Young people's perspectives on self-service technology and hospitality: A McDonald's case study

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Abstract

Self-service technology (SST) is a new service delivery method widely used in different fields, including the hospitality industry. The kiosk is one of the most popular self-service technologies in the hospitality industry. The motivations for organisations to implement SST include reduced labour costs, and increased efficiency, productivity and corporate performance (Kuo, Huang, Tseng, & Boger, 2016); however, the motivations, reactions and attitudes of customers towards SST differ widely. Although the relationship between technology and customer satisfaction has attracted increased attention in recent years, no studies have provided a deep insight into young customers' SST-using experiences and how they view SST in a hospitality context. This study therefore uses a qualitative methodology to explore young people's SST-using experiences and their perspectives of hospitality in relation to SSTs. In particular, this research explores why young people choose SST as a service method in fast food restaurants (McDonald's) and how they experience hospitality while using SST in a restaurant. Semi-structured interviews were used to collect data from young people (18 to 24 years old). Not all the interviewees felt that SST provided hospitable moments; in fact, it was contested. However, the findings suggest that young people prefer SST as it provides them with a level of empowerment when they purchase their fast food. Moreover, some young people in this study felt that they could experience hospitable moments while using a kiosk. Findings are discussed in terms of their contribution to theory and practice.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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Confidential Material

The young people who participated in this research have retained the right to have their identity kept confidential. To maintain anonymity, names that may identify the respondents have been replaced with pseudonyms.

Chapter 1. Introduction

1.1 Research background

With the development of technology, an increasing number of self-service technology kiosks (SST) are being adopted by service providers such as hotels, restaurants, airports, and banks (Cunningham, Young, & Gerlach, 2009). SSTs can supply or replace traditional service delivery channels for many service organisations, for example, the use of automated teller machines in banks, self-check-ins at the airport, and self-service kiosks in hotels and restaurants (Rosenbaum & Wong, 2015). Kasavana (2008) stated that the self-service kiosk has become one of the most popular SSTs in the hospitality industry. A self-service kiosk is defined as a self-service machine that helps customers order food and complete other services without encountering an employee (Kim, Christodoulidou, & Choo, 2013). However, customers hold different attitudes towards the implementation of SSTs in the hospitality industry.

Meuter, Ostrom, Roundtree, and Bitner (2000) stated that customers are satisfied with SST because its application could meet customers' intensified needs, bring additional benefits, improve the consuming experience, and finish a service task smoothly. 'Intensified need' refers to situations in which customers need services and products more urgently than usual because of environmental factors (Meuter et al., 2000), in this case the environment of a fast food restaurant. SST applications have no limitation on place and operating time so they can assist customers during a difficult situation such as asking for food late at night, or in a park (Kuo et al., 2016). SST can bring additional benefits and improve the consuming experience. For example, SST makes it easy to avoid interaction with people, saves time, is open 24 hours a day, provides a flexible location and saves money (Curran, Meuter, & Surprenant, 2003). SST finishes a service task smoothly and can make some customers feel technology does help in their daily life. This might then dispel their doubts about the usefulness of SST applications (Meuter et al., 2000).

However, some customers are not willing to use SST for four reasons: pre-intention, previous unsatisfactory experiences, readiness, and technology anxiety (Blut, Wang, & Schoefer, 2016). Hemmington (2007) suggested that the foundation of hospitality is communicating and interacting with human beings. In prior research, some customers expressed the view that communication cannot be replaced by machines and they

therefore have a negative prejudicial attitude towards SSTs (Peters, 2016). Other customers have a negative attitude towards SST because they were dissatisfied with their previous experience. For example, they may have experienced slow service, unavailable service or unsure responses (Forbes, 2008; Wang, Harris, & Patterson, 2012). These negative experiences can decrease customers' willingness to use SST again in the future (Yen, Gwinner, & Su, 2004). In addition, technology anxiety and a lack of customer readiness may also add to customers' rejection of SST (Chang & Lin, 2011; Gelderman, Ghijsen, & van Diemen, 2011).

Thus, the benefits of SST in the hotel industry are controversial, and a deeper understanding of customers' experiences and perspectives is useful.

1.2 Research problem

With the development of technology, an increasing number of SSTs are being used in the service industry such as self-order kiosks, self-check-in, self-check-out where SST can improve efficiency, enhance control, reduce labour cost and increase profit (Considine & Cormican, 2016; Cunningham, Young, & Gerlach, 2008; Meuter et al., 2000; Wei, Torres, & Hua, 2016). However, Ritzer (2011) expressed the view that high levels of efficiency and control have an adverse impact on service quality and hospitableness in the context of commercial hospitality such as a fast-food restaurant. Furthermore, the application of SST lacks human interaction, which could exacerbate the problem of the sense of the inhospitality of fast-food restaurants (Ritzer, 2011). However, young people, as an important market segment, seem to be willing to use SST in fast-food restaurants (Herne, Adams, Atkinson, Dash, & Jessel, 2013), suggesting that there is considerable value in SST to some segments of the fast-food market.

Previous studies have generally researched customers' acceptance of SST in the service industry (e.g. Considine & Cormican, 2016; Cunningham, Young, & Gerlach, 2009; Katja & Britta, 2014; Kim, Christodoulidou, & Choo, 2013; Torres, van Niekerk, & Orlowski, 2017). Young people are an important segment of consumers, but their ideas about SST in fast-food restaurants have not been thoroughly investigated. This research takes a qualitative approach and uses semi-structured interviews to deeply explore why young people use SST (i.e., a self-order kiosk) in fast-food restaurants (i.e., McDonald's) and to discover their attitudes and feelings while using SST in relation to consumption.

In addition, this research takes customers' points of view as indicators of whether the application of SST increases or removes a sense of hospitality, rather than just taking the operators' perspective to determine the advantages and disadvantages of SST in the service industry. This research also identifies important elements that make young people experience a sense of hospitality or hospitableness in a fast-food restaurant.

1.3 Research aims and questions

The aim of this study is to explore customer experience and perspectives of SST use and determine how customers view and experience hospitality while using self-service kiosks in McDonald's restaurants.

Research questions arising from the problem statement are:

1. Why do young people choose to use SST as a service delivery method in fast-food restaurants?
2. How do young people experience hospitality when using SST at McDonald's restaurant?

To explore answers from young people, a qualitative case study approach was adopted. In this approach, the nature of the research is explorative and interpretive. A purposive sampling strategy was used to select as research respondents young customers (18 to 24 years old) who have used the McDonald's self-order kiosk before. A semi-structured interview was used for collecting data, and a thematic coding method was chosen for analysing the interview data.

Although not all interviewees expressed that SST provided hospitable moment, they explained their own reasons and stories in detail. There are two aspects to the research findings: the reason for young people using SST, and young people's perspectives on hospitality. Seeking more customer empowerment was identified as the main reason for young people using self-order kiosks in fast-food restaurants (i.e., McDonald's). Young people were found to be willing to co-produce their own satisfying consumption experience by using self-order kiosks because they could control their use of time, and have detailed product information, privacy and service. The peer effect also played a role in attracting young people to use self-order kiosks at McDonald's. In terms of hospitality offerings, some young people expressed the view that human interaction is

a key element of hospitality, while others indicated that they sometimes experienced a sense of hospitality while using a kiosk. However, a hospitable moment in relation to a self-order kiosk is an acknowledgement by the individual that the kiosk is customer-oriented, as the requirements of customers vary according to the situation. Thus, different customers have their own hospitable moments in relation to a self-order kiosk, which is unique and cannot be replicated because of their different requirements.

1.4 Overview of the dissertation

There are six chapters in this dissertation. Following this chapter, which introduces the background of research as well as the research questions, Chapter Two, the literature review, introduces the main topics of the research such as SST, the categories of hospitality and young people's attitudes towards fast-food restaurants. The gap in the literature which the study aims to fill is stated clearly in the conclusion to this chapter.

Chapter Three introduces the research paradigm, methodology, and method. The research took a qualitative approach as the methodology and case study as the method. Data were collected using semi-structured interviews and coded by a thematic coding method. A total of 16 respondents consisting of young people (18 to 24 years old) were interviewed.

Chapter Four presents the findings from the research, which include nine key themes: time, pressure, interaction, empowerment, privacy, information, convenience, enjoyment, and the peer effect, that help explain why young people use self-order kiosks in McDonald's restaurants. This chapter also presents the core hospitality elements identified by young people and how they experienced hospitality while using a kiosk.

Chapter Five provides a discussion of the findings. Customer empowerment and the peer effect are main reasons why the young people in this study use the self-order kiosk at McDonald's, so these themes are analysed in this section. In addition, where young people have a negative attitude towards McDonald's and the application of kiosks, this perspective is also discussed.

Chapter Six answers the research questions and overviews the practical and theoretical implications and limitations of the research. Suggestions for future research are also presented. Guaranteeing the quality of human service and offering more service options

for customers are the practical implications from the research. The main theoretical implication relates to challenging human interaction as the key element in feelings of hospitality. Therefore, the research suggests the relationship between SST and a sense of hospitality still need to be explored further in the future.

1.5 Terms

Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement (Meuter et al., 2000).

A self-service kiosk is defined as a self-service machine that helps customers to order food and complete other services without encountering an employee (Kim, Christodoulidou, & Choo, 2013).

Chapter 2. Literature Review

2.1 Introduction

This chapter presents a review of the history of and basic information on SST, the literature on the concept of hospitality, young people's attitudes towards fast-food restaurants, previous studies' frameworks and the introduction of consumption value theory to provide a background to the study. The general hospitality concept is then introduced to show why some people disagree with the application of self-service in the hospitality industry. As young people are the target customer group in this research, it is necessary to know their attitudes towards kiosks applied in the fast-food industry. Consumption value theory is adopted as the research theoretical framework.

The review of the literature concerning customers' acceptance of SST in the service industry reveals that few studies have specifically focused on young people's perspectives. Most research has measured the advantages and disadvantages that kiosks bring to the service industry from the perspective of the organisation and managers. This study, therefore, explores young people's perspectives on SST in the fast-food industry and provides the customers' point of view concerning how a kiosk increases or removes a sense of hospitality.

2.2 Self-service technology

This section overviews the history of SST's development in the hospitality industry and the categories of SST. The section introduces three common categories of SST in the hospitality industry and then highlights the difference between a kiosk and other SSTs.

2.2.1 Development of SST

In 1916, Clarence Saunders built the first ever self-service grocery store, named the Piggly Wiggly, in Memphis, Tennessee, United States of America (U.S.). Saunders believed customers were an untapped resource who could serve themselves, which was a revolutionary idea for the service industry (Kolbe, Brenner, & Salomann, 2006). Self-service means "customers perform tasks by themselves that were once done for them by others" (Kolbe et al., 2006, p. 66). Customers serve themselves rather than being served by others, which appears to break the host-guest relationship in which the host serves customers. However, the hospitality organisation gains benefits such as reduced cost (Kuo et al., 2016), increased efficiency and productivity (Larivière et al., 2017),

which enables them to serve more customers and potentially make more profit (Peters, 2016).

The self-service format has had evolutionary progress over time because of the level of technology automation and the degree of technology that mediates customer relationships (Kolbe et al., 2006). In 1970, Alvin Toffler, an American writer and futurist, was first to identify customers as having joint roles of producers and consumers at the same time. He labelled this development "prosuming" (consisting of the terms "producing" and "consuming") (Toffler, 1970). In 1986, Mills and Morris further stated that the client's role is to be a service organisation's "partial" employee. Mills and Morris (1986) maintained that in a service setting, a customer could share the production responsibilities with the producers. Similarly, Wikström (1996) referred to customers as co-producers who are part of a type of joint venture in the marketplace with the co-workers. Prahalad and Ramaswamy (2000) extended Wikström's (1996) concept by referring to customers not only as co-producers, but also as co-creators of value. They argued that customers (especially with the help of the Internet) step out of their traditional roles and become part of an enhanced network enabling them to act as companies' collaborators, co-developers, and even competitors.

In recent years, the shift from high-touch (e.g., withdrawal requests handled by a bank teller) to high-tech (e.g., withdrawing cash from automated teller machines) has become a feature of the service industry. This development reflected in the increased usage of the term "self-service technology" (SST) (Meuter, Ostrom, Roundtree, & Bitner, 2000). SSTs are technological interfaces that enable customers to produce a service independent of direct service employee involvement (Meuter et al., 2000). SSTs are widely used in various aspects of daily life, such as automated teller machines in banks (Chang & Lin, 2011), self-checkout machines in the retail industry (Weijters, Rangarajan, Falk, & Schillewaert, 2007) and self-service kiosk machines in a hotel lobby (DiPietro & Wang, 2010).

2.2.2 Popular SSTs in the hospitality industry

Kasavana (2008) pointed out that the three most popular applications in the hospitality industry are vending machines, web applications and kiosks. A vending machine is a stand-alone machine that offers tangible products to customers as long as the payment is accepted. The most common example in the hospitality industry is of vending

machines selling drinks and snacks (Kasavana, 2008). The advantage of a vending machine is that it is direct and simple, allowing customers to see the products and make a quick purchase decision. However, vending machines only focus on simple products and cannot deliver complex services (Kit, 2011).

Web applications mean that all products and services are presented in digital format online and customers can select digital pictures or hypertext links to choose services or products. Within web applications, all processes are completed directly online including the non-cash payment (Kasavana, 2008). With the development of the Internet, online consuming has become a global phenomenon and is gradually changing customers' consuming behaviour (Kit, 2011). For example, booking hotels through the use of online reservation platforms is a growing phenomenon within the hotel industry. Additionally, through the Internet, consumers are able to scan, select, order, monitor and modify their room selections without the help of a hotel employee or travel agent.

A kiosk is an interface that can provide service, products, and information through cashless transactions (Kasavana, 2008). Customers cannot directly see products from a kiosk, which is its main difference from a vending machine (Kasavana, 2008). The structure of a kiosk is more complicated than that of a vending machine, as a kiosk usually has a touch display screen and, sometimes, a keyboard. Customers can browse and touch the kiosk screen, select the service type (e.g., order, check-in, check-out), input the required information (e.g., identification details, the method of payment) and wait to receive the services or products (e.g., order number, tickets, room receipt). A well-designed kiosk can guide customers to finish their service process smoothly and without the aid of a human employee (Kaushik, Agrawal, & Rahman, 2015). As such, it saves labour costs (Kit, 2011). In addition, kiosks have the capacity to synchronise with mobile phone applications, which could increase efficiency and enhance the overall service experience (Bergweiler, Deru, & Porta, 2010).

However, some customers do not support the application of SST in the hospitality industry because they seek human communication as part of hospitality (Lashley, Lynch, & Morrison, 2007). The next section will therefore introduce the general definition of commercial hospitality in order to understand why some customers might not like SST in the hospitality industry.

2.3 Hospitality definitions and commercial hospitality

This section introduces a general definition of hospitality and explains the different categories of hospitality, especially commercial hospitality. In addition, the attitudes of young people towards fast-food restaurants in a commercial hospitality context are explored.

2.3.1 General hospitality definition

This section introduces basic definitions and the essence of hospitality, then introduces the differences in hospitality in private, social, and commercial environments. Because this study is a case study of McDonald's self-service kiosks in the context of commercial hospitality, this section will also discuss the application of SSTs in commercial hospitality.

There are two approaches to defining hospitality: semantic and evidential. Lashley and Morrison (2000) proposed that the semantic definition is more academic and comes from a university hospitality management perspective. Conversely, the evidential definitions come from the real-world, but are not well developed. Brotherton (1999) offered a coherent definition of hospitality, stating that it is "a contemporaneous human exchange, which is voluntarily entered into, and designed to enhance the mutual wellbeing of the parties concerned through the provision of accommodation, and/or food, and/or drink" (p. 168). This definition emphasises hospitality as a human exchange, with both parties having a willingness to acquire what they need.

Additionally, Brotherton and Wood (2001) further suggested that hospitality has an essence which includes: the physical products, the exchange relationship, its uniqueness within various hospitality contexts, and the centrality of human interaction. This suggests that hospitality can be provided for different reasons and is concerned with building an exchange relationship with economic, social or psychological aspects by offering physical products to guests such as food, drinks, and accommodation. Brotherton and Wood (2001) also stated that hospitality is particularly related to human behaviours and interactions. According to Brotherton and Wood's (2001) perspective of hospitality, the application of SST offers physical products to customers, builds an exchange relationship with customers, and can be used for a variety of purposes. Human interaction is the only element absent from the process, which suggests it will not match the requirements of being hospitable. However, SSTs are widely used in the service

industry. An investigation into the categories of commercial hospitality might provide the reason for the widespread use of service machines in the service industry. Categories of hospitality, especially commercial hospitality, will therefore be introduced in the following discussion.

2.3.2 Hospitality categories

Lashley and Morrison (2000) developed a three-domain model to categorise the concept of hospitality. This theoretical framework analyses three different aspects: social and cultural domains, private or domestic levels, and commercial levels. In private or domestic hospitality, individuals offer a more authentic and genuine hospitality without financial motives, to strangers, which makes them feels at home through private home settings (Kit, 2011). At the social and cultural level, the duty of hospitality and the relationship between host and guest could vary in different societies and cultural backgrounds. Moreover, different societies set different standards of being hospitable to customers and the obligation of being hospitable to customers has changed over time (Lashley et al., 2007).

