

# **To Self-Service or Not To Self-Service? That is the Question for Hotels.**

**An Exploratory Study of Senior Hotel Managers'  
Perspectives.**

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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.

Signed:

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This research was approved by the Auckland University of Technology Ethics Committee on 27 September 2010. AUTEK Reference number 10/212.

## **Abstract/ Summary**

Customer self-service technology such as self-check-in kiosks has been implemented successfully at airports. Travellers seem to have accepted this technology and have become familiar with the concept. Self-service kiosks are currently also introduced in some American, European and Asian hotels. However, New Zealand hotels have not yet generally taken advantage of this technology. This study researches hotel managers' views on the advantages and concerns of these self-service kiosks and their impact on customers and the hotel's front-office operations. In addition, the managers' concerns, related to introducing the kiosks are discussed.

The aim of this study was to gain the perspectives of managers from New Zealand's four and five star hotels regarding the impacts of self-service technologies (SSTs) on the hotel's front-office operations and guests. A qualitative, case study research methodology was used in this research, to understand the managers' perceptions and impacts of the self-service technologies. The research was conducted through ten semi-structured interviews and common themes which were found to be important to these participants were discussed.

The research highlighted that managers had certain reservations towards SSTs, which may explain why they have not yet been implemented in New Zealand. The main reasons expressed were that personal service is vital in four and five star hotels, especially for leisure guests who like the friendly interactions with employees. Additionally, the costs to implement and interface the kiosks are significant and need adequate justification either through adding value for the guests or reducing costs for the hotel. There also may be some difficulty in interfacing the kiosks with each hotel property's front-office system and the local New Zealand banking system. Finding the appropriate kiosks for each property would be imperative for SSTs to be a success.

Managers believed that there are significant benefits associated with introducing SSTs in hotels. For the customer, managers felt that kiosks enabled benefits such as allowing check-in efficiency, additional guest-control,



customised service interactions, choice of communication language for foreign travellers and easy, standardised service interactions. Managers felt that kiosks would predominantly benefit corporate and regular travellers, due to the efficiency and speedy self-check-in process. For the hotel, managers viewed kiosks as being able to lower labour costs, alleviating pressure on check-in staff during busy periods, enabling easier data access for customer-profiling and improving revenues through customised up-selling. Also the introduction of kiosks is predicted by some managers to revolutionise the hotel lobby and evolve employee roles, where service staff may greet guests on the lobby floor rather than from behind the reception desk, and spend more time creating closer relationships, adding to the guests' hotel experience and being more customer-orientated.

This study in New Zealand found that the majority of managers supported the introduction of self-check-in kiosks as an alternative value offering, as long as the kiosks were introduced as complimentary to service staff. Well-trained and friendly staff, in their opinion, would always be vital for guest satisfaction and reducing staff numbers would lower the hotel's service standards.

# 1 Chapter One: Introduction

Service encounters in industries such as those involved with hospitality, tourism and travel have traditionally centred on customer services delivered by front-line employees (Beatson, Lee, & Coote, 2007; Curran, Meuter, & Surprenant, 2003). The encounter has been revolutionised in the past decade by the introduction of customer self-service technologies (SSTs) such as self-check-in kiosks and automated teller machines (ATMs). SSTs have been successfully implemented at international and domestic airports, banks and other service organisations around the globe (Kontzer, 2005; Makarem, Mudambi, & Podoshen, 2009; Starwood Inc, 2010). Self-service kiosks are also currently being introduced in American, European and Asian hotels; however, in New Zealand, hotels do not seem to have embraced this technology.

The purpose of this study was to discover the perceptions of senior managers of four and five star New Zealand hotels regarding self-service technology. The main focus of the study was to explore the managers' views on the possible introduction of self-check-in kiosks in these hotels and gain their opinions of the potential impacts on the guests as well as on the hotel's check-in operations. The study also investigated which type of hotels managers' perceived that SSTs would be best suited to.

As the existing body of knowledge on SSTs in New Zealand was found to be limited, one goal of this study was to contribute further knowledge about the implementation of self-service technology to the New Zealand hospitality industry. The topic was chosen because of its relevance in our current society where customers interact with self-service technology on a daily basis.

This dissertation is organised as follows. This study begins with Chapter Two: the Literature Review, which reviews current knowledge about the impacts of self-service kiosks in hotels. The chapter commences by initially describing the traditional service process compared to a contemporary self-service encounter. A model, *the Self-service Encounter Model*, was used to assist in clarifying aspects of this encounter. Next, customer satisfaction factors are explored and related to SSTs. Associated quality determinants are presented and service

areas requiring quality management, such as the service encounter and the service design, are explained. Subsequently, the importance of customisation and standardisation is noted and the capability of SSTs to assist hotels with these service areas is examined. Next, the major benefits and concerns of SSTs for hotel front-office operations and for guests are investigated. Lastly, technology acceptance models are analysed and adapted to form a new theoretical model. This new model is subsequently used in the discussion chapter to discuss the advantages of self-service technologies for hotel guests. The literature review is based upon academic research journals and text books focusing on hospitality, marketing, banking and other service industries. Some newspaper reports and internet articles have also been consulted.

Chapter Three describes the research philosophies that informed the study and outlines the design used in the research project. This study adopted a qualitative explorative approach and used semi-structured interviews to gain information regarding the topic. The explorative stance allowed the researcher the opportunity to investigate participants' opinions and perceptions about the topic and the New Zealand hospitality environment.

Chapter Four reports on the data revealed through the interviews. The findings are organised into major themes uncovered through the interview process and are supported with appropriate quotes from the interviewees, whose identities are kept confidential with the use of pseudonyms. This chapter summarises and presents the significant results of this study.

Chapter Five consists of the discussion and conclusion sections of the dissertation. The data collected and analysed in the findings chapter is discussed and a conclusion is reached. The discussion highlights some themes which have not been apparent in the literature but were identified through the interviewing process.

Some significant conclusions drawn from this study are that managers were definite that SSTs should not replace service-staff, especially in four and five star hotels. The introduction of SSTs was believed to reduce service quality and organisation-customer interaction thought to be vital for customer satisfaction.

Managers were also wary of technology malfunctioning and their systems suffering security breaches; thus they suggested that these issues would need to be addressed before hotel kiosks would be introduced. The study finds that habitual and corporate travellers would be more likely to appreciate the benefits of SSTs, while leisure travellers would prefer the personalised hospitality service. The majority of managers felt that kiosks offer significant operational benefits to the hotel and additional value to guests. Hotel managers also believed that self-service kiosks would be appropriate at any type of hotel ranging from budget hotels to luxury five star hotels; however, the motives for introducing kiosks among these properties would be different.

The research informs the industry about the views of hotel managers about potential impacts that self-service technologies may have on hotel operations and on hotel guests. It is hoped that this research will enlighten further debate on whether it will be beneficial or not for New Zealand hotels to introduce self-service kiosks in the future.

## **2 Chapter Two: Literature Review**

### ***2.1 Introduction***

This chapter reviews literature relating to customer service encounters. It begins with the traditional service interaction and progresses to the self-service encounter. Customer satisfaction and aspects of service quality are explored. These are further related to self-service technology and how technology may assist in these areas. Subsequently, customisation and standardisation of hotel services and the extent to which technology influences these areas is investigated. Next, the advantages and concerns of self-service technology are described for guests and for hotel operations, and the customer technology acceptance models are explained and also explored. The chapter concludes with an outline of the significant areas of research uncovered through the literature review. There is significant research on self-service technologies specific to internet service, bank ATMs and airport check-in kiosks. This study uses the information relating to these diverse service industries and applies it to the hotel industry. The literature review investigates the important issues surrounding the introduction of self-service technology for the hotel industry. The review focuses specifically on customer self-service technologies such as automated check-in kiosks which are utilised predominantly at airports and more recently in hotels.

### ***2.2 Traditional Guest Service Encounters***

Service encounters have been defined as face-to-face service interactions between a buyer and a seller (Curran et al., 2003), for example when customers arrive at the hotel and are greeted by service employees in the case of doormen or concierges and receptionists. At this time the guests are checked into the hotel, their personal and credit card details are obtained, room-keys are issued, relevant hotel and local city information is provided and the guests are directed to their room. Check-in encounters between guests and hotels have always been an important interaction traditionally performed by front-office staff (Beatson et al., 2007). It is one of the first encounters between the guest and

the hotel staff where the guest develops a strong first impression about the hotel. This interaction sets the standard of service quality that guests can expect to receive since the guest has not yet seen the room, been to the restaurant or experienced any of the other offerings of the hotel. Therefore it is essential that, while effectively performing the check-in procedure, employees are polite, knowledgeable and friendly so that guests feel welcome (Verginis & Wood, 1999).

### **2.3 Guest Self-Service Encounter**

The traditional encounter has changed with the introduction of self-service technologies where customers interact with technological platforms which deliver services to the customer without a need for contact with employees (Curran et al., 2003; Oyedele & Simpson, 2007). Traditional service sometimes involves guests waiting in long lines at the reception or being subjected to unsatisfactory customer service from front-office staff (Doyle, 2006). Customers can now interact with the automated interface and obtain the required products or services through their own efforts such as check-in and check-out processes via kiosks or making reservations and payments through online websites (Kontzer, 2005; Makarem et al., 2009; Serlen, 2005; Starwood Inc, 2010; Stellin, 2006), thus essentially serving themselves.

Technological advances have provided service organisations alternative options to the traditional employee interactions (Curran et al., 2003). SSTs have recently arrived at the forefront of service encounters in many aspects of daily life, where customers are widely exposed to the choice between self-service and service staff (Dabholkar, 1999; Victorino, Verma, Plaschka, & Dev, 2005).

Self-service technology has attracted considerable interest from hospitality academics and practitioners because of its novelty and strategic importance to the hotel sector (Cunningham, Young, & Gerlach, 2009). Bitner et al. (2001) state that technology has already impacted service delivery methods and will continue to do so in the future. The advancement of SSTs has caused a significant shift in the nature of service delivery from customary interactions of

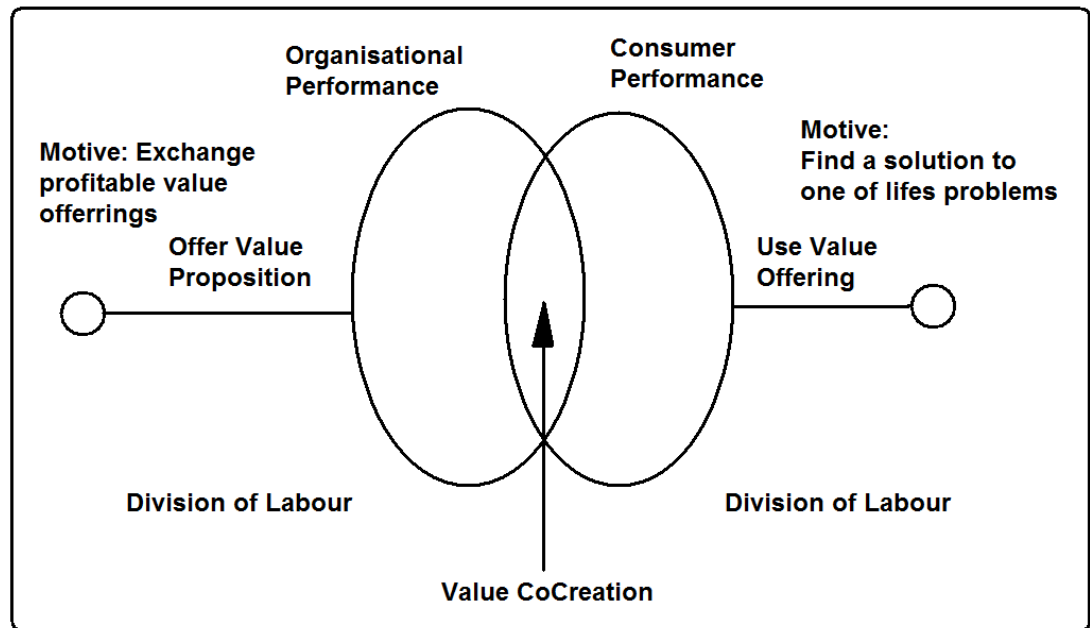
employee-to-customer to interactions between customer-to-SSTs (Cunningham et al., 2009; Pujari, 2004). Some customers are found to prefer self-service compared to interacting with service employees (Makarem et al., 2009), therefore organisations which remain stagnant and do not evolve in this respect may struggle to compete and even survive in the market place (Pech, 2002).

SSTs have been introduced in service industries such as the banking industry with ATMs and internet self-service options (Bitner et al., 2001; Curran et al., 2003), the retail industry with self-scanning terminals at outlets (Bitner et al., 2001), hotels with electronic concierges and check-in/check-out kiosks (Cornell University, 2010; Curran et al., 2003; Griffy-Brown, Chun, & Machen, 2008; Kontzer, 2005; Schick, 2004; Starwood Inc, 2010). International hotel brands such as Marriott, Hyatt, Hilton and Starwood, for example, have already introduced automated self-service kiosks terminals in their hotel lobbies, enabling customers to perform various processes (Schick, 2004; Serlen, 2005; Stellin, 2006). The travel industry (Bitner et al., 2001; Griffy-Brown et al., 2008) also allows travellers to check themselves onto flights via self-check-in options (Cornell University, 2010; Jenner, 2009).

### **2.3.1 The Self-Service Encounter Model**

The self-service encounter is described in this section. The *Customer Self-service Encounter Model*, adapted from Oliveros, Halliday, Posada, & Bachmann (2010) model [below], illustrates the process of a self-service encounter which customers experience in many situations, such as when customers take out cash from a bank ATM, when customers check into flights at airport kiosks or when hotel customers check-in to their rooms via kiosks. According to Figure 1 below, the organisation offers the customer a value proposition [kiosk] and when the customer uses the offering, they [customer and kiosk] together co-create the service [check-in]. The customer takes on a more active role in gaining the service for themselves and they create the service via technology rather than through an employee.

**Figure 1. The Self-Service Encounter Model**



Source: Oliveros, Halliday, Posada, & Bachmann (2010, p. 362)

The main attributes of the model are described below.

### ***Motive***

The motive from the organisations' point of view is to reduce operational costs for certain services and to perhaps offer customers the choice of a different channel to obtain a service. The motivation for the customers' point of view is to find a solution to their problem. If the new offering [check-in kiosk] will make processes [checking-in] easier, faster and more effective, then customers are likely to adopt the new offering.

### ***Organisational performance***

From the hotels' point of view there is enhanced organisational performance, operational efficiency and possible reduction in staff levels.

### ***Customer performance***

There is more control presented to the customer since they can access the service kiosks during any time of the day, avoid queues at the reception desk and choose from a variety of available options.



### ***Division of labour***

Hotels opting to implement kiosks would benefit by enabling and encouraging customers to create the service via kiosks for the check-in encounter, since banks and airlines have already seen reductions in staff numbers due to customers accepting the technology and performing various services for themselves (Oliveros et al., 2010).

Co-creation is a term used to describe the collaboration whereby customers collaborate with companies to produce the services whether it is through collaboration with an employee or a machine (Honebein & Cammarano, 2005). Customers have become more active in gaining services and are exposed to performing services for themselves in many daily activities, such as filling petrol into cars and visiting bank ATMs to withdraw money (Honebein & Cammarano, 2005; Oliveros et al., 2010). Organisations provide the means and opportunities via technology for customers to perform the tasks which used to be traditionally performed by service attendants.

