Readiness for Innovation in the New Normal: A Technological Model for the Hotel and Resorts Industry

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Abstract

This study looks at how ready hotels and resorts in the Western Visayas region of the Philippines are to use new technology after the COVID-19 pandemic. We studied three different types of hotels (budget, mid-range, and luxury) and compared their technology use to what successful cruise lines are doing. Our study had two parts: first, checking what technology they already have and how well they use it; second, suggesting new technologies that could help them. The results will help hotel managers improve their technology, offer better service, and compete better in the changing hotel market. This research helps us understand how hotels can change to use technology better and make their businesses more successful.

Keywords: Hotels, New technology, Digital change, Covid-19, Hospitality, Cruise ships

Introduction

The cruise ship industry was the first to adapt to technological advances and operate successfully in the new normal. They have addressed all operational possibilities while complying with strict health standards and technological advancements in innovations. The importance of innovation as a driving force of competitiveness in the industry is growing exponentially. Because of the global epidemic, the cruise industry is in a state of flux. An increase in the number of ships on the water might result from new technology meant to promote passenger safety. Therefore, they have developed contingency plans and built relationships with local health officials. Onboard ships and on land, the cruise industry now receives extensive assistance on COVID-19-appropriate practices provided by international, regional, and national health authorities, as well as medical specialists. This guidance was previously unavailable to the sector (Li, 2021).

Due to the extreme achievement of cruise ship operations, hotels are looking forward to providing long-term benefits to their staff by being effective without compromising their customers' overall value of service. Although the Covid-19 outbreak emerged rapidly, the harsh measures that have immobilized travel are in stark contrast to that. A growing number of hotels have closed their doors as a result of this. The client- hotels will be required to establish rigorous cleaning processes to cope with the coronavirus in the new normal, and visitors and guests will prioritize safety and hygiene measures when selecting their accommodations in the future (Lin, 2021).

This study will also focus on Hotels and Resort's readiness towards innovations. Because of the current epidemic that has severely impacted the hospitality industry, this study is quite relevant. Thus, it will adhere to a framework that will examine existing innovations in a specific hotel, how they may be

maximized, and how they can perform even better by fully implementing suggested innovations. Running a business in the twenty-first century is drastically different from pre- pandemic times; consequently, firms should be willing to investigate digitalization solutions