On the other hand, commercial hospitality behaviour is generally provided for ulterior motives including economic benefits and commercial advantage. Moreover, commercial hospitality has some features including pursuing high efficiency, calculability and a high degree of control (Lashley et al., 2007). High efficiency is pursued by commercial hospitality because an efficiently run hospitality setting could process more customers and produce higher profits (Thompson, 2009). Many hotels and restaurants search for great efficiency by using SSTs such as kiosks (e.g., hotel self-check-out kiosks) (Hanks, Line, & Mattila, 2016). SST accelerates the service speed and enables more customers to be served, which may enhance customer satisfaction (Thompson, 2009). Commercial hospitality places an emphasis on calculability and enables production and service to be quantified. Commercial hospitality organisations place importance on the numbers of customers served, the speed of service and lowering labour cost. The use of SST helps the calculability become tangible and accountable (Dixon, Kimes, & Verma, 2009). Technology not only increases the speed of service by reducing order-taking time and shortening payment time but also reduces labour costs (Kokkinou & Cranage, 2013; Thompson, 2009). A high degree control of the business units becomes a required principle in many fast food businesses (Hsu & Chiang, 2011). For example, the high degree of control ensures that brand standards are being met, service times are defined

and delivered, costs are managed, and expenditure limited. The use of technology could ensure a restaurant offers a high standard quality of products and more consistent service to customers (Dixon et al., 2009).

However, Ritzer (2011) suggested that commercial hospitality has a shortcoming. He proposed that high efficiency, high calculability and a high level of control help the expansion of the hospitality industry but simultaneously threaten the authenticity of hospitality. Therefore, the efficiency and calculability of commercial hospitality have an adverse effect on the quality of service, and the high degree of control acts as a restraint on the ability to be hospitable (Ritzer, 2011). The controls required of the organisation limit the flexibility required to meet unusual guest requests, to resolve customer complaints or to maintain high-quality and responsive service. Warde and Martens (2000) made a comparison between dining out in a private setting and commercial setting, and drew the conclusion that diners tend to regard private hospitality as authentic, and commercial hospitality experiences as simulated. In this case, a fast-food restaurant might be regarded as an inhospitable place because this type of restaurant pursues efficiency, calculability, and control, and customers are required to do some service by themselves (Lashley et al., 2007). Therefore, the application of SST is regarded as a commercial way of increasing efficacy and control, but has a weak ability to be hospitable (Ritzer, 2011). However, Herne et al. (2013) suggested that young people, as an important consuming group, do not reject SST in hospitality; instead, they enjoy using it (Herne et al., 2013). This indicates that young people accept commercial hospitality and the application of SSTs. In looking to explain commercial hospitality activity, Hemmington (2007) provided a useful framework to help analyse and explore the commercial hospitality experience.

To explain the commercial hospitality experience, Hemmington (2007) provided a structure of five dimensions: the host–guest relationship; generosity; theatre and performance; many little surprises; and safety and security. The host-guest relationship is the essential part in the context of commercial hospitality. Indeed, the hospitality industry is perceived as much more people-oriented than other industries and tries to build a long-term interaction with guests (Pizam & Shani, 2009). The host would balance between generosity and economic return through controlling the cost of products and making a financial gain from guests; however, at the same time, hosts are also supposed to create welcoming and generous feelings for their guests (Pizam & Shani, 2009). As for theatre

and performance dimensions, the key point of hospitality is offering unique experiences to guests which are performed by the staff of hotels and restaurants (Lashley et al., 2007). In this case, hospitality tries to stimulate the guests' five senses in order to create a good experience, which is similar to the theatre. A number of little surprises at important moments aim to extend guests' good feelings (Lashley et al., 2007). For example, when the staff take a creative approach to designing guests' experiences, then a whole experience consists of a chain of surprise moments to excite their guests. Protecting guests' personal security could be identified as one of the significant components of enjoying hospitality (Lashley, 2007). These five dimensions of commercial hospitality offer a specific structure for measuring how young people experience hospitality when they use SST in McDonald's restaurants.

2.3.3 Young people's attitudes towards fast-food restaurants

As this research focuses on young people as the segment customers for the SST application in McDonald's restaurants, this section will introduce young people's opinions about fast-food restaurants and their attitude toward SST applications in the fast food field.

Young people identify fast-food restaurants as youthful and welcoming places where they fill their particular needs of eating and socialising regardless of the fact that fast-food restaurants are seen by some as inhospitable places (Untaru & Ispas, 2013). Untaru and Ispas (2013) explored the motivation of young people in choosing fast-food restaurants and concluded there were eight motivations: quick service, food price, familiarity, the accessibility of location, the socialising possibility, home delivery and take-away products, the availability of products at any time, and 24-hour opening. The speed of serving and the food price are regarded as essential criteria when choosing a certain type of restaurant (Kanyan, Ngana, & Voon, 2016). Familiarity with the products offered by a fast-food restaurant conveys to young people that they receive trust, safety and certainty from the restaurant (Osman, Johns, & Lugosi, 2014). The accessibility of the location is another motive for young people to prefer fast-food restaurants. Therefore, most fast-food restaurants are easy to find because of their location, which strengthens the possibilities for meeting together and socialising (Forsyth, Wall, Larson, Story, & Neumark-Sztainer, 2012). Young people think that all the dishes being available at any time, and restaurants opening 24 hours and offering a home delivery service are important attracting points of fast-food restaurants (Curran et al., 2003; Law, Hui, & Zhao, 2004; van der Horst,

Brunner, & Siegrist, 2011). Therefore, for young people, a fast-food restaurant provides attractive advantages rather than just inhospitableness as Ritzer (2011) suggested.

SST applications in the hospitality industry are regarded as dehumanising and inhospitable (Ritzer, 2011), but young people accept SSTs because SST applications bring improved convenience and increased control (Herne et al., 2013). Most younger people enjoy the convenience coming from digital technologies (Herne et al., 2013). More and more children have own their digital technologies in daily life such as game consoles, cell phones, and other devices (Thomas, 2011). This young generation has belief in the ease and usefulness of technology, and they regard technology as a fun "partner" (Thomas, 2011). Younger people have grown up with digital technology as toys, so they more easily master technology and feel more comfortable about using it (Herne et al., 2013). Therefore, it is possible that they do not find SSTs inhospitable, even though the literature (e.g., Ritzer (2011)) suggests they might.

Young people enjoy the increased control from the application of SST in the hospitality industry (Untaru & Ispas, 2013) . Ariely (2000) stated that customers are more likely to be satisfied with a service encounter when they perceive that they have substantial control over the process of the service encounter. Control is defined as the need to demonstrate one's competence, superiority, and mastery over the environment (Hui & Toffoli, 2002). Specifically, customers' perceptions of control can be subdivided into the following three categories: behavioural, cognitive, and decisional (Averill, 1973). Customers have behavioural control when they can directly influence or modify the environment (Averill, 1973). In restaurants, customers can exert behavioural control by choosing the time they eat and order, choosing to use a self-service kiosk order or not, choosing the table to sit at, etc. (Hui & Toffoli, 2002). Cognitive control is related to the predictability and interpretability of a situation (Averill, 1973). If restaurants can provide accurate wait time estimates or use technology to increase product and service consistency, they will give customers heightened cognitive control (Hui & Toffoli, 2002). Finally, decisional control concerns customers having a choice among alternative courses of action (Averill, 1973). Restaurant customers who have to wait to order can choose to stay at the restaurant or leave and return. To avoid a wait, they can choose to order through the self-service kiosk or not (Hui & Toffoli, 2002). The application of SST in restaurants could increase customers' perceived control, so young people have a positive attitude towards SST.

Customers' consuming behaviour and cognition of hospitality is gradually changing because of the wide use of SST in the hospitality industry (Blut, Wang, & Schoefer, 2016). Since customers are increasingly dealing with non-human technologies of one kind or another in the hospitality industry, their perspective on SST as offering hospitality and the way they experience hospitality while using SST deserves attention. Young people, as a powerful segment of consumers, represent a consuming tendency that should be taken into consideration (Untaru & Ispas, 2013).

2.4 Gap in the literature

As noted, although there are many studies relating to SST applications in the service industry, these studies generally research customers' acceptance of SST (Bruner & Kumar, 2005; Davis, Bagozzi, & Warshaw, 1989; Katja & Britta, 2014; Kim, Christodoulidou, & Choo, 2013; Lee, 2016; Ozturk, 2016). Young people are shown to be a powerful segment of consumers (Thomas, 2011), but their specific perspectives on SST are generally ignored and few studies focus on it (Considine & Cormican, 2016; Kaushik et al., 2015; Lee, 2016; Meuter, Bitner, Ostrom, & Brown, 2005). The research presented in this dissertation aims to discover why young people use SST in fast-food restaurants and to explore young people's consumption perspectives during the process of using SST.

Many hotels and restaurants use SST such as self-order kiosks and self-check-in to pursue high efficiency, high profit and low labour costs in the context of commercial hospitality (Hanks et al., 2016; Kuo et al., 2016; Thompson, 2009). However, a previous study (Ritzer, 2011) showed that the high efficiency and calculability of commercial hospitality have an adverse effect on the quality of service, and the high degree of control acts as a restraint on the ability to be hospitable. The published research accounted for the perspective of the operator in measuring the advantages and disadvantages of SSTs in hospitality industries. However, this research takes customers' perspectives to understand how the kiosk increases or removes a sense of hospitality, which has not been studied previously. In addition, this research explores the important elements that young people require to feel hospitableness during their time in the fast-food restaurant.

2.5 Theoretical framework

This research uses consumption value theory as the research theoretical framework because of its comprehensive value dimensions. This section presents the common theoretical frameworks of previous studies, compares the findings of previous studies and introduces consumption value theory.

2.5.1 Previous studies' frameworks

A number of previous studies have researched customer acceptance of SST using the Technology Acceptance Model (TAM) as the research framework. The TAM has two elements (perceived usefulness and perceived ease-of-use) to measure how customers accept and use technology. Most research results show that both perceived usefulness and ease of use have an important role in customers' acceptance (Blut et al., 2016). However, the TAM model has just two factors to measure and analyse customers feedback, which is quite limited.

Some previous studies have taken self-determinant theory as the research framework to analyse the determinants of customer technology acceptance. Self-determinant theory relies on two motivations (i.e., extrinsic and intrinsic) to explain customers' behaviours. The extrinsic factors relate to doing an activity for a useful consequence and focus more on economic and utilitarian outcomes, as well as objective functions of technology (Ryan & Deci, 2000). In contrast, intrinsic motivation is doing something because of the intrinsic feelings of accomplishment and pleasure that emerge from one's engagement in the activity (Gagné & Deci, 2005). Regarding technology adoption, researchers have identified several extrinsic factors that positively affect customers' attitudes towards and intentions to use SST: efficiency (Wei et al., 2017), saving money (Meuter et al., 2000), customised functionality, and reducing risk (Cetin, Akova, & Kaya, 2014). However, intrinsic factors do have a significant role in producing an unforgettable service experience (Wei et al., 2017). Previous studies found that perceived fun/enjoyment, empowerment, sense of independence, accomplishment, novelty and engagement have a positive impact on customer self-service experiences of SST (Cetin et al., 2014; Varshneya & Das, 2017; Wu & Liang, 2009). Therefore, intrinsic factors are also identified as a motivation for customers to repeatedly use SST.

Although self-determinant theory could explain customers' views and experience more deeply and more broadly than the TAM, there are some effective factors that still cannot

be categorised as extrinsic or intrinsic such as individual factors and situational factors. Individual factors should be considered in research and can be divided into demographics and psychographics. Demographic aspects affecting customers using SST are age, gender, education, income and cultural background (Kim, Christodoulidou, & Brewer, 2012; Lee, 2016) and the psychographic aspects include technology anxiety, technology readiness and need for human interaction(Chang & Lin, 2011). Increasingly, researchers have recognised that situational factors might moderate the relationship between customers and their willingness to use SST. The situational factors do have an effect on changing customers' choices of service to some extent (Kokkinou & Cranage, 2015). Some situational factors have also been considered, such as waiting lines, service complexity and perceived crowdedness (Gelderman et al., 2011; Wang, Harris, & Patterson, 2012). However, both the TAM and self-determinant theory only measure a limited number of factors such as ease of use, perceived usefulness, intrinsic factors and extrinsic factors.

Because the frameworks discussed have limitations in terms of their potential use for this study, consumption value theory is used as a theoretical framework to analyse young people's experiences of and attitudes towards self-service kiosks at the McDonald's restaurants. The advantage of consumption value theory is its set of comprehensive measurable dimensions for analysing affective factors. A detailed explanation of consumption value theory is provided in the next section.

2.5.2 Consumption value theory framework

Consumption value theory was developed by Shelth, Newman and Gross (1991) and focuses on consumption values, explaining why consumers choose to buy or not buy (or to use or not use) a specific product or service, and why consumers choose one product type or service over another. The theory is applicable to choices involving a full range of product types (consumer nondurables, consumer durables, industrial goods, and services) (Gagné & Deci, 2005). In the field of hospitality, this theory can help understand why customers choose to use or not use SST as the service delivery method.

Consumption value theory identifies five values affecting customers' consuming behaviours: functional value, emotional value, social value, epistemic value and conditional value. There are three fundamental propositions of consumption value theory: First, consumer choice is a function of multiple consumption values. Second, the consumption values make differential contributions in any given choice situation.

Third, the consumption values are independent. These values are derived from the individual's experience and interaction with the product or service, and determine the strength and direction of the relationship between the consumer and the product (Sheth et al., 1991). Therefore, a decision can be influenced by any or all five consumption values. Each of these values has a different and incremental contribution in specific buying situations (Gonçalves, Lourenço, & Silva, 2016). In comparison with the other theories (refer section 2.5.1), the benefit of consumption value theory is that it provides comprehensive measurable dimensions including functional, emotional, social, epistemic and conditional values. Thus, consumption value theory can be suitable for research requiring multiple reason analysis.

Functional value relates to service utilitarian and physical performance. Sheth et al. (1991) stated that functional value is the initial factor attracting customer attention. With respect to the functional value of SST, a number of previous studies have been carried out in this area via different theoretical frameworks, and the results show several factors could affect customers' use attitudes such as efficiency (Wei et al., 2017), saving money (Meuter et al., 2000), customised functionality, and low risk (Cetin et al., 2014). Although it is researched in many studies, functional value is still under consideration in this present study because how functional value affects young people has not been discussed specifically.

Emotional value relates to customers' subjective feelings and affective reactions. Sheth et al. (1991) expressed the view that the process of consuming products and services always increases the emotional response, such as the romance aroused by flowers. In addition to functional considerations, consumers are also motivated to use SST by emotional considerations such as feeling happy, having a sense of control and feeling relaxed (Gagné & Deci, 2005). This study explores the reasons for young people using SST, which cannot be limited to a functional level. Emotional values vary from person to person, and it is important to find out which are deeply held to understand young people's experience of using SSTs and explain their psychological characteristics.

Social value is defined by Sheth et al. (1991) as "the perceived utility acquired from an [a consumption] alternative's association with one or more specific social groups. An alternative acquires social value through association with positively or negatively stereotyped demographics, socioeconomic, and cultural-ethnic groups" (p. 161).

Choices involving highly visible products (e.g., clothing, jewellery) and goods or services shared with others (e.g., gifts, products used in entertaining) are often driven by social value (Sheth et al., 1991). Hence, social value relates to social approval and the enhancement of self-image among other individuals (Sweeney & Soutar, 2001; Wang, Liao, & Yang, 2013) Both in the information systems and service context, research has demonstrated that social value will positively affect the behavioural intention to use or purchase information artefacts (Ming-Sung Cheng, Shih-Tse Wang, Ying-Chao Lin, & Vivek, 2009) or mobile services (Wang et al., 2013). This research especially focuses on one demographic group: young people (18 to 24 years old) who have grown up in the technology environment and believe in the ease and usefulness of technology. Social pressure or comparisons and peer opinion are key factors in the decision-making process (Arvola et al., 2008). Young people are identified as the research participant group, and the study is intended to find out about the social value for young people of using SST in fast-food restaurants.

Epistemic value is created when a product/service arouses customers' curiosity, provides novelty and/or satisfies a desire for knowledge (Sheth et al., 1991). For example, in a mobile app context, the app entails curiosity for new content and knowledge gained through using a new product and getting a new service (Wang et al., 2013). In terms of the epistemic value of SST, the previous research (Lee, 2016) showed only that web-based SST could give customers a sense of novelty at the beginning of use. However, few studies explore the epistemic value of using a self-service kiosk more deeply, so this area still offers much to explore. As this research targets young people, then epistemic value might have more attraction for them. Therefore, epistemic (or novelty) value is worth considering.

Conditional value means customers might make a different choice in a specific condition or circumstance. When the value is strongly linked to the product or service's use in specific contexts, the conditional value arises (Wang et al., 2013). It might be derived from temporary functional or social value (Sheth et al., 1991), hence it arises when the circumstances create a need. In terms of the conditional value of SST, previous studies simply mentioned some situations such as waiting line, complex purchases and the number of purchasers that would lead customers to make different choices.

Consumption value theory is an effective and comprehensive tool to explain customers' consuming behaviours and is applicable for all products and services (Sheth et al., 1991). SST is identified as a technology of service delivery and therefore it belongs to the research scope of consumption value theory. Consumption value theory could provide standardised procedures to researchers by enabling them to adapt it to their research topics, and it is appropriate in capturing value content due to its flexibility and comprehensiveness (Park & Rabolt, 2009). Building on the consumption values theory, this research proposes that functional, social, emotional, conditional and epistemic consumption values could specifically explain customers' experiences and subjective feelings when using SST (i.e., self-order kiosks) in McDonald's restaurants. Therefore, consumption value theory is used as a theoretical framework to further analyse the interview data.