Customers have become sophisticated, informed and able to perform service tasks through their own efforts, and the tools provided by organisations (Honebein & Cammarano, 2005). Thus by co-creating, customers may experience more value from the service process due to their perceptions of having more control, achieving quicker results, spending less time waiting and the avoiding interaction with potentially slow or unhelpful employees. Such proactive, independent customers not only help themselves but also help organisations in decreasing operational costs and speed up the service processes (Honebein & Cammarano, 2005; Oliveros et al., 2010). Companies can realise significant cost savings by passing parts of the process of service operations on to customers. This can allow for the relocation of human resources to perform other tasks which may create further value for customers.

However, different customers have different needs and expectations (Teare, 1998), and some will continue to prefer interactions with staff. Thus, organisations could benefit in securing a balance by offering both options for

customers. The above model is used in the discussion chapter to explain some findings of this study.

## ***2.4 Customer Satisfaction in Service Encounters***

Customer satisfaction with service quality is important since it may lead to customer loyalty which benefits the organisation (Kotler, Bowen, & Makens, 2003). Customers evaluate the quality of service based on the quality of the service delivery process and the outcome (Bowen, 1997). Orsingher and Marzocchi (2003) propose that customers' perceptions of service quality are directly related to the outcome of service encounters. Therefore, service encounters, where employees satisfy customers' needs are positive encounters while inability to answer guest queries or deliver on needs may be regarded as unsatisfactory encounters. An unpleasant service interaction with an employee would dissatisfy the guest even if the product, such as a room, is satisfactory and vice versa. Pratten (2004) posits that customers enjoy additional value of face-to-face service encounters when an employee is pleasant, knowledgeable and delivers on customers' needs. Service quality is enhanced by an employee's knowledge, skills and ability to satisfy customers and meet their needs.

Lin and Hsieh (2006) suggest that customers' perceptions of the service quality delivered directly impacts customer satisfaction. Therefore, organisations strive to satisfy customers by providing high quality service experiences. Hume (2008) finds that customers revisit establishments when their experiences are satisfactory and that an organisation's profitability increases through repeat customers. He also suggests that satisfied customers may spend more time and money during their subsequent visits since they are more familiar with the products and services.

Makarem et al. (2009) state that customers have certain expectations when entering a service encounter, and judge the service encounters based on whether or not their expectations are met. Law, Hui and Zhao (2004) determine that customers have expectations of how much time should be spent on a

service encounter and if the time meets their estimation, then they will more likely be satisfied. Customers' satisfaction is affected by length of time that they have to wait for services; for example, if they are made to wait in long queues, they develop negative feelings of agitation, impatience and dissatisfaction (Law et al, 2004). Roberts & Sullivan (1998) suggest that quicker service delivery is often interpreted as better service. However, when the speed of a service encounter was unnecessarily quick or unusually slow, customer satisfaction was noted to be weak (Noone, Kimes, Matilla, & Wirtz, 2007). Thus, meeting expectations of duration and quality in service interactions highly impact upon customers' choice of whether or not to return to the establishment.

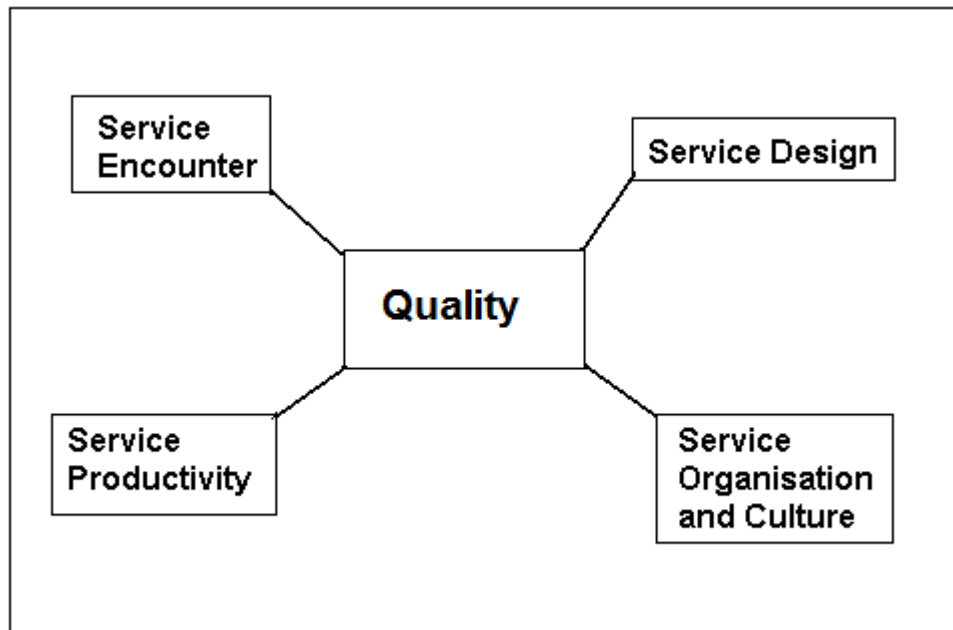
Customers have similar expectations of service quality and outcomes whether dealing with hotel employees or a self-service technology. Makarem et al. (2009) contribute to Parasuraman, Berry and Zeithaml's (1993) concept of service quality (SERVQUAL) aspects which organisations should focus on to satisfy customers. Some original SERVQUAL measures were reliability, assurance, empathy, competence, courtesy and understanding from service. These aspects still hold importance in today's service environment. However, Makarem et al. (2009) state that service quality measures are different when customers are interacting with service employees, compared to dealing with service technologies. The main customer satisfaction factors during face-to-face service encounters have been identified as "reliability, responsiveness, spontaneity, service recovery and convenience" (p. 135), whereas the main satisfaction factors during self-service encounters are noted as "process convenience, reliability of technology and service outcome" (Makarem et al., 2009, p. 136).

Thus, during face-to-face service encounters, hotels need to ensure that superior reliability, responsiveness, assurance and empathy are delivered to customers (Makarem et al., 2009; Mudie & Cottam, 1999, p. 86; Parasuraman et al., 1993). Reliability is determined by the ability of service employees to provide what they have promised to customers, at a suitable time and in a satisfactory manner. Responsiveness entails the willingness of the employee to fulfil the customers' requests and to offer quick service. Assurance is the

service employee's ability to arouse confidence in the customer about the employee's ability to perform the service and provide the products. Empathy means that hospitality employees should be able to care for, understand and sympathise with the guest's needs (Makarem et al., 2009; Mudie & Cottam, 1999; Parasuraman et al., 1993). SSTs can provide some of these service quality factors such as reliability, and responsiveness; yet others such as empathy and assurance may be better provided by skilled employees. Furthermore, SSTs would benefit by satisfying the service quality aspects of process convenience, reliability of technology and service outcome. Process convenience relates to the ease and simplicity of the customer obtaining the service via the technology. For example, when guests visit an airport kiosk to check in to their flights, the process of entering valid details, checking-in and obtaining their tickets should be as simple and easy as possible for the interaction to be satisfactory. The machine should also be reliable in providing this service to customers so that it does not malfunction, print out a wrong ticket or lack security and privacy of customers' information. Finally, the service outcome should be satisfactory, in the sense that customers should gain the desired outcome such as being checked onto the correct flight, gaining the correct ticket and all the required baggage tags.

Customer satisfaction is important for an organisation to maintain; however, first it needs to determine in which service areas to provide quality (Mudie & Cottam, 1999). These necessary service areas are described in the following section.

**Figure 2. The Impact of Quality Model**



Source: Mudie & Cottam (1999, p. 82)

Figure 2 above shows the service areas where quality needs to be maintained throughout a service organisation. The **service encounter** is where the customer interacts with either service employees or service technology to receive a desired product or service. The interaction quality of the service employee or technology is important in ensuring that the customer's needs are met during the interaction. The **service design** is the process through which the customer acquires the service. This can be through the phone, internet, face-to-face or via kiosks, to name some options. The process which the customer must go through to obtain the service needs to be efficient, effective, reliable, timely and convenient to ensure customer satisfaction (Mudie & Cottam, 1999). The **service productivity** is the relative connection between the quality of products and services produced and the quality of resources utilised to produce the products and services. This shows the organisation's efficiency in creating the service, such as how many employees the organisation utilises to create and deliver products and services. The **service organisation and culture** refers to customs, traditions and values of the organisation and how it is

organised affects the quality of service. This determines how the organisation treats its customers and employees. The organisation's culture determines its views, attitudes and practices of how services are delivered to customers (Mudie & Cottam, 1999, p. 82). Each of these areas affects customer-service quality. Hotels would benefit by maintaining high quality standards during hotel-guest interactions in these service quality areas, according to the latest SERVQUAL measures.

## ***2.5 Self-Service Technologies Enable Both Customisation and Standardisation***

Service customisation is described as modifying services to satisfy customers' needs and wants based on individual circumstances. Customisation is necessary when the demands of customers are unpredictable (Lovelock & Wright, 1999). Frontline employees require high skill levels for adjusting the service process to satisfy each customer's unique demand. Customisation makes guests feel unique and treated as an individual, creating customer loyalty.

Currently most hotels offer standard products such as accommodation, restaurants, room service and laundry; however, the point of differentiation comes down to the customised and personalised service (Beatson et al., 2007). Lashley (1998) states that, in hotels, the intangible factors such as pleasant, friendly service interactions and knowledgeable service staff, are dominant even though the tangible elements are important. It is crucial that front-line staff are skilled to provide guests with enjoyable and customised service experiences.

Technological innovations may facilitate service customisation by hotels being in a position to use sophisticated guest-history systems where information is collected about guests' preferences and past requests and being able to satisfy each customer's needs. This information is stored and reused for guests' subsequent visits. Future guest check-in processes are consequently made easier and quicker since the guest's information is already in the system, which

enables guests' needs to be more easily met ensuring satisfaction (Griffy-Brown et al., 2008).

Customised services are found to be an important characteristic for luxury hotel guests (Bowen, 1997). Technology allows the hotel to accumulate and store customised guest information and preferences more easily, which can be utilised by the hotel to meet customers' specific requirements (Khan & Khan, 2009). According to Beatson et al. (2007), SSTs can allow better customisation of the service delivery process, since it enables customers to go at a comfortable pace, offers them a variety of suitable options and enables additional privacy for customers (Makarem et al., 2009). The kiosk can offer customers a range of hotel options from which to select, such as rooms and package deals, which customers can simply select without talking to a service employee.

Huang (2008) states that service delivered directly affects the organisation's chances of retaining customers, thus the organisation should focus on satisfying the customer's individual needs. Customisation improves a hotel's ability to improve guest loyalty (Khan & Khan, 2009). However, Sandoff (2005) finds that hotels seldom customise services in practice. Service standardisation is when companies maintain consistency in service processes, and he reflects that hotels attempt to standardise service delivery because that allows stronger control, higher predictability and minimises mistakes for the hotel (Sandoff, 2005). This is beneficial when customers' needs are more predictable and simple (Lovelock & Wright, 1999). Lashley (1998) and Bowen (1997) state that hotels predict customers' needs in order to standardise services; however, simultaneously they also offer customised services such as when a customer visits the hotel's concierge they may be treated as individuals, with unique needs which the concierge will satisfy to the best of their ability.

Even though technological advances have altered the nature of many service processes and interactions, customers still have the same standard demands and expectations that they have always had; such as consistent outcomes, reliable systems, ease of access and flexible organisational policies, explanations, apologies and reimbursement when things go wrong (Bitner,

2001; Kotler et al., 2003). Customers appreciate simplicity and predictability in the service encounter. However, they have high expectations and demand high service quality, equally from service employee and SSTs (Bitner, 2001). Their satisfaction depends upon service convenience, the service process and the service outcome. SSTs can be programmed to store all necessary standardised knowledge to assist guests during the self-service interaction.

To summarise, Rayport & Jaworski (2005) state that there is a significant distinction between machine-operated services and employee-operated services; nevertheless, customisation and standardisation is possible through both modes of service delivery. They find that menial, repetitive and standard tasks such as simple check-in/check-out procedures, which require efficient, quick and simple responses, can be successfully performed by a machine; whereas friendly encounters, offering genuine advice creativity and problem solving, dealing with unanticipated issues, satisfying unique requests or interpersonal communication with customers, would be better provided by service employees. Thus hospitality organisations would benefit by considering the use of self-service technology in certain areas and providing a greater staff focus in other areas. This enables staff to spend more time with guests and provide personalised service interactions. Makarem et al. (2009) find that the service employees are still vital for service organisations. In their opinion, SSTs cannot replace the personal face-to-face service which many customers desire.

## ***2.6 Self-Service Advantages for the Customer***

Self service technology provides a range of advantages for guests. Customers can access self-service kiosks at any time during the day (Carlin, 2005). For example, guests who arrive at the hotel during the early hours of the morning or late at night can simply and quickly access the kiosk and proceed to their room without needing to deal with anyone.

Kiosks offer an alternative choice of service for customers where guests can choose between traditional, friendly service from front-office staff or from a



modern technologically advanced service kiosk (Carlin, 2005; Curran et al., 2003; Griffy-Brown et al., 2008). Guests can reduce time spent waiting in lines and potentially check-in faster via kiosks (Carlin, 2005; Curran et al., 2003; Makarem et al., 2009). This is beneficial to many travellers who may be tired or in a hurry and prefer not to queue at the reception to check-in to their rooms (Jenner, 2009). SSTs are found to be preferred by certain customers such as frequent and business travellers, who may embrace the service efficiency of the technology, compared to leisure travellers who may prefer to choose the friendly contact with front office staff (Victorino et al., 2005). Guests are offered a choice and may select whichever options suit them without any anxiety (Griffy-Brown et al., 2008).

Additionally, Bitner et al. (2001) find that SSTs simplify service processes for guests, when used correctly. Guests are awarded increased control over the service process which helps them feel more in command of the transaction and also the overall experience. This increases customer satisfaction in service encounters (Curran et al., 2003; Griffy-Brown et al., 2008). The feeling of control over the interaction improves customers' perception of service quality, which consequently raises their intention to reuse the technology in the future (Oyedele & Simpson, 2007). This allows customers to be confident of the service process and avoid any anxiety of dealing with potentially inefficient employees (Cunningham et al., 2009; Khan & Khan, 2009). The quality of service offered by kiosk is consistent, reliable and predictable, which ensures that each interaction is simple, pleasant and reliable and that each guest is treated in the same manner (Carlin, 2005; Curran et al., 2003). Thus, guests know what to expect when visiting a kiosk and do not run the risk of poor service, rudeness or incompetence.

Finally, kiosks can offer privacy to sensitive customers who may be anxious to communicate privileged information with hotel staff (Carlin, 2005). Guests can also communicate in their preferred language and the kiosk can perform a variety of features and functions, such as making reservations at local restaurants, checking onto flights and electronic concierge-services via the kiosk machines (Carlin, 2005; Curran et al., 2003).

Kiosks offer significant advantages to customers such as extended access hours, speed, ease of use, enhanced customer-control, privacy, language options, alternative choice and uniform service quality (Curran & Meuter, 2007; Makarem et al., 2009; Oyedele & Simpson, 2007; Victorino et al., 2005). These benefits can satisfy customers and potentially make them loyal customers, which is also good for the hotels.

## ***2.7 Self-Service Advantages for Hotel Operations***

SSTs have the potential to improve hotel operations by various means. Technology provides advanced precision, standardisation and customisation, and productivity (Curran et al., 2003; Fitzsimmons, 2003; Griffy-Brown et al., 2008). Technology is less likely to make errors provided the data is input correctly (Curran et al., 2003; Durkin, O' Donnell, & Crowe, 2008; Fitzsimmons, 2003; Makarem et al., 2009). When the technology is well programmed, it operates with efficiency and accuracy. For instance, when customers check-in to a room via the kiosk, the machine is more likely to provide the correct information, obtain the correct payment and retrieve the correct details from the guest compared to an employee.

