<td></td>
<td>.342**</td>
<td>.434**</td>
<td>.487**</td>
</tr>
<tr>
<td>N</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
</tr>
<tr>
<td><strong>SE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.433**</td>
<td>.434**</td>
<td>.342**</td>
<td></td>
<td>.401**</td>
<td>.422**</td>
</tr>
<tr>
<td>N</td>
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<td>303</td>
</tr>
<tr>
<td><strong>BA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.431**</td>
<td>.421**</td>
<td>.434**</td>
<td>.401**</td>
<td></td>
<td>.450**</td>
</tr>
<tr>
<td>N</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
</tr>
<tr>
<td><strong>SA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.469**</td>
<td>.524**</td>
<td>.487**</td>
<td>.422**</td>
<td>.450**</td>
<td></td>
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<tr>
<td>N</td>
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<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
</tr>
<tr>
<td><strong>CE</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>303</td>
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<td>303</td>
<td>303</td>
</tr>
</tbody>
</table>

Note: **. correlation significant level at 0.01 level (2-tailed).

Table 6. Correlation matrix

According to the proposed classification by Hair et al. (2003), it shows that all five independent variables are moderately correlated with the dependent variable (customer experience). Perceived ease-of-use has the strongest correlation with customer experience among five independent variables in this study. In terms of the correlation between independent variables, all correlation coefficients are lower than .70 level which does not appear the signs of multicollinearity. Whereas, the correlation values between the dependent variables and the independent variables are not perfect values.
Therefore, the multicollinearity will be subsequently verified by the value of VIF as well.

4.5 Hypotheses testing

4.5.1 ANOVA

(Univariate) Analysis of variance (ANOVA) is a statistical technique that executed to ascertain the overall regression model fit, concerning whether the means of samples are equal to the means of populations (Hair et al., 2010). Researchers have mainly interested the value located in the "Sig." column; the other rows are used primarily for computational purposes (Stockburger, 1998).

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>61,658</td>
<td>5</td>
<td>12,332</td>
<td>43,845</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>83,532</td>
<td>297</td>
<td>.281</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>145,190</td>
<td>302</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Predictors: (Constant), SA, BA, SE, PEOU, RGI

Table 7. ANOVA of the model

It is statistically significant with a significance level of .000, which means that this regression model is not particular for samples in this study but also appropriate to other samples from the population (Malhotra, 2010).

4.5.2 Regression model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.652&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.425</td>
<td>.415</td>
<td>.53033</td>
</tr>
</tbody>
</table>

Table 8. The regression model

The multiple $R$ (.652) is the correlation coefficient which indicates the degree of association between the detected and estimated values of the dependent variable (Hair et al., 2010). Moreover, the coefficient of determination ($R^2$) is applied to assess prediction accuracy of the regression model which computed as the correlation coefficient squared ($R^2 = .425$), it reflects the percentage of total variance of the dependent variable regarding its average value that is interpreted by independent
variables. $R^2$ varies from 0 to 1; the higher value denotes, the better prediction of the dependent variable (Hair et al., 2010).

Hair et al. (2010) define the adjusted coefficient of determination (adjusted $R^2$) as a modified item of the $R^2$ which to assess the situation in which adding more independent variables in the regression equation or changing sample size. It is useful in comparing between models with different numbers of independent variables or different sample sizes or both (Hair et al., 2010). The value of adjusted $R^2$ is usually smaller or equal to $R^2$. The standard error of the estimate is useful in measuring the accuracy of predictions, which figures the variation around the regression line.

In this research, the result presents that five independent variables: reference group influence, perceived ease-of-use, sensory experience, brand association and spatial accessibility can interpret 42.5% of the variability in customer experience (i.e. dependent variable).

**4.5.3 Regression analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.230</td>
<td>.260</td>
</tr>
<tr>
<td></td>
<td>RGI</td>
<td>.161</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>PEOU</td>
<td>.268</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>SE</td>
<td>.234</td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td>BA</td>
<td>.143</td>
<td>.067</td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>.112</td>
<td>.045</td>
</tr>
</tbody>
</table>

Table 9. Regression coefficients

Regarding the extent to which each accepted hypothesis impact customer experience, it can be interpreted by the item standardized coefficient Beta ($\beta$) which implies the change of standardized deviations in the dependent measure for per unit change in the independent variable (Hair et al., 2010).