2.6 Summary

At present, SST is widely used in different fields including the hospitality industry (DiPietro & Wang, 2010). Hospitality organisations could reduce labour cost, increase efficiency and generate more economic benefits by setting up SSTs (Kuo et al., 2016; Larivière et al., 2017; Peters, 2016). However, customers serving themselves seems to break the traditional host-guest relationship in which hosts serve customers, so a fast-food restaurant with SST is identified as a less hospitable place (Ritzer, 2011). SST is also regarded as a tool for improving efficiency and calculability in the commercial hospitality context (Dixon et al., 2009).

However, young people have a different attitude towards fast-food restaurants and the application of SST in the hospitality industry. Young people identify fast-food restaurants as youthful and welcoming places which fill their particular needs for eating and socialising (Untaru & Ispas, 2013). Moreover, the young people who have grown up with digital technology (Thomas, 2011) have a high acceptance of technology in daily life (Herne et al., 2013).

Young people are shown to be a powerful segment of consumers (Thomas, 2011), but their specific perspectives on SST are generally ignored and few studies focus on them (Considine & Cormican, 2016; Kaushik et al., 2015; Lee, 2016; Meuter et al., 2005). Therefore, this study takes McDonald's self-order kiosk as a case study to discover why

young people use SST in fast-food restaurants and explore young people's perspectives on hospitality. Moreover, consumption value theory has comprehensive measurable dimensions, namely functional, emotional, epistemic, social and conditional values, and so consumption value theory is selected to be the theoretical framework for this research.

Chapter 3. Methodology

3.1 Methodology

The purpose of this study is to find out about young people's perspectives on SST at McDonald's and their definition of hospitality. This research used an interpretivist paradigm and qualitative methodology to explore the relationships between hospitality, customers, and SST (i.e., kiosks). McDonald's self-order kiosk was the case study object and the respondents were 16 young people (18 to 24 years old) who had used self-order kiosks before. An inductive approach was used to analyse the interview data and code into categories. The overview of research methodology is shown in Table 1.

Table 1: Research methodology for this study

General description	This study
Paradigm	Interpretivist paradigm
Ontology	Relativism
Epistemology	Emic perspective
Methodology	Qualitative research
Method	Case study
Respondents	16 young people (18 to 24 years old)
Data type	Interview data
Analysis approach	Inductive approach

3.1.1 Interpretivist paradigm

A research paradigm is the basic guide to theory and research (Neuman, 2014). The thinking patterns during the research, the research assumptions, and research techniques are collectively known as the inquiry paradigm, and include the ontological, epistemological, and methodological approaches. To be more specific, the researcher can identify an inquiry paradigm by answering three interconnected questions (Goodson & Phillimore, 2004): the ontological question relating to the form and nature of reality, the epistemological question relating to the relationship between the researcher and knowledge, and the methodological question about how the researcher can discover knowledge.

Interpretivism was adopted as the research paradigm; it holds that reality is constructed by the researcher's perception of it (Goodson & Phillimore, 2004). Applying Goodson

and Phillimore (2004) three interconnected questions to this paradigm, it is clear that (see Figure 1) the ontological question, related to multiple interpretations of events; the epistemological questions related to how the knowledge is generated, and therefore, interaction with respondents; and the methodological question, related to the qualitative approach to gain an in-depth understanding of young people's perspectives.

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                    ┌─────────────────────┐
                    │   Interpretivist    │
                    │     paradigm        │
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            ┌───────────────┼───────────────┐
    ┌───────────────┐ ┌───────────────┐ ┌───────────────┐
    │   Relativist  │ │     Emic      │ │  Qualitative  │
    │    ontology   │ │ espistemology │ │  methodology  │
    └───────────────┘ └───────────────┘ └───────────────┘
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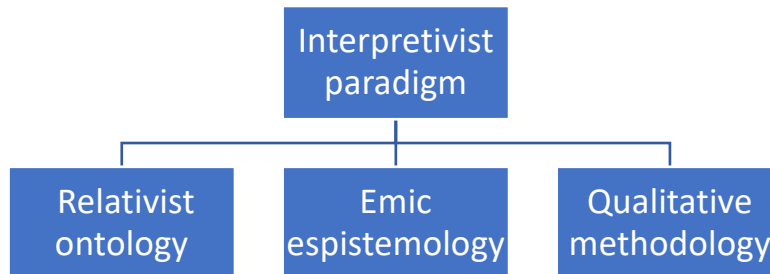
Figure 1: Interpretivist paradigm

Interpretivist researchers identify respondents as a good source of social knowledge (Goodson & Phillimore, 2004). This research identified 16 research respondents as a social research resource and it was believed that respondents' varied backgrounds, understanding and experiences could contribute to the on-going construction of the reality of hospitality between customers and SST (i.e., self-order kiosks in McDonald's restaurants).

In addition, interpretivist researchers take the stance of an emic or insider perspective, which means the social reality comes from within the perspectives of the people themselves. Wahyuni (2012) noted that interpretivist researchers prefer to interact and have communication with the respondents being studied, to more deeply understand the social world from their experience and their subjective meaning. This research worked with qualitative data that offered rich descriptions of young people's experiences and perspectives on SST and hospitality.

3.1.2 Relativist ontology

Ontology is concerned with the nature of reality and how people perceive the truth, which influences what people think (Goodson & Phillimore, 2004). In general, ontology has two categories: realism and relativism (Wahyuni, 2012). Realism holds that there is only one eternal truth/reality and it can be generalised into other situations. However, in relativists' eyes, reality is shaped by a certain context and social factors, and so it could be defined

in multiple ways (Wahyuni, 2012). Therefore, perceptions of truth can evolve and change, and can transfer to similar contexts rather than be generalised to all contexts.

This research took relativism as the research ontology because the reasons for young people using SST in McDonald's are diverse rather than unified. In addition, young people's perspectives on SST and their understanding of hospitality are shaped by their own situations such as different cultural backgrounds (Kang, Lee, & Yoo, 2016). Therefore, the world and reality could be defined in multiple ways by different people and individuals could contribute to social phenomena. Thus, relativism was identified as the research ontology.

3.1.3 Emic epistemology

Epistemology is about how the researcher can acquire knowledge, which focuses on the relationship between the research and the researcher (Goodson & Phillimore, 2004). Epistemology contains two types of perspective: etic and emic. Using an etic approach, the researcher should remain detached from the research in order to acquire objective measurements. The emic approach holds that interaction is needed during research so that the researcher can get an in-depth understanding of respondents (Goodson & Phillimore, 2004). The ontology dictates the epistemology because beliefs about what can be known and how knowledge can be constructed influence ways to discover new knowledge. This research has a relativist ontology, which holds that reality can be defined in multiple ways by different people, so communicating with respondents, rather than remaining detached from them, is necessary to understand their experience. Pike (1967) defined the emic approach as the insider perspective on social phenomena, which provides insights into the nuances and complexities of social phenomena. The emic approach focuses on the observation of social phenomena and mainly relies on the richness of detailed description (Morris, Leung, Ames, & Lickel, 1999). Face-to-face interviews were chosen for collecting rich descriptive data from young people and acquiring an in-depth understanding of different young people's perspectives on SST and hospitality.

This research particularly focuses on the social phenomenon of why young people choose SST as a service method in a fast-food restaurant and how they experience hospitality if using SST in McDonald's. Therefore, to understand young people's various experiences and the contexts that shape them, an in-depth conversation with respondents was necessary for exploring more details. The interaction between researcher and respondents

was necessary for fully understanding this social phenomenon, since it can improve the authenticity and reliability of the research. In this case, the emic approach was suitable for this exploratory research.

3.1.4 Qualitative approach

This research respects the diverse opinions of the young people who participated in the study and, rather than testing any hypotheses, it aims to find out the themes and categories of young people's behaviour patterns in using SST in McDonald's. Therefore, this research took a qualitative approach, which entails an inductive logic, to carry out the case study and investigate the understanding and interpretation of young people's perspectives of SST and hospitality.

The qualitative approach is used as the research methodology. 'Methodology' refers to the philosophical beliefs underpinning what knowledge is and how information leading to knowledge can be interpreted and analysed. Knowledge production relies heavily upon the ontology of the researcher – their definition of reality and the epistemology – and how to acquire the knowledge, which determines the methodology (Cody, 2002). A relativist believes that reality can be defined in multiple ways and the emic approach requires interaction between researcher and respondents. Yates and Leggett (2016) noted that the purpose of qualitative research is to examine social phenomena of individuals or groups. In general, communicating with respondents is inevitable for ensuring accurately understanding of social phenomena. In this case, the qualitative approach followed the features of the relativist and emic approach, and matched well with the relativist and emic approach. Gog (2015) explained that qualitative research is based on non-numerical data and takes an inductive approach to understand the "how" and "why" of the story or generate theories. Bhattacharya (2017) also agreed that qualitative research helps deeply understand and differentiate real-world situations from respondents' opinions. Yates and Leggett (2016) also observed that the researcher is intimately engaged in the context of the study – the research setting, respondents, and the data collection in qualitative research. A quantitative approach is suitable for examining the relationship between various variables or testing a hypothesis (Yates & Leggett, 2016). In addition, the quantitative research focuses on numerical data and precision and the researcher should remain detached from the research (Ludwig & Johnston, 2016). In this case, comparing the quantitative and qualitative approaches, the qualitative approach was more suitable

for this research because the aim of the research is to deeply understand young people's perspectives on SST and hospitality.

3.1.5 Inductive approach

An inductive approach was identified as an appropriate way to analyse the interview data and determine the research findings. Bryant and Charmaz (2007) indicated that inductive logic relates to inferring conclusions based upon data, and induction keeps closely to the data and can reveal new understandings of existing knowledge and conclusions. Merriam and Tisdell (2016) also stated that, in qualitative research, induction means that a researcher keeps an open mind without presupposing patterns; concepts and theories emerge from the data through the researchers' interactions with the respondents. In this case, treating the data objectively and keeping an open mind have an impact on improving the reliability of the findings within this research.

3.1.6 Case study method

A case study method was adopted to explore the reasons for young people using self-service kiosks in McDonald's restaurants and to investigate how young people conceptualise hospitality. A case study is defined as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units" (Gerring, 2004, p. 4). Case study research typically focuses on an individual representative of a group, an organisation, or a phenomenon (Hancock & Algozzine, 2017). Johnson (1996) also suggest that the research result might be more helpful because of the particularity and representativeness of the targeted case.

In this research, the McDonald's self-order kiosk was identified as the targeted case. McDonald's Corporation is the world's largest chain of fast-food restaurants, operating over 31,000 restaurants worldwide in more than 119 countries (Mohapatra & Singh, 2012). At present, there are 167 McDonald's restaurants across New Zealand, with around one million people visiting them every week (McDonald's, n.d.b). Thus, McDonald's could be regarded as a widely recognised brand for potential respondents coming from different countries or for those who are local New Zealanders. In addition, more than half of McDonald's have used self-order kiosks in New Zealand since 2016 (McDonald's, n.d.a). In this research, the popularity of McDonald's and the common use

of self-order kiosks in McDonald's gave McDonald's self-order kiosks the particularity and representativeness to become the targeted case.

The choice of the research method depends on the research question (Mills & Birks, 2014). The case study is an exploratory form of inquiry and can offer an in-depth understanding of the unit of study, which can be a person, group, organisation or social situation (Mills & Birks, 2014). In addition, Hancock and Algozzine (2017) pointed out that case study research tends to seek themes or categories of behaviour and events rather than to document similarities and differences or to test hypotheses. Thus, in general, the case study is preferable for research when the purpose is answering questions about 'how' or 'why' a contemporary phenomenon happens in a specific environment or case (Yin, 2014). The case study matches the requirements of this exploratory research to gain an in-depth understanding of why young people choose self-order kiosks in McDonald's and how they experience hospitality during the process.

Hancock and Algozzine (2017) pointed out that the social phenomenon of the case study is bounded by its natural context and space and time. Consequently, a social phenomenon has its own meaning within a certain situation. Therefore, it is important that the research context is described, to fully understand the social phenomenon in real life. Hancock and Algozzine (2017) also pointed out that case study research is richly descriptive because it is grounded in deep and varied sources of information. Therefore, the semi-structured interview is designed for collecting rich descriptive data from respondents.

3.1.6.1 Semi-structured interview

This research used semi-structured interviews to collect data. Semi-structured interviews are a common data collection method in qualitative research (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). A semi-structured interview is a hybrid type of interview which mixes structured interviews and in-depth interviews. Therefore, the semi-structured interview has the merit of using a list of predetermined themes and questions, as in a structured interview, while keeping enough flexibility to enable the interviewee to talk freely about any topic raised during the interview (Rubin & Rubin, 2005). Semi-structured interviews enable general questions to asked at first, followed by questions that probe more deeply into interviewees' responses (Yin, 2014). Therefore, semi-structured interviews enable in-depth, valid and reliable data to be gathered (McCusker & Gunaydin 2015).

Validity and reliability are elements of demonstrating the trustworthiness of research findings (Roberts, Priest, & Traynor, 2006). Validity is related to the collection of data (Punch, 2013); however in qualitative research, researcher bias is identified as a potential difficulty for achieving validity (Johnson, 1997). In semi-structured interviews, the researcher guides the general direction of the questions rather than controlling every single question, which enables respondents to have the freedom to answer questions as co-producers of the research. Therefore, to some extent researcher bias is reduced and validity increased. In qualitative research, reliability relates to the trustworthiness of the procedures and data generated (Punch, 2013). While the ability for respondents to freely share their experience increases the reliability and trustworthiness of the research, the following sections also outline how reliability is developed through case study procedures. To summarise, answers from respondents not only follow the interviewer's themed questions to ensure validity and efficiency, but also obtain the respondents' open and free perspectives on the social phenomenon being studied to ensure reliability.

3.1.6.2 Indicative questions design

Demographic questions including age, gender, ethnicity and educational background were ask at the beginning of interview to gain background information from respondents. For the main part of a questionnaire, Robinson (2011) suggested that using open-ended main questions, follow-up questions and probing questions has a positive effect on obtaining rich data. Moreover, Wahyuni (2012) noted that the main questions should be developed based on the research aim derived from the literature review (i.e. they are concept driven). Follow-up questions should focus on the particular themes of the theoretical framework, key concepts of the research, and probing questions focus on unexpected thoughts and ideas provided by the interviewees (i.e. data driven).

Gubrium, Holstein, Marvasti, and McKinney (2012) suggested that a good interview guide also has an important role in the quality of the interview. Formulating interview guides involves arranging a list of questions and topics likely to elicit responses that refer to the research questions. Flick, Scott, and Metzler (2014) suggested that the topics of discussion about which questions might be asked need to be carefully considered, along with how to sequence the questions. In this case, the research questions usually begin with broader questions before moving to more specific probing questions and applying open-ended questions, rather than closed questions. This encourages respondents to

openly and freely express their perspective rather than simply answering the closed question with a 'yes' or 'no'.

As interviewers rely on their own knowledge and experience about the research topic, the way they ask questions, formulate follow-up prompts, and direct how conversations unfold will be highly dependent on what they know (Robinson, 2014). In addition, the research is co-produced and co-created by the researcher and respondents (Robinson, 2014). Therefore, the researcher has a responsibility to help respondents fully understand and engage in the research through good preparation for interviewing, properly asking questions, and observing respondents (Gubrium et al., 2012). This requires the researcher to have patience and passion to stimulate respondents' desire to speak out and offer rich descriptive data.

For this study there were two research aims: 1) Why do young people use SST (i.e., kiosks) in fast-food restaurants? And 2) How do young people experience hospitality when they use SSTs at fast-food restaurants? These aims provided the foundation for designing the interview questions. As Table 2 indicates, two main questions focusing on reasons for using SST were developed to answer research aim one, and three main questions focusing on the perspective on hospitality were developed to meet research aim two.

Each of the main questions have several follow-up questions influenced by the literature review and designed to explore the topics in more detail. Consumption value theory provides the basis for seeking answers to questions one and two while concepts of hospitality inform questions three, four and five (see Table 2). Probing questions such as "why?" and "could you explain more?" were also used to explore unexpected answers from the respondents in more detail (see Table 2).

Table 2: Questionnaire design

Research aims	Main questions	Follow-up questions	Probing questions
Aim 1: Why do young people use SST (i.e., kiosks) in fast-food restaurants?	1. When you first saw a kiosk at McDonald's, what were your thoughts?	1.1 What was your first experience of using the McDonald's kiosk like? 1.2 Do you worry about the ease of using it? 1.3 Were you curious about how to use it? 1.4 Did you try to use it or did you just ignore it at the first time?	Could you explain more?
	2. Why do you use kiosks at McDonald's?	2.1 When do you prefer to use a kiosk rather than order from the counter? 2.2 Does the length of time it takes to use a kiosk or order from the counter affect your choice? 2.3 Does the number of people you are with affect your choice of ordering systems? 2.4 Does the McDonald's environment affect your choice between ordering systems?	Could you describe more details?
Aim 2: How do young people experience hospitality when they use SSTs at fast-food restaurants?	3. How does the use of kiosks at McDonald's improve or detract from your experience?	3.1 Do you think kiosks improve the service provided by McDonald's?	Why?
	4. What is your hospitality experience like when you use a kiosk at McDonald's?	4.1 What does hospitality mean to you? 4.2 How do you experience hospitality at McDonald's?	How?
	5. Would you like kiosks to be used widely in hospitality businesses?		For example, where?

3.1.6.3 Recruitment and sampling

Recruitment started as soon as approval from the Auckland University of Technology Ethics Committee (AUTEC) (Appendix D) was gained. The only selection criteria for respondents was that they had experience of using McDonald's kiosks and were between 18 and 24 years old.