Carlin (2005) further posits that kiosk technology would allow hotel companies improved standardisation and customisation in the service delivery processes, thus providing reliable and consistent service and, simultaneously, offering customised products and services to guests. To illustrate this point, kiosks can present the hotel rooms to guests and also allow guests to choose additional offerings. All hotels offer standardised products to guests such as rooms, while the additional services and products, such as room upgrades, spa-treatments or laundry are customised to each guest.

On another note, managers currently are found to increase staffing levels to accommodate busy/peak times; however, kiosks may serve as additional service options which assist front-office staff to process higher influxes of guests (Kotler et al., 2003). Carlin (2005) suggests that SSTs could allow the hotel to reduce labour levels in the hotel, which would reduce labour costs,

because some customers may simply utilise the kiosks to attend to their own check-in. When customers obtain services through SSTs, long waiting times and customers crowding around the reception area can be reduced (Curran et al., 2003; Fitzsimmons, 2003; Makarem et al., 2009).

Automated kiosks can allow staff to spend less time performing the tedious intricacies of operational duties and provide time for employees to perform more complex and customer-satisfaction related services such as welcoming guests, answering guests' queries, responding to guest complaints and making timely corrections (Carlin, 2005; Schick, 2004). Hospitality employees are responsible for making the guests' experience memorable and outstanding. These interactions can create emotional bonds with guests which improve hotel-customer relationships through higher guest satisfaction, customer loyalty and result in higher hotel profitability (Curran et al., 2003; Pujari, 2004).

When organisations attempt to improve operations through technological innovations, the question does arise about the technology's cost-effectiveness and impacts on service quality. This would be a significant area of future research; however, it is not discussed in detail in this study.

## ***2.8 Concerns Regarding Self-Service Technology.***

Even with the benefits mentioned in earlier sections, Curran and Meuter (2005) find that technology sometimes fails to reach its potential. Thus SSTs maybe seen as problematic by some customers and organisations.

Curran et al.(2003) state that some customers may be unfamiliar with the technology or be sceptical of how problems arising from the use of the technology will be solved. Customers may chose not to use the technology because they feel that if they make a mistake through using the technology that it might cause problems or that the technology might make a mistake.

Customers may also be reluctant to make use of the new kiosks due to reasons of misperceptions and fear of complexity, practicality, inconvenience, design flaws, security issues or lack of customisation options of the technology (Curran

& Meuter, 2007). The original kiosks were regarded as bulky and obtrusive. They were poorly promoted to guests who were unfamiliar with the concept and the service offered by the kiosks was unreliable. For example, kiosks would terminate service sessions when rooms which customers requested were occupied and then instruct the customer to visit the reception desk. This caused frustration and irritation for guests (Griffy-Brown et al., 2008).

The case may also be that some customers simply prefer to interact with people because they desire the personalised social interaction which may be their primary reason for paying high hotel rates. Beatson et al. (2007) find that employee-customer contact strengthens relationship building and customer retention, which are vital for hospitality organisations to prosper. SSTs may reduce the personalised service interaction with some guests, thus diminishing the organisation-guest relationships (Curran & Meuter, 2007). This could cause the hotel to miss the opportunity of building relationships with current and future loyal customers.

In spite of these negative customer attitudes technology has gained wide acceptance and become common throughout service industries (Curran et al., 2003).

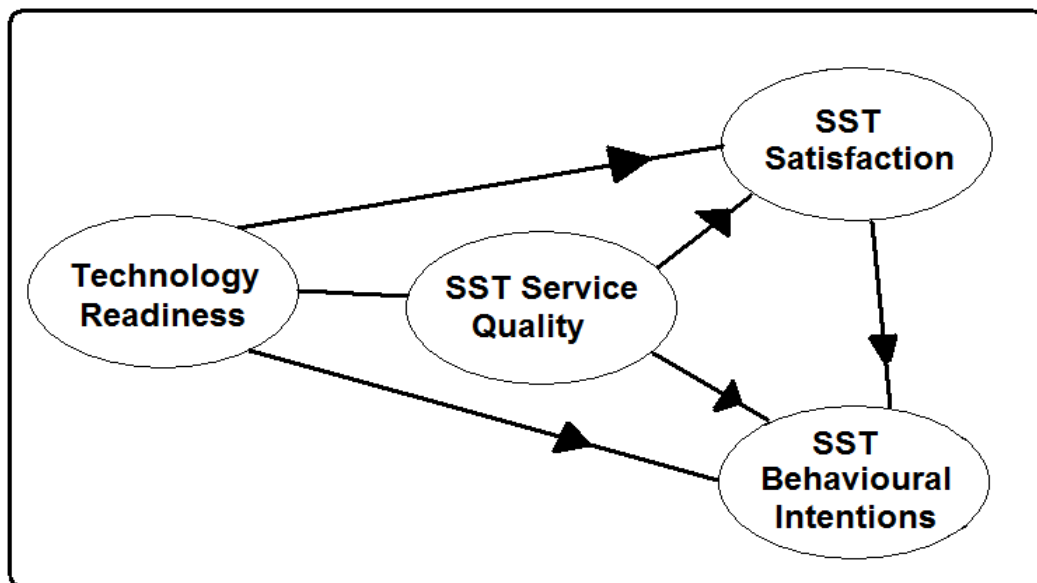
## ***2.9 Customers Acceptance of Self-Service Technology Models***

For the implementation of SSTs to be successful, customers must first be willing to accept and use the technology. 'Technological readiness' is describe by Lin and Hsieh (2006) as the level of customers' willingness to accept using new technologies in service encounters. Technological readiness affects customers' perceptions of the service quality of SSTs as well as influencing customers' intentions to utilise the technology. Technologically advanced customers may utilise kiosks more easily.

### ***The Role of Technology Readiness***

The model below, by Lin and Hsieh, (2006) suggests that technological readiness of customers, impacts their perceptions of SST service quality, satisfaction with the SST and the intentions to use the SST.

**Figure 3. The Role of Technology Readiness Model**



Source: Lin and Hsieh (2006, p. 503).

Customers must be technologically ready to operate SSTs before they develop an attitude and behaviour to use it for checking-in. Bitner (2001) finds that some customers fear making mistakes whilst using the kiosks since they are unaware of how any errors will be rectified by front-desk employees. These mistakes can range from providing incorrect information or simple spelling mistakes to ordering wrong products or services. Organisations therefore need to assure customers that SSTs are simple and safe to use.

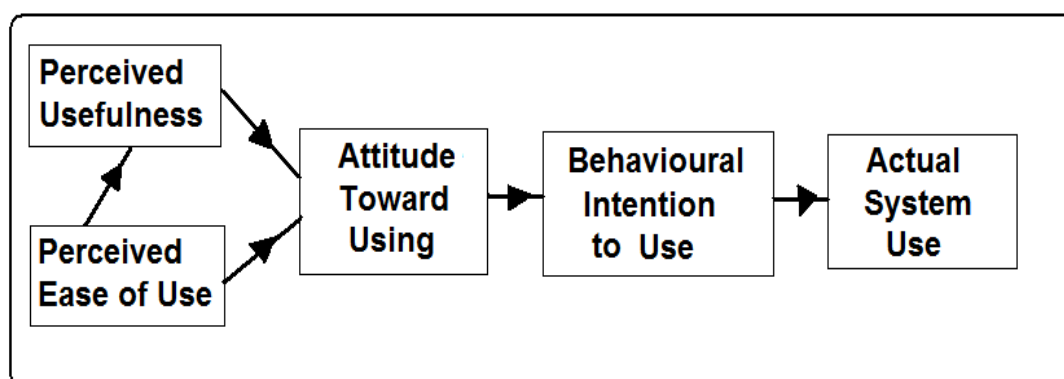
The important aspects of innovative technology include providing the self-service kiosks at convenient locations, displaying appropriate branding and

offering functions which meet customer demands (Khan & Khan, 2009). Other factors determining whether or not customers accept and use the technology include ease of use, user-control, operational reliability and speed (Curran & Meuter, 2005). The ease of use is imperative to allow customers to accept and be satisfied with a new technology (Beatson et al., 2007; Curran & Meuter, 2005).

### ***Technology Acceptance Models***

Customers have been found to first need to develop an attitude of accepting a technology before they will actually adopt and use it. The main attributes that technology must possess before customers will form an intention to accept the technology are illustrated in the following models.

**Figure 4.1. Technology Acceptance Model**

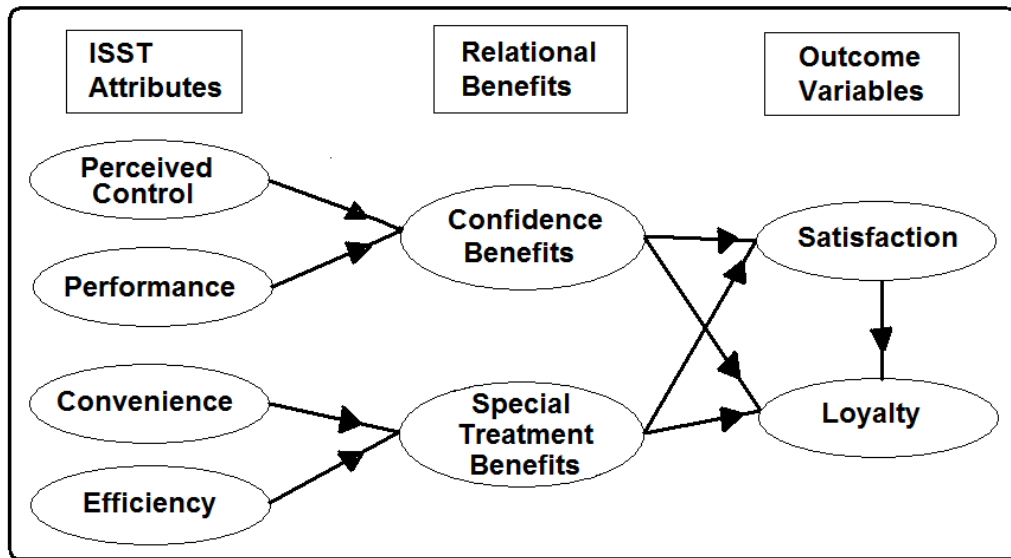


Source: Davis, Bagozzi, & Warshaw (1989, p. 984)

In the Technology Acceptance Model developed by Davis et al. (1989), it is suggested that perceived usefulness and perceived ease of use are significant attributes for technology to be accepted by customers. That is, customers must perceive the technology to be useful in providing the customer with the product or service which they desire. Customers should feel that the technology will help them in obtaining what it is they desire through simple means. This model

seems simplistic in its analysis and therefore, for this study, other models have been sought to add further detail to this concept.

**Figure 4.2. Linking relational benefits, internet self-service technology, customer satisfaction and loyalty.**

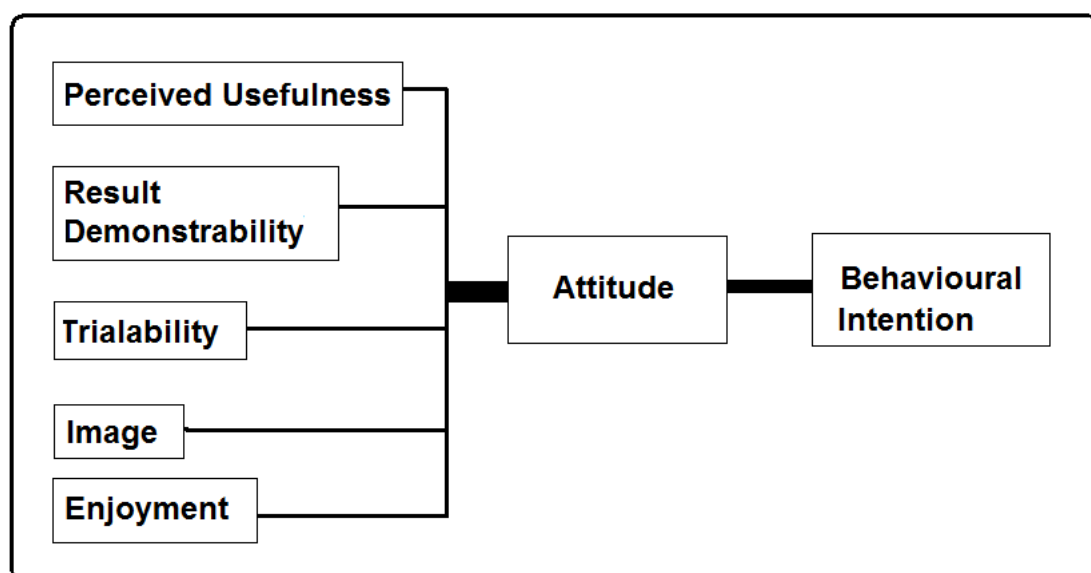


Source: Yen & Gwinner (2003, p. 488)

The next model by Yen and Gwinner (2003) links internet self-service technology attributes and relational benefits to customer satisfaction and loyalty. They suggest technology attributes of perceived control, performance, convenience and efficiency. Self-service technology must allow customers control over the service process; the technology must perform effectively and provide the necessary outcomes. It must also be convenient and efficient for customers to use. As mentioned earlier, customers expectations of a self-service encounter are different compared to traditional service encounters (Makarem et al., 2009). Thus, Yen and Gwinner's (2003) model includes the attributes of control, performance, convenience and efficiency which customers expect when interacting with technology, compared to friendliness and empathy. According to the authors, the first two attributes, perceived control and performance, lead to guest confidence with the technology, while the next two

attributes, convenience and efficiency, develop feelings of special treatments benefits in guests. Guests feel that the organisation is offering additional value which, in turn, leads to guest satisfaction and loyalty.

**Figure 4.3. Factors Contributing to Behavioural Intention**



Source : Mahmud, Dahlan, Ramayah, Karia, & Asaari (2005)

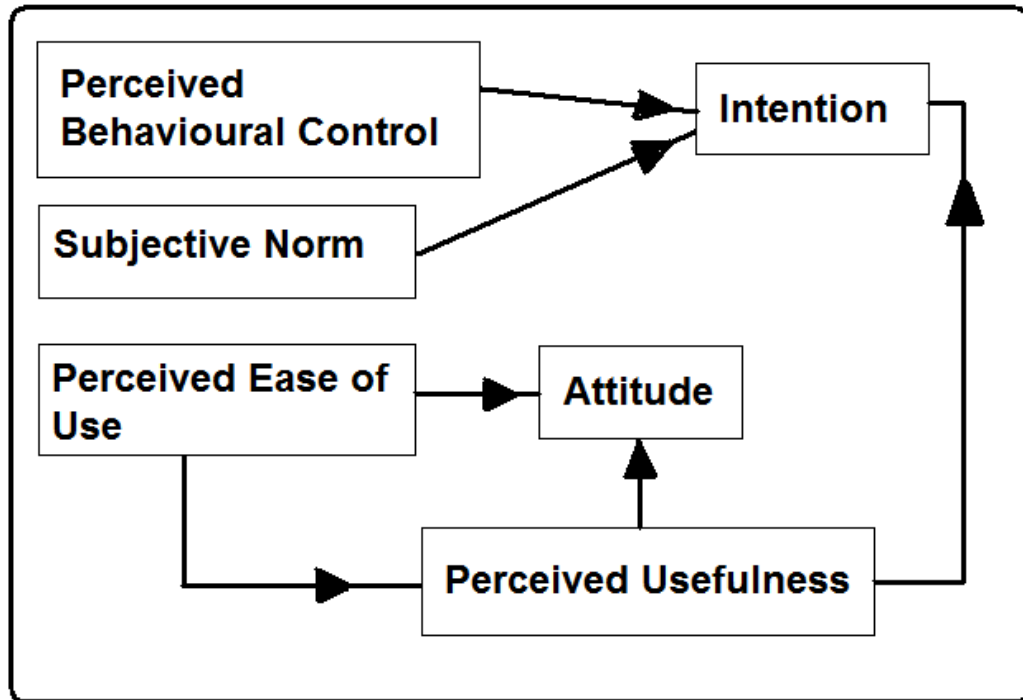
Mahmod et al.'s (2005) Factors Contributing to Behavioural Intention model [above], suggests five characteristics of SSTs that positively influence users attitudes and behavioural intentions. They are perceived usefulness, result demonstrability, trialability, image and enjoyment. Perceived usefulness is already described above in Davis et al.'s (1989) Figure 4.1 model. Result demonstrability involves customers being able to view the outcomes from using the technology, such as customers being able to view the result of using an airport kiosk in the form of a ticket and baggage tags. Trialability is when guests are allowed to actually trial the technology first-hand and operate it for themselves. Being able to trial the technology encourages a confidence in users to operate the technology. Image relates to whether using the technology will be a positive or negative impact on one's social standing. If users' status is elevated by showing others that they possess the knowledge, skill or position to



operate the technology then users are more likely to do so. Enjoyment is whether or not users like using the technology. If users dislike interacting and using the technology then they are unlikely to use it. This model incorporates new factors of trialability, image and enjoyment which seem valid as attributes which describe customers' behaviours in adopting technology.