According to the Table 9, for each unit increase in Reference group influence, Customer experience would increase .160. Moreover, for per unit increase in Perceived ease-of-use, Customer experience would increase .264. For each unit increase in Sensory
experience, Customer experience would increase .216. And for per unit increase in Brand Association, Customer experience would increase .112. For each unit increase in Spatial accessibility, Customer experience would increase .131. Therefore, the results, in terms of the model in this research, denote that the variable perceived ease-of-use has the strongest impact on customer experience, and following variables are the sensory experience, reference group influence, and spatial accessibility, and the construct brand association has the weakest impact on customer experience.

With regards to the collinearity statistics data in Table 10, all values of VIF range from 1 to 2 which smaller than the range from 3 to 5, which can confirm the nonappearance of multicollinearity among five independent variables in this study.

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGI</td>
<td>.669</td>
<td>1.495</td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>.678</td>
<td>1.475</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>.708</td>
<td>1.412</td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>.706</td>
<td>1.417</td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>.680</td>
<td>1.471</td>
<td></td>
</tr>
</tbody>
</table>

Table 10. Multicollinearity analysis

Concerning the coefficients (Table 9), it implies that the significant levels of all five constructs are lower than .05 level which is at typically acceptable level. Reference group influence is .003, Perceived ease-of-use is .000, and Sensory experience is also .000, Brand association is .033, and spatial accessibility is .015. It implies that five hypotheses from Hypothesis 1 to 5 all are accepted.

4.6 Results of Q27

The Q27 was set by the researcher as a ranking question which involving five items to be ranked. The purpose of Q27 was to identify respondents’ different perception regarding the impact of five variables toward their O2O experiences. These five items reflect independently on the primary characteristics of the five independent variables. For instance, in terms of the construct perceived ease-of-use, the issue was summarized as the easy booking operations.
The weighted mean was applied and computed in this section. The weight to the first ranking was set a value of 5, the second place with the weight of 4 and the fifth position with the weight of 1.

As the Figure 5 shown, overall, the weighted mean of Brand and endorsement gains the highest score with 3.72, which implies that most of the samples consider Brand and endorsement as the most important item which impacts their experience towards O2O activities. Subsequent to that, Website information was voted as the second most important item with score 3.31. Following the Easy booking operation with score 2.9 and Friends and family members with score 2.81. Lastly, Majority of samples chose the convenience of reaching the place as the relatively least important item to their O2O experiences, with score 2.27.

![Figure 5. Weighted mean of each item](image)

It is significant to study samples’ responses in detailed, in this study, the researcher mainly focused on the results from the item which was ranked as the most important.

According to the results shown in Figure 6, 108 samples consider the Brand and endorsement would most impact their experience towards O2O activities. Moreover, an approximately equal quantity of samples selected Website information (with 66 samples) or Friends and family members (61 samples) as the most important item to their trust toward O2O experiences. Following the 53 respondents placed Easy booking operations as the most important item to their O2O experiences.
In accordance with the result shown in Table 3, in terms of the past experience with O2O business in the online travel industry in the previous three years, 106 samples (7-9 times and >10 times) had relatively rich experience in it. Among them, 47 respondents voted Brand and endorsement as the most important item, 14 samples voted Friends and family members, 15 samples selected Easy booking operations, and 26 responded Website information. Lastly, 4 responded Convenience.
Concerning the most samples which had less experience in the O2O online travel business, 197 respondents had less experience (1-6 times) in the past three years. Figure 8 shows a relatively stable result compared to the Figure 7. Among them, most respondents (61) also selected the Brand endorsement as the most significant factor which can affect their experience in the O2O business. And then, 47 samples selected Friends and family members and 40 samples selected Website information. Following the 38 responses to Easy booking operation. Convenience also gained the fewest votes.

Figure 8. The responses of respondents with less experience in O2O regarding the item ranked as the most important
5 Discussion

This chapter presents the discussion regarding the developed hypotheses following the theoretical framework as well as the findings from the Q27. This chapter will promote the development of conclusion section.

Even though scant study addresses a quantitative analysis of influential factors of customer experience to O2O business model, with a specific focus in China, there has equivalent research which can be followed regarding customer experience in an online or offline setting independently across the globe.