Regarding the sample size, Gubrium et al. (2012) suggested that for research interviews with an idiographic aim that typically focuses on local voices and applies intensive analysis of each answer, the sample size should not be too large, and 3 to 16 is enough (Robinson, 2014). Eatough and Smith (2006) also suggest that an idiographic aim emphasises the importance of each individual and requires analysis of detailed data about the experience and emotions of respondents. The planned sample size was 12, but ultimately 16 respondents coming from different countries joined the research.

Robinson (2014) observed that research often employs a purposive strategy because different categories of individuals may have a unique, different or important perspective on the phenomenon in question. This research takes a purposive sampling strategy to select young customers (18 to 24 years old) who had used the McDonald's self-order kiosk before.

Currently, young people make up a powerful segment of fast-food consumers (Candan, Ünal, & Erciş, 2013), so their consumption behaviours should be taken into consideration. Young people who have grown up with digital technology have the potential to provide unique and interesting answers to the interview questions because young people have a belief in the ease and usefulness of technology, and they regard technology as a fun "partner" (Thomas, 2011). The United Nations Secretariat uses the terms "youth" and "young people" interchangeably, and defines both as ages 15 to 24 (Gass, 2015). In addition, the respondents should be at least 18 years old for ethical protection of vulnerable people such as the very young, so for this research the targeted respondents were between 18 to 24 years old.

Potential respondents were contacted through recruitment posters, personal networks and recommendations. Recruitment posters were displayed on a board in the university's Business, Economics and Law Faculty building and on the primary researcher's personal

Instagram website. One Respondent used email to express enthusiasm for joining the research and sharing the experience of using a kiosk at McDonald's. Five respondents connected through the mobile phone application, Instagram, to express their willingness to join the research. The rest were from personal network recommendations.

Barbour (2018) suggested that recruitment preparation also includes getting in touch with respondents to arrange a suitable meeting place – preferably a quiet place, free from distractions, which will allow for good quality audio-recordings. In this study, respondents' opinions about meeting place and time were prioritised. Most interviews took place in a quiet coffee shop located in the Auckland city centre which was convenient for respondents and the researcher. Sometimes respondents changed their mind, so the interview location was also flexible to respondents' preferences for other places such as a local city park and a café at the Auckland University of Technology.

3.2 Ethical considerations

Mills and Birks (2014) explained that ethical issues must be taken very seriously because they have a significant impact on the ethical and methodological defence of the final research outcome. The application of ethics started as soon as approval from the Auckland University of Technology Ethics Committee (AUTEC) (Appendix D) was gained.

Mertens (2018) emphasised that working closely with respondents brings complexities associated with cultural norms, beliefs, values, and behaviours. Mertens (2018) suggested that it is critically important for researchers to be aware that they are conducting themselves in an ethical manner throughout the course of the research, especially during the data collection. In this study, the only selection criteria for Respondents were that they had previous experience of using McDonald's kiosks and were between 18 to 24 years old. Therefore, there was no gender, racial or cultural discrimination. To respect the rights of respondents, they were fully advised of the aim and procedures of the research and that they could take part on a voluntary basis. Every interview respondent was provided with an information sheet (Appendix B) and a consent form (Appendix C) prior to the beginning of data collection. In addition, oral explanations of the research topic and background were also offered if they had any questions about the research.

Respondent confidentiality was highlighted to the respondents, and it was explained that no contact information would be offered to any third party. The respondents were

assigned a pseudonym to ensure their confidentiality. The voluntary nature of the study was also emphasised. During the data collection, respondents were informed that they could stop the interview or decline to answer any question if they felt uncomfortable. In keeping with AUT's ethical standards, all aspects of this study have been designed to avoid deceit, harm, and coercion.

3.3 Data collection and analysis

This section explains how the interview data was collected and analysed including recording, transcribing and thematic analysis.

3.3.1 Recording and transcribing

Flick (2018) suggested that researchers should prepare equipment for recording interviews and for keeping the data prior to conducting interviews. Flick (2018) also notes that researchers should be familiar with the recording device and have a backup plan in case a device fails. In this research, a recording pen was used to record the interviews and for making sure of the clarity of the voices. In addition, a smartphone was used as a backup recording device.

Hancock and Algozzine (2017) suggested that it is important to keep track of research methods used during the process of research. Therefore, detailed records including the names of respondents, the date and time of interview, and sound file were kept. All the respondents' records were backed up in the researcher's personal computer and USB in case important details were forgotten or there was recording pen error.

The interview recordings from the 16 respondents were transcribed verbatim. Flick (2018) suggested that researchers have a responsibility to ensure the readability, granularity, and accuracy of the transcripts. Readability relates to the comprehension of the intended audience and can be addressed by using standard writing conventions to enhance clarity. Granularity concerns how faithful the researcher is to the complex nature of the social interaction and this could be achieved by using non-standard writing conventions (i.e. symbols and punctuation marks) to depict the dynamic nature of social interaction. Accuracy refers to the extent to which social and interactional features present in a data recording are transcribed for later inspection and this could be addressed by recording as much as possible of the spoken, interactional (e.g., pauses), and embodied action (e.g., hand gestures) data. For the purpose of this research, the interview recordings were

transcribed to capture the dynamic conversation including pauses, repeats and punctuation marks. In addition, the final interview transcriptions were then corrected to improve readability by removing oral English grammar faults without changing the meaning.

After each interview, the audio recordings were transcribed and any surprising answers and emotions of respondents were noted. After reading the transcripts and reflecting on the research notes, the research questions were modified for later interviews to ensure the collection of valid data from future respondents.

3.3.2 Thematic analysis

Research coding was done manually because the number of respondents is small (16 interviewees). Merriam and Tisdell (2016) define coding interview data as labelling relevant words, phrases, sentences, and sections in terms of relevant actions, activities, concepts, differences, and opinions. Merriam and Tisdell (2016) also indicate that once full transcriptions of the interviews are made, then the interview data can be coded.

Firstly, the data were entered into Word software. The full transcriptions of 16 respondents' interviews were arranged in a table, in which every answer could be seen separately, and the notes on and labelling of each answer could be made and seen clearly. A number of coding sets were produced according to the similarity of the notes and labelling. Then the important answers were highlighted (see example in Figure 2), as these offered some basic thoughts on and made some sense of the respondents' behaviour and conversations. In addition, the highlighted answers were also identified as direct evidence of different coding sets. The thematic analysis technique was then used to analyse the coding sets.
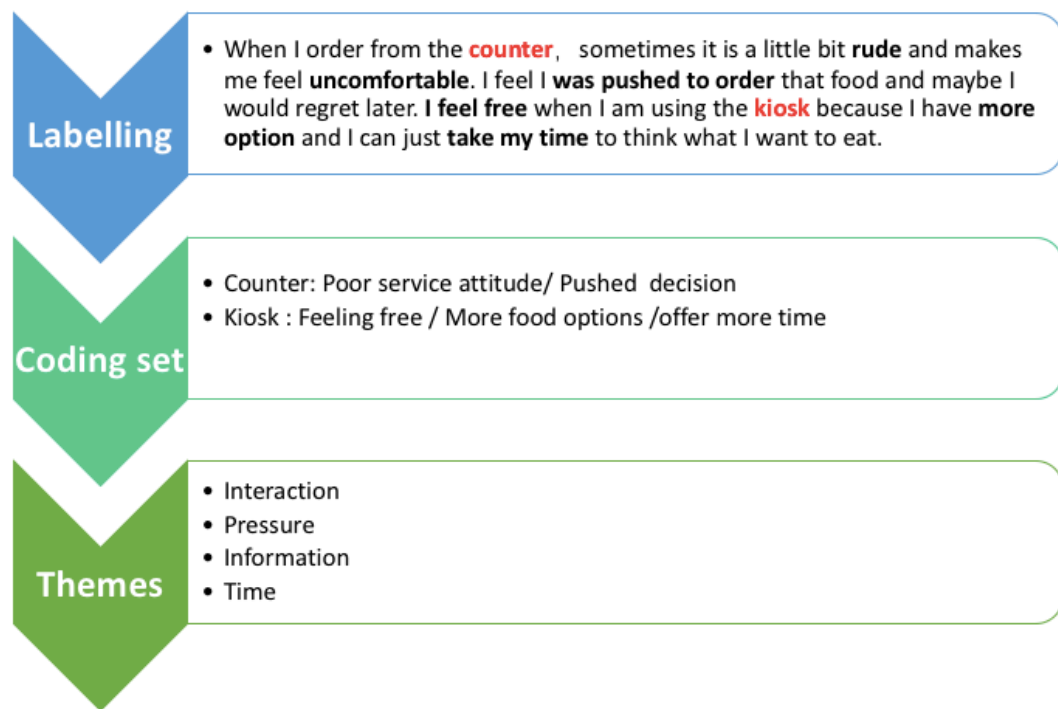
Figure 2: Thematic analysis example

Thematic analysis is textual analysis and means classifying multiple meanings of coding sets into a patterned meaning (Clarke & Braun, 2014). Therefore, interview transcription data were sorted into different themes from previous multiple coding sets (see example in Figure 2). At the beginning of analysing the data, there were hundreds of labels and dozens of tentative categories. During this process, the large amount of information provided various coding ideas. Then, the initial coding set underwent some revision by renaming some coding sets more precisely to reflect what was in the data. After several rounds of revision, the ideas in the themes were clearer and more matched the purpose of the research. In the end, 129 coding sets were categorised into 10 themes (i.e., time, pressure, interaction, empowerment, privacy, information, convenience, enjoyment, peer effect and hospitality) and each theme had up to four subcategories. In addition, the process of revising the data had a further positive impact by giving an in-depth understanding of respondents' behaviour and thought patterns, which was helpful when writing the findings chapter.

3.4 Limitations and challenges

As Merriam and Tisdell (2016) stated, there is a no perfect academic research. Therefore, there are several limitations to this research including sole interview data, a small data set and the potential for cross-cultural misunderstandings. Interview data are identified as the only primary source in the research, which leads to some limitations (Flick, 2018). Using

the interview as the sole method of data generation can be problematic because human respondents might forget some details or recall details inaccurately. Furthermore, human respondents express themselves differently according to the social setting and the people they are speaking to. With this situation in mind, and because the research relied on interview data as the primary source, data were analysed with caution.

The sample size of this research is 16, which is arguably a small data set. In this case, it is acknowledged that the findings obtained from the interview data only express a part of young people's perspectives, and it would be hard to generalise from them.

The respondents came from diverse cultural backgrounds such as India, the Philippines, Morocco and Korea, which are different to that of the interviewer (who is from China). Therefore, different cultures might have a different understanding of some concepts and might produce cross-cultural misunderstanding. In addition, although 70 per cent (11) of respondents were non-native English speakers, English was the common language used for this research. Not everyone can guarantee the accuracy of wording and expression, especially for non-native English speakers, which increases the possibility of cross-cultural misunderstanding.

There were three difficulties encountered during the process of doing the research. Firstly, it took some time to find enough interviewees. In the field work phase, six respondents were interviewed in the first week. Although this seemed a good and highly efficient start, few people were interviewed in the next week because many students travelled during the Easter holiday. It was hard to determine a proper time for the interviews because the available times of potential respondents were changeable. Therefore, almost three weeks were needed to collect the data.

Secondly, in regard to the quality of the interview data, most attitudes and opinions about SST application in the hospitality industry had a substantial similarity at the first stage. After checking the demographic information, the researcher found these respondents came from a hospitality management education background, so their perspective on SST might be shaped and limited by having the same professional knowledge. In this case, the researcher tried to widen the educational and cultural backgrounds of respondents in order, as much as possible, to explore more diverse information.

Thirdly, accuracy of language was a problem while conducting the interview. The respondents came from different cultural backgrounds so sometimes the researcher needed to repeat the questions or rearrange the questions to make sure the respondents understood the meaning of the question, and to get matching answers to related questions. In addition, the respondents came from diverse educational backgrounds such as art design, technology, business, hospitality, and philosophy, so sometimes had queries about the question meanings. Therefore, repeated explanations about the shared understanding of language in terms of the interview topic were necessary.

Chapter 4. Results

4.1 Respondents' profiles

Sixteen young people (18 to 24 years old) from different cultural backgrounds participated in the interview. The details of demographic information are shown in Table 3. Pseudonyms are used in the research in order to protect the privacy of respondents.

Table 3: Respondents' profiles

Name	Age	Gender	Country of origin	Educational standard	Kiosk use frequency
Andrew	24	M	China	Postgraduate	13+
Annie	22	F	New Zealand	Undergraduate	4
Charlie	24	M	China	Postgraduate	13+
Harris	18	F	Korea	Undergraduate	13+
Henry	21	M	New Zealand	Undergraduate	13+
Jack	24	M	India	Postgraduate	13+
Jai	24	M	India	Postgraduate	10+
Jane	24	F	Korea	Postgraduate	13+
Lily	23	F	Vietnam	Postgraduate	13+
Mandy	22	M	New Zealand	Undergraduate	13+
Matt	24	M	New Zealand	Postgraduate	7
Ming	24	F	China	Postgraduate	3
Peter	24	M	Philippines	Postgraduate	13+
Ruby	18	F	Vietnam	Undergraduate	13+
Sam	24	M	New Zealand	Undergraduate	5
William	22	M	Morocco	Undergraduate	13+
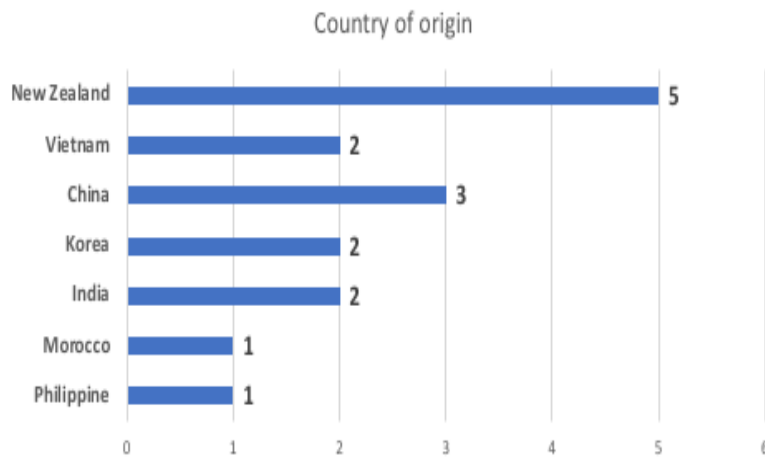
Country of origin

Figure 3: Country of origin
The 16 respondents come from seven different countries: India, China, Korea, Vietnam, the Philippines, Morocco, and New Zealand

Age
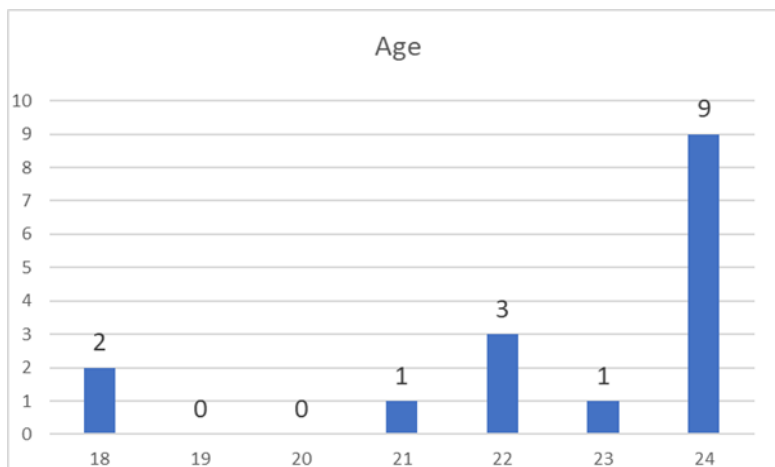
Figure 4: Age
Respondents were young people aged from 18 to 24 years. More than half (56%) were 24 years old.

Gender

Figure 5: Gender
Male = 10 (62%)
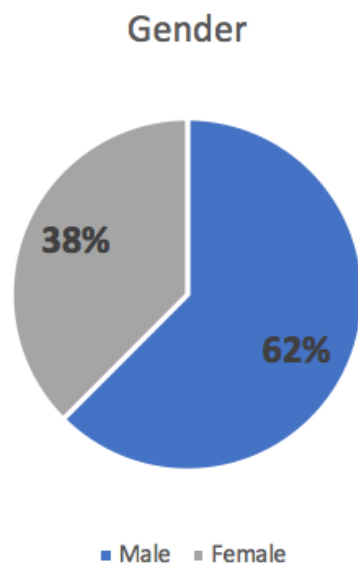Female = 6 (38%)
Of total respondents, 62% were male, and 38% were female.

Kiosk use frequency
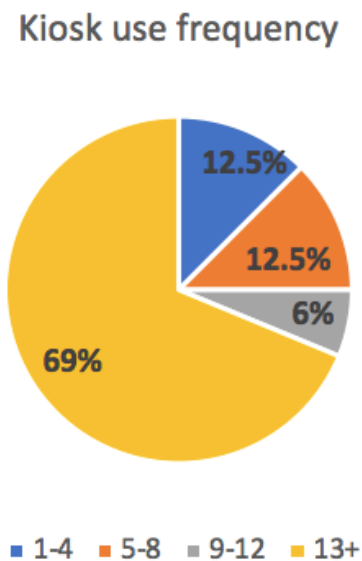
Figure 6: Kiosk use frequency

1-4 times = 2 (12.5%)

5-8 times = 2 (12.5%)

9-12 times = 1 (6%)

13+ times =11(69%)

Most respondents (69%) had used self-order kiosks at McDonald's more than 12 times.