However, their model does not include other factors as outlined in Yaghoubi & Bahmani's (2010) model Figure 4.4. Factors Affecting Adoption of Online Banking. Perceived behavioural control, subjective norm and perceived ease of use which are suggested below, as significant technology acceptance attributes. Perceived control is already described under Yen and Gwinners' (2003) model and perceived ease of use in Davis et al.'s (1989) model. The subjective norm is when a technology becomes common use in an industry. This is when customers are more likely to adopt a positive attitude towards using the technology since it is now a common service offer. ATMs in the banking industry and check-in kiosks at airports around the world which customers utilise daily are examples of technology which have become widespread in their industries. Venkatesh and Davis (2000) suggest that familiarity influences customers intention to use the technology. Perceived usefulness has also been explained earlier in Davis et al.'s (1989) model Figure 4.1.

**Figure 4.4. Factors Affecting Adoption of Online Banking**

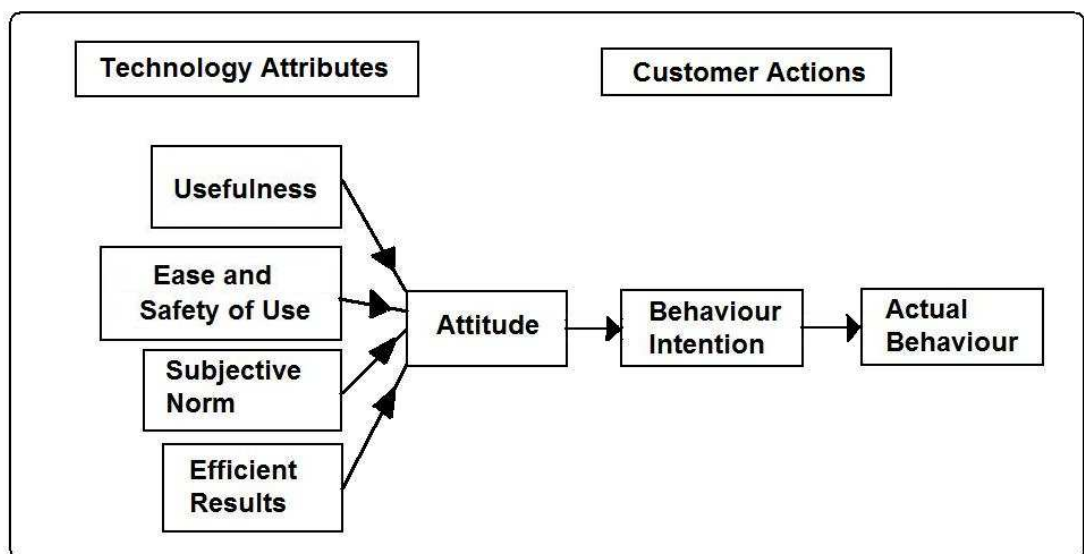


Source: Yaghoubi & Bahmani's (2010)

Yaghoubi & Bahmani's (2010) model, Factors Affecting Online Banking proposes a somewhat different view from the other models. Figures 4.1., 4.2. and 4.3. present that customers must first develop positive attitudes toward the technology and then they develop the intention to use it. Yaghoubi & Bahmani's model suggests that perceived control and subjective norm directly influence intention to use, whereas only the perceived ease of use and perceived usefulness influence customers' attitudes which, in turn, influences intention to use. This study used the ideas from these models to develop a new model [below] with relevance to hotel check-in kiosks.

These technology acceptance models [4.2, 4.3 and 4.4] have been created by expanding on Davis, Bagozzi, & Warshaw's (1989) *Technology Acceptance Model*. However there is a need to refine the models to better relate to self-service kiosks in hotels. Therefore, these models have been merged into one new model below. This model is used in the discussion chapter of this study to analyse the customer acceptance of SSTs and highlights how the attributes are fulfilled by self-service kiosks.

**Figure 4.5. Technology Acceptance Model for Customer Self-service**



Adapted from models by Davis et al. (1989); Mahmud et al. (2005); Yaghoubi and Bahman (2010) and Yen and Gwinner (2003).

The **“Technology Acceptance Model for Customer Self-service”** above has been adapted by merging the models of Davis et al. (1989), Yen and Gwinner (2003), Mahmud et al. (2005) and Yaghoubi and Bahman (2010), into one new model. The structure of all the models commonly suggests that technology's attributes influence customers' actions toward using the technology. The new model [above] developed for this study has followed the same structure. However, it further incorporates the attributes which were highlighted through

the literature review and later sustained in the findings. These attributes are usefulness, ease and security of use, subjective norm and result efficiency; which positively influence customers toward using SSTs in hotels. Usefulness has been described earlier in Davis et al.'s (1989) Figure 4.1 mode, as was ease of use in Yaghoubi & Bahmani's (2010) Figure 4.4 model. Safety refers to the attribute of the technology being safe and secure for customers to use, provide personal details and make payments. The subjective norm attribute was explained in Yaghoubi & Bahmani's (2010) Figure 4.4 model where the technology becomes widespread in the industry. Result efficiency ensures that customers receive the appropriate outcomes through using the technology. This adapted model is further discussed in chapter five.

## **2.10 Conclusion**

The service encounter has evolved from the traditional, employee-to-customer interaction, to a technologically advanced SST-to-customer interaction. Customers have been exposed to SSTs in numerous industries and are becoming more familiar with self service technologies. Customers' needs have changed and SSTs provide customers with certain benefits, such as increased accessibility, convenience, customer-control and time savings. Check-in kiosks also assist in providing customised services for a hotel customer's benefit while also facilitating standardised services, which assists the hotel's front office efficiency (Carlin, 2005). Moreover, self-service kiosks provide certain benefits to the hotels which implement them, such as assisting front-office staff with checking-in high inflows of customers during busy periods, operational efficiency and labour cost-savings (Curran et al., 2003; Fitzsimmons, 2003; Makarem et al., 2009).

However, when problems emerge with the technology, then "guests are far less willing to return, much less pay a premium rate" (Cornell University, 2010, p. 1). In addition, some customers are still reluctant to use self-service machines due to fear, complexity issues or misconceptions of the technology (Curran & Meuter, 2007; Makarem et al., 2009). For these customers, interaction with

front-office staff is essential; yet the literature suggests that SSTs can benefit the hospitality organisation and customers, when it is implemented as an additional service.

Fitzsimmons (2003) states that the original reasons for introducing technology into the service industry was for the machines to assist employees with repetitive operational tasks. Technology was introduced to perform operations which lacked revenue enhancing opportunity and added little or no value to the customer. However, technological advancements have not only reduced labour costs for hotels, they have also offered value enhancement in speed, accessibility and reliability of service to customers.

Although technology has become vital in doing business, its full potential remains currently untapped (Curran & Meuter, 2005) as discussed in the preceding literature review. Beatson et al. (2007) find that satisfactory employee contact with customers is known to create positive impressions among customers and strengthen organisation-customer relationships. These positive relationships increase customer retention, which is important for hospitality organisations. This implies that, although technology has many advantages, hospitality staff continue to play vital roles in customer service; friendly, knowledgeable and skilled staff are highly valued by customers.

## **3 Chapter Three: Methodology**

### ***3.1 Introduction***

The methodology chapter provides an outline of the philosophical beliefs and research approach of this study and explains the methods chosen for acquiring the data. An overview of the research paradigm is provided, with the justifications to why this paradigm was chosen for this research. Subsequently, the methodology is presented and the reasons for selecting the qualitative research approach are explained. The semi-structured interview process is discussed. The data analysis process is outlined. Finally, the limitations of the study, the ethical considerations and conclusions are presented.

### ***3.2 Justification of the Paradigm***

This study was carried out from an *interpretive phenomenologist* point of view. Determining a research philosophy helps researchers to identify the nature of evidence that needs to be collected, whether qualitative or quantitative data is required; how this data should be gathered, whether it is through questionnaires, interviews or focus groups; and from whom the data would be collected, such as individuals, organisations, laboratories, databases. For this study, an interpretive phenomenologist view was chosen. Phenomenology believes that situations are subjective and based on people's perceptions. Its central focus is on understanding the reasons for, and the meaning behind, a phenomenon (Altinay & Paraskevas, 2008). People provide varying and valuable perspectives and meaningful information and phenomenological researchers collect perceptions, views and opinions about a particular subject topic (Sayre, 2001). It is believed that human perception varies from situation to situation (Patton, 2002).

In this study, views, perceptions and opinions about impacts of customer self-service technologies were collected from different sources and then the information was collated into common themes. Each situation and customer is different and each manager's perceptions, opinions and observations can vary.

However, with this project there was also the probability of finding commonalities related to the topic of interest (Altinay & Paraskevas, 2008; Fisher, 2010; Patton, 2002). Altinay & Paraskevas (2008) state that phenomenological research is flexible in nature and can evolve with new data. This study was able to uncover new ideas and explore new areas of information as they emerged from the research findings.

Additionally, phenomenological research can be successfully performed on small samples and the researcher can still gain an in-depth understanding of a situation or topic (Altinay & Paraskevas, 2008). Thus, for this study, since the number of four and five star hotels in Auckland city is limited, phenomenology allowed for a small sample to be chosen because saturation point potentially was easily reached.

In contrast to phenomenological researchers, positivist researchers favour the views of natural scientists, where research is objectively conducted and focuses on evidence (Denzin & Lincoln, 2005). Research findings are in the form of facts and statistics which are generalised to the topic regardless of the situation. Positivist researchers have more control over the research process and allow little flexibility and variation from the research questions.

As the purpose of this exploratory research was to gather a rich understanding of managers' professional opinions and perspectives about the impacts of self-service technologies in New Zealand's four and five star hotels, it was felt that an interpretive phenomenological framework would be more suited to the research question. It would give a better understanding of the hotel managers' perceptions of the how self-service technology could impact hotel operations and guests.

### ***3.3 Justification of the Methodology***

A qualitative explorative research approach was used for this study. Qualitative research is utilised to understand customer related issues and brings out

valuable information as well as deeper understandings of a particular situation (Patton, 2002).

### **3.3.1 Research Approaches**

In research, the two approaches towards gathering data are quantitative and qualitative (Denzin & Lincoln, 2005). Quantitative methods seek to investigate how things affect one another in society by quantifying the impacts and links between the factors. Quantitative researchers use numbers and statistics and measurements to determine the situation and the findings from the research can often be generalised (Altinay & Paraskevas, 2008; Fisher, 2010; Patton, 2002). Quantitative research allows researchers to be objective and scientific since data is specific and distinct. Quantitative researchers use the deductive research approach; that is, a hypothesis is formed, the data is gathered and the hypothesis is confirmed or disproven as per the findings. Finally, the data is gathered mainly in the form of statistical information or numbers. Thus, the research is rigid and confined to specific research boundaries.

Qualitative methods, on the other hand, aim to understand the situation, the reasons causing the phenomena and the behaviour of the involved participants. The focus is on people's experiences, beliefs, perceptions and reasons for their behaviour. Qualitative methods include case-studies, interviews, observations and personal experiences, which are ideal for phenomenological perspectives (Denzin & Lincoln, 2005). A qualitative research approach is well suited to this research as shall be explained in the next section.

### **3.3.2 The Qualitative Explorative Research Approach**

*“Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2005, p. 3).*

Through this approach, the study sought to discover valuable information and a deeper understanding of the participants' views concerning the use of self-



service technology in New Zealand hotels. Senior hotel managers' professional views regarding the impact on New Zealand's four and five star hotel organisations were obtained to help present an informed industry-wide view regarding self-service in NZ hotels. However, this study does not claim to present the view of all New Zealand managers, as this was only a small sample of participants from Auckland City. However, it does provide useful information and managers' views.

One danger of qualitative interpretative research is that a researcher may bring his/her own ideas and perceptions to the presentation of information. A researcher may choose to include and leave out certain information gained from the qualitative research (Denzin & Lincoln, 2005). Thus, there is an evaluative aspect to presenting the findings, critiquing, analysing and comparing the findings to previous knowledge of the subject. Care was taken to be as objective as possible when analysing and critiquing the research findings of this study, in order to contribute to the field knowledge.

### **3.4 Procedures**

Phenomenological researchers can utilise various methods to gain data such as questionnaires, surveys, interviews and focus groups. The methods chosen depend on how much depth of information the researcher expects to uncover.

Ten participants, including five Front-office Managers, one General Manager, two Operations Managers, one Rooms Division Manager and one Marketing Managers, were interviewed to gain distinctive perspectives for the study.

This number seemed satisfactory to uncover management insight and perspectives, as well as the probability of reaching saturation point of information gathering. These interviews were conducted with managers at four and five star hotels in Auckland. Participant were invited by email to partake in the study. The invitation included the research aims, the possible benefits for the industry as well as the participants and other details. Appointments were

made to meet each manager and interviews were held for approximately 30 minutes. The confidentiality of the participants was appropriately protected by using pseudonyms.

## **3.5 *The Interview Instrument***

### **3.5.1 Interviews**

The aim of interpretive inquiry is to understand a situation and to construct an explanation of the situation. Appropriate methods award researchers with the most useful and richest information from the research participants. Some research instruments include surveys, questionnaires, interviews, and observations (Sayre, 2001).

The interviewer and the interviewee both play roles in creating the success of the interview. “An interview is a conversation; the art of asking questions and listening” (Denzin & Lincoln, 2005, p. 643). The interviewing method was chosen because participants can share their perceptions, opinions and ideas clearly and in sufficient detail. The two ends of the scale are structured interviews and unstructured interviews (Denzin & Lincoln, 2005). Structured interviews are where rigid questions are presented to the interviewees and any divergence from the questions is discouraged. Structured interviews were not used since they are primarily inflexible and specific and do not allow participants to expand on their answers. Unstructured interviews are when questions are vague and unspecific. Interviewees are expected to provide data about a certain topic and the interviewer asks a question whenever he/she feels it is appropriate. Unstructured interviews were not used because of the nature of this topic; that is, since SSTs are not common in New Zealand hotels and interviewees needed to be guided to divulge appropriate information.