In terms of the demographic features of samples, the female samples and samples from Beijing, as well as samples occupation as employees, are slightly overrepresented in the entire sample to some extent which may impact the research results.

Concerning the mean value of variables (Table 4), the customer experience had the average value with 3.76 indicating that all samples overall had greater customer experience in the past three years. Moreover, all independent variables have a mean value higher than three which implies that these variables were perceived by respondents as influential to their customer experience in the O2O context.

**H1. Customer experience is positively affected by reference group influence in the context of O2O business.**

-Supported-

The mean value of reference group influence is 3.60 which denotes that respondents consider it can impact their experience toward O2O activities. Moreover, the relation between the reference group influence and customer experience towards O2O business is positive and significant as the likelihood of occurring irrelevance between these two variables by chance is 0.003 (Hair et al., 2010). This finding is in line with the statements in the literature review on this topic regarding the online setting and offline setting independently (Bilgihan, Kandampully and Zhang, 2016; Lemon and Verhoef, 2016; Verhoef et al., 2009). It is proven that the more inputs or ideas from others (i.e. reference group), the stronger customer experience in an O2O setting. As regards to the direction of these two variables, whether positive reference group influence can result in better customer experience and vice versa have to be verified by a further study on this topic.
H2. Customer experience is positively affected by the perceived ease-of-use in the context of O2O business.

-Supported-

The mean value of perceived ease-of-use is 4.07 which is the highest mean value among all variables. Regarding the standardized coefficient from the regression model, the result shows that it influences customer experience the most. The relation between the perceived ease-of-use and customer experience in the O2O context is significant (sig.000) and positive. The finding corresponds to the result by Hackbarth, Grover and Yi (2003) that the positive relation between ease of use and system experience. As a vital step of experiencing an O2O activity, it can be interpreted as websites that communicate service or product information efficiently in a way which is consistent with consumer’s browse process will create a better experience (Rose et al., 2012). An effective website enables to provide effective as well as efficient customer experience (Rose, Hair and Clark, 2011). As Bilgihan, Kandampully and Zhang (2016) address that ease of use has been interpreted as a representative that the company cares for and respects its customers, samples’ answers also reflect on this point that it impacts the customer experience significantly.

H3. Customer experience is positively affected by the sensory experience in the context of O2O business.

-Supported-

Sensory experience, with the mean value of 3.81, is influential to respondents’ O2O experience. Based on the multiple regression analysis, the sensory experience has a significant and positive impact on the customer experience in an O2O setting. As Hultén, Broweus and Dijk (2009) state that the five human senses are crucial to a person’s experience during the processes of different purchase and consumption. As a customer gains better sensory perception to a specific service provider from pictures displayed online or the physical visualization or touch, it will result in superior perception to the entire experience.

H4. Customer experience is positively affected by brand association in the context of an O2O business.

-Supported-
In accordance with the result of the regression model analysis, the relation between the brand association and customer O2O experience is positive and significant as their probability to happen accidentally is 0.033 lower than 0.05 (Hair et al., 2010). The result is in line with what Keller (1993) states that experiential benefits of the brand association involve the feelings of consuming a product or service which can satisfy experiential needs such as sensory pleasure and variety. A brand association involves any links to a brand in one’s memory, and a stronger association is based on numerous experiences or exposures to communications or connection with other links (Aaker, 1991).

Integrating the result of Q27, respondents ranked the Brand and endorsement as the most significant factor to their O2O experience. However, the standardized coefficient (, 112) is the lowest one among five independent variables which imply the weakest influential to the customer O2O experience. The reasons why this happen should be studied further.

H5. Customer experience is positively affected by the spatial accessibility in the context of an O2O business.
-Supported-

The mean value of spatial accessibility (3.56) is the lowest one in this study. According to regression analysis, the relation between the spatial accessibility and customer O2O experience is positive and significant with a Beta .131, which denoted that spatial accessibility was not considered as very influential to their experience towards an O2O activity. It may derive from that traffic infrastructure construction in these two mega-cities is reaching perfection gradually, as macro-accessibility defined by Sit, Merrilees and Birch (2003) that transport connections between the residential locations to the shopping mall. Furthermore, in order to maintain the high volume of customer, service providers mainly establish their locations around the prosperous area which supports the suggestion from Hart et al. (2007) that customer will have more enjoyable experience if service providers pay attention to macro- and micro-accessibility.