4.2 Key factors influencing SST use

The interview data were categorised into the following 10 themes: time, pressure, interaction, empowerment, privacy, information access, convenience, enjoyment, peer effect, and perceived hospitality.

4.2.1 Time

Many respondents mentioned that shortened waiting time was the most important factor in choosing a self-order kiosk as a service method. Efficiency was considered the most important consideration in the environment of fast-food restaurants because it was the first response from respondents. For example:

> "On a Friday night or Sunday night, I might need to wait half an hour to order my food. After having a kiosk in there, it shortened the time of ordering, maybe just by five minutes." (Andrew)
> "Much easier and time-saving, you don't have to wait in line at the counter." (Jay)
> "[I use it] because I think it can save my time. Every time I go to McDonald's, there is a kiosk free and I can use it." (Andrew)

At the same time, self-order kiosks also offer more personal ordering time to customers, which is another reason for young people using them. Many of the respondents appreciated flexible personal time and the efficiency it offered rather than standing in a queue. Customers are provided with space and time to make up their minds and are released from the pressure of ordering when they use a self-order kiosk. For example:

"You can keep trying […]. It's fine to take some time because there are a lot of kiosks, you won't delay someone else. You have your own time to stand there and make your choice." (Jack)

"I feel free when I am using the kiosk because I have more options and I can just take my time to think about what I want to eat." (Andrew)

"I like using the kiosk because I can take one minute, two minutes or longer and it gives me more space, more freedom, and less pressure." (Peter)

In this case, the self-order kiosk provides customers with a large degree of flexibility for using their ordering time. Using self-order kiosks could not only reduce the waiting time in line at the counter, but also offer more ordering time. In this case, the application of kiosks could increase customers' efficiency at the pace they prefer.

4.2.2 Pressure

4.2.2.1 Pressure at the counter

The main reason for feeling pressure when ordering from the counter was the expectation of fast ordering speed in McDonald's restaurants. Fast ordering was an assumed benefit of a fast-food restaurant, but the respondents indicated that it has an adverse impact on their ordering experience. The respondents explained that they were forced to make a quick decision when they were standing in front of the employee at the counter. The other customers waiting behind them in the queue and the fast working speed of the employees also increased the pressure to make a quick decision. The respondents felt that they needed to make a fast decision when ordering food otherwise they would occupy employees' time and delay other customers, which would make them feel uncomfortable. Thus, the fast ordering speed increased customers' stress in having to follow the working pace of the restaurant, and this pushed them to make unsatisfactory decisions. For example:

"I feel I am pushed by employees, people behind me, the whole pace, to order or make the decision quickly. But I [am] usually not satisfied with this quick decision [about] my food." (Peter)

"[When I] order from the counter, I feel I was pushed to order that food and maybe I would regret later. Yes, you feel pressure if you make a decision at once." (Andrew)

"When you come to the counter, you can see staff are very busy, and they do not want to talk to you. If you are taking your time, you will feel like you are making mistakes, you should be very quiet." (William)

Another reason for pressure is that some respondents were afraid of annoying employees or becoming an annoying customer in public. They cared about potential feedback and attitudes from the counter staff and, at the same time, they also cared about their personal image in public or what other people thought of them. In this case, these respondents thought carefully about their words and behaviour during the process of talking with staff in public, which increased the pressure:

"I don't want to get the negative reaction from the staff. I also don't want to ask them many questions and make them annoyed. Even though they act nice, … I know I make them annoyed. I don't want to do it. That's the reason I prefer to use the machine, I don't want to annoy people." (Lily)

"I feel bad when I ask 'Can get it again or can you remove this?' I think it's annoying for employees, I guess. If you do [change your mind or take your time] in the machine, it doesn't matter. And when I order less than an average meal, I feel bad to ask for service." (Jane)

In summary, the fast working pace added pressure to young people experiencing the fast-paced environment and making a quick decision. In addition, some respondents worried about annoying staff, which increased their own pressure. If respondents tried to be efficient customers who do not ask questions, following the pace of the fast-food restaurant, they felt pressured.

4.2.2.2 No pressure at the kiosk

The respondents indicated that there was no pressure when using kiosks because there were more kiosks available in McDonald's and the kiosks offered more time and a judgment-free environment for customers. As previously mentioned, the kiosk offers enough time to customers, which has a significant impact by releasing the pressure of making a quick decision. Enough time also brought enough space for discussion of food choices among friends. For example:

> "You don't have to stand in front of the counter and think what you want, you can just use the kiosk and take your time to explore […] the option they have." (Jay)
> "I just get myself space, more space. You don't have to be in the crowd when you use the machine." (Jane)
> "When I order with friends it allows us [the time] to discuss what we want to have." (Harris)

The number of kiosks in McDonald's restaurants is greater than the number of employees serving at the counter, which means a kiosk is available for customers most times. As the following respondent quotes indicate, the kiosk releases pressure because respondents did not delay other customers:

> "It's fine to take some time because there are a lot of kiosks, you won't delay someone else." (Jack
> "I don't feel pressure from other customers because kiosks are resources for everyone. Not like just one or two employees." (Ruby)

Using the self-order kiosk provides customers with a judgment-free environment away from other customers and working employees. The respondents felt that no-one would complain about them if they took time when using the kiosk.

> "It doesn't matter if it takes long, no-one would complain about us." (Harris)
> "The machine is not emotional like the staff. So, I can easily choose what I want, I can easily remove what I don't want, I can even easily cancel my order without being afraid of people. No-one will get mad at me. I always change my mind." (Lily)

"I feel free when I am using the kiosk because I have more options and I can just take my time to think about what I want to eat." (Andrew)

The kiosks offer more freedom to respondents in the ordering process. Respondents could do what they want without worrying about the time, delaying other customers or being judged by others.

4.2.3 Interaction

McDonald's gives customers two choices of service methods: one is interaction with employees at the counter; the other is interaction with the kiosk.

4.2.3.1 Interaction with staff

One respondent discussed the importance of having the option of speaking with an employee at the serving counter because it is a two-way communication channel between customers and employees. The respondent emphasised that customers could ask employees for extra requirements or could ask questions.

"I will prefer to talk with people and [use] human ordering and just make sure order everything is fully understood. If you want the special of the [day], you cannot ask the machine what it is special today." (Jay)

However, data suggested that the situation of communicating with employees in fast-food restaurant is quite different from other kinds of restaurants. The respondents expressed the view that employees working in the fast-food restaurant are similar to a kiosk as they provide no extra service.

"Having a person doesn't make a difference between having a machine. If you order from the counter, the employees do the same thing and they don't do any extra for customers." (Jack)

"Because some of the employees are not that friendly, talking to employees is similar to talking to the computer as well." (Peter)

In addition, some respondents mentioned that fast-food restaurant employees are very busy and stressed so that sometimes employees lack patience and are not friendly. The

respondents felt that the poor staff performance could negatively affect customers' feelings and emotions. In this case, some respondents preferred to use the kiosk rather than order from the counter because of the risk of getting an employee with a bad attitude. For example:

> "The attitude from the counter sometimes I think is a little bit rude and makes me feel uncomfortable." (Andrew)
>
> "When I use the machine, [there is] less pressure because I just touch the screen. When the employees look tired or angry, I prefer to use the machine [as] I don't want to bother them." (Jane)

As Auckland is an international city where there are large numbers of immigrants and international customers, the respondents mentioned potential communication problems. For example, as the following respondent quotes indicate, although all the staff speak English, understanding each other is not smooth at times because of different accents or vocabularies. At the same time, there is a greater chance of counter employees making mistakes about customers' requirements because of communication problems.

> "Firstly, when I speak bad English, I am not confident about my pronunciation of the food name or I am not sure I can hear clearly and understand the employee. I remembered once I talked with an employee; I cannot understand his accent or the sentence, I tried hard to understand him, but actually, I didn't. But I pretend to understand, so I just said yes, okay. I also feel the pressure that other people were waiting for my decision on food. In the end, I am not satisfied with my food." (Ruby)
>
> "As a foreigner, English is not my first language. They sometimes misunderstand what I am saying. Sometimes I am afraid of speaking something when they are really busy. They have high possibility of misunderstanding my order when they are busy. This kind of discourages me when I speak." (Jane)

4.2.3.2 Interaction with kiosk

The interaction with the kiosk is one-way communication. The self-order kiosk does not have any human emotions, thus respondents regarded using a kiosk as an anti-social application:

"Maybe the negative one is that you don't get much social interaction. So, you don't really talk with the people in the front. So, it might be a little bit anti-social." (Matt)

"However, it also decreases the communication between customers and employees." (Charlie)

However, some respondents expressed the view that they did not need human interaction, even within the hospitality industry. For example, one respondent stated:

"I don't want to [have] more conversation with other people. This [kiosk] is an option for me. For some people, they don't talk with the people. It's nothing about the language, the time, they just don't want to talk with the people. Sometimes I feel the same thing when I am so tired. I don't want to talk to the people" (Andrew)

Some respondents liked using self-order kiosks because they offer a standard and predictable service in comparison with changeable serving attitudes from the counter. In this case, the respondents did not need to worry about anything unpredictable. For example:

"Yes, every time I use the kiosk, the feedback is the same. I don't need to worry about the attitude, language, emotion. I will say this is a standard and predictable service. The same feeling whenever people use the kiosk." (Andrew)

4.2.4 Empowerment

4.2.4.1 Increased control

Some respondents thought that kiosks increase their feeling of control because they only require one-way communication. The kiosk does not have emotions so one does not need to care about its feelings. In this case, respondents felt in control of everything in the process of using the self-order kiosk at McDonald's. The self-order kiosk provided respondents with a sense of empowerment through the ability to customise food, the right to change orders without annoying an employee, and a feeling of control.

Food customisation means customers could make changes to the menu items by adding or removing ingredients. As the following respondent quotes indicate, they were able to control every item in their order:

> "When I use the kiosk, I can customise what I want. This is my burger, I can add more tomatoes, I can add more lettuce, I can remove the onions and I can remove the pickles. That's too sweet for me because I am a picky eater. Yeah, that really works for me, it's very flexible." (Peter)
>
> "One thing impresses a lot is they give me a customising option. For example, if I order a milkshake, I can choose an additional topping, this kind thing is very good. For someone [who is] vegetarian or food allergic, they can carefully and slowly choose. This part is good hospitality for me." (Harris)

Respondents could easily add more orders or delete orders through the self-order kiosk without needing the permission of employees. Some respondents were indecisive about the food amount and the final price, so they could easily change their mind during the ordering process. However, respondents felt embarrassed to ask employees to change their order even though they had this right. In this case, this kind of customer felt a sense of control when using the kiosk because they could change their mind whenever they wanted.

> "I don't want to be an annoying customer, and I also have the right to change my idea of my food. So, using kiosk is a better choice." (Ruby)
>
> "You can see the total amount. and you can cancel it if you think it's too much after you [have ordered] everything. So, the machine can help me calculate in a practical way." (Jane)
>
> "I can order what I want and change the menu without annoying the employees." (Henry)

Some respondents just enjoyed the feeling of being in control. They chose the self-order kiosk because they could control the machine from the beginning. Respondents felt like they were playing a game and gained a feeling of power, which attracted them to use the self-order kiosk.

"I feel I control this machine like play the game. Quite interesting, and I like it." (Ruby)

"I feel more empowered and I feel more control over my eating experience and over my food. I feel more engaged, I feel more involved in choosing my food and I feel more empowered. I interact with a computer and it's not two-ways. I control everything." (Peter)

4.2.4.2 Technology problems

While the respondents enjoyed the feelings of control when using the kiosk, they lost control when the self-order kiosk broke down. Kiosk error is different from a human mistake, which can lead to an apology. Customers cannot do anything except wait for employees to fix and explain the situation or change to a new kiosk. For example:

"That is really annoying me a lot because it is technology and it went back to home screen quickly. That moment I feel I am limited because the technology [has] much more power than me. If it is broken, I cannot do anything." (Peter)

"Sometimes [the kiosk] has [an] error, and we have to call the staff to fix it." (Jane)

4.2.5 Privacy

Respondents emphasised that they had a sense of safety during the process of using the self-order kiosk. The perceived that the confidential ordering environment given by the self-order kiosk could protect their privacy, for example when they were upset, intoxicated, or had a poor English level.

Customers could have their own space and time to finish ordering when using the self-order kiosk, and no-one would disturb them. To some extent, customers' personal emotions (e.g., happy, sad), personal skills (e.g., level of English language), and personal eating habits (e.g., eating a lot, being food allergic) were confidential in comparison with ordering in public at the counter. Customers had a sense of safety because they would not be judged. Their personal situation, be it their good or their negative side, was not shown in public when they used a self-order kiosk. For example:

"I and my friend were quite drunk. I think that [was] why I need[ed] to use the self-service – because I was drunk, and I don't want to show I was drunk to

everyone. It helps a lot because we don't have to talk with anyone, just press the button." (Harris)

"When I [wear] no makeup. There are a lot of [other people] there, but I don't want to be face-to-face [with them]. I don't want [them to] see my face." (Jane)

"I don't want my negative side or aspect be shown in front of people or [in] public. That's the reason why I go to the McDonald's instead of Burger King. I don't want people to see my crying face or [my] weakness. I feel safer when I use the kiosk. No-one will judge my broken crying voice or judge how long I [take to] choose the food." (Ruby)

4.2.6 Information access

Sufficient information including menus, discounts, promotional activities and advertising is given by the kiosk. The amount of information in the kiosk is comprehensive and much more than the counter menu board, which was an attractive point for customers using the self-order kiosk. The main parts of the extra information in the kiosk are the complete menu and the details of promotions, which offered customers more food options and helps them practically in spending their money. For example:

"I think the menu behind the counter [does] not include everything, and I can see some discounts or activities on the kiosk. I think it's very helpful." (Andrew)

"I use the machine. It tells you all the menu and describe[s] the details and the price and size, things like that. You can see the total amount." (Jane)

In addition, the information could be shown in more detail and clearer than on the counter menu, which was another reason for customers using self-order kiosks. For example:

"The menu board behind the counter is very far [away], I couldn't see it because I am short[-sighted]. The first thing the machine helps me to [do is to] easily access to the menu. It's big." (Lily)

"The menu on the board is far away, I cannot see clearly when sitting in the back. If I use the machine, I can look slowly [at] every single menu [item] in front of me." (Jane)

The respondents also mentioned the kiosk is an advertising platform because they can explore and think about the food for next time. If customers go to the counter, they have to order food rather than ask the questions and leave; however, if they just want to look through the menu, it is fine to do that when using the kiosk.

> "I just stand here. I just watch the machine and think about what I should have next time. It's also good for McDonald's, this is also advertising stuff." (Jane)
>
> "Sometimes I just go to McDonald's to see what I can eat, but then I might not eat there. I cannot go there to ask the employee there 'How about the price of this one, that one?' but [then not] order it. However, for the machine, I just have a look, just a look and decide to order or not." (Lily)

4.2.7 Convenience

Many respondents mentioned using the self-order kiosk is convenient for them. The convenience could be divided into three categories: ease of use, easy for group ordering and ease of payment.

Ease of use relates to the clear food categories with pictures, the simple English vocabularies in the kiosk, and the clear ordering system. The transparent food categories with pictures helped customers find a targeted item quickly and efficiently. The simple English level allowed the majority of customers to understand, including non-English speaking customers. In addition, the clear ordering system helped selecting the food, making the payment and receiving the order number. For example:

> "I think it's very convenient. [The] first time I came to McDonald's I don't want to talk to the counter because of my bad English. I think it's very useful for a foreigner who comes to an English-speaking country. You know, it can help a lot. Maybe the tourists coming from Japan, Korea, China do not speak English. They cannot do everything in an English environment. McDonald's has the kiosk; they can take time to order. I think the English level on this machine is average and people can understand. It is very easy to use." (Andrew)
>
> "At midnight, if we shut down the kiosk, customers come and get really worried because they cannot speak English, or they are not confident to speak English to order. So, they can just look at the picture to order through the kiosk." (Henry)

"It is very convenient that you got the receipt and that is also is your number, so you can just order your food and have a seat. The whole process much more convenient than the ordering from the counter." (Jack)

The respondents felt that a self-order kiosk is more convenient for group ordering than the counter. Group customers not only could have time and space to discuss the food choices but also see the final price easily through using the kiosk. In this case, the kiosk helps groups to make a practical decision for everyone. For example:

"When I go with some friends, we will use the kiosk together. We can discuss and talk [about] the whole order among groups. For example, [someone] said this [is] bad, don't try! This one is better, order this. I think these judgments cannot [be spoken] frankly in front of employees." (Ruby)
"You can see the total amount. And you can cancel it if you think [it is] too much [if] you [are] ordering everything." (Jane)

Some respondents also mentioned that making a payment is very easy, including paying with cash and with a card. For example:

"I thought this is quite nice, it's easy to use, so I think this [is] a beautiful option and I can easily pay [for] what I got with cash or card." (Jack)
"One more thing [is] that [the] machine can easily [allow you to] pay." (Lily)
"It can [easier to] pay … the machine than people." (Charlie)

4.2.8 Enjoyment

A sense of enjoyment also plays a role for customers choosing the self-order kiosk as the service method. In the beginning, respondents expressed the view that they have a strong curiosity and interest about what the kiosk is used for and how to use it. For example:

"I think its high tech, novel, very cool new technology, I feel very curious and I just want to touch and explore how can I use." (Peter)
"I really want to know how to use it. You know, at [the] first time, I don't know how to use it, I just try to touch it, to swipe it, everything [was] tried once." (Lily)

50

Then, some of the respondents felt the fun of using the self-order kiosk because of its novelty and the similarity to playing a game. The novelty of the self-order kiosk produces a sense of enjoyment, which was an important factor for young people. For example:

> "It's … fun to do it yourself. It's a little bit like [a] game. I think it's fun because in New Zealand, we do not have a lot of kiosks, machines or robots or anything. Anything is new, is different or advanced for New Zealand. So that is why [it is] a little bit fun. Like woo, this is different, this is very interesting." (Annie)
> "I feel I control this machine, like play[ing a] game. Quite interesting, and I like it." (Ruby)

4.2.9 Peer effect

The peer effect was also one of the reasons that young people choose the self-order kiosk as the service method. The power of the peer effect was shown in two scenarios. Firstly, for the first-time use, seeing friends or other people using self-order kiosk sparked young people's desire to try the kiosk as well. Young people were unwilling to fall behind other peers when they saw their friends using the new technology. For example:

> "Yes, of course, actually the first time I used the kiosk when I was with my friends. I saw one of my friends using it, so they also spark my curiosity." (Peter)
> "I tried to use it the first time because I saw other people use it. So, I want to use it, too." (Sam)

Secondly, young people's choice to use the kiosk, or not use it, might be affected by their peers when they are with a group of people. Choosing the same service method might help to increase group socialisation. One respondent described the situation of peer pressure in the following quote:

> "I guess because they just went straight to use the kiosk, I feel like that maybe made it easier like 'Ah, this is what you usually go to' rather than being used to go[ing] to the counter or the person behind the counter. If my friends just go to the kiosk for order, I probably will go there to use one as well. If they decide to go order from the counter, I probably will go to the counter." (Mandy)

4.2.10 Summary

The convenience offered by kiosks including ease of use, easy payment and ease of group ordering is an important factor for young people using the kiosk for the long-term. The ease of use, such as clear design, simple English level, vivid pictures and easy payment methods, supported the wide use of kiosks, especially by non-English speakers and non-native speakers. In addition, using the kiosk for group ordering gave young people enough time and space to discuss the food and make their decisions.