For this study, semi-structured, one-on-one interviews were the preferred method of gathering primary data. Participants were led through a general outline of topic questions and further questions were asked to clarify, describe and explain their responses. This enabled the researcher to guide the conversation along a specific topic path. At the interviews, participants were provided a question sheet, which outlined the basic research questions to act as a starting point. Questions were mainly open-ended and interviewees were free to provide information. Some precautions taken were to avoid close-ended questions, leading participants' answers, and guessing (Fisher, 2010; Sayre,

2001) as closed questions provide limited information as leading, guessing and making assumptions impairs the quality of data.

Open-ended questions were asked in interviews, where interviewees were able to provide answers in descriptive form rather than simply answering 'yes or no'. These questions allowed interviewees to describe their answers and provide reasons and their opinions (Sayre, 2001). Participants were free to answer questions without being constrained and able to discuss broader issues relating to the topic. The open-ended questions enabled a conversation and allowed participants to introduce and explain reasons, ideas and surrounding information which may not have been previously considered, as proposed by Goldie and Pritchard (1981) and Altinay and Paraskevas (2008). This provided unexpected and valuable data.

### ***3.6 Analysis Procedures***

Interviews were recorded and transcribed to gain the richest quality of data from the interview process. Recording was thought to be the best method of obtaining the richest data from the interviews. This allowed the interviewer to have a conversation with the interviewee and ask relevant questions without being preoccupied with taking notes. The data was later assembled to uncover common themes and the topics of interest were analysed. The themes were identified through a process of deep analysis of each interview and collating information relating to the interview questions, such as all information pertaining to concerns of SSTs were compiled together. Next these themes were attributed headings and subheadings to enable easy 'coding', as suggested by Patton (2002) and Sayre (2001). Coding involves collecting and organising data into common themes of information. The coding process was complex, since much of the data was inter-linked. This made separation of subheadings a difficult task. However, the findings were eventually categorised into the final coding themes in the Table 1 below. Final conclusions were drawn relating to the key themes and limitations of the data gathering process were noted.

**Table 1. Coding themes.**

<b><i>Themes</i></b>	<b><i>Subthemes</i></b>
Hotel Type Appropriateness	SSTs as Complimentary to Service Employees Lobby Layout
Kiosk Convenience and Benefits for Guests	Faster Check-Ins Guest Control over Service Encounter
Operational Benefits for the Hotel Organisation	Operational Efficiency and Lowering Costs Profiling/Guest History and Up-Selling Change in Staff Focus Clear Information to Guests
Concerns with Self Service Technology	Kiosk Interface with Hotel's Operating System The Importance of Personal Interaction in Hospitality Kiosk Functionality and Security System Costs
Guest Expectations Regarding Self Service Kiosks	

The interpretation of the findings is presented in the discussion and conclusions chapters of this study. The research participants' views, ideas and perspectives were synthesised and an analysis of the findings was presented. This analysis confirmed or contradicted current academic knowledge and revealed gaps in the literature which will ultimately add further to the current knowledge of the subject.

### ***3.7 Limitations of the Qualitative Research and How they were Handled***

Qualitative research has some limitations as discussed earlier in this chapter, since it involves gaining information through descriptive, opinion-based means (Denzin & Lincoln, 2005). Additionally, there could be less control over the data-gathering process and problems could arise with the reliability of the findings. Also data collection and analysis can be difficult and take some time to complete (Altinay & Paraskevas, 2008). For this qualitative study, some limitations were that interviewees' opinions, beliefs and observations were possibly influenced by their position, their background and their personal and professional preferences. The qualitative research did not gain completely objective information, but rather participants' accounts and opinions of the situation. Thus the validity of the data can be questioned. To partially overcome this, this study interviewed managers from different hotel departments. This enabled backing up of opinions and perspectives and allowed for a more informed discussion.

Also participants revealed information primarily specific to their individual situations and their individual hotel company. Therefore, some managers more exposed to the leisure market preferred the traditional service, while managers dealing with a higher corporate market were more open to the notion of SSTs.

Care was taken to maintain control and effective time management over this research process. A timeline was also drafted to keep the study on-track and assist in meeting deadlines.

### ***3.8 Ethical Considerations***

Formal approval was required to carry out this study, since personal communication with hotel managers was involved. Thus a detailed proposal was submitted to the Auckland University of Technology Ethics Committee (AUTEC) to authorise this research project. While the information sought in this study was not contentious, there could potentially be some risk associated with

interviewing participants, such as confidentiality or divulging potentially private information. Once approval was granted, participants were contacted directly through email and arrangements were made for the interviews.

Participation was voluntary and open to any person fulfilling the single requirement of being a senior manager in the appropriate department of a four or five star Auckland City hotel. All participants signed consent forms to protect themselves from being identified. Pseudonyms were used to keep their identities confidential. The consent forms were securely stored in the office of a supervisor of this study, in a locked file cabinet.

Furthermore, participants were advised that they could avoid any questions which they were not comfortable discussing and they were also free to end the interview if they had any issues with the process. They were provided with an information sheet containing necessary information about the aims of the research, the interview process, and the interviewees' role in the study as well as the supervisors' contact details, in case of any issues. The interviews were recorded on a digital recording device and stored onto the personal computer of the interviewee. The transcribed data was stored securely in accordance with AUTEK's policy.

### **3.9 Conclusion**

Access to the hotels was reasonably simple to gain. Managers were prompt in replying to the email invitations and were enthusiastic to participate in the study. Semi structured interviews were effective in gaining a wealth of information beyond simply the topic areas that were intended upon. This allowed further ideas to be developed and explored. Managers were, in fact, aware to some degree or the other of the topic and shared valuable insight about how they believed SSTs would impact their guests and their hotel's operations. Chapter four presents the information discovered in this study.

## **4 Chapter Four: Findings**

### **4.1 Findings Introduction**

This chapter presents the findings of the research. The semi-structured interviews uncovered commonalities of hotel managers' perceptions regarding the idea of introducing self-service kiosks in four and five star New Zealand hotels and the impacts for the hotels as well as their customers. As outlined in the methodology chapter, the major themes discovered were:

- 1. Hotel type appropriateness,*
- 2. Kiosk conveniences and benefits for guests,*
- 3. Operational benefits for the hotel organisation,*
- 4. Concerns with self-service technology*
- 5. Guest expectations regarding self-service technology.*

These themes formed the significant areas of discussion among the participants. They were major areas of consideration when discussing self-service kiosks in four and five star hotels in New Zealand. Quotes from the participants are used to emphasise the findings themes and are used to support the researcher's analysis and understanding of the findings.

### **4.2 Hotel Type Appropriateness**

One of the most significant findings of this study was that the majority of participants believed that SSTs are appropriate for all hotels standards ranging from budget and three star to luxury and five star hotels.

- *"I feel they're [kiosks] are appropriate at all levels." [John]*

With technology becoming more prevalent in other industries, the airlines, retail and banking, customers are becoming more familiar with the concept of self-service and these kiosk-type machines. Therefore, managers believed that technology-savvy customers and frequent travellers would quickly adopt the self self-check-in option.



- *“What is important to people [customers] now is different than what was important to their parents.” [Chris]*

The larger international chains were expected to be the first hotels to implement SSTs in New Zealand hotels. Managers suggested that with the significance of initial investment required for the machines, they expected the bigger hotel chains to be the ‘first movers’ regarding kiosks. Participants also felt that if the larger chains introduced kiosks, smaller hotel chains and single hotels would soon follow.

- *“The first movers would be the bigger international chains... possibly higher end of the market.” [Chris]*

However, the reasons for implementation will differ according to the type of property. The majority of participants felt that at budget and three star levels, the self-service kiosks would be utilised to cut labour costs and improve operational efficiency.

- *“Three star and budget hotel guests are looking for that cheaper rate and will understand that service may not be a huge thing for them and for them kiosks might be the answer.” [Emily]*
- *“I would have thought that something like this [kiosk] would have suited more like the three star model. But if that’s what the [five star hotel] customer wants, then we [the hotel] have got to provide it.” [Kara]*

At four and five star hotels, the intention is to provide guests with an additional service option since these guests are paying higher rates for more and better service quality. Most interview participants felt that four and five star hotels should offer self-check-in as an addition to the regular desk check-in but not as a complete replacement since some guests would view kiosks positively as offering more or better quality service.

- *“At four and five star I think it can enhance the overall package [for the customer], but it should compliment front office staff. Kiosks would be no replacement for front-line staff, especially in a five star property.” [Benn]*

#### **4.2.1 SSTs as Complimentary to Service Employees**

The participants also felt that if kiosks were to be introduced, they should be introduced as a complimentary additional option to the front-office staff, especially at four and five star hotels. A strong presence of skilled staff

members alongside kiosks was supported by the majority of participants, to offer high service quality to guests.

- *“Four and five star hotels need to maintain service standards with human service, but a mix would be good... five star guests might want to check in at a kiosk.” [Emily]*

Two and three star hotels were seen as providing less personalised service, therefore having the kiosks here would be more acceptable by guests. Managers felt that the success of self-service kiosks will be determined by the manner in which each hotel implements the SSTs.

#### **4.2.2 Lobby Layout**

Participants noted a need to reconfigure the layout of the hotel lobby, if the kiosks were to be introduced. The participants' view the placement of the kiosks' in lobbies as depending upon the standard of hotel. At budget and three star level hotels, SSTs will be more prominently displayed compared to four and five star hotels.

- *“In two and three star lobbies, kiosks may be more predominant, with staff [members] being more toward the side. You might have three or four machines as you walk in and have a small desk with a staff member on the side.” [John]*
- *“In a five star property, kiosks to be tucked away so that they [guests] could do it [check-in] privately without people looking over their shoulder. We may need to reconfigure the lobby... the lobby layout may need to be adjusted to fit the kiosks in appropriately.” [Benn]*

### **4.3 Kiosk Convenience and Benefits for Guests**

The large majority of participants acknowledged that kiosks had potential advantages for the hotel guests. Kiosks are seen to facilitate faster check-ins and provide an alternative option for customers.

#### **4.3.1 Faster Check-Ins**

Participants felt that the usefulness of self-service kiosks for the purpose of checking-in would depend on the hotel's market-mix. Another significant finding

is that managers unanimously expected that particularly corporate guests and regular travellers would opt for self-check-in options. If the hotel has a large portion of corporate guests then the kiosks may be a beneficial alternative to the traditional alternative to the traditional check-in for those customers. Their reasoning was that these travellers are familiar with the hotel and its offerings and simply want to get to their rooms as quickly as possible. Guests may be disinterested in visiting the hotel reception desk.

- *“Corporate guests would appreciate the convenience, especially when checking in at odd times.” [Kara]*
- *“I think a lot of that will depend on your market mix. A lot of corporate guests, who travel frequently, will possibly opt for that technological check-in.” [Benn]*
- *“They’re [kiosks] a great idea [to provide] convenience to guests, to avoid lines at the reception desk.” [Rene]*

The kiosks can provide the choice whether to check-in with a staff member or a self-service kiosk. Managers stated that the importance of providing a kiosk would be giving customers the options. Most managers were happy about providing guests the opportunity of more control over their trip and to empower guests with the choice. Managers felt that although not all guests would opt for self-check in through kiosks, a significant amount of guests would.

- *“Kiosks give the guest options and freedom and control over their journey.” [Emily]*

➤ **Corporate Guests Prefer Self-Service Efficiency**

Some participants felt that customers may find self-service to be more efficient than staff. These managers believed that interaction with front office staff would at times be less preferable, especially for corporate guests who may prefer checking-in and out without visiting the front desk staff.

- *“Some guests do not want to interact with a hotel employee. Some may not be comfortable with interacting with a human server... Customers may be shy, uninterested, tired after a long/ bad/ hard day.” [Chris]*

Managers stated that sometimes it was actually the computer system which was slow; however, guests attribute the slowness to the employees. Thus guests checking in at the kiosks may feel that the check-in process is quicker.

- *“Guests may expect instant service from staff. They will see the staff member as being the slow one; they do not understand why they are being made to wait [for service]. They do not understand that it is the system which is taking time and they will get irritated at the staff member.” [Emily]*

➤ **Beneficial for Tour Groups**

One manager mentioned that kiosks could possibly make it easier for the tour group leader to check-in guests at one time and also be faster and less tedious than checking-in at the reception desk.

- *“Could benefit tour leaders to check-in and register many guests at the same time and collect their keys.” [James]*

### **4.3.2 Guest Control over Experience**

The majority of managers felt the kiosk would ideally be linked to the hotel front-office and allow guests to choose the options that they desired. It was believed that this perception of guest's control over the service encounter would satisfy them.

- *“Gives guests the perception of control. Gives them the sense of power over their trip. The real control however is with the hotel, since the guest*

*can only select what the hotel provides for them to select. ...However, the perception of control satisfies the guest.” [Emily]*

- *“We already have a system where regular guests can choose which rooms they want to stay in. So they could do that on the kiosks as well.” [Benn]*
- *“I think YES, you want to give guests as much control as you can without putting the hotel at risk.” [John]*

### ➤ **Overcoming Language Barriers**

Participants mentioned that international travellers could be more comfortable utilising a machine where they can read the information on a screen rather than communicate with a receptionist in a foreign language.

- *“Kiosks can provide information in different languages and foreign customers may feel more comfortable to see the information in their language. Customers may prefer to converse with the machine.” [Chris]*

### ➤ **Electronic Concierge Kiosks for Guests**

Electronic concierge kiosks are interactive machines which guests can use to access information and make bookings or reservations and purchase tickets for themselves rather than through a hotel concierge. Although a very minimal percentage of the hotels that participated in the research were actually in the process of considering self-service kiosks for check-in and check-out purposes, there were a number of hotels which were considering the electronic concierge SST.

- *“We are actually looking into those touch-screen platforms, where guests can check for information and things, and they don’t have to wait in lines at the reception to ask simple questions [of where to eat or shop or visit].” [Kara]*

Managers favoured the implementation of these electronic-concierge interfaces, since they allow guests to perform tasks for themselves which would traditionally be performed by the hotel’s concierge service.

## **4.4 Operational Benefits for the Hotel Organisation**

### **4.4.1 Operational Efficiency and Lowering Costs**

Kiosks are seen as helpful technology which would help the operations for the hotel. Managers predict that self-service kiosks would benefit check-in efficiency.

#### **➤ Operational Efficiency**

The majority of the managers communicated similar benefits of the self-service kiosks for customers as well as the hotel, with certain exceptions. They suggested that having kiosks would help staff during peak check-in and check-out times by easing the burden on staff during these times. Managers felt it was likely that customers would opt to check-in via the technology rather than wait in line to check-in with a human server. Some managers suggested that, since service quality is subjective for each individual, the service kiosks may be seen as a better service option by some customers as mentioned in the earlier section.

- *“There would be operational benefits and speed efficiency. Improves productivity... Would help staff to ease burden during busy periods and would clear up the front desk.” [Kara]*
- *“Less chances of staff errors.” [Chris]*

#### **➤ Lowering Organisations' Costs**

Some managers believed that the introduction of these kiosks might reduce the staffing levels for front office in the long run, thus lowering labour costs.

- *“[Kiosks enable] cutting staff numbers... could reduce operational [labour] costs.” [Kara]*
- *“[Kiosks] would be a major benefit from the payroll side. The hotel would not need as many staff [to be available] at all times.” [Benn]*

One participant noted that self-service kiosks could reduce paper costs for the hotel.

- *“Most of our paperwork is specifically printed and that costs a significant amount of money to a business.” [Benn]*

#### **4.4.2 Profiling/ Guest History and Up-Selling**

Profiling is performed at many hotel properties where hotels store guest information on their systems. Participants stated that creating profiles, especially for regular guests, was important for offering personalised and customised services. Maintaining guest histories allows the hotel to impress guests and show guests that the hotel cares to remember what that guest's preferences are.

