

A. Introduction of Project Purpose

Traditionally, consumers have been accustomed to face-to-face interactions during service and retail transactions such as visiting the local grocery store or going to the neighborhood bank. But one major recent change in consumer behavior is the growing tendency for consumers to interact with technology instead of a human. Self-service technologies (SSTs) are a growing trend and have slowly become normal in some aspects of our daily routine such as: telephone and ATM banking, online package tracking, internet searches, pay at the gas pump, self checkout kiosks, and self tax preparation software etc. The tourism industry and specifically hotels have slowly introduced self-service technology including online booking engines, setting your own wakeup calls, pay-per-view, and most recently, attempts at self-service kiosks or mobile technology for check-in, check-out and keyless entry for rooms.

In a mid 2000s study, consumers expressed strong feelings regarding self-service technology. Consumers love them when SSTs bail them out of difficult situation, when they are better than interpersonal interactions, and when they actually work. However, they despise them when they fail, if they are poorly designed, if the customer messes up, and especially if there is no service recovery (Zeithaml, Bitner, Gremler, Mahaffey, & Hiltz, 2007).

My previous employment and hotel management experience within the Kamloops hotel industry and my interest in hospitality industry trends has evolved into a specific interest in hotel technologies and guest service application platforms. Hotel technology is a very broad topic from online and mobile booking platforms, to mobile and keyless check-in/out methods, to guest service and customer relationship management (CRM) applications. But I am most interested on what kind of guest experience self-service hotel technologies (SSTs) create, what specific target markets and segments prefer it and would utilize this technology, and with what scale of hotel, as well as the barriers affecting the guest experience.

Customer satisfaction is an integral part to the success of a business' bottom line. But, by introducing changes to the standard service model (i.e. the standard check-in or room key access process) can alter not only customer satisfaction, but can change their expectations and their customer delight. My project seeks to investigate specifically the effects of mobile self-service check-in and keyless entry methods in mid scale hotels on customer delight.

B. References

Bilgihan, A., Okumus, F., Nusair, K., & Joon-Wuk Kwun, D. (2011). Information technology applications and competitive advantage in hotel companies. *Journal of Hospitality and Tourism Technology*, 2(2), 139-154.

This article examines the decision making process for hotel management in implementing new Information Technology (IT) projects. It analyzes the competitive advantages, intended benefits such as productivity and increased customer service, the coherence between the business strategy, and the various types of integrated IT applications. The article also explains the decision making process and evaluates the pros and cons for choosing certain IT investments such as sustainability, return on investment, and the lag time between the decision, installment and seeing their intended outcomes.

This article is very interesting and important from a hotelier's point of view for deciding what technologies to implement over others. The article will contribute to the project by providing analysis of how IT decisions are made from an executive level and how the various IT platforms can affect the guest experience from the initial contact stage. This insight will be most useful in the literature review, as it will provide arguments and background information of hotel technologies, as well as in the discussion section because the executive decisions may affect their customer's delight and satisfaction.

Carlino, N. (2014). HITEC: It's all about choice. *Hotel Business*, 23(12), 1-26.

This article examines the current technology trends that came out of the Hospitality Industry Technology Exposition and Conference (HITEC) – examining mobile check-in and keyless entry using The Americas, OpenWays technology as the example. SONIFI Solutions also introduced their investment in an innovation lab for the hospitality industry in the Silicon Valley – testing next generation technology and innovations that can assist with the customization and personalization of guest experiences.

The article will contribute to my research and literature review by highlighting current technology trends in the hospitality industry that will provide relevant examples and provide background information that could be used in my questionnaire to determine the appeal of the technology from my sample size.

Carlino, N. (2014). Hotel industry keys in to mobile, keyless-entry solutions. *Hotel Business*, 23(21), 10-12.

The article introduces 2015 as the year of mobile technology and introduces Starwood Hotels and Hilton Hotel's plans of rolling out keyless entry test sites in 150 hotels worldwide using Android and Apple mobile platforms. It examines the security questions of utilizing keyless entry over a third party network and examines KABA's (key system manufacturer) 'white paper' that helps hoteliers understand secure mobile key solutions and the steps it takes for implementing keyless technologies.

This article will contribute to my project by offering a real world example of two major hotel brand's installation of new hotel technology and providing information on the analysis of security requirements and implementation for this system. It also provides data on the future trends of the technology. The arguments and examples can be utilized in the literature review as current and background information on the topic, as well as its security issues could assist in the discussions if questions arise from the questionnaire.

Catellier, H. (2015). Do You Compute?. *Hotelier Magazine*, Jan/Feb 2015, 42-45.

This article is a Q & A of hotel industry professionals about the cutting edge of today's changing technological landscape and how the 'bring your own device' concept confirms software improvements are a growing necessity in hospitality. The experts explain upcoming technology, the importance of Wi-Fi and two tiered Wi-Fi systems, embracing the 'cloud',

impacts of technology on efficiency and labour savings, the importance of mobile apps and securing mobile bookings through your loyalty app (i.e. SPG app).

This article showcases a great industry perspective on the current tech trends in the hotel industry and examples can be utilized as real life guest experiences and how the millennial generations are engaging in the technology. This industry discussion will assist the literature review in forming an argument of current hotel trends and may offer a baseline of suggestive market segments to compare results of the data collection in the discussion.

Chathoth, P. (2007). The impact of information technology on hotel operations, service management and transaction costs: A conceptual framework for full-service hotel firms. *International Journal of Hospitality Management*, 26, 395-408.

The article analyzes the transactional costs of IT systems and its relationship and impact to guest service at the various stages of guest interaction: preregistration/reservation process, registration process, guest service and checkout systems. It also examines the 'customer delight' or satisfaction of their needs and wants by focusing on creating joyful and surprising experiences that hopefully leads to guest loyalty. Utilizing guest history and tracking specific transactions such as special occasions or requests from previous stays can create these experiences. The paper concludes that there is a need of a combination of technology and human resources to manage customer relations.

The article provides excellent analysis of the impact and importance of having IT based systems complementing the human resource based systems in full service hotel firms. The paper will contribute to the argument and analysis of how hotel technologies contribute and affect the delivery of customized guest experiences. The paper may assist in examining various delivery methods like P2P & B2C. It will especially be of great assistance in the literature review providing an introduction into the customer delight concept and how its been utilized in hotel case studies.

Connolly, D. & Olsen, M.D. (2001). An environmental assessment of how technology is reshaping the hospitality industry. *Tourism and Hospitality Research*, 3 (1), 73-93.

The paper examines how information technology is evolving and affecting the competitive advantage landscape in the hospitality industry – altering how companies conduct business and reach their customers. The paper utilized 160 industry professionals to conduct their research creating a ‘Think Tank’ to assist the sector in preparing for the future as well as positioning themselves for the future needs of its guests and identifying challenges that lie ahead. It identifies the roles of technology in the operations of ‘today and tomorrow’ and how hoteliers link their strategy with IT investments. It also discusses how hotels are evolving as a packaged product with experiences and that how IT is developing consumers and managers of tomorrow by visualizing the future.

The paper raised more questions than answers, but I will see if I can utilize its future forecasts and questions in my research to see if they can be used to assess the barriers of hotel technologies on the guest experience, or relate their predictions to my data analysis in the discussion and results sections.

Hotel Management. (2015). The appeal of the human welcome vs. mobile check-in. 230(5), 26.

The write up provides an example of the Kimpton Hotel’s check in model where they have found that mobile check-in doesn’t appeal to everyone, a large group of people including leisure travelers crave individual attention and that the human connection is integral to the guest experience.

The article provides a great example of an elite boutique hotel chain’s approach to the mobile check-in debate and seamless check-in experience. This will contribute to my research by providing a real life example of hotel check in experiences as well as providing a relatable case study that identifies certain market segments that prefer human interaction vs. technology. This will be useful as a reference to compare and contrast my data results to.

Jung, S.Y., & Kim, J. (2014). In-room technology trends and their implications for enhancing guest experiences and revenue. *Journal of Hospitality and Tourism Technology*, 5 (3), 210-228.

This article provides a breakdown of the trends of in-room technologies and how they affected the guest experience and guest satisfaction – such as high speed internet access, HD TVs, pay per view systems, & mobile docking stations. It also examines future technology trends and the barriers for installment including high implementation costs of hardware and software and the worry of sustainability and relevancy. It also examines a cost-benefit ratio on how these technologies can generate additional revenue for the hotel and it offers a comparative analysis on how certain scale of hotels are implementing certain technologies over others.

The article will contribute to my project by providing excellent background statistics on the adoption of mobile technology and how hotel guests currently utilize it. It also provides great data on the trends of hotel technology and how it can affect a hotel's performance, guest experience. This article will be useful in the literature review by providing recent results and assist me in identifying the gaps of current research.

Keiningham, T., & Vavra, T. (2001). *The Customer Delight Principle: Exceeding Customers' Expectations for Bottom-Line Success*. New York, NY: McGraw Hill.

This book will provide the foundation of the customer delight principle. Its data and methodology from previous research, real life applied corporate examples, and their analysis will assist in transferring the principle to the hotel business service model. Chapter one discuss the relationship between satisfaction and customer behavior by analyzing different thresholds of satisfaction: the Zone of Pain, the Zone of Mere Satisfaction and the Zone of Delight; success comes when customers are moved out of the Zone of Mere Satisfaction and into the Zone of Delight. Chapter two discusses various definitions of Customer Delight:

- Positive surprise arising from extremely good service delivery or product performance
- The highest level of satisfaction
- Exceeding customer's expectations

Chapter two (page 29) provides an example of the range of expectations using the hotel check in process' expectations as a brief case study. This example provides an expected experience and discussing how a customer's experience affects their expectations. This chapter provides excellent graphs and diagrams of customer satisfaction as a reference of the correlation of delight creating attributes of a product or service that continues in Chapter four with examining six delight principles and discussing the importance of customer loyalty. The loyalty concept could be utilized and applied to hotel self service technologies since the mobile and keyless check-ins are incorporated into hotel loyalty program apps like SPG (Starwood Preferred Guests) and Marriot Hotels. Throughout the book, real life applications of the delight principle are examined in various corporate structures that highlight the importance of the implementation process and the HR component of training and development. Chapter eleven summarizes the "Delight Epiphany" with first step suggestions for approaching the delight principle and implementing it into a new business model. Overall, the book will assist in the literature review with the in depth knowledge of the customer delight principle and its theories can be used to compare to my data results in the discussion portion of the project.

Lee, S.A., & Shea, L. (2015). Investigating the Key Routes to Customers' Delightful Moments in the Hotel Context. *Journal of Hospitality Marketing & Management*, 24, 532-553.

This article examines the 'customer delight' phenomenon of what guests look for in their hotel experiences – both in tangibles (property related) and intangibles (service related). The paper identifies five categories as factors that affect guest delightful experiences. The paper also breaks down delightful experiences by segments: gender, expected level of service, & market segment. The paper provides hotel management with practical implications of what affects guest satisfaction and loyalty so they can implement them into their daily operations. They must focus

on their servicescape (physical environment) and intangible factors such as guest service. The study also confirms the relationship between customer delight and loyalty that will lead to the long-term success of the organization.

The article will contribute to my research by providing excellent background information on guest satisfaction requirements affecting guest experiences and customer loyalty. This study could also provide a framework for creating my questionnaire based on the five categories affecting delightful experiences.

Mest, C. Elliott. (2012). Front-desk substitutes and supplements ARE KIOSKS USEFUL?. *Hotel Management*, 227 (6), 44.

The article discusses the argument of installing front desk substitutes (kiosks) in hotel lobbies. The article's survey found that they are a quick option for busy periods, but guests like a correlation between when you walk in and there is a voice. Not all hotels are suitable for self-service kiosks and the survey found that the kiosks themselves didn't save much time. It's an added cost that doesn't replace workers at the front desk. It's an added capital cost with no savings.

The article is very useful to my research by showcasing a real life example arguing that technology doesn't always have a financial benefit (savings) or positively affect the guest experience. Therefore its content could be applicable in the discussion section depending on certain results and some of its arguments and conclusions could assist in designing certain questions based on existing research.

Ostrowski, C. (2006). CRM Among Most Key Tech Hotel Issues. *Hotel Business*, 15, 10A.

The brief article highlights that the hospitality industry is in catch up mode for adopting new technologies vs the home environment. It discusses the roundtable topics of future hotel technologies including implementing Customer Relationship Management software (CRM) to

improve the guest experience by exceeding their expectations and creating a 'home away from home' environment with various in room technology. Various hotel groups discussed that technology needs to be geared toward a guest experience, satisfaction and operations efficiency. They also debated that a challenge could be training the labor force on the complex technology; it's already a struggle hiring good staff.

Although brief, the article brings up important points and challenges that are still relevant 10 years later. These challenges will contribute to my project by providing a framework for my limitations and possible challenges for the guest experience and questionnaire questions. These limitations in conjunction with other studies and their results can be useful in the literature review discussing the trends and challenges of implementing new technologies and relate it to the customer experience and satisfaction levels.

Pratt, L. (2015). State Your Preference. *Hotelier Magazine*, July/Aug 2015, 39-42.

This article introduces new hotel technology offering customized experiences for guests. It highlights the Starwood Hotel brand and the importance of tracking and capturing guest's personal preferences in their property management system for preparing for the guest's next arrival. This leads to personalized welcome messages, gifts, and amenities that can lead to positive experiences. It also introduces the preference that guests want the luxuries of home when they travel – especially technology. The article discusses how hotels must generate other forms of revenue from technology by making it exclusive to loyalty and rewards apps such as the SPG app for example SPG Keyless, a digital key using Bluetooth through mobile phones. The article also highlights interactive in room guest service technologies such as the Intelity tablets at the Fairmont Pacific Rim. This service enables guests to make concierge requests, room service, book spa treatments, application (app) access to thousands of newspapers, and control room temperature & lighting from the convenience of their fingertips. Technology as a capital investment is expensive, but the paper finally stresses that the bottom-line should never be impacted, but to leverage technology to help meet guest expectations.

This article will assist my research by providing current technology examples from various hotel brands and how they are currently contributing to the guest experience. This will be utilized in the literature review as an industry case study. This article prompted me to try the technology with a hotel stay to see how user friendly it is. This experience and case study insight will assist me with forming questions from a consumer's point of view, in conjunction with my hotel industry knowledge.

Sigala, M. (2005). Integrating customer relationship management in hotel operations: managerial and operational implications. *International Journal of Hospitality Management*, 24, 391-413.

The article explains that the correlation and importance of integrating a Customer Relationship Management System (CRM), in addition to Information and Communication Technologies (ICT) due to the fact that travelers are becoming more price conscious and less brand loyal. The article compares how CRMs are used small hotels (<60 rooms) vs larger hotels (60+ rooms) in Greece. CRMs enable hotels to gather individual guest data and preferences which lead to enhanced customer service & customized guest experiences.

This article may contribute to my project as another form of technology that hotels use to enhancing customer service and guest experiences, but I am not sure at this point how it correlates with the other technology platforms. This article intrigued me to see if it can be useful in segmenting the various hotel types and how they utilize technology. I am interested most in seeing how mid-scale hotels currently use technology and to inquire if their target markets complements with the shift in implementing self-service technologies.

Torres, E. N, & Kline, S. (2013). From customer satisfaction to customer delight: Creating a new standard of service for the hotel industry. *International Journal of Contemporary Hospitality Management*, 25(5), 642-659.

The article breaks down customer delight into several categories and factors: problem resolution delight, charismatic delight, professional delight, comparative delight, & fulfillment delight. The research also demonstrates how different hotels can delight in a variety of ways and how the culture of the organization will impact the guest experience and examines guest satisfaction and guest recovery situation. But the results examine when managers spend more time at planning for exceptional service, these actions will reduce complaints in addition to their time and cost, thus increasing loyalty and long term relationships.

This article will contribute to my research by providing a breakdown of customer satisfaction and delight factors that affect a guest's stay which can be used in examining future hotel technology investments and analysis for guest experiences. The customer delight and satisfaction will be helpful in the literature review to correlate or to contrast existing research, as well as to provide a 'standard of service' benchmark to compare and relate my data results to in order to provide discussion.

Walls, A. (2011). Understanding the Consumer Experience: An Exploratory Study of Luxury Hotels. *Journal of Hospitality Marketing & Management*, 20, 166-197.

This study examined the various factors affecting the consumer experience in luxury hotels. It assessed the physical environment of the hotel, human interactions (staff to guest, & guest to guest), personal characteristics and trip related factors that affected their overall guest experience. The study found that the guest experience is a complex phenomenon due to the various guest perceptions and how they each affect the hospitality experience.

The study's conceptual model for the structure of consumer experience will assist with the framework and theming for my research on how technology affects the guest experience and relating these dimensions together. Even though this research was focused on luxury hotels, I can use it as a basis in the literature review and can extrapolate some of the concepts and see if they apply to my narrowed focus on the mid-scale hotel market.

Zeithaml, V., Bitner, M., Gremler, D., Mahaffey, T., & Hiltz, B. (2007). *Services Marketing: Integrating Customer Focus Across the Firm*. Toronto, ON: McGraw-Hill Ryerson.

This services marketing textbook discusses both the history and applications of self-service technologies (SSTs) in Chapter three. The chapter's technology spotlight examined several SSTs and divided them into categories and purposes. The chapter also discussed the results of a recent study that discussed several key conditions of the love-hate relationship customers have with SSTs. This discussion will provide a historical baseline to compare any primary data to in order to compare any trends or changes in customer perceptions. Chapter five discusses customer satisfaction, which can assist with applying the customer delight principle in my questionnaire or literature review analysis.

And Chapter thirteen examines self-service technologies relating to the concept of customer participation. It provides a brief history of some previous (now common) SSTs and discusses case study successes like eBay and Amazon (Self Service online ordering). It applies the importance of defining customers' roles/jobs to SSTs since its crucial to explain and inform the customer on what they are expected to do when utilizing the new technology platform which will lead to satisfaction.

Overall this textbook provides a great introduction and background into the mainstream self-service technologies and provided an excellent timeline of their evolution. Its recent studies on customer's reaction to utilizing SSTs will be relevant in my literature review for background knowledge of previous guest satisfaction issues. The existing research can then be compared to my data results to see if after ten years consumers are experiencing the same factors affecting their guest experience and satisfaction levels.