As for young people taking the initiative to use the self-order kiosk for the first time, the enjoyment provided by the kiosk, including novelty seeking, strong curiosity and a sense of fun, was an important attraction for young people first time actively trying to self-explore the usage of the kiosk. In addition, the peer effect also played a role in pushing young people to try new technology. Young people were reluctant to fall behind in trying new technologies when they saw their peers using a kiosk at McDonald's that they had never tried before. Furthermore, the peer effect also pushed young people to all choose the same delivery method, such as kiosks, which helps make a positive impact on group socialisation.

Young people were willing to enjoy a slow and relaxing personal space in a fast-food restaurant if they had the choice. Therefore, the flexible ordering time and pressure-free ordering environment provided by the kiosk at McDonald's restaurants could meet these requirements. The flexible ordering time means the kiosk not only could shorten waiting times for young people, but also could offer enough time for ordering. As for the pressure-free environment, it relates to more kiosks being available than attendants at a busy counter, which helped young people to make a slow decision without potentially being blamed by other customers and employees.

Protecting personal privacy from being judged by others was a highly valued factor for young people using the kiosk to order. Young people asked for a perceived confidential environment for ordering when they are crying, have no makeup on, have poor English, or eat too much. Using the kiosk could offer young people a personal space for ordering without being bothered and judged, which was an important factor for young people using the kiosk at McDonald's.

The comprehensive information including the details of the menu, the promotion and advertising provided by the kiosk was another reason for young people to be attracted to using the kiosk. The detailed information, such as price, quantity, and discounts, helped young people make economical and practical ordering decisions, which saves money to some degree. In this case, young people are more sensitive to the value of money and try to use their money in practical ways.

Disappointing human service and a strong desire for control played a mixed role for young people using the kiosk in a fast-food restaurant. The young people in the study expressed the view that communicating with working employees in fast-food restaurants is similar to communicating with a machine. Furthermore, sometimes the person providing the service had an unfriendly attitude, which is much worse than the standard and predictability of kiosk service. In addition, communication misunderstandings might happen because of the language barrier between employees and customers. In this case, young people in the study had a strong desire to control the consuming experience to avoid the negative experience mentioned above. Moreover, young people could gain customer empowerment through using the kiosk in terms of controlling the amount of ordering time, the information about restaurant, service quality and process, and the privacy. As a result, young people were willing to become co-producers in order to enhance their personal consuming experience.

4.3 Perspectives on hospitality

The perspectives on hospitality in fast-food restaurants of the young people in the study is another point that the research focused on. The answers to the question on the meaning of hospitality are diverse, according to different respondents' experiences. In this case, the core element of hospitality varies from person to person.

As for the attitude towards the application of SST in the hospitality industry, those who felt that SST cannot provide hospitality (as human interaction is key) did not support the use of SST. However, supporters had two rationales: one was that SST provided a more consistent service (compared with unpredictable human interactions), and the other is that they felt they experienced a hospitable moment when using SST.

4.3.1 Human interaction

Some of the respondents clearly expressed the view that the fast-food industry (e.g., McDonald's restaurants) was not hospitable at all (see Table 4). Table 4 includes the respondents who disagree with the application of kiosks at McDonalds. These respondents regarded human interaction as a necessary factor in hospitality. In addition, they put an emphasis on the importance of good quality human service. These respondents insisted that hospitality has to happen between human beings, and employees are supposed to please customers for this purpose. In this case, the performance of McDonald's employees did not qualify as hospitality according to their standard. The respondents stated that McDonald's employees were similar to interacting with the kiosk, or even worse than the machine as they can had a bad attitude. For example:

> "Having a person doesn't make [a] difference from having a machine. If you order from the counter, the employees do the same thing and they don't do any extra for customers." (Jack)
>
> "Some employees are not that friendly; talking to employees [is] similar [to] talking to the computer as well." (Peter)

Furthermore, these respondents regarded the self-service kiosks in McDonald's as the cause of inhospitality in a fast-food restaurant. Having more self-service kiosks in McDonald's decreases the number of working employees to some extent. Respondents thought that removing the humans removed hospitality from the restaurant. In their eyes, McDonald's was a restaurant where employees have a bad serving attitude. In this case, McDonald's restaurants were described as consumer factories, supermarkets, and retail stores. For example:

> "If you let the machine run the business, it [is] just the factory not the hospitality. I won't call McDonald's the hospitality industry, it [is] just the consumer factory. They give you product, and you take the product, that [is] it. It is a more [like a] supermarket, but not the hospitality organisation." (Jai)
>
> "I don't have much experience at all. Because you remove the person, you remove the hospitality." (Annie)

Some respondents were unwilling to see kiosks used widely in the hospitality industry. However, other respondents supported the kiosk used in the fast-food restaurant because

kiosks are better than unfriendly employees. This suggests that, on its own, human interaction in the hospitality industry is not enough to provide hospitality; what matters is the quality of the human interaction. Good quality human interaction can be shown through the performance of employees including their attitude, tone of voice, and facial expression. As the following respondent quote emphasises, the kiosk improved service in comparison to unfriendly employees. In this context, the kiosk became a better option for customers when they were unwilling to face poor human service.

> "I can say [a kiosk is] better. As I mentioned, this process is personal. Generally, it's really much better. I mean, when you talk to people [it] is also good. But, [as] I mentioned, there are employees [who] lack friendliness. I am just [saying that] the kiosk, in that case, is much better." (Peter)

Table 4 Opponents of SST kiosks at McDonald's

Respondent	Hospitality definition	Attitudes toward McDonald's	Attitude to kiosks in the hospitality industry
Annie	• Human interaction	It removes customers service and does not provide experience.	No, because I enjoy the human interaction.
Jack	• Entertains customers	It is like a retail store or a shop.	Yes. The place which is not a sit-down restaurant such as coffee shop, ice-cream shop.
Jay	• Offers service	It is like a consumer factory or a supermarket.	No, I enjoy human contact.
Peter	• Human interaction • Good emotion and attitude	It does not provide much hospitality. thing I control everything.	Yes. Kiosks are much better than employees who lack friendliness.
Sam	• Human interaction • Meets customers' expectations	It does not provide experience	No, I think this system can make it clearer and better.

4.3.2 Service quality

Some respondents identified offering service as the key point of defining hospitality (see Table 5). Table 5 presents the views of respondents who support the application of kiosks

at McDonald's because the kiosk service is more stable than the human service. In addition, respondents also added some conditions to shape the service, such as patient employees, convenience, entertaining customers and meeting expectations. For example:

"For me, […] basic hospitality is service, patient, improv[ing] my life, convenient." (Harris)

"I think the hospitality is servicing things with people and try[ing] the best to satisfy customers' expectation." (Charlie)

"Serving customers and their reaction." (Henry)

Respondents thought highly of the quality of service. Although McDonald's provided human interaction with customers, the quality of service was unstable. For instance, employees sometimes serve customers with a bad attitude or employees may make mistakes during the ordering. Thus, respondents had some complaints about the hospitality provided by McDonald's. If the quality of service cannot be guaranteed, the young people in the study prefer to use the kiosk rather than human interaction. The kiosk could offer a standard, the same quality of service to all customers. Therefore, the kiosk application becomes the better alternative for young people in fast-food restaurants. For example:

"Yes, every time I use the kiosk, the feedback is the same. I don't need to worry about the attitude, language, emotion." (Andrew)

"I think it can improve the service because it can decrease the mistakes made by employees." (Charlie)

Table 5 Supporters of the kiosk at McDonald's because of service quality

Respondent	Hospitality definition	Attitudes toward McDonald's	Attitude to kiosks in the hospitality industry
Harris	• Offers service • Patient employees • Convenience	No expectation of hospitality.	Yes, in cinemas.
Henry	• Offers service	Service quality is changeable and it depends on who serves you.	Yes. Kiosks are good for the groups who are shy, cannot talk very

			well and don't know the menu.
Ming	• Entertains customers	Just expect food.	Yes. Setting kiosks in restaurants for improving the efficiency.

These respondents valued service quality in terms of reliability and consistency as the core element of the hospitality. Thus, they had an uncertain attitude or even had no expectation of hospitality in the fast-food restaurant. However, they supported the kiosk application in the hospitality industry because kiosks offered standardised and predictable service. For example:

"It's different and it depends on who serves you. Some people are really nice and some people really rude. It just depends on the time or the day they [are being] pushed by the manager [or] whatever. The service [is] always different and depends on who you are talking to." (Henry)

"Actually, McDonald's is not a good place to experience hospitality, I just go there to get food. I don't have any expectation for hospitality." (Harris)

4.3.3 Kiosks and hospitableness

While some respondents felt that McDonald's and kiosks did not provide hospitality, others expressed the view that they had experienced a hospitable moment at a self-order kiosk (see Table 6). Table 6 shows that respondents support the application of kiosks at McDonald's because they receive and enjoy hospitable moments from the kiosks. They suggested that human interaction was not a necessary condition for experiencing hospitality. In addition, this kind of respondent put emphasis on the senses in defining hospitality as comfort, relaxation, enjoyment, and good emotions.

"Hospitality… hmm. I think it's experience and emotion. I keep a good emotion and I could have a nice experience in a certain situation." (Ruby)

"Feeling welcome and [a] comfortable environment. And you are able to enjoy yourself. Feeling relax[ed], not feel[ing] pressure." (Mandy)

The hospitable moments provided by the kiosk satisfied customers' requirements at certain times and in certain situations. It is worth mentioning that these certain times and

situations are the emphasised conditions of feeling hospitality, which means the kiosk gains more trust from customers than human service at certain times but not every time. Respondents had different situations when they went to a restaurant, thus, the requirements were changeable. McDonald's provides customers with two choices of service (employees and kiosks), and customers can select the service method that meets their requirements at that time. There were two categories of hospitable moments: one was experienced by respondents who had no desire to face people including employees; another was experienced as kiosks produced a more welcoming environment for respondents who had a weak ability to communicate with local employees.

Kiosks can provide hospitable moments for respondents who have no desire to face people such as employees. For example, if respondents wanted to hide negative emotions such as a bad mood, or even a face without makeup, kiosks offered them personal space and a sense of privacy without the judgment of others. Respondents expressed the view that the kiosk was helpful, and they felt comfortable with that experience. For example, as the following respondent quotes indicate, the kiosk was an alternative service option for respondents and can provide a hospitable moment:

> "I had a really bad mood and [was] almost cry[ing]. That day was busy, I just want to eat something. I don't want anyone to disturb me or interact with me. I just want to stay [by] myself. So, I decide go to McDonald's because I have this choice that I can order by myself and find a peaceful corner to wait [for] my food. Yes, I think yes, [the] kiosk helps me [be] slow, [have] more free space and time, even sometimes help[s] me avoid embarrassment. I think [at] that moment, [in] that situation, I get the hospitality from the kiosk. I feel comfortable and keep my good mood, at least would not get negative feedback from others." (Ruby)
>
> "This sounds funny, when I [wear] no makeup. There are a lot of [other] people there, but I don't want to be face-to-face [with them]. I don't want [them to] see my face. And there are so many machines there, I was so surprise[d] there are so many. The menu is very clear, the order is very quick and simple. I will think [it is] good hospitality is you have a good experience the person or… oh I will say the machine is the hospitality as well. I have a good experience with a machine in a certain [way]. It gives me what I want, it comforts me. I would say I have a good memory, it is a hospitality." (Jane)

A kiosk provides a hospitable moment for respondents who have a weak ability to communicate with employees. This kind of respondent was unable to enjoy the convenience of interacting with employees because of communication problems and the language barrier. Even interacting with employees could put pressure on respondents because of the possibility of misunderstanding and delaying other customers. In contrast, kiosks were more useful for them because they have enough time and space to make an order in a pressure-free environment. This kind of respondent thought highly of the application of kiosks which produced a more welcome environment for different people. The kiosk opens a broader community including native English-speakers, non-native English speakers and non-English speakers, and customers feel more power and less sense of insecurity. In this case, using the kiosk could satisfy the requirement of experiencing hospitality in an unfamiliar environment.

"Yeah, for me, I get enough [of what] I want [from] the machine. Because I don't need to think that much like how to [speak] to the people. So, I think less when I order. I don't know how to […] make the employee understand what I really want. It's a problem for the people coming to a foreign country that we speak English but still cannot understand each other. I don't need to think much about how I can talk to the staff [so that] they can understand me. So, I think McDonald's gives me choice to experience the hospitality." (Lily)

"I think it's [a] broader option and open [to a] wider community because it allows everyone to see what they want or [are] able to buy. I feel like people can move through the service a lot more smoothly and also a lot of different people [are] absolutely welcome to use the machine. I feel like people are more empower[ed] by using the kiosk than having to talk to someone [at] the counter. Sometimes people can feel […] insecure because talking [at] the counter has limited time. Yeah, using the machine feel[s] like more welcoming and knowing you have that option you can [do] what you want. It's more relax[ed]." (Mandy)

"Maybe the tourists coming from Japan, Korea, China doesn't speak English. They cannot do everything in an English environment. McDonald's has the kiosk, they can take time to order. The kiosk can improve the welcome [in this] environment for them." (Andrew)

Therefore, these respondents strongly supported the kiosk application in McDonald's. Respondents identified the self-order kiosk as one more option of service given by

McDonald's. They expressed that McDonald's use of technology is the right evolution and emphasised McDonald's is better than other fast-food restaurants because they offer more serving options.

"We are living in the 21st century, I think [McDonald's evolution] is a right thing to do. They are not just doing the one thing at [a] time. They use the technology thing. What they are doing is right, they should offer more options of service, things like the kiosk." (Jane)

"I have to say McDonald's is […] better than other fast-food restaurants. I can choose to use the kiosk, which is […] slow, [gives] enough time and space, [a] more free process. I also can go to the counter, which is [the] same as other fast-food restaurants and focus on quick [service]." (Ruby)

Table 6 Supporters of the kiosk at McDonald's because of hospitableness

Respondent	Hospitality definition	Attitudes toward McDonald's	Attitude to kiosks in the hospitality industry
Jane	• Greeting • Comfort • Customer Information	McDonald's evolving is the right thing to do because it offers more options for service.	Yes. I have a good experience with a machine in a certain way. It gives me what I want, it comforts me. I would say I have a good memory, it is a hospitality.
Ruby	• Experience • Emotions • Certain situations	It is better than other fast food restaurants because it offers more choices of service.	Yes. Kiosks help me be slow, have more free space and time, sometimes even helps me avoid embarrassment. I think in that moment, that situation, I get the hospitality from the kiosk
Lily	• Convenience	Do not care.	Yes. I get enough of I want from the machine. Kiosks solve communication problems for non-English speakers. McDonald's gives me a choice to experience the hospitality.
Mandy	• Good atmosphere • Enjoyment • Relaxed	It is smooth hospitality with polite employees and straightforward kiosks.	Yes. Kiosks offer broader options to a wider community because it allows everyone to use it. Kiosks increase the welcoming atmosphere for the public.

| Andrew | • Experience | It is good hospitality in fast food with the standard service. | Yes. Kiosks improve the welcoming environment for non-English speakers such as Korean, Chinese, Japanese. |

4.3.4 Summary

In terms of the perspectives on hospitality among young people, human interaction still plays a critical role. However, simple communication between customers and employees is not enough; employees' attitudes and work accuracy were highly valued by young people in this study. Young people not only asked for human interaction but also sought high-quality service. However, respondents generally were not satisfied with human service in fast-food restaurants like McDonald's. In this case, the application of kiosks in fast-food restaurants was a better alternative for those unwilling to take the risk of receiving unsatisfactory human service from a counter. In addition, according to some respondents, the kiosk also has the ability to produce a kind of hospitable moment for young people who have certain requirements in specific contexts. However, the hospitable moment produced by the kiosk just happened at specific times for demanding customers, and not every time for everyone.

