# SELF-SERVICE TECHNOLOGIES INFLUENCING GUEST SATISFACTION IN HOTEL INDUSTRY

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#### Abstract

This conceptual study highlights the relationship between several variables that influence guest's satisfaction to use self-service technologies in hotel industry. Nowadays, with all kinds of technologies at one's fingertips, it makes a lot of sense to do without human contact. The evolution of reservation systems, the internet, the smartphone and other technologies now provide significant convenience and savings to hotel guests. In order to facilitate efficient and effective service delivery, hotels are introducing self-service technologies (SSTs) at an increasing pace. By understanding this relationship, it will provide different perspectives of guest's satisfaction to use SSTs. The objective of this study is to discuss the factors that influence guest's satisfaction in using SSTs in hotel industry. By referring to the previous research on SSTs, it was found that ease of use, reliability, technology readiness, and interactivity were among the factors enormously discussed by previous researcher. Previous studies have dealt with the consumer's intention in influencing them to use SSTs in Tourism and Hospitality Industry but only few highlighted the relationship between SSTs with consumer's satisfaction in hotel industry. Therefore, in this study, researchers will try to gather the literatures that may support the fact that most of hotel business should focus more on the SSTs in enhancing guest experience while staying at hotel premis directly satisfying their needs and wants.

**Keywords:** Self-Service Technology (SSTs), Customer Setisfaction, Hotel Industy

# INTRODUCTION

In order to facilitate efficient and effective service delivery, hotels are introducing self-service technologies (SSTs) at an increasing pace. Self-service technology (SST) can be defined as technological interface that allow consumers to produce a service which is independent of direct service employee involvement (Ong, 2010). The evolution of reservation systems, the internet, the smartphone and other technologies now provide significant convenience and savings in term of time, money and energy to hotel guests. Nowadays, with all kinds of technologies at one's fingertips, it makes a lot of sense to do without human contact. For example hotel reservation has largely changed whereby the guests need not to walk-in or make the phone call to do reservation for the hotel room.

They only need to make the reservation as convenience as using online hotel booking system where the reservation are fast and easy without spelling and billing errors. As technology innovations continue to transform every industry and job role in the today's world, the service industry is certainly no exception. The latest trend in the hospitality industry is about embracing technology while retaining the one-on-one interactions. The requirement here is to enhance the guest experience with the help of technology, which has a direct impact on hotel's revenue(Ming & Wai, 2013). Moreover, hospitality industry currently increasing relying on technology and more hotels are now in search of the best combination of technology and human touch to increase guest satisfaction levels. Emerging hotel technology trends are automating and simplifying many tasks for makes day-to-day operation become easier and enhance guest experience, thus hoteliers cannot deny the importance of hotel's technology.

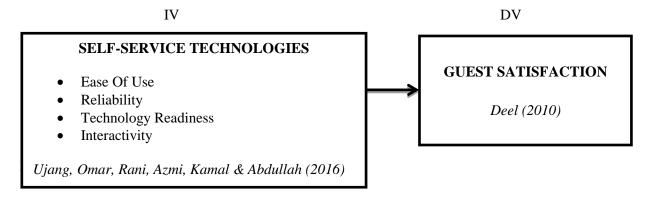
Millar (2009) stated that when it comes to technology desired by guests, there is difference in the demands between business guest and leisure guest whereby for business guest, most of time itineraries can be incredibly intense and time constraints can be very high. In such a situation, the

expectation is that the hotel one chooses to stay in makes the whole process of guest easier. The delay of service or technology will leads to frustration with the overall stay. In this context, hoteliers need to look for ways to help guests optimize the technology use in order to help guests complete guest problems quickly or become productive almost immediately. For hotels, efficiency of activities performed by staff is measured by the time needed to execute them. It means the less time is, the less expensive labor cost would be. Hence, investment in technology is often less expensive than paying humans (Tussyadiah & Park, 2018).

Despite any number of technological innovations and no matter how advanced they are it cannot replace the human touch in the hospitality industry for thousands of years to come. Therefore, the management must know how to incorporate technology and human role effectively and bring about a massive change to the way they are working and also discover new ways to increase hotel revenue (Ujang, Omar, Rani, Azmi, Kamal & Abdullah (2016). It is because one of the most significant factors of firm success in business today is the adoption and implementation of technology to more efficiently meet and exceed the needs of customers and for this reason, self-service technologies have already been applied in many segments of industry included hospitality industry (Deel, 2010). Hotel guest satisfaction can derive from many elements such as the effective employees, service quality, effective technologies, and service at valuable price (Angelova & Zekiri, 2011). Hence based on these issues, this research will explore four major factors that predicted in influencing guest satisfaction toward self-service technologies in hotel industry. These factors are ease of use, reliability, technology readiness and interactivity.