- *“... the next step would be to interface the guest profiling system with the kiosks, so that when the guests log into the system, the system recognises them, their preferences and offers available rooms and products which are in the guest's preferences range. This ensures guest satisfaction.” [Benn]*

Up-selling products and packages through kiosks have the potential to increase hotel revenues. Some people would possibly find it easier to say *no* to a machine, whilst others might feel less pressured by the machine and say *yes* simply because they feel it is a good deal. Managers suggested that some staff members would routinely offer guests a higher priced room or additional products to add to the customers' package, whereas some staff would rarely offer these additional revenue earning options. Some managers felt that the machine could be more efficient, since it would not hesitate to ask guests to upgrade and add products to packages. Managers suggested that the technology could be programmed to remember what guests had previously purchased at the hotel and then the machine could prompt guests with that option at their future visits. This way the guest is prompted to purchase items or upgrades which are related to their preferences, rather than at random.

- *“Kiosks may be able to up-sell better than staff since they will not hesitate to ask guests if they wish to upgrade or add items to their*

*packages. Kiosk can recognise the guest on log-in; suggest upgrades, products and services; which the guest had used during previous visits. The machine can remember and potentially increase revenue in a more effective and efficient manner.” [Chris]*

Another manager agreed with the up-selling possibilities to be offered at the kiosks, however adds a word of warning that customers might get frustrated with up-selling at kiosks if the programming is intrusive to the speedy check-in process.

- *“It [the kiosk] could easily be programmed to prompt, for a dinner reservation, for an additional whatever. There's definitely the potential for it... but you don't want to make someone's life miserable. It's got to be efficient...and non-obtrusive. That defeats the purpose of a quick check-in.” [John]*

There are opportunities for the hotel to up-sell products and upgrades to guests via kiosks; however this needs to be done efficiently so that the guest does not become frustrated with the process.

#### **4.4.3 Change in Staff Focus**

A minority of participants highlighted that since they preferred that employee numbers did not reduce, staff roles would need to evolve into overall customer service oriented roles, rather than the current operational-based roles. Managers visualised service employees coming out from behind the traditional reception desk and moving around the lobby. Managers felt that this would create more opportunity for staff to be approached by guests and for the hotel to create and build more personal relationships with guests. Furthermore, in response to the introduction of the kiosks, the roles of front office staff will need to change and be more customer-oriented.

- *“Kiosks could allow staff to be more free flow around the lobby. Open up the reception so that staff become more all-round guest service agents and customer service professionals.” [Emily]*
- *“The idea is to bring them [staff] out [from behind the reception desk] onto the lobby floor while reduce operational duties and freeing up time to make impacts on a guests stay.” [John]*



#### **4.4.4 Clear Information to Guests**

Participants proposed that written information on kiosks screens could inform the guests of exactly what they are eligible to use and what their company had paid for them to use.

- *“Kiosks can show the guest, on the screen, clearly detailed information about what they are entitled to, so that there is no misunderstanding. The kiosks will state what the guest is entitled to on the company’s account and what he’s not entitled to.” [Chris]*
- *“It’s all automated in a sense, so there’s less room for error.” [Emily]*

If customers had any additional needs, they could purchase the products and services for themselves. A minority of managers highlighted that sometimes corporate guests believe that they are entitled to the extra offerings, yet their employers have not paid for these offerings. This sometimes creates trouble for the hotel to retrieve that expenditure and sometimes leads to a loss or a dispute between the guest and the corporate client. In this regard, the staff are sometimes uncomfortable dealing with the guests’ complaints. Thus a kiosk was seen as a useful tool for informing these guests of what is included as part of their stay. This could potentially avoid misunderstandings and save the hotel from lost revenue and harmful disputes with corporate clients.

### **4.5 Concerns with Self-Service Technology**

#### **4.5.1 Kiosk Interface with Hotel’s Operating System**

Interview participants were concerned with various interface issues which would need to be solved when considering implementation of the kiosks. Participants were sceptical how the kiosks would be programmed and interfaced with the hotel’s front office system, the local banking system and how the programming would fit to each property. The efficiency of these interfaces would be vital to the hotel operations.

➤ **Customised for Each Property**

- *“Kiosks would need to be interfaced with the hotel’s property management system and work effectively with it.” [Benn]*
- *“The kiosks programming would need to be tailored to each property.” [Benn]*
- *“Is the machine so smart that it can recognise loyalty cards so the guest gets points for his stay? The machine would need some interface to scan the loyalty cards and record points.” [Alex]*

➤ **Interface with NZ Banking and Eftpos/ Recognising Local And International Credit Cards**

The kiosk programming would need to be specific to the New Zealand banking procedures and policy to accept payments.

- *“The kiosks would need to fit with the NZ banking system, to accept credit cards and Eftpos payments. It would need to be in accordance to the New Zealand banking standard.” [Alex]*
- *“Securing payment is important at check in. Kiosks would need to work for international cards and authorisation to make sure that spend is guaranteed.” [Benn]*

#### **4.5.2 The Importance of Personal Interaction in Hospitality**

Participants stated that personal interaction was essential to the hospitality industry. Personal contact with staff was discussed in all the interviews and was seen as possibly the most important aspect of hospitality, especially in four and five star hotels. Interaction with front-line staff, friendly welcomes and genuine hospitality from hotel employees were noted to be vital to hospitality, especially in four and five star hotels.

### ➤ **Service Quality and Staff Interaction as a Point of Difference**

All managers who were interviewed reiterated that human contact and personal customer service was seen as the component that differentiates hotels from each other. Hotel staff are valued and seen to be significant for building and strengthening customer-hotel relationships. Managers mentioned that the quality of staff interaction is directly responsible for guest satisfaction during hotel stays.

- *“Interaction between staff and customers is a must in the hospitality industry. Guests may prefer to have the human interaction; feel welcomed, greeted by a human attendant.” [Victor]*
- *“There are other hotels out there and we all have ratings, we have different locations maybe, but the thing that sets each hotel apart is probably that personalised customer service. How people feel about you [the hotel] is built through the staff.” [Kara]*

New Zealand hospitality is seen as a warm, friendly, engaging and interactive experience. Hospitality staff engage with customers and create feelings of satisfaction for guests. Participants were firm believers that hotel staff contributed largely to the outcome of a guest’s stay.

- *“The human factor is very important. When our guests walk in; they are acknowledged, they’re identified, they’re spoken to, and they’re smiled at.” [James]*
- *“Guest feedback usually compliments the impact staff have on their stay. The welcome and farewell is part of the process.” [Benn]*
- *“Customers are disappointed when they hear an automated service if they are looking for a human server to help with their queries.” [Benn]*
- *“We greet them by name, offer advice remember their preferences and offer it to them. Guests like that personalised genuine service. It shows them [guests] that someone cares and that’s the ‘WOW’ factor.” [Ted]*

### ➤ **Reduction of Staff-Customer Interaction**

Most participants were concerned about the possible reductions in hotel-customer interaction. They felt that customers may not get the adequate staff interaction and personalised service and relationship building opportunity.

- *“You [the hotel] lose that customer interaction opportunity.” [Kara]*
- *“I just think that kiosks would take away the personalised feel of the hospitality industry.” [James]*

All managers stated that they would not like to see the quality and level of personal service to drop, especially in four and five star hotels where guests expect a certain level of human service and personal touch. Managers were largely supportive of offering the guest the option of the kiosks, yet offering kiosks as an alternative and not as a substitution for staff members.

- *Taking people out of the industry would make the industry very stagnant.” [James]*
- *“...would not want technology to replace staff entirely. ...hate to see kiosks completely replace people. There still needs to be a duality-situation [employees and technology].” [Benn]*
- *“The little things that go wrong now will still go wrong even with technology. [Such as] guests being directed to un-made room, or wrong rooms.” [Rene]*
- *Staff can rectify any customer complaints right away. Machines can't do that.’ [John]*

Implementing self-check-in kiosks would require support staff to provide assistance to customers who might be unfamiliar with using the technology.

- *“Some guests may not understand how to use the machines. Some might not know whether the system works.” [Chris]*
- *“I know at the airlines you can do it yourself now, but you’ve always got to have somebody [staff] there to monitor in case something goes wrong, in case the people don’t understand the prompts, so you would need to have somebody available to help people out with these kiosks.” [James]*

### ➤ **Leisure Guests Prefer Personal Service**

All managers felt that leisure guests, whether individuals, tour groups, domestic or foreign, would prefer communicating with a front-office staff member rather than a machine. For leisure guests, high quality human interaction creates stronger impacts upon the guests’ stay.

- *“I would still think that leisure guests would like to have the interaction with the front office staff.” [Victor]*

- *“Leisure guests like to talk to the locals and interact with staff members. They like having a chat and speaking to people. They like the whole hospitality culture. [Ted]*

➤ ***Impersonality Of Kiosks***

Some managers viewed machines as an impersonal service delivery option. They were concerned that machines cannot offer emotions while employees can, thus customers may feel that the hotel is being impersonal and unwelcoming by having check-in machines.

- *“Kiosks may be impersonal. It’s hard for machines to offer that service and intimacy.” [Kara]*
- *“Machine service is not as genuine as human beings.” [Chris]*
- *“They would take away that customer intimacy and friendliness factor.” [James]*

➤ ***Tone of On-Screen Language***

Managers felt that the tone of the language displayed to customers would require to fit the image of the hotel property. The language would need to be simple so that it is understood by the hotel’s customers yet friendly and welcoming. The language would also need to be succinct so that it does not become a burden for guests to read through paragraphs of information.

- *“You have to be very careful with the type of language that you use on the prompt-screens. [Kiosks should be] courteous, friendly, informative and easy to use without being too formal. You’d have to be very careful that a sense of warmth and genuine welcome comes through the screen.” [John]*

### **4.5.3 Kiosk Functionality and Security**

Most participants were concerned with the actual functioning of the kiosk machines. Furthermore, staff would be needed to make sure that the kiosks are functioning properly and without incident.

- *“Depends on how the kiosks are programmed and what features and options the guests have to utilise. [Victor]*

- *“You [the hotel] would potentially need to manage the programming on a daily basis to make sure the rooms are being vacated at appropriate times and so on.” [Emily]*

➤ **Reliability of Self-Service Technology**

A few of the participants were also concerned about the reliability of the technology. Managers were concerned that when things went wrong, staff should be available to fix any problems. Participants were uneasy with the possibility technology malfunctioning or breaking down.

- *“Staff may need more training to cope with kiosk technology in case they malfunction or guests make mistakes.” [Emily]*
- *“People [staff] to support it [self-service technology] would be vital. Having an ‘Out-of-Order’ sign, negates all positivity of the technology” [Benn]*
- *I would wait until the kinks have been worked out.” [Benn]*

Some managers were also wary about the security of the systems, the susceptibility to fraud and hacking. Interviewees were conscious of the possibility of situations where certain people would find ways where the security of the system was not fully protected.

- *“There could be loopholes in security... new technologies are particularly susceptible to fraud...” [Chris]*
- *“Customers may find it easier to keep identities a secret, thereby being unaccountable or using fraudulent credit cards.” [Chris]*
- *“[It is important to] make sure that that information gained through kiosks is one hundred percent secure for the guests. Privacy’ is a big thing.” [Emily]*

#### 4.5.4 System Costs

##### ➤ **Return On Investment**

Participants were cautious as to whether kiosks would provide a good return on investment. Technology and machines were seen as the cheaper route, however, managers were cautious about reducing the human contact in the hospitality industry thus the question arises that; *'if these machines are not saving significant amounts, what value do they provide to the organisation?'*

- *"Actually installing those systems [kiosks] into a hotel that's already established is a huge cost to the hotel. And you'd need to show some return on investment on how that would improve your [hotel's] service." [Emily]*
- *"I think it could be a significant cost to the hotel... It would depend on your uptake [acceptance from customers]." [Rene]*

##### ➤ **Short Life Span**

Additionally, one manager mentioned that with technology moving at the pace that it does, these kiosks could potentially have short life spans, with replacement by more innovative check-in and self-service facilities for hotel guests, such as check-ins through mobile phones.

- *"Kiosks may not be the wave of the future. It is possible that with mobile technology, where you can use your I-phone or whatever as a key card. You can land at the airport and check-in via mobile. Then get to the hotel and go straight to your room and swipe your phone which has this encoded message. How fantastic. So in that sense kiosks may be short-lived." [Rene]*

#### 4.6 Guest Expectations Regarding Self Service Kiosks

Participants mentioned that guests to four and five star hotels in New Zealand would have different expectations. All managers stated that no guests had inquired about self-service kiosks; however, some managers believed that guests' expectations would change over time and that there might be customer expectations for New Zealand hotels to follow trends from overseas.

Kiosks are not extensively utilised in hotels in most countries as yet and so travellers are not accustomed to seeing these during their travels.

- *“Travellers do not ask about or expect kiosks in New Zealand yet.” [John]*

However, the majority of managers did predict that guest expectations regarding self-service would change over time. Some participants stated that if self-check-in was the trend overseas, then it would come to New Zealand too.

- *“Customers’ attitudes are changing toward self service and hotels need to accommodate for this change.” [Benn]*
- *“People like to be seen as capable with technology. Customers also accept technology more quickly now than in the past.” [Chris]*
- *“International guests might come to expect it if they’ve been exposed to it overseas.” [Benn]*
- *“The technology won’t be too different from that already at airports, I suspect, so it won’t be a problem for guests to learn to use the machines.” [James]*

#### **4.7 Conclusion**

The findings from the ten semi-structured interviews showed a strong support for maintaining human front line staff in all areas of the hospitality industry, especially at the four and five star level. Customer-service employees were believed to be vital in creating emotional connections with hotel guests. These employees were seen as being warm, friendly, genuine, caring and able to respond to a guest’s needs. The employee-guest interaction was regarded as vital for hotel organisations to satisfy guests, to create and form lasting relationships with guests and to have positive effects on hotel guests.

Most participants acknowledged the advantages of self-service check-in kiosks. Offering guests an alternative method of check-in was the most frequently voiced benefit of the kiosks. The kiosks are believed to be an additional service offering to guests, especially corporate and regular visitors, who may prefer to check-in to their rooms by themselves. These guests would benefit by not having to wait in lines at the reception desk during busy periods. They can be awarded privacy and avoid conversations with staff, if that is what they prefer. The majority of hotel managers supported the introduction of check-in kiosks as



long as hotel staff remain in the forefront. All participants were firm on the belief that kiosks should not replace employees, but merely add to the reception team. The important thing was that guests have the choice while checking-in. Therefore, hotel managers preferred to have both check-in methods; the self-check-in as well as the traditional reception desk.

Self-service was seen as advantageous for the hotel during peak periods since some customers will prefer to utilise the check-in kiosk rather than wait in line. This alleviated pressure on the front desk staff. As a result, hotel employees may focus more time on those guests who particularly prefer interacting with employees, asking questions and enjoy conversations during their visits.

However, a number of concerns with introducing self-service kiosks in hotels were uncovered. While the kiosks have advantages such as added convenience and operational efficiency, they would not be an acceptable form of service for many leisure guests who are believed to prefer front office staff. Participants suggested that the kiosk system would need to be linked with local as well as international banking and finance systems to facilitate payment and may need integration with each specific hotel property. The language which the kiosk uses should be as warm, friendly and succinct as possible to offer customers efficient yet personable service.

Additionally, participants are concerned about the reliability of kiosks. Technology is seen to malfunction and breakdown at inconvenient times. The reliability of the machines to function effectively is imperative for the organisation and its customers. The positivity of technology is diminished when it malfunctions. Moreover, the kiosk technology needs to be secure and protected. The information which customers give out to the kiosks, during check-ins, would need to be secure and safe from hacking to maintain privacy. Other managerial concerns expressed were cost related; to determine if the costs of the kiosks were justifiable for the organisation.