Chapter 5. Discussion

5.1 Introduction

This chapter discusses the main findings presented in the result chapter. The chapter starts by analysing customer empowerment, which was found to be the primary motivator for young people using self-order kiosks at McDonald's. It then continues to discuss the peer effect on young people's consuming behaviour. Young people's perspectives on the kiosk application in hospitality are also discussed, which further helps understand how young people define hospitality.

5.2 Empowerment as a co-producer of consuming experience

As presented in section 4.2.4, seeking empowerment was the primary feature of young people using the SST at McDonald's. According to the themes identified as time (see section 4.2.1) privacy (see section 4.2.5) and information (see section 4.2.6), young people in this study wanted to control their consuming experience in order to meet their personal requirements. As a result, they were willing to build their own consuming experience and be the active co-producers of their experience.

Li and Han (2006) suggested that consumers now have a stronger desire for empowerment than ever before, especially in a service-dominant field. Hoffman et al. (2003) also stated that choosing a kiosk as the service method increases the feeling of control such as proceeding at a personal rate and achieving high accuracy in the order. Oyedele and Simpson (2007) also noted consumers' increasing demand for control because they want the best value, price, and quality. The findings of this research agree with these previous studies; young people use kiosks to control every aspect and detail of the order to ensure satisfaction and fill personal emotional needs.

The findings also agree with those of Viet Ngo and O'Cass (2011), who explained that people desire different levels of involvement and participation in the service process. In their research, some young people prefer to be served by employees and are unwilling to use kiosks, consistent with the findings of Dabholkar and Bagozzi (2002) that a strong preference for personal contact will make customers reluctant to use an automated process. However, it is interesting to note that other young people have a desire for autonomy and are willing to become the co-producers of their own consuming experience by using self-order kiosks at McDonald's. This phenomenon supports the work of Oh, Jeong and Baloglu (2013) in that SST attracts customers with an autonomous, private, and efficient

service. The findings suggested that providing McDonald's customers with two service options (i.e., human service and self-order kiosk service) is the right decision. Customer empowerment could be achieved by using SST, which the findings indicate is the main reason young people use self-order kiosks at McDonald's. According to the findings, there were four different control situations in terms of time, information, privacy and service, as expressed in Figure 7, below.
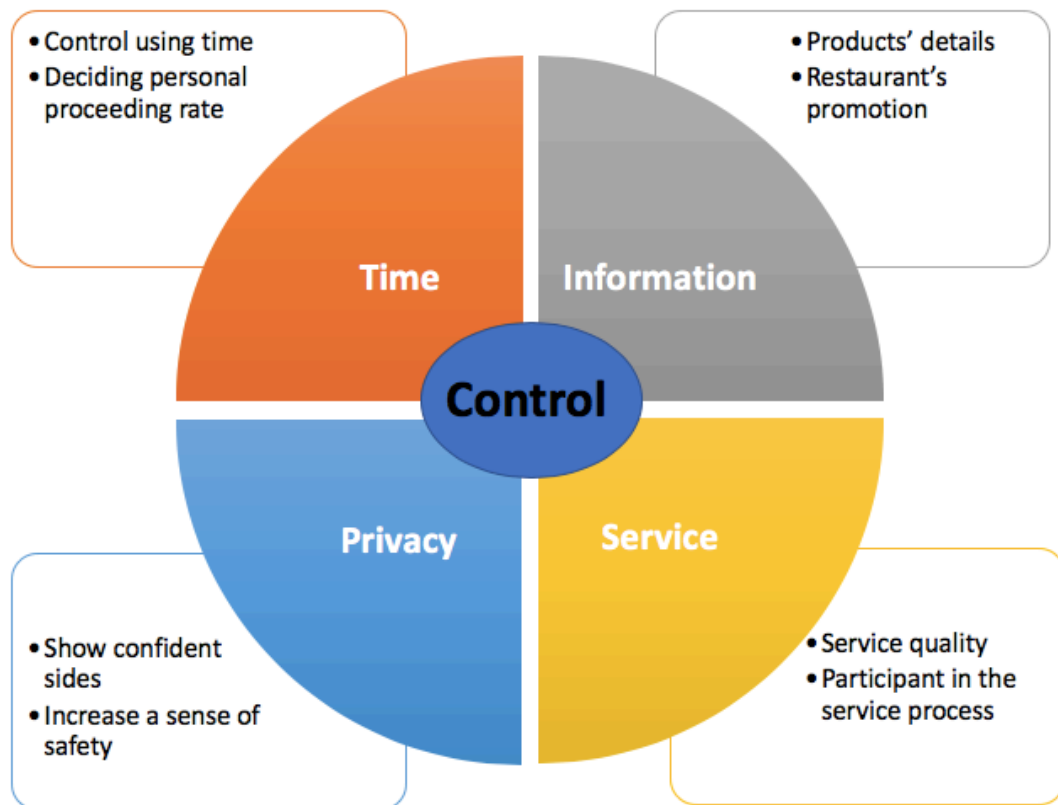
Figure 7: Benefits of kiosks

5.2.1 Time control

Time is a valued resource for customers and customers prefer to use the SST under time pressure (Hoffman et al., 2003; Kokkinou & Cranage, 2015). The self-order kiosk works more directly than humans, as it is one-way control without any greeting or questions. Thus, the self-order kiosks work faster than human service (Kokkinou & Cranage, 2015). One of the reasons the organisation put SST in McDonald's was to save ordering time and increase organisation work efficiency (Ritzer, 2011). In this case, the organisation could serve more customers than before and improve profits. However, the findings showed that the ordering time might not be saved by the self-order kiosk (see section 4.2.1). The young people in this study could control the amount of ordering time, and

order at their own preferred pace, which is identified as a benefit of using the kiosk at McDonald's.

The findings showed that some young people desire a slow and relaxed atmosphere for ordering (see section 4.2.2.2). However, when ordering from the counter, respondents felt stressed and pressured because they were forced to order quickly. Respondents expressed the view that they had to make a quick decision in a limited time, otherwise they might delay other customers or annoy the staff. In comparison with ordering from the counter, respondents could manage and control the amount of ordering time and spend a longer time on the kiosk for checking the price and exploring items without delaying others. The young people in this study spent a longer time ordering via the kiosk, which is contrary to the original intention of McDonald's. However, respondents indicated that their perceived consuming experience was improved by ordering from the kiosk because they could spend as much time as they want. According to consumption value theory (Sheth et al., 1991), control over time by using the self-order kiosk brought functional value, emotional value and conditional value to the young people in this study, as the following paragraph explains.

The functional value of time control is found in the fact that customers can order at their preferred rate. Using the self-order kiosk not only could increase customers' efficiency by shortening waiting times and accessing the available kiosk quickly, but also could offer a slow and relaxed ordering environment. The emotional value of time control is increasing a sense of relaxation. In comparison with ordering from the counter, customers totally control personal ordering speed without others pushing or forcing. The conditional value of time control relates to some situations including group orders and orders by non-English speakers. Group order customers need time and space to discuss their whole order, which might take longer than individual customers. For non-English speakers, using the self-order kiosk offers enough time to them for work out the order in an unfamiliar language environment. Customers from these situations have the right to control the amount of ordering time to meet their requirements. Therefore, controlling the amount of ordering time by using the kiosk is valuable for young people.

5.2.2 Information control
The data analysis showed that young people have a desire for detailed information about products and restaurant promotions in order to make an economical purchasing decision

(see section 4.2.6). Furthermore, using the self-order kiosk helps young people access comprehensive information and so they can make a satisfying decision concerning food materials, size, and price. Therefore, the information provided by the kiosk channel for them to access comprehensive information brings functional value (Sheth et al., 1991).

As noted in section 4.2.6, respondents felt that the information at the counter, such as the menu, is limited. In this case, customers making orders are largely guided by the fast-food restaurant. At this moment, young people lost the initiative of selecting food freely. However, some young people come to the fast-food restaurant to have food quickly and save money at the same time (Mohammad, 2004). The self-order kiosk offers detailed information to customers, such as the whole menu, the discount options and the food ingredients and so on, so they can make better decisions. Therefore, the result supports Ming-Sung Cheng et al. (2009) in that offering comprehensive information to customers becomes a competitive advantage of SST. This finding also indicated that young people are sensitive to the value of money and prefer to use money wisely. Therefore, the control over the amount of information obtained by using the self-order kiosk produces functional value in that an economic decision is made, and money is saved.

5.2.3 Privacy control

The findings showed that young people pay great attention to their image in public and care about their privacy. Oh et al. (2013) note that customers' desire for privacy positively influences SST adoption. The results of this research explored more deeply the idea that young people have great concern for privacy protection especially in situations such as being in a bad mood, wearing no makeup, having weak language competency, or eating large amounts in public. Using the self-order kiosk offered a personal space to respondents, which helped them stay away from the judgment of others. In this case, they can control their privacy by using the self-order kiosk at McDonald's.

According to consumption value theory (Sheth et al., 1991), controlling personal privacy without judgment by using self-order kiosks produces emotional value to customers. Respondents feel more comfortable when they use the kiosk because no-one will disturb them and/or judge them. In this case, using a self-order kiosk covers lack of confidence and increases a sense of safety.

5.2.4 Service control

Service control was another reason for young people using the self-order kiosk at McDonald's. Service control not only means customers can ensure service quality, but also refers to customers being able to participate in the service process. The service quality of interactions with staff was not stable. Respondents mentioned that communication misunderstandings, the language barrier, serving mistakes, and staff lack of friendliness makes the human service quality unstable (see section 4.2.3.1). These problems of human service take place randomly, and are out of customers' control. These results agree with Frambach et al. (2008) in that customers feel a loss of freedom when they have no option for service delivery. Respondents expressed the view that the self-order kiosk offers a predictable and standard service that is within their expectation. They could also increase the level of service control further by food customisation, adding or removing items freely.

The service control provided by the self-order kiosk provides both functional value and emotional value (Sheth et al., 1991). The functional value is provided by the ability to customise food choice and increase order accuracy. Respondents selecting their preferred food materials not only improve order satisfaction, but also avoid the food they are allergic to and any other sources of dissatisfaction. As for emotional value, customers feel free to use the self-order kiosk without annoying or hindering anyone. Respondents indicated that they feel embarrassed asking for extra requirements during busy times in McDonald's and the employees also show impatience at those times.

However, customers entirely control the service in that they add or remove items by themselves through the kiosk, rather than worrying about annoying staff and delaying other customers at busy times. The self-order kiosk gives customers a personal space where they have no need to worry about others' feelings and can focus on their own requirements. In this case, the control of the service process through the self-order kiosk brings a sense of freedom to customers.

Young people can realise empowerment by using the self-order kiosk at McDonald's, and they co-produce and improve their consuming experience by controlling the amount of ordering time, detailed product information, privacy, service quality and the service process. This result is consistent with Joosten, Bloemer, and Hillebrand (2016), in that customers advocate for empowerment and co-production in service delivery, and supports

Lusch, Vargo, and O'Brien (2007) who suggest the service provider will have a competitive advantage if they offer the chance of empowerment to customers.

5.3 Peer effect

Lee and Coughlin (2015) found that peer pressure has an impact on older adults adopting new technology. The findings in the present research showed that the peer effect also plays a role for young people using self-order kiosks actively for the first time. This finding also agrees with Rintamäki, Mitronen, and Kuusela (2007) in the idea that shopping behaviour could help customers to express themselves. The findings in this study suggest that young people want to follow the latest trend, as they were reluctant to fall behind others trying new technologies when they saw their peers using a kiosk. In other words, for young people, the peer effect has a positive influence on adopting new technology. Furthermore, the finding is consistent with that of Lucas, Salladarré, and Brécard (2018), who found consumers may copy behaviours of other consumers inside their peer group, and agrees with Shobri, Wahab, Ahmad, and bt 'Ain (2012), whose work showed the peer effect influences young customers product purchase behaviour, especially product preference. Respondents were willing to using self-order kiosks, the same as their friends, because it might have a positive impact on engaging in group discussion and socialisation.

Therefore, the peer effect of using the self-order kiosk brings functional value and social value to customers. The functional value is that young people are more willing to adopt a new technology, which increases their technology acceptance ability. As for social value, using the self-order kiosk, the same as their friends, helps young people engage in group discussion and socialisation.

5.4 Young people's perspective on hospitality

With the application of SST in fast-food restaurants (i.e., McDonald's), young people have opposing opinions about the impact of SSTs on hospitableness. Some young people in this study clearly expressed the view that a fast-food restaurant with SST is a consumption factory rather than a space of hospitality. Others indicated that the SST application improves their consuming experience and they could receive hospitable moments from the self-order kiosk. These two different situations will be discussed in the following section.

5.4.1 Essence of hospitality

Some respondents did not regard McDonald's as hospitable because of poor human service and the application of SST. This showed that some young people emphasise the human interaction as a key factor in hospitality at McDonald's. Human interaction is identified as a common core element of hospitality in commercial settings (Lashley, 2015; Osman et al., 2014; Teng, 2011). However, respondents complained that the McDonald's staff serve customers like machines because of their behaviour that lacks care for customers. Furthermore, they felt that staff did not offer a basic service to respondents because of rude attitudes and work mistakes. Therefore, respondents expressed the view that they do not get hospitality experiences in McDonald's because of poor human service. This phenomenon was also found by Torres, van Niekerk, and Orlowski (2017) in the form of employee incivility towards employees having a negative impact on customers' experience.

In terms of the application of self-order kiosks in McDonald's, these respondents regarded SST as a tool for increasing restaurant efficiency because the company does not care for people. In addition, they also regarded SST as a machine to replace the staff. These respondents held the view that less human interaction leads to less of a sense of hospitality. Thus, self-order kiosks in McDonald's were a cause of removing the sense of hospitality from fast-food restaurants. Ritzer (2011) stated the McDonald's restaurants pay more attention to efficiency than service quality and Dixon, Kimes, and Verma (2009) described the self-order kiosk as a way to improve efficiency. In this case, some young people might agree with Ritzer's (2011) view that the efficiency of commercial hospitality has an adverse effect on the quality of service, and the ability to be hospitable.

As discussed already in section 2.3.1, Brotherton and Wood (2001) suggested that hospitality has an essence which relates to four aspects: the physical products, the exchange relationship, its uniqueness within various hospitality contexts and human interaction. Brotherton and Wood (2001) also stated that hospitality is particularly formed by human behaviours and interactions. According to this hospitality essence definition, fast-food restaurants using SST (i.e., McDonald's) lose the essence of hospitality because of the lack of human service. Apart from this, the application of SST offers physical products to customers, builds the exchange relationship with customers, and has uniqueness within various hospitality contexts. However, the human interaction is the

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only element absent from the process, which seems not to match the requirements of hospitality.

5.4.2. Customer-oriented hospitality

The findings showed that other young people not only consider McDonald's to be a good fast-food restaurant but they also enjoy some hospitable moments provided by the kiosk (see section 4.3.3). These young people pointed out that McDonald's is better than other fast-food restaurants because it offers two service options (i.e., human service and the self-order kiosk) to customers. Customers have the initiative to choose the service that suits their needs and requirements, so they will not be forced to communicate with employees nor to use self-order kiosks.

5.4.2.1 McDonald's: The human-technology hybrid model

Respondents regarded the kiosk application in McDonald's as a wise evolution because they have more options for service delivery. In addition, the human-technology hybrid model of McDonald's brings mutual benefits to customers and the organisation. To be more specific, McDonald's could serve more customers including non-English speakers and make more profits if McDonald's implemented the self-order kiosk (Peterson, 2015); customers could choose the service method suitable for meeting their requirements without being forced to use SST or the counter.

In terms of the benefit for the organisation, the human and technology model of McDonald's suits the purpose of commercial hospitality: to pursue high efficiency by serving more customers (Thompson, 2009). As for the benefit for customers, young people have both their desired service outcomes and they have the right to choose service delivery. This finding matches the study of Liu (2012) who noted that customers select the delivery method that best fits their needs, which positively influences consumer satisfaction. McDonald's human-technology hybrid model is supported by Di Pietro, Pantano, and Di Virgilio's (2014) paper, which stated that people and technology are the important resource and provide a unique competitive advantage for a hospitality organisation.

5.4.2.2 Customer-oriented hospitable moments

Respondents in this research also expressed the view that they received hospitable moments from the kiosks. It is worth mentioning that these young people regarded the self-order kiosk as an alternative service in McDonald's and enjoyed the advantages of the self-order kiosk: flexible ordering time, personal space, customer empowerment, protection of privacy and the offering of sufficient information. They recognised that the application of self-order kiosks improves service. These young people focused more on their personal requirements being met rather than who meets the requirements. In this case, personal requirements could only be satisfied by the kiosk and not by humans, and so they have a hospitable moment from the self-order kiosk. In general, the hospitable moment given by kiosk is on the premise of providing a sufficient sense of security, such as protecting privacy (e.g., when they are crying, not wearing makeup, or eating a large amount), and a judgment-free environment (e.g., no annoying staff, not delaying others, not being judged by others). These young people got a hospitable moment from the kiosk in certain situations; however, the individual's hospitable moment was unique according to their requirements in a particular situation.

This finding that young people receive a hospitable moment from a self-order kiosk without human interaction challenges the previous hospitality essence identified by Brotherton and Wood (2001). However, as discussed previously in section 2.3.2, Hemmington (2007) provided a structure to explain commercial hospitality experience which included five dimensions: host-guest relationship; generosity; theatre and performance; many little surprises; and safety and security. These five dimensions can be applied to analyse the finding on the hospitable moment received from a self-service kiosk, as the following paragraphs explain.