Although studies on self-service technology have been conducted by many researchers in other industries, there is a lack of study involving the hotel industry particularly related to guest satisfaction. Therefore, it raised an interest for the researchers to investigate the accepted factors of self-service technology from the perspective of hotel guest and find the dominant factor of self-service technology that most influencing the guest in using the technology and satisfied with it. This study will review the previous literature to determine the factor of acceptance of SSTs in the hotel services cape.

The objective of this study is to discuss the factors that influence guest's satisfaction in using SSTs in hotel industry. By referring to the previous research on SSTs, it was found that ease of use, reliability, technology readiness, and interactivity were among the factors enormously discussed by previous researcher. The objectives are divided into four which are: (1) to understand how ease of use of technology influence guests' satisfaction, (2) to understand how reliability of service influence guests' satisfaction, (3) to understand how technology readiness influence guests' satisfaction and (4) to understand how interactivity of service influence guests' satisfaction. Since the research purpose is to study on how self-service technology influence guests' satisfaction in hotel industry, this theoretical framework was adapted from the previous literature sources which are Ujang, et.al, (2016) and Deel (2010).



Ease of Use

Davis (1989) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort". According to Agag & El-Masry (2016) stated ease of use

as one of several aspects preferred by customer through online booking. Meanwhile Abdullah, Ward & Ahmed (2016) define ease of use as the degree to which hotel guest feel that online booking is user friendly.

Therefore ease of use can be defined as the user perceptions on the process that lead to final outcome whether the user is satisfied or not. In a very competitive world today, customer would look to use the technology because most of the time it will give positive impact in term of fast transaction, a convenient system, ease of information and lower price as their key motivator to purchase online (Ming & Wai, 2013). Beside that the customer perceived by using SST it can saving in many aspects included reduce waiting time, saving the cost, and the service will be handle by the customer itself without involvement of human contact (Ujang, et.al, 2016).

The increasing number of technologies today was transforms every industry where it allowed the users to find any information regarding certain products and services easily (Lee & Erdem, 2013). Nowadays, the customer will easily get influence by the advertisement or believe with information regarding hotel through revisit third-party websites rather that the hotel websites Qi & Buhalis (2013). In another study, meeting planners also agreed that ease of use factor influence their perception on the usefulness of social media (Lee et. al., 2013). SSTs on the other hand, create a more consistent service and the customer will be able to know precisely what to expect with every service encounter with the SST and enjoy the same experience each time (Ong, 2010).

Furthermore with such ease of use technology available, users can easily take advantage on any available complaint from other users before making any decision. For example, user will look at the complaint column on hotel's website before making choice.

# Reliability

Previous research found that although customers cannot touch any product online but they still can rely on product features as well as the information needed (Cho, & Sagynov, 2015). They can also read from complain section in the website in searching for quality. User found that they can also rely on online shopping because of the detailed product information given since this is differ from offline shopping where the selling person cannot accurately remember the detailed features about product (Malik, & Sachdeva, 2015).

Customers also found that technology is reliable because they can firstly use the web to search good deals and promotions about product before going into physical store (Vonkemana, Verhagenb, & Dolenc, 2017). They also will compare prices as well as review any complaint about product before making decision to buy any preferred product

## Technology Readiness

Today modern life style is becoming increasingly characterized by technology-facilitated transactions. Growing numbers of people interact with technology to create service outcomes instead of interacting and interface with a customer service employee. Although extensive academic research has explored the characteristics and dynamics of interpersonal interactions between service providers and customers but it much less research has investigated customer interactions with technological interfaces (Bitner, Brown, and Meuter, 2000).

In addition, although some SSTs have become commonplace (e.g., ATMs, pay-at-the-pump terminals), more innovative SSTs continue to be introduced. For example, the Internet enables shoppers to purchase a wide variety of products without having to visit a retail outlet or converse with a service employee. According to Parasuraman (2000), technology readiness refers to people's propensity to embrace and use new technologies for accomplishing goals in home life and at work.Lin and Hsieh (2006) revealed customer technology readiness can result in higher perceived service quality and positive behavioral intentions when using SSTs. Individuals avoid technology if they are uncomfortable and unprepared to utilize the technology and they will avoid to use it (Ujang, et.al, 2016). Therefore, it is important to explore customers' readiness to use them as new technologies are developed.