Thus SST implementation has mixed views from New Zealand managers. The next chapter analyses the details of these findings.

## **5 Chapter Five: Discussion**

### ***5.1 Introduction***

The primary goal of this explorative research was to examine the professional perceptions and opinions of hotel managers in New Zealand's four and five star hotels regarding the introduction of customer self-service kiosks in their properties. The research sought to identify potential impacts that self-service kiosks would have on New Zealand's hotel operations and on guests' experience. Interviews with managers revealed information which may be applicable not only to New Zealand but also the international hospitality industry. The study used a qualitative methodology to gain answers to answer the following primary question:

How would the introduction of self-service kiosks, in four and five star New Zealand hotels impact upon a hotel's front-office operations and guests?

There was a significant enthusiasm among the participants about the study. The participants were supportive of the research aims and interested in finding out the final outcomes. This chapter discusses, analyses and synthesises the findings uncovered in this study and is presented in four sections. Some gaps in the literature are also identified in these sections which can provide ideas for future study.

Participants agreed that self-service has become widespread, with more industries and organisations offering self-service options to customers, (Bitner et al., 2001; Curran et al., 2003; Dabholkar, 1999; Griffy-Brown et al., 2008). This chapter therefore begins by discussing the possible reasons regarding why self-service kiosks have not yet been implemented in New Zealand's four and five star hotels. Participants were found to have certain concerns about SSTs being introduced in hotels. The second section explores the advantages of self-service kiosks for hotel guests. Here the Self-service Encounter Model and the Technology Acceptance Model are used to support the findings of this study regarding the advantages of kiosks for hotel guests. A table presents how each attribute of the technology acceptance model may be fulfilled by the self-service

kiosk in a hotel. The third section examines the advantages of self-service technologies for the hotel's front-office operations. These sections can provide managers with valuable information which can help them to determine whether or not to introduce self-service kiosks in four and five star hotels. The fourth section discusses participants' views of how SSTs may transform areas of the hotel industry.

## **5.2 Concerns Regarding Self-service Kiosks**

It was interesting to find that New Zealand four and five star hotels have not yet implemented self-service kiosks as a service offering to guests. Thus it is important to explore the concerns stated by managers which may explain why kiosks have not been introduced. The significant concerns were that kiosks would reduce the personalised hospitality service interactions with guests. In addition, the investment costs of implementing the kiosks and interfacing them with a hotel's front-office system was significant and would need to be justified. Moreover, managers were wary of security issues and technological malfunctions.

### **➤ Importance of Personalised Service Interaction**

All managers argued that hospitality is about the friendly, welcoming, and personalised service interactions between guests and well-trained hotel employees. They believed that self-service kiosks would remove this personal and friendly aspect of the hotel experience which they regarded as vital for guest satisfaction and loyalty, especially for leisure guests. This sentiment is echoed in the literature (Beatson et al., 2007; Durkin et al., 2008; Makarem et al., 2009; Orsingher & Marzocchi, 2003; Pratten, 2004).

It is believed that service staff can offer a vital point of difference for guest satisfaction (Mudie & Cottam, 1999). Interviewees agreed that most hotels offer similar products such as rooms, food and beverages, spa treatments and swimming pools; however, it was the personalised service that made the real

difference, which kiosks cannot truly provide. Self-service machines cannot offer the same friendly, genuine or hospitable interactions to travellers as service employees can. Hotel managers recognise this and therefore endeavour to offer high-quality service to guests through well trained, knowledgeable and personable staff confirming Pratten's (2004) suggestions. Managers were adamant that staff should not be replaced by self-service kiosks. However, most participants were supportive of introducing SSTs to four and five star New Zealand hotels only as complimentary to front office staff, with a small minority against introducing kiosks in hotels at all. Thus the data suggests that labour costs savings due to implementing kiosks and reducing staff, in four and five star hotels may not be as significant as previously suggested, by Carlin (2005), in the literature review.

➤ ***Interfacing Kiosks with the Hotel***

Kiosks are not simple stand-alone machines; they require integration into other complex information systems. In airports, they are usually interlinked to an airline's check-in system (Carlin, 2005). Hotel kiosks are also linked to the hotel's front office systems. Managers suggested that each kiosk would need to be linked to suit the individual hotel property and updated each day to monitor front-office operations, such as rooms being vacated and cleaned at appropriate times. Introducing and interfacing the kiosks with the hotel's front-office system was believed to be a substantial investment cost and would need justification. Thus, most managers questioned whether the return on investment of the kiosks, either through customer satisfaction or operational efficiency, would be significant enough for New Zealand hotels to implement them.

In New Zealand hotels, linking kiosk systems with a New Zealand's banking system is thought to be necessary for accepting payment from not only international but also local bank cards such as the Eftpos card, which is prominent in New Zealand and Australia. Furthermore, local credit card checks would also need to be performed.

The literature review did not find much evidence regarding the issue of interlinking (a) hotels' front-office systems and self-service kiosk technology; and (b) the kiosks with local banking systems. This is an important issue for hotels who may consider the introduction of self-service technology.

➤ ***Kiosks Security Issues and Technological Malfunctions***

Most managers were also concerned that new technology was vulnerable to loopholes and hacking. Security and privacy of guests' information was of utmost importance for hotel managers. Any security breaches of the kiosks, such as guest personal details and credit-card information being stolen, would make customers lose confidence in the hotel and the kiosk's technology, resulting in customer dissatisfaction and the potential loss of customers or guests' avoidance of hotels' SSTs in the future (Kontzer, 2005). However, bank ATMs and airport kiosks are relatively secure and serve high volumes of customers daily. Accordingly hotel kiosks can also be protected with adequate security measures.

Along with security issues, all participants commented that technology is susceptible to malfunctioning and technical issues. Managers suggested that hotel staff would need to monitor and provide assistance for kiosk check-ins; just as airline staff assist customers with self-check-ins at airports. This would negate all the positives of having a self-service kiosk in the hotel.

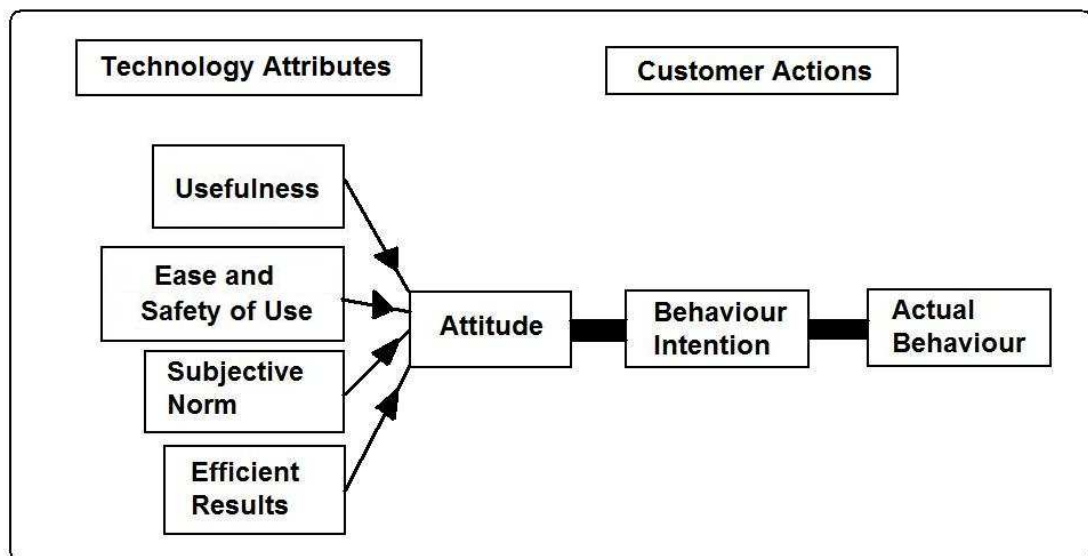
These were the major concerns that managers had regarding introducing SSTs in New Zealand Hotels. Managers felt that these issues need to be addressed before the kiosk option could operate successfully in New Zealand. Nevertheless, most managers stated that once the first hotel takes the initiative and introduces the first kiosks in New Zealand, other hotels would soon follow suit.

## The Relevance of Theoretical models to the Debate

Before discussing the advantages of self-service kiosks for customers, it is useful to first revisit the self-service encounter illustrated in the model the Customer Self-service Encounter Model Figure 1, by Oliveros, Halliday, Posada, & Bachmann (2010) as described in the literature review [pg. 19].

Where technology and customers interact, there are certain valued features of the technology which influence customers' intentions to use the technology. Therefore for customers to accept the value offering [self-service kiosk], the offering must possess these attributes. The next model [a synthesis of four models] presents these attributes. The Technology Acceptance Model for Customer Self-service Figure 5 below has been fully described earlier in the literature review chapter [pg. 35].

**Figure 5. Technology Acceptance Model for Customer Self-service**



These main technology attributes provide additional value and satisfaction to customers, which interviewees felt was important if introducing self-service kiosks in four and five star hotels. These are thought to be the most important features which customers may demand from self-service technologies. When a SST satisfies these attributes, customers would be more likely to utilise them.

The attributes illustrated in this model were important to the participants of this study and were also found to be important within the literature review. Participants felt that these would be most important to hotel guests in deciding whether or not to use the self-check-in kiosks. The Technology Attributes Table 2 [below] links these attributes to how SSTs would fulfil them so that guests may accept the technology. These advantages were uncovered through the findings of this study and were also echoed in the literature review. The table below presents the customer-related advantages in connection with each attribute required for customers to accept the technology.

**Table 2. Technology Attributes**

<b>Technology Attributes</b>	<b>Advantages for Guests</b>
Usefulness	Faster check-ins Guest control over check-ins
Ease and safety of use	Simple and safe to use
Subjective norm	Used in other industries, bank ATMs, Airport kiosks
Result efficiency	Self-check-in efficiency

The kiosks can be useful since they provide guests with faster check-ins and considerable control over check-in processes. Even though there were some concerns of managers regarding security breaches, which were discussed previously under the concerns section of this discussion chapter, kiosks can be easy and relatively safe to use for customers. Furthermore, they are the norm in other service industries and are also being introduced in many hotels around the world. Managers from this study felt that once a technology becomes common in the industry, customers are more likely to accept and utilise that technology. Lastly, result efficiency is where the kiosks provide guests with efficient check-ins. The advantages of kiosks shown in table two are further discussed in the following section.

### **5.3 Advantages of Self-service Kiosks for Guests**

In the current service environment, co-creation and self-service is an important aspect for the service industry (Oliveros et al., 2010). The advantages which these kiosks provide to customers are discussed in the next section. This study finds that some guests, especially corporate travellers, may prefer to use self-service kiosks rather than visit the reception desk. They can use the hotel kiosks to co-create the service encounter and gain the desired outcomes, such as self-checking-in to their room. Self-service and co-creating services can be useful to guests in achieving faster check-ins, better efficiency and more control over their service encounter.

#### **➤ Guest Control over Check-ins**

Managers felt that many customers know what they want, when they want it and how they would like it delivered. Guests value having control over service encounters (Honebein & Cammarano, 2005). Managers felt it was important for guests to have the choice of whether they wish to check-in via a kiosk or with a service employee. They can control how they would prefer to check-in to the hotel. SSTs can empower guests with more control over the check-in process which is a valued customer service offer. Kiosks can provide service efficiency and speed, which is suggested to be particularly beneficial for corporate guests and regular travellers. These guests are expected to appreciate the faster option, since they travel often and may either be in a hurry or simply prefer to go straight to their rooms, a supposition supported by Carlin (2005), Curran et al. (2003), and Makarem et al. (2009). Check-in kiosks could allow those guests the choice to avoid long reception lines and reception employees (Jenner, 2009). Corporate guests can simply check-in, acquire their keys via kiosks and go to their rooms without visiting the reception desk. Furthermore, regular guests' details may already be stored onto the hotel's database, which means that guests need not re-enter their details every time they log-in to the kiosk system. This can also makes the check-in process faster for these guests.



Customer control can also facilitate service customisation, which is found to increase guest satisfaction (Khan & Khan, 2009; Lashley, 1999; Sandoff, 2005). Each guest can control and customise their purchases by choosing optional hotel offerings to add to their package, choosing their rooms and controlling the duration of their interaction with the kiosk. Guests may choose additional spa treatments or a room with a pool side view, and may take their time using the kiosk without feeling rushed. Foreign travellers to New Zealand may even choose to converse in their preferred language via the hotel kiosk machines, which can improve their check-in process compared to attempting to speak with hotel employees who speak only English. This can reduce mistakes, miscommunications and embarrassment for guests by removing the language barrier.

Kiosks can be accessed at any time of the day which adds convenience (Carlin, 2005; Cunningham et al., 2009). Guests have the control over checking-in when they are ready and do not need to worry about missing the check-in time at the reception desk. There is no issue of the reception desk being closed or employees not being present to check-in a guest. Some managers felt this would add value to guests, however some participants argued that four and five star New Zealand hotel receptions are required to be operational at all times in accordance with the New Zealand Qualmark ratings. Thus customers arriving at odd hours would always have the choice to be served by the reception team as well. These reasons fulfil the usefulness attribute of the SST.

➤ ***Easy and Safe to Use***

Yaghoubi & Bahmani (2010) suggested that simplicity of use was vital for customers to accept SSTs. The study also finds that simple kiosk interactions were preferable, and also that kiosks would need to be secure for guests.

Customer interaction with self-service kiosks can be easy, where users can be guided through certain steps and follow on-screen prompts to obtain their desired service. For example, when visiting airports, it is the norm for travellers to be able to check themselves onto flights via kiosks. They follow the on-

screen prompts, enter their details and are automatically provided with baggage tags and tickets. This process is standardised, which makes it easy for customers to know what to expect and the prompts make the process efficient and easy to follow (Rayport & Jaworski, 2005). Similarly, hotel check-in kiosks are expected by managers to provide guidance and ease of use which is the second attribute on the Technology Acceptance Model for Customer Self-service.

Additionally, machines do not have emotions or feelings and therefore customers can expect the same quality of interaction from any kiosk. Service interactions will, in this regard, be standardised and easy where guests will not be surprised by a machine's attitude or service manner. SSTs can therefore possess some service quality attributes such as reliability, convenience and service outcome (Makarem et al., 2009). However, other SERVQUAL measures of empathy, courtesy, service recovery and responsiveness, (Parasuraman et al., 1993) were thought to be better provided by service employees. This satisfies the result efficiency attribute which is believed to be important for customers.

To address the earlier concern regarding kiosk security, the technology can be well programmed to keep guests' details secure from breaches similar to how bank ATMs and online payment systems provide security to customers who use their machines and websites. Thus self-service is the norm in many service related industries.

These were the major benefits which this study's participants saw as being useful for New Zealand's four and five star hotel guests. Victorino et al. (2005) state that hospitality organisations offer innovative processes and technologies to meet customers' changing expectations and needs. Thus self-service in hotels may be a beneficial alternative value-offering which many guests would utilise because of the four major attributes of usefulness, ease and safety of use, subjective norm and result efficiency, which are fulfilled by the technology. Kiosks allow customers customisation and provide standardised service. Most

managers supported introducing the kiosks option as long as it was additional to the front-office employees and not a replacement.

#### **5.4 Advantages for Hotel Operations**

Not only can self-service kiosks provide valued services to customers, but also to the hotel. This section discusses the major advantages of self-service kiosks for hotel front-office operations. The main benefits are that kiosks provide assistance to front-office employees by easing the pressure. They also help the hotel with profiling guest information and up-selling products and services to guests.