Q27

Based on the results from Q27, at first place, it is interesting that most respondents consider the Brand and endorsement as the most significant and influential item to their
experience in the context of O2O business. However, the finding from the regression model analysis cannot support this relation, as the brand association has the slightest impact on the customer experience in the context of O2O business.

Secondly, in terms of the experience, customers with less O2O experiences require having more inputs from friends and family members more than customers with more experiences. Customers with more experience regard Easy booking operation as more influential and significant to their O2O experience.

Finally, the convenience of accessing the location was generally regarded as the least important factors. The finding relatively supports the result of regression model analysis that spatial accessibility is the second least important variable to affect customer experience in the O2O business.

Customer experience & Customer journey

Back to the customer journey map of O2O business (Figure 1-2), it is part of the process model for customer journey and experience from Lemon and Verhoef (2016). Combining the verified five influential factors that demonstrated in this study (i.e. (1) reference group influence; (2) perceived ease-of-use; (3) sensory experience; (4) brand association; (5) spatial accessibility), the entire process model is shown below in Figure 9.

Concerning the view of the customer journey, the first stage is to find out a destination and how to get there and then do the search work regarding the transportation and accommodation (Voss and Zomerdijk, 2007). The next stage operates with decision making to the specific experiential service providers and order placement as well as payment complete (Lemon and Verhoef, 2016). The final step moves through the various stages of experiencing and generates feedback and reviews about the selected destination and experiential service providers and even trigger iterative visits (Lemon and Verhoef, 2016; Voss and Zomerdijk, 2007). The current customer experience incorporates past experience, and this process (Figure 9) may be assistant to empirically examine customer experience over time during the customer journey (Lemon and Verhoef, 2016).
Figure 9. The entire process of customer journey in online travel industry. Source: adapted from Lemon and Verhoef (2016).

During these three stages, (1) Chinese customers may ask for opinions from their friends and family members and also read online reviews. Besides, after they complete the process, they may also become reference group to other individuals. For instance, generating word-of-mouth contents and recommending the destination and experiential service providers to their family or friends, writing down reviews on the brand or company’s website, etc. The reason why respondents ranked reference group influence as influential, especially to Chinese customers with less past experience, maybe it is involved during the entire customer journey. (2) The ease-of-use of the websites also influence Chinese customer’s interactions with the company or brand, involving the easiness of finding out the required information and placing orders, and trustful online payment security. Therefore, the interpretation of Chinese respondents ranked the perceived ease-of-use as the most important factor could be owing to the correlation with decision-making and online transaction security.

In addition, (3) partly online sensory experience (e.g. sight and sound) during the information search and filter (stage 1 and 2), and the entire sensory experience of the provider’s service in the physical location, as well as the consistency of the information provided online (e.g. pictures, videos and 3D visualisation) with physical service
location can affect customer experience as well. The various stages of the experience are the most significant step in the customer journey. Therefore, the sensory experience was ranked by Chinese customers as the secondarily influential factor. Besides, (4) association with a particular experiential service provider or brand lies in customer’s mind over time, and it affects Chinese customer experience at all three stages. The result of Q27 is consistent with this statement that brand association impacts mostly to their customer experience. Finally, (5) the accuracy of presented address of the service provider online and the physical access convenience also affect the customer experience. Spatial accessibility is viewed by Chinese respondents as an influential factor with less significance to the customer experience.
6 Conclusion

*Based on the findings shown in previous chapters, this chapter intends to provide general conclusions, involving answers to the research question and both theoretical contributions and managerial implications as well as possibility of conducting future research.*

6.1 General conclusion

The purpose of this paper is to verify the factors, from the proposed conceptual framework concerning customer experience in the O2O context, are influential to the Chinese customers. The reason of formulating the research area and question in this way is owing to the fact that the development of the O2O business in China has been increasingly growing and will remain a steady growth in 2017 (iiMedia Research, 2016). But it is still an ambiguous phenomenon in the academic world and lack of relevant research. As the “experience” is the vital step of the O2O business model, this research can result in further understanding of the application and relevance of each form of customer experience (that reference group influence, perceived ease-of-use, sensory experience, brand association and spatial accessibility) in the O2O business model as well as from the perspective of customer journey.