# Interactivity

Interactivity can be defined as the ability or design to respond to the actions and commands of a uses (Ujang, et.al, 2016). Interactivity has long been recognized as one of the important components of new media and is generally known to enhance consumer online experience (Noort, Voorveld, & Reijmersdal, 2012). Generally, interactivity is associated with new communication technologies especially the internet and World Wide Web.

In some areas, the level of interactivity varies across media, usually anchored in its ability to facilitate interactions similar to interpersonal communication (Kiousis, 2002). For these reasons, personalized and interactive SSTs can offer substantial value to the two way communication interaction between consumers and firms. According to Abdullah, Jayaraman, Kamal, Md Nor, (2016) in hotel industry booking or making a room reservation, making an express check-in and express check-out can be done simply through an application on a customer's mobile phone.

Ujang, et.al, 2016 also said the customer today most prefer to booking a hotel room, retrieving data and navigating around the destination, locating dining as well as entertainment options through an application on theirs mobile devices because all the activities can be done quickly. Therefore, interactive SSTs offer two-way communication and enable users or consumers to move promptly and well-ordered through the SSTs.

## **Customer Satisfaction**

Dilpazir & Amin, (2015) defined customer satisfaction as the extent to which a firm fulfills a customer's needs and desires in relation to his expectations, prior to receiving the products or service. Whereas Sriyam (2010) define customer satisfaction as a result of customers evaluation to the consumption experience with the services Meanwhile Vanacore and Etro (2002) defined customer satisfaction as the general assessment, which is done by customers about specific product or service at a certain time.

In conclusion, customer satisfaction can be defined as evaluation of the customer towards service that they have consume/experience and their levels of satisfaction might be different based on their attitudes and perceived performance from the product/service. Gunawardana, Kulathunga & Perera (2015) mentioned that ability to perform the transactions more quickly in the SST environment compared to the interpersonal service environment increases customer satisfaction. Furthermore, Yen (2005) has found that the efficiency attribute of SST environment leads to customer satisfaction. According to Weijters, Rangarajan, Falk, & Schillewaert (2007) said consumers are expected to be satisfied with SST if they perceive efficiency in the self-service technology environment. Moreover, the efficiency of the SST in the service setting in term of waiting time was lead to increase customer satisfaction (Buell, Campbell & Frei, 2010).

# **METHODOLOGY**

This conceptual paper is based solely on a review and analysis of research and data from previous empirical studies. For the literatures, researched reviewed several journals and found out Ujang, Omar, Rani, Azmi, Kamal & Abdullah write up was the most relevant journal that may be used as the main reference for constructing this conceptual paper. Other method that being used was the google search engine. Data collection for future research, a quantitative study will be used and the population to be studied would be all the hotel guest that staying at 5 star hotels in Malacca.

The sample would consist of the business guest that staying at 5 star hotels in Malacca. For ethical reasons, participants will be asked to read and sign a consent form stating that they willingly participated in the study and that any answers provided will be used as data and compiled into a report. The participants will also be informed that participation in the survey is completely confidential and voluntary and they are free to leave at any time.

## **CONCLUSION**

Literatures found were very helpful in assisting the researchers to understand this conceptual paper very well and lead the researchers to some meaningful findings. Based on the empirical studies, it was found that perceived usefulness and ease of use were the most notable determinants of technology user acceptance (Wong, Lo, Ramayah, 2014). Iqbal, Hassan & Habibah (2018) supported this statement whereas based on their statement the implementation of SSTs has resulted in customer ease of use included cost reduction and a convenient service environment for the users of SSTs.

The findings above led us to draw a conclusion and make recommendation for future research. It is obvious that the combination of four dimensions of SST mentioned in the framework got positive relation with the hotel guest satisfaction. We are now living in the society that using varieties of advance technologies in making our daily activities become easier. The result through the previous studies showed that the customers are very much depending on current technology which it is very much needed to make their visiting in hotel premise smooth and enjoyable during the stay.

From the literatures, some of the recommendations for the future research are (1) Further research should be conducted more specific and more in-depth by using existing theoretical framework or little improvising of theoretical framework. (2) It would be interesting to investigate the dimension of self-service technology that influence hotel guest satisfaction in hotel industry and how it may impact the hotel industry in transforming and shifting from the conventional methods toward modernization era. These are some of the recommendations from the researchers that interested with this topic, which was not possible in this study because of time constraints.

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