##### **➤ Assists Front-Office**

Most significantly, kiosks are expected to alleviate pressure on the front-office staff and assist check-in processes. Guests are expected to use self-service to check-in, especially when there are lines at the reception desk during busy periods, similar to what is suggested by Carlin (2005) and Kotler et al. (2003). Those customers who wish to engage with frontline staff can choose to wait in the line, while customers who are in a hurry can simply use the self-check-in. This would allow staff to spend more time welcoming guests to the hotel, advising them about the hotel facilities, answering any questions which the guests have and performing other value-building service, without rushing through the process. This can help staff focus more on creating a superior experience which can form a closer guest-hotel relationship and consequentially lead to increased customer satisfaction and loyalty which ultimately benefits the hotel. Moreover, for tour groups, the tour-leader may check-in the entire group via the kiosks which could be easier than dealing with a staff member at the front desk.

Kiosks are expected to adequately inform guests of all hotel information and policies, therefore reducing errors, misunderstandings and misinformation which can cause problems for the hotel and guests.

In the long term, SSTs are also expected to allow the hotel to reduce staff levels which would reduce labour costs (Curran et al., 2003; Fitzsimmons, 2003; Makarem et al., 2009). However, this cost saving option was opposed by all the managers of this study.

➤ ***Profiling and Up-selling***

Another advantage for the hotel is that technology is believed to be more proficient than front-office employees in remembering guest information (Griffy-Brown et al., 2008). Technology already assists the hotel to profile guests' history and store their preferences. Kiosks can recognise guests at log-in; analyse the guests' spending history and up-sell services and products the guest had utilised during previous hotel visits. Managers believed that this customised and customer-specific up-selling would effectively satisfy the guest, while at the same time provide the hotel with additional revenue. Some managers believed that kiosks would be better at up-selling since the machine would not hesitate to offer additional products and services to guests.

➤ ***Evolved Service Employee Roles***

Some participants were optimistic that self-service would create an evolved staff-customer relationship rather than reducing the personal contact. These participants envision the reception area being more open, where guests are not separated from staff by a barrier [reception desk]. Staff could come out onto the lobby floor and converse with guests in a more friendly and personal manner. This was believed to create stronger relationships between hotel and customers, which is stated to be vital in making customers loyal to a hotel organisation (Durkin et al., 2008; Hume, 2008). Managers suggested that staff can welcome guests and offer to assist with kiosk check-ins or offer traditional reception check-ins.

Removing the barrier [reception desk] was believed to make it easier for staff to walk around and assist guests with queries. If kiosks are introduced, front office roles are predicted to evolve and one new duty would be to encourage and assist guests to use the self-check-in kiosks.

## ***5.5 Considerations for the Introduction of Self-Service Kiosks in Hotel Properties***

This section discusses the managers' considerations for introducing self-service technologies in hotels. The three main areas of thought were guest-market relevance, motivation of SST introduction and future impacts on the hotel lobby.

### **➤ *Kiosks Benefit Corporate-Guest Market***

A significant finding of this study was that the majority of participants believed that self-service kiosks would be suitable for any hotel regardless of star ratings; that is ranging from budget and three stars properties to five star hotels. It was found that the kiosks are thought to benefit especially corporate guests and frequent travellers, who may visit any style of hotel. Therefore, rather than the star rating of a hotel, the market-mix would be a more appropriate measure to determine whether or not to introduce the kiosks. Hotels serving higher numbers of corporate travellers seem likely to gain more benefits and also offer additional value for these guests by introducing self-service kiosks. This is discussed further in the section 'perceived usefulness of SSTs for customers'. Leisure guests, on the other hand, were thought to prefer the friendly service employees as previously mentioned.

### **➤ *Motive of Kiosk Implementation for Hotels***

The motive for hotel companies to implement kiosks would be different among star ratings. The study determines that introducing self-service kiosks in four and five star rated hotels would be principally to add service value for the hotel's guests as opposed to reducing staff numbers and decreasing operational costs. Reducing staff numbers was presumed, by all managers, to reduce the high customer-service quality which was expected from these hotels. The literature clearly indicates that high service quality is vital for customer satisfaction (Makarem et al., 2009; Orsingher & Marzocchi, 2003; Parasuraman et al., 1993). Thus managers felt it was more acceptable to reduce staff numbers and

lower labour costs in budget and three star hotels, since these hotels were serving a different market of customers and were working with different price-service expectations. In four and five star hotels, it was considered important to retain the staff numbers and the high service quality. The kiosks would be available as an extra service channel.

➤ ***Transform the Appearance of Traditional Hotel Lobbies***

If self-service kiosks are introduced in hotels, the lobbies are predicted to be transformed from what they are currently. In the future when customers walk into a three star or budget hotel, they may be greeted by a self-service kiosk, which welcomes them, gathers their details, accepts payments and issues the room keys. The reception desk, manned with a limited number of hotel employees, may be situated at the side and serve customers who have additional needs. Customers may be satisfied with this service since it enables them to pay less to stay at these hotels and allows efficient service processes. In four and five star hotels, the staff and the reception desk would be more prominent with kiosks located at a side. This presents the image of higher personalised hospitality services in five star hotels, while also offering the additional self-service option for guests who may prefer self-service kiosks.

On a related note, there were several hotels in New Zealand already planning to introduce electronic-concierge machines. These platforms allow guests to view information, make reservations and purchase tickets via the kiosk. These machines can add value and efficiency for customers' additional service needs which is usually performed by the hotel concierge.

## ***5.6 Conclusion***

The opinion of managers who participated in this study was largely supportive towards offering guests the option of self-service kiosks; however with the proviso that the SST should be an additional offering to service-staff and not a replacement for employees. A minority of four and five star hotels have

considered introducing self-service technologies in their New Zealand properties; however managers suggested some reasons and concerns as to why the kiosks have not yet been implemented.

Personal interaction with guests was regarded as a vital aspect within the hospitality industry and especially for four and five star hotels. Kiosks may be perceived as impersonal and lowering service standards compared to front-office staff members. All managers stressed the importance of personal service which enriches, especially the leisure travellers, experience at a hotel property. Friendly, helpful and caring staff members were imperative for the hotel and their guests. Additionally, it was expected that implementing the kiosks would be a significant cost, and therefore the return on investment, whether through cost-reduction or value-offering, would need to be able to justify that cost. Also, SSTs may be susceptible to security breaches and malfunctioning which negates all the positivity of the kiosk. Security issues such as loopholes, fraud and hacking were stated by participants, which need to be addressed before implementation would be successful.

Unanimously, managers considered SSTs most useful for corporate and regular guests. They believed that corporate guests would opt to use self-check-in kiosks due to their desire for efficiency and effectiveness in service. SSTs fulfil the main attributes of the technology acceptance model of usefulness, ease and safety of use, subjective norm and result efficiency. By fulfilling these attributes it is likely that guests will use the technology.

Guests enjoy control over their service encounters and are enabled to customise services and products. Kiosks offer guests an alternative option to save time and avoid hotel employees for acquiring services of checking-in, checking-out, making reservations or even upgrading their stay. Guests may choose to communicate in their preferred language which can avoid miscommunication and errors. Kiosk access would be all day, which means that guests are able to check-in at their convenience rather than at the hotels' convenience. These benefits for guests validate that kiosks would be a valuable

offering by hotels. The quality of kiosk service encounters would be standardised and consistent so that customers do not suffer unpleasant service encounters.

Self-service kiosks provide advantages not only to guests but also hotels, when the technology is used alongside hotel staff. Kiosks could assist front-office staff, especially during busy check-in periods, as some customers would be likely to check-in via the kiosks rather than wait to check-in to their rooms. This would relieve pressure on the staff and allow faster access to rooms for customers thus reducing congestion at the reception desk.

Technology is already used to profile guests' preferences in guest history data bases. This information can be better used to up-sell products and services via kiosks, and enables a customised service offering by the SST which adds to customer satisfaction.

Participants believed that SSTs are appropriate for all hotel ratings. However the reason for introducing kiosks in a four and five star hotel would be different to introducing it in budget and three star hotels. When implementing kiosks in four and five star hotels, it is important that the kiosks add value to guests and not reduce service quality. Here, kiosks should be used as an optional value – adding service feature since guests expect a high service quality. Reasons for introducing kiosks in three star and lower rated hotels can be justified for reduced staffing levels since these hotels serve a different market. Furthermore, since regular and corporate guests were believed to more likely to utilise SSTs compared to leisure guests; hotels with higher corporate and frequent travellers would likely achieve superior benefits from introducing kiosks regardless of the hotel's star rating.

Managers also predicted that with the introduction of self-service kiosks, the roles of front-office staff would evolve. Service employees would now focus on more value-adding tasks to satisfy the guests. Staff could be free to perform customer-satisfaction related duties such as building hotel-customer relationships or handling customer complaints.



It seems that hotels and guests could benefit from implementing self-service kiosks when the technology operates effectively and when the hotels maintain their superior service standards with those guests that prefer the personal service interactions. Hotels with a larger corporate guest market would gain more benefit from introducing the SSTs compared to hotels which have a larger leisure traveller base. However, there is no certainty that self-service kiosks will be as accepted in New Zealand hotels as they have been in hotels of other countries or in other industries.

### ***5.7 Research Limitations and Possible Areas for Further Study***

It would seem that the area of self-service in hotels has not been widely studied. The results of this study are largely based on managers' professional opinions. It would have benefited this study to be able to gain data from hotel guests as well. This could have allowed further cross comparisons between the managers' opinions and the customers' views. Some other areas to consider for future study are cost-value analysis of kiosks; impact of kiosks on employees; impacts of avoiding customer self-service on the hotel and success rates of SSTs in hotels.

Self-service kiosks bring potential benefits and also concerns, which this research has not been able to fully explore due to time constraints and the nature of this study. Further research into customer perspectives on the introduction of self service technology could assist in giving an answer to the question asked in the title of this dissertation- 'to self-service or not to self-service.' Until then it seems hotels have an interesting journey of experimentation and exploration with such self-service technology.

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# Participant Information Sheet



**Date Information Sheet Produced: 25 / 08 / 2010.**

## **Project Title**

*Customer self-service technology in hotels: Outcomes for hotel organisations and their customers.*

## **An Invitation**

Hello, my name is Varzan Kolah and for my Masters Degree in International Hospitality Management at the Auckland University of Technology, I am researching the topic of *customer self-service technology in the four and five star hospitality environment*. Some American, European and Asian hotels have already introduced customer self-service technology, such as check-in kiosks, however New Zealand hotels do not appear to have taken advantage of this technology.

I am interested to know your professional opinions on this type of technology, whether your hotel company intends to introduce this technology in the near future, reasons as to why the technology has not already been implemented, the potential reasons for introducing the technology and what possible benefits or difficulties you can predict relating to your customers and your hotel company. Your participation is voluntary and I would very much appreciate the opportunity to discuss your professional opinions and your hotel's position on customer self-service technologies in New Zealand.

## **What is the purpose of this research?**

The purpose of this research is to determine the future of customer self-service in New Zealand hotels. The research is aimed at uncovering possible reasons behind the introductions of self-service technology and the potential impacts on the customers' experience as well as the hotel. The research will also be beneficial to me gaining my Masters Degree.

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

Ten front-office managers employed in four and five star hotel properties in central Auckland City, New Zealand have been invited to be interviewed. As a

front-office manager, you are a valuable source of information and could yourself benefit by participating in this research.

**What will happen in this research?**

A one-on-one 40 minute interview will be conducted with you. Your name and the name of your hotel will be completely confidential and your opinions will be confidential at all stages of the research. The interviews will be audio recorded and transcribed. All other parties involved in, transcribing or storing the data will sign confidentiality agreements. All steps shall be taken to ensure that your “voice” or “words” cannot be used to identify you or your hotel.

**What are the discomforts and risks?**

There are no risks or discomforts in the interviews. The interviews will be undertaken in a safe, comfortable location away from the hotel. The interview data and recordings will only be handled by myself and my supervisor who will each sign confidentiality agreements.

**How will these discomforts and risks be alleviated?**

Throughout the interviews, I will attempt to be sensitive to how you are feeling. If at any time you are unhappy with issues being raised, please let me know. Also, you will have the opportunity of concluding the interview or withdrawing from the research at any stage. When the interviews are transcribed, pseudonyms and coding will be used to protect your identity as well as your hotel’s identity.

**What are the benefits?**

There is very little research which focuses on customer self-service in the New Zealand hospitality industry. If factors influencing the introduction of this technology can be identified and harnessed, then the research could benefit the New Zealand hospitality industry. The research may also help the tourism industry operators and provide information on how customer self-service technologies can benefit organisations whilst providing improved service and customer satisfaction.

**How will my privacy be protected?**

Data will be kept secure during the research process and will be destroyed after the research is completed. You will remain confidential as only myself and my supervisors will have access to the research.

**What are the costs of participating in this research?**

The interviews may take approximately 40 minutes.

**What opportunity do I have to consider this invitation?**

You have two weeks to consider and decide if you want to participate in the interview.

**How do I agree to participate in this research?**

You may contact me by email or phone to arrange a suitable meeting time. There is a consent form to be signed before the interviews proceed which legitimises your agreement to participate and guarantees confidentiality for you.

**Will I receive feedback on the results of this research?**

A summary will be provided to you if you would like to receive it.

**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, *Shelagh Mooney, AUT (email address [shelagh.mooney@aut.ac.nz](mailto:shelagh.mooney@aut.ac.nz)), Telephone 00 64 9 921 9999.ext: 5835.*

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEK, Madeline Banda, [madeline.banda@aut.ac.nz](mailto:madeline.banda@aut.ac.nz), 921 9999 ext 8044.

**Whom do I contact for further information about this research?**

Contact Details:

Researcher: Varzan Kolah, E-mail address: [varzansk@hotmail.com](mailto:varzansk@hotmail.com). Mobile : 021-055-6819.

Project Supervisor: Shelagh Mooney, E-mail address: [shelagh.mooney@aut.ac.nz](mailto:shelagh.mooney@aut.ac.nz), Telephone 00 64 9 921 9999, ext 5835

**Approved by the Auckland University of Technology Ethics Committee on 27/9/2010  
AUTEK Reference number 10/212.**



**CONSENT TO PARTICIPATION IN**  
**RESEARCH**



Title of Project:

**To Self-Service or Not To Self-Service? That is the Question for Hotels.  
An Exploratory Study of Senior Hotel Manager’s Perspectives.**

Project Supervisor: Primary: Shelagh Mooney. Secondary: Warren Goodsir

Researcher: Varzan Kolah

I have read and understood the information provided about this research project (Information Sheet dated 2010)

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

I understand that the interview will be audio-taped and transcribed.

I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.

If I withdraw, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.

I agree to take part in this research.

I would like to receive feedback from the research. YES / NO.

Participant Signature: .....

Participant Name: .....

Participant Contact Details (if appropriate):

Date:

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

## Interview Questions



### **To Self-Service or Not To Self-Service? That is the Question for Hotels. An Exploratory Study of Senior Hotel Manager's Perspectives.**

The aim of this research is to obtain your professional views on customer self service technologies and their impact on hotels and customers. Of particular interest are your thoughts about the use of *self service kiosks* which allow customers to check-in to and out of the hotel.

The main themes for the interview questions are:

1. What are your thoughts on the use of self service kiosks in four and five star hotels?
2. How do you believe your customers would respond to using self service kiosks?
3. Is there a segment of customers who would be more likely to use self service kiosks?
  - Business travellers, leisure guests, conference?
  - Do you feel that customers might expect self service kiosks in NZ hotels?
  - Have any customers already remarked or inquired about kiosks?
4. Are you aware of New Zealand hotels using self service technology?
5. Does your hotel currently use any kinds of self service technology?
6. How do you see self service technology changing the nature of hospitality?

Thank you very much for your time.

Varzan Kolah