Generosity means the host is supposed to create generous feelings for customers in the commercial context of making a financial gain from guests (Pizam & Shani, 2009). Theatre and performance dimensions means staff serve and perform well to make a unique experience for customers (Hemmington, 2007). Respondents did not mention these two dimensions in the research interviews, so the commercial hospitable experience of young people consuming in McDonald's did not contain generosity or theatre and performance as far as this study was concerned.

The host-guest relationship is an essential part of the context of commercial hospitality. For the young people in this study, McDonald's restaurant could be regarded as a good host because it offers more service options to customers than other fast-food restaurants. Thus, a good host-guest relationship between young people and McDonald's is a basic foundation for customers' commercial hospitality experience. It is worth mentioning that Hemmington (2007) observed that a hospitable experience is based on a good relationship with the host, has no set limitations, and must include human interaction.

A number of little surprises at important moments aim at extending guests' good feelings (Lashley et al., 2007). This finding showed that some young people are surprised by McDonald's providing customers with a number of self-order kiosks, which is regarded as a competitive advantage over other fast-food restaurants. Respondents noted that McDonald's is different from other fast-food restaurants because they provide the right to actively choose the service method. Furthermore, respondents were also surprised at the enjoyment, convenience and customer empowerment provided by the self-order kiosk.

Finally, Hemmington (2007) also mentioned that protecting guests' personal security could be identified as one of the significant components of enjoying hospitality. Young people who experienced a hospitable moment from the self-order kiosk emphasised the sense of psychological security when using a kiosk. The inner sense of security comes from the personal space provided by the self-order kiosk protecting young people from judgment. At that moment, the self-order kiosk meets young people's requirement for privacy and increases the inner sense of security, so they receive a hospitable moment from the self-order kiosk.

The views of the young people in this study align with Lee and Yuan (2018), who wrote that the meaning of hospitality could be interpreted in various ways, and the hospitable moment is an acknowledgment of customers (Lugosi, 2008). Results of this study are consistent with the view of Lockwood and Jones (2000) in that commercial hospitality is demand-oriented, and customers have a strong ability to control their own hospitality experience. According to the data, the prerequisite for a hospitable moment provided by a kiosk is that young people trust the technology more than humans in that specific context. This situation is called technology trust, and was described by Johnson (2007) who suggested that customers believe technology has reliable performance without moral

issues. To be more specific, a self-order kiosk can keep customers' personal information and situation confidential and away from the moral judgments of others. This phenomenon supports a previous study that indicates technology trust plays an important role in the adoption of technology and relates to satisfaction with SST (Schlosser, White, & Lloyd, 2006).

What must be emphasised is that the young people experience a hospitable moment by using the self-order kiosk in a specific context. This specific context is that customers have individual requirements at that moment and they trust the self-order kiosk to meet them more than they trust a human. Therefore, the hospitable moment provided by the kiosk is customer-oriented at a specific time; it is not at every time for everyone. In addition, the hospitable moment provided by the self-order kiosk conforms to the proposal by Lugosi (2008) that meta-hospitality is infrequent, existential in nature and emotional in essence. Taking the respondent Ruby as an example (see 4.3.3), she felt hospitableness by using the self-order kiosk because she had the option of using SST in McDonald's and the self-order kiosk give her a confidential space without the judgment of others. Ruby recounted that she was crying at that moment and she need a personal space without disturbance or judgment. Using the self-order kiosk was more comfortable and safer than human interaction at that moment because Ruby trusted the SST would not judge her. Ruby had an emotional requirement for a sense of safety and relaxation without judgment, which was met by the self-order kiosk. Thus, Ruby indicated that the self-order kiosk provided the hospitable moment to her that day. This example agrees with the meta-hospitality Lugosi (2008) said is tied to an individual's short-lived emotional need that is hard to arrange and recreate. Therefore, young people could receive meta-hospitality (i.e., a hospitable moment) from a kiosk; however, each customer's hospitable moment is unique to their individual requirements.

Chapter 6. Conclusion

6.1 Answering the research questions

The research questions arising from the problem statement are addressed in this section.

Question one: *Why do young people choose to use SST as a service delivery method in fast-food restaurants?*

The findings (see section 4.2.8) show that novelty seeking, fun, and curiosity are important reasons for young people to try a new technology (i.e. kiosks at McDonald's) at the beginning. In addition, the convenience (see section 4.2.7) provided by kiosks is the critical factor for young people using them in the long-term. Therefore, the findings suggest enjoyment and convenience are the basic attractions for young people to use kiosks.

Customer empowerment is the main reason young people use the self-order kiosks at McDonald's. Some young people have a desire for empowerment and are willing to co-produce their consuming experience by using the kiosks. To be more specific, young people can control their use of time and have detailed product information, privacy, and service to produce a satisfying experience in terms of value, price, and quality. During the process of customer empowerment obtained by using the self-order kiosks at McDonald's, young people could receive functional value, emotional value, and conditional value.

In addition, peer effect plays a significant role in encouraging young people to adopt new technology. Some young people like to follow a trend and are reluctant to fall behind their peers. Therefore, they may choose the self-order kiosk as the service method if their friends do so because of the peer effect; that is, the potential effect that not following them might have on group socialisation.

Question two: *How do young people experience hospitality when using SST at McDonald's restaurants?*

Human interaction is still a core element of hospitality. Simple human interaction is not enough; the young people in this study want to have a quality human service experience.

Therefore, some did not regard McDonald's restaurants as hospitable establishments because of poor human service and the application of kiosks.

However, some young people think a McDonald's restaurant is better than other fast-food restaurants because it offers more service options (i.e., human service and self-order kiosks). Customers have the initiative to select the service method suiting their requirements without being forced to use either the counter or kiosk. Moreover, some receive hospitable moments by using a self-order kiosk in a specific context. This specific context is that customers have individual requirements and they trust the SST to meet them more than human interaction. These hospitable moments from kiosks could be identified as meta-hospitality, which is infrequent, existential in nature and emotional in essence. Different customers have different emotional needs in specific situations; therefore, the hospitable moment from the kiosk is unique and cannot be replicated. This finding challenges current understandings of what hospitality is, and therefore challenges the work of Brotherton (1999) who suggests that human interaction is the vital part of hospitality.

6.2 Implications for practice and theory

In terms of implications for practice, this research suggests that a fast-food restaurant's manager is supposed to ensure the quality of human service. Poor quality human service has a negative impact on the evaluation of the restaurant (Gede Mahatma Yuda Bakti I & Sumaedi Sik, 2013). Although a small number of employees are working behind the counter, they need to keep a positive attitude towards customers who choose to receive human service. Managers need to pay attention to the quality of customer service that employees are providing, therefore they should obtain feedback and collect suggestions from customers.

Hospitality providers need to fully understand consumers' needs and the marketplace, and design a customer-driven marketing strategy (Kotler, 2017). Hospitality providers could offer more service delivery methods (i.e., counter and SST) to customers if the target customers have a desire for empowerment. To create a competitive advantage, service organisations need to satisfy and delight customers (Chakraborty, 2017). In this case, customers have a right to choose a suitable service method. To consider increasing the acceptance of new technology, the manager could use the peer effect. The findings

from this study suggests that young people have a desire to follow trends, therefore the manager could make some promotion and activities for young people.

In terms of implications for theory, this study improves on prior research efforts to understand young people's behaviour regarding SST at McDonald's. First, by researching the reason young people use self-order kiosks at McDonald's, this research emphasises customer empowerment in terms of ordering time, information, service quality and process, and privacy as the main reasons for using SST in fast-food restaurants. The peer effect is also significant among young people adopting new technology. From the consumption value theory perspective, this study shows that customer empowerment brings functional value, emotional value and conditional value to young people, and the peer effect brings social value to young people.

Second, this study contributes to the literature by demonstrating the roles of consumption values on young people's consuming behaviour in the SST context. Most earlier SST studies employed the technology acceptance model (TAM) as the theoretical foundation for their research (Blut et al., 2016). The TAM focuses on the usefulness and the ease of use (i.e., functional value) of SST, however it excludes the emotional, social, epistemic and conditional value dimensions from their investigations (Kelly, Lawlor, & Mulvey, 2010). Other research use self-determinant theory as the theoretical foundation, paying attention to the extrinsic and intrinsic factors and excluding the conditional value (Wei, Torres, & Hua, 2017). Only rarely have researchers employed consumption value theory in their research (Lucas et al., 2018; Phau, Quintal, & Shanka, 2014; Turel, Serenko, & Bontis, 2010), but they explored the fields of green products, mobile phone and young people's choice of destination. This research demonstrates that consumption value theory also can be applied to different contexts such as the use of SST.

In addition, this research indicates that customers could receive hospitable moments when using a kiosk in specific contexts, which challenges Brotherton's (1999) idea that human interaction is a necessary element for a feeling of hospitality. Consequently, this research gives a new angle to understand being hospitable toward customers and shows that feelings of hospitality do not always include human interaction.

6.3 Limitations of the study

This research collected data from 16 young people, which could be identified as a small data set. The findings of the interview data express just some of the perspectives of young people, but caution should be taken before generalising from the results.

Gerring (2004) defined a case study as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units" (p. 4). However, Yin (2014) explained that if a case study focuses on knowing and learning more about a particular group, event or organisation, then such a case study is not necessarily able to create general theories or findings that can be generalised to the broader population. This case study, consistent with Yin's (2014) explanation, focused on knowing and learning more about the young people's perspective on the kiosk application at McDonald's, and their conceptualisation of hospitality. Therefore, the research findings are best suited for being applied to some situations similar to the research context of this case study, rather than being generalised to the broader population.

The cultural backgrounds of respondents and the researcher were different. Respondents come from diverse cultural backgrounds such as India, the Philippines, Morocco, Korea etc. and the researcher comes from China. Therefore, people from different cultures might have had a different understanding of some concepts during the interviews and might have produced erroneous responses because of cross-cultural misunderstandings. In addition, it was a challenge for many respondents to express themselves accurately in English. Most (n = 11, or 70%) were non-native English speakers, but English was the only common language in this research. Not all respondents had excellent spoken English and not everyone could guarantee the accuracy of wording and expression, especially for non-native English speakers. Therefore, respondents' uneven ability to express themselves in English could have increased the possibility of cross-cultural misunderstandings.

6.4 Suggestions for further research

The research findings show that the young people could receive a hospitable moment by using SST without human interaction in specific contexts. This finding also emphasised that the hospitable moment obtained from SST is customer-oriented and cannot be replicated. In this case, the research suggests that understanding of the relationship

between SST and hospitality still needs work. In addition, how customers conceptualise hospitality also needs further exploration in the future.

Furthermore, young people's desire for customer empowerment is the main feature of their choice to use SST. Young people seek control in terms of ordering time, restaurant information, service quality and process, and privacy, and respondents from different cultural backgrounds expressed different levels of desire for control. Therefore, cultural dimensions such as the degree of cultural uncertainty avoidance could become a new opportunity for researching customers' perspectives on SST.

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Publications.

Appendix A: Indicative Questions

Indicative Research Questions
Project title: The hospitality between customers and self-service technology—A case study of McDonald's restaurants.

Participant code: (e.g. 01)

Date: _____ **Time:** _____

Gender: Male / Female

Age:

Ethnicity:

Highest education:

First impression of self-order kiosk
1. When you first saw the kiosk at McDonald's, what was your thought?
    - What was your first experience of using the McDonald's kiosk like?
    - Did you worry about the ease of using it?
    - Were you curious about how to use it?
    - Did you try to use it or did you just ignore it at the first time?

Factors relating to choosing the self-order kiosk
2. How many times have you used a kiosk at McDonald's?
    1-4, 5-8, 9-12, more than 12

3. Why do you use kiosks at McDonald's?
    - When do you prefer to use a kiosk rather than order from the counter?
    - Does the length of time it takes to use a kiosk or order from the counter affect your choice?
    - Does the number of people you are with affect your choice of ordering systems?
    - Does the McDonald's environment (e.g. long queue, little staff) affect your choice between ordering systems?

Perceptions of hospitality
4. How does the use of kiosks at McDonald's improve or detract from your experience? Why?
    - Do you think kiosks improve the service provided by McDonald's?

5. What is your hospitality experience like when you use a kiosk at McDonald's?
    - What does hospitality mean to you?
    - How do you experience hospitality at McDonald's?

6. Would you like to kiosks use widely in hospitality businesses? For example? Where?

Appendix B: Participant Information Sheet

Participant Information Sheet

Date Information Sheet Produced:

7 March 2018

Project Title

The hospitality between customers and self-service technology—A case study of McDonald's restaurants.

An Invitation

I am a master's student of International Hospitality Management in Auckland University of Technology. I am doing research for my degree in exploring young people's experiences and perspectives of using self-order kiosks in McDonald's restaurants. I invite you to participate in my research to share your experiences of using self-order kiosks in McDonald's restaurants. Participation in this study is voluntary, so you can decide whether to participate or not.

What is the purpose of this research?

The purpose of this study is to explore customer experiences and perspectives of self-service technology use and determine how customers view and experience the use of self-service kiosks in McDonald's restaurants.

How was I identified and why am I being invited to participate in this research?

You have received this information sheet because you have responded to a poster about this study, or contacted by someone you know, and shown interest in this study. If you have used a McDonald's kiosk before and are between 18 years and 24 years old, you are eligible to participate in this study.

How do I agree to participate in this research?

Please contact me by email within two weeks if you would like to participate. Together, we will decide on a suitable time for the interview in a public place such as at McDonald's. When we meet I will ask you to complete a Consent Form before the interview starts.

What will happen in this research?

I will ask you about your experiences of and attitudes towards self-order kiosk in McDonald's restaurants. The interview will be recorded on a digital recorder and I will take notes.

What are the discomforts and risks?

There are no discomforts or risks of participation as the questions are not personal. Your participation in this research is voluntary (it is your choice) and you can withdraw from the study up to two weeks after your interview. If you choose to withdraw, there will be no adverse consequences, penalty or repercussions and your data will be removed from the study.

What are the benefits?

The benefit to the participants: You will have the opportunity to contribute your opinions and potentially affect hospitality organisations' decisions relating to self-service technology applications.

The benefit to the researcher: This research is being undertaken as a part of qualification for the researcher. Additionally, undertaking this study provides the researchers with the opportunity to learn more about self-service technology application in hospitality.

The benefit to the community: Customers' consuming behaviour and cognition of hospitality gradually changes due to the wide use of self-service technology in the industry. Since customers are increasingly dealing with non-human technologies in the hospitality industry, their opinions and experiences of SSTs offering hospitality deserves further attention. Currently, young people represent a powerful portion of consumers, and their consumption tendencies should be taken into consideration. The findings are not only helpful to McDonald's regarding the application of kiosks specifically, but also to provide advice to the fast food industry on how to improve customer satisfaction through the use of self-service technology.

How will my privacy be protected?

No contact information will be given to any third party and I will use pseudonyms in any publications, presentations, and the final report.

1

What are the costs of participating in this research?

The interview will take around 45-60 minutes.

What opportunity do I have to consider this invitation?

Please contact me as soon as you decide you are willing to participate.

Will I receive feedback on the results of this research?

A summary of the research finding will be available on the website of New Zealand Tourism Research Institute: http://www.nztri.org. You are welcome to visit the website and view the findings.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, *Warren Goodsir, warren.goodsir@aut.ac.nz, Phone: +64 9 921 9999 ext. 8374.*

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz,* 921 9999 ext. 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Qi (Kiki) Yang: kikiyangaut@gmail.com

Project Supervisor Contact Details:

Warren Goodsir: warren.goodsir@aut.ac.nz / Telephone: 09 921 9999 ext. 8374

Jill Poulston: jill.poulston@aut.ac.nz / Telephone: 09 921 9999 ext. 8488

Notice:

1. The research does not hold the interview at McDonalds.

2. The research is not being done on behalf of or funded by McDonalds.

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted,* AUTEC Reference number *type the reference number.*

Appendix C: Consent Form

Consent Form

Project title: **The hospitality between customers and self-service technology—A case study of McDonald's restaurant**

Project Supervisor: **Warren Goodsir / Jill Poulston**

Researcher: **Qi(Kiki) Yang**

○   I have read and understood the information provided about this research project in the Information Sheet dated dd mmmm yyyy.

○   I have had an opportunity to ask questions and to have them answered.

○   I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

○   I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

○   I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

○   I agree to take part in this research.

○   I wish to receive a summary of the research findings (please tick one): Yes○   No○

Participant's signature :   ………………………………………………………………………………………………………

Participant's name: ………………………………………………………………………………………………………

Participant's Contact Details (if appropriate) :

………………………………………………………………………………………..

………………………………………………………………………………………..

………………………………………………………………………………………..

………………………………………………………………………………………..

Date:

Approved by the Auckland University of Technology Ethics Committee on **type the date on which the final approval was granted** AUTEC Reference number **type the AUTEC reference number**

Note: The Participant should retain a copy of this form.

Appendix D: Ethics Approval

AUTEC Secretariat

Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

26 March 2018

Warren Goodsir
Faculty of Culture and Society

Dear Warren

Ethics Application: 18/120 **The hospitality between customers and** <u>self service</u> **technology - A case study of McDonald's restaurants**

I wish to advise you that a subcommittee of the Auckland University of Technology Ethics Committee (AUTEC) has **approved** your ethics application.

This approval is for three years, expiring 26 March 2021.

Non-Standard Conditions of Approval

1. Do not hold the interview at McDonalds;
2. Advise participants on the Information Sheet that the research is not being done on behalf of or funded by McDonalds.

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries please contact ethics@aut.ac.nz

Yours sincerely,

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