With regards to the literature review, it could not find relevant quantitative study presenting the extent to which factor impacts the customer experience in an O2O setting. Thus, it is significant to visualize how much these factors impact the customer O2O experience and how they correlate with it. This research was carried out with Chinese population who permanently reside in Beijing and Shanghai, with the age of 18 years old and higher and have access to the Internet. The data analyzed to enable the researcher to answer the research question:

**What factors affect customer experience in China in the online travel industry of O2O business?**

The findings of this study show that all five proposed hypotheses are supported. Therefore, five variables (reference group influence, perceived ease-of-use, sensory experience, brand association and spatial accessibility) are positively influential to Chinese customer experience in the context of O2O business. However, the result of
regression model was not satisfactory, the predictive accuracy of the proposed model was relatively low.

Perceived ease-of-use and Sensory experience are the most dominant influential factors followed by the Reference group influence and Spatial accessibility. The Brand association impacts Chinese customer O2O experience least. Besides, reference group influence is more influential to Chinese customers who have less O2O experiences, while perceived ease-of-use has more impacts on customers who have more O2O experiences.

In terms of the analysis from customer journey perspective, it integrates and verifies the relationship between Chinese customer experience and five factors from another perspective.

6.2 Theoretical contributions

Through the literature review, the author identified the research gap which has not been filled in.

First of all, as O2O business is an emerging phenomenon in e-business filed, there is no study concerning the customer experience in the O2O context. Most of the research study the customer experience either in an offline environment (e.g. Verhoef et al., 2009) or an online setting (e.g. Bilgihan, Kandampully and Zhang, 2016). Furthermore, there is no paper proposing conceptual models regarding influential factors to customer experience in the O2O context. For instance, Bilgihan, Kandampully and Zhang (2016) develop a unified customer experience model in the online environment. However, the data and approach of verifying the model were not shown in the paper. Based on the theoretical review, the researcher developed and proposed a conceptual framework for this study that involving five variables from different aspects which may affect customer experience in China’s O2O setting. For instance, the reference group influence, sensory experience and spatial accessibility are variables concerning both online and offline environment. The brand association is involved in general and perceived ease-of-use is just applied in an online environment.

Secondly, most of the previous studies conducted qualitative method to gather data rather than the quantitative approach that utilized in this study. This paper facilitates the
visualization of how much these factors impact the customer O2O experience and how they correlate with it.

Finally, there is no paper focusing on the China’s O2O market which is leading the revolution of O2O business (Pasquier, 2015). Moreover, this paper also analyses the result from the customer journey perspective. These findings make significant contributions to the theoretical development on this topic.

6.3 Managerial implications

The findings of this research may also be useful to service providers who are operating in O2O business in China, mainly working in the online travel industry.

Based on the findings of this study, service providers should effectively manage the negative comments on their websites which support the suggestion from Sparks, So and Bradley (2016). Moreover, proper information display on the website and easy booking operations are influential to Chinese customer experience indeed. Service providers should avoid scant or overloaded information on the website. Furthermore, the offline setting ought to provide high-quality service as well. Customers who possess superior experiences with certain experiential service providers or brands may result in repeated visits in the same place in the future.

6.4 Limitation and Future research

The first limitation of this study is simply focusing on Chinese O2O market with a particular focus on the online travel industry and people who reside in Beijing and Shanghai. Future research can expand the scope of research to other O2O industries, or other cities even other countries.

Concerning the constitute of samples, the population from self-employed individuals and male respondents should be more involved.

This paper can be seen as the starting point of conducting research relevant to customer experience in the O2O setting. The second limitation is that the selected five variables are generally correlated with customer experience either in an offline environment such as shopping mall or an online setting such as online shopping. As O2O is an integrated form of online and offline settings, thus, are there any unique variables which are only
influential for an O2O business model can be identified and verified further in the future research.

The entire customer journey should also take multiple touch points into consideration which cannot be reached in this study.

Since the result of multiple regression models was not satisfactory ($R^2=0.425$). Therefore, the researcher could have predicted other types of regression model rather than multiple regression analysis. Thus, to increase the prediction accuracy, other regression models should also be developed and examined in the future. Moreover, the findings from the Q27 were not consistent with the result of regression model analysis. Therefore, future research could ascertain the relation between the brand association and customer experience again. Concerning the customer journey, multiple touch points are also important role in it. Therefore, the future research could also focus on various roles of multiple touch points.
7 Bibliography


Hyman, H. H. (1942). The psychology of status. Archives of Psychology (Columbia University), No. 269, pp.94.


Appendices
Appendix A Questionnaire – English

Hi,
I am a student in Innovation through Business program from Linnaeus University. I am conducting the master degree project concerning influential factors to customer experience in O2O (online to offline) context and how easy it is for you to enter into the O2O context. This study mainly focuses on online travel industry. It emphasizes your personal experiences, which means that all actions (online booking and offline experience) should be done by yourself.
There is a list of statements, where you evaluate to what extent you agree or disagree with them, from one (1) is strongly disagree and five (5) is strongly agree. Besides, a few questions regarding the frequency or the extent are also stressed. If you have any additional questions or want to know more about the result of this study, please do not hesitate to contact me.
Your responses are highly valuable for my study. I really appreciate your help and promise that all your responses will be anonymous. The survey contains 27 questions and takes approximately 5-8 minutes to complete.
Thanks in advance!

Information about you
1. Gender
   ○Male ○Female ○Prefer not to say
2. Your city of residence
   ○Beijing ○Shanghai
3. Your age
   ○18-25 years ○26-35 years ○36-45 years ○Over 45 years
4. Your profession
   ○Employed ○Student ○Unemployed ○Self-employed/own business ○Other
5. How often (how many times) did you book plane tickets or hotels and experienced the service in offline operations yourself in the last three years?
   Never(0) Rarely(1-3 times) Occasionally(4-6 times) Often(7-9 times) Always(>10 times)

6. How often (how many percent) do you get satisfied experiences with airline companies or hotels?
   Never (0) Rarely (1-30%) Occasionally (30-50%) Often (50-80%) Always (>85%)

7. I use mobile devices (e.g. smartphone, iPad) to book flight tickets and hotels online more than desktops and laptops.
   Strongly disagree Disagree Netural Agree Strongly agree

8. I would like to recommend the service (from the hotel or airline companies) I have experienced to my friends.
   Never Rarely Occasionally Often Always

9. Acquaintances’ (e.g. friends, family members, who travel with you together) ideas affect my perceptions of the service provider.
   Strongly disagree Disagree Netural Agree Strongly agree
10. Other unknown customer’s behaviors in the same airline or hotel have influenced my perception of the company.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. Opinion leaders/celebrities ideas affect my perceptions of the service provider.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. I always share my own impressions about a hotel or an airline company with my friends and family members.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

13. I always post reviews online about my own impressions about a hotel or an airline company.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. It is easy to become confident when I book flights or hotels online.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15. All websites or Apps are easy to use while make bookings.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

16. It is not difficult for me to learn how to navigate websites or Apps to make bookings of plane tickets or hotels.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Netural</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
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<td>2</td>
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<td>5</td>
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</tbody>
</table>

17. These websites, which I can book plane tickets or hotels, provide various types of information, such as videos, images and texts.

<table>
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<th>Agree</th>
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</table>

18. I prefer to make bookings from websites which have more videos or images.

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<th>Agree</th>
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</table>

19. The information presented on the websites is always consistent with the physical operations.

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</table>

20. I believe that a hotel or airline companies with better reputation always can provide better service and environment.

<table>
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</table>

21. I always search and book the same brands of flights or hotels since I had positive experiences with the service provider before.

<table>
<thead>
<tr>
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<th>Netural</th>
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</table>

22. My impressions about one airline or hotel is associated with the impressions about the whole brand or group.

<table>
<thead>
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23. Opinion leaders/celebrities ideas affect my association with the brand.

<table>
<thead>
<tr>
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<th>Agree</th>
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<td>5</td>
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</tbody>
</table>
24. The location information presented on the websites is always accurate.
   Strongly disagree   Disagree   Neutral   Agree   Strongly agree
   1                     2           3         4         5

25. It is worth to experience appealing service or environment of a hotel no matter how far the distance between my position and the hotel is.
   Strongly disagree   Disagree   Neutral   Agree   Strongly agree
   1                     2           3         4         5

26. I would like to pay the travel cost which incurred by getting to the hotel.
   Strongly disagree   Disagree   Neutral   Agree   Strongly agree
   1                     2           3         4         5

27. What influences your trust for the O2O experience most? Please ranks them.
    Friends and family members
    Easy booking operations
    Website information
    Brand and endorsement
    Convenience of reaching the place
Appendix B Questionnaire — Chinese

关于您的个人信息
1. 您的性别 [单选题] [必答题]
   ○ 男  ○ 女  ○ 不愿透露
2. 您目前居住的城市 [单选题] [必答题]
   ○ 北京  ○ 上海
3. 您的年龄 [单选题] [必答题]
   ○ 18-25 岁  ○ 26-35 岁  ○ 36-45 岁  ○ 45 岁及以上
4. 您目前从事的职业 [单选题] [必答题]
   ○ 学生  ○ 公司雇员  ○ 自雇/自主创业  ○ 未就业（失业/退休）  ○ 其他
5. 在过去三年中，您为自己预定机票并登机或预订酒店并入住的频率是多少？ [单选题] [必答题]
   ○ 从未有（请跳至第问卷末尾，提交答卷）
   ○ 偶尔（1-3次）  ○ 有时（4-6次）  ○ 经常（7-9次）  ○ 频繁（>10次）
6. 您对自己预订并体验过的航空公司或酒店的服务满意程度有多少（百分之多少）？ [单选题] [必答题]
   ○ 很低（0-20%）  ○ 较低（20-40%）  ○ 一般（40-60%）  ○ 较高（60-80%）  ○ 很高（高于80%）
7. 我使用移动设备（例如智能手机，iPad）在线预订机票或酒店，而不是台式机或笔记本电脑。 [单选题] [必答题]
   ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
8. 我愿意向我的朋友推荐我曾体验过的酒店或航空公司。 [单选题] [必答题]
   ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
9. 与我同行的旅伴（例如朋友，家人）的看法能够影响我对该酒店或航空公司的看法。 [单选题] [必答题]
   ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
10. 与我在同一航班或酒店的其他顾客的行为（如帮助行为或破坏行为）会影响我对该航空公司或者酒店的看法。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
11. 您对自己预订并体验过的航空公司或酒店的整体满意程度有多大？ [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
12. 我通过朋友、家人以及网上分享关于我对酒店或航空公司的印象或评价。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
13. 我经常在网上发表关于航班或酒店的环境、服务等方面的意见。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
14. 当我从网站预订航班或酒店时觉得很轻松自如。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
15. 我用过的网站或手机App在进行预定时都易于使用。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
16. 对我来说，学习如何使用网站或手机App来预订机票或酒店并不困难。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
17. 我用过的预订网站或手机App提供了各种类型的信息，如视频，图像和文字等。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
18. 我更喜欢从视频、图像或文字更丰富的网站预定机票或酒店。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
19. 网页上提供的信息总是与实际环境一致。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
20. 我相信一家拥有更好声誉的航空公司或酒店总是能够提供更好的服务和环境。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
21. 我经常搜索和预订相同品牌的航班或酒店，因为该服务商之前为我提供了良好的服务体验。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
22. 我对一家航空公司或酒店的印象与我对其整个品牌或团体的印象有关。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
23. 意见领袖或名人对某品牌的意见会影响我对该品牌的看法。 [单选题] [必答题]
    ○ 很不同意  ○ 不同意  ○ 一般  ○ 同意  ○ 很同意
24. 网页或手机应用程序上显示的商家位置信息始终是准确的。 [单选题] [必答题]
○ 很不同意 ○ 不同意 ○ 一般 ○ 同意 ○ 很同意

25. 无论酒店的位置有多偏远，我认为去体验具有吸引力的服务或环境都是值得的。 [单选题] [必答题]
○ 很不同意 ○ 不同意 ○ 一般 ○ 同意 ○ 很同意

26. 对于更有吸引力的酒店，即使位置偏远我仍然愿意支付额外的交通费用。 [单选题] [必答题]
○ 很不同意 ○ 不同意 ○ 一般 ○ 同意 ○ 很同意

27. 排序题

27. 什么因素会影响你对 O2O 环境的信任？请对以下因素根据不同的信任程度进行排序 [排序题，请在中括号内依次填入数字] [必答题]
[ ] 朋友、家人或意见领袖的看法
[ ] 预订的易操作性
[ ] 网站提供的信息
[ ] 品牌及对其认可
[ ] 商家的位置

提示：请先选择对您影响程度最大的因素，以此类推。1 表示对您影响最大，5 代表对您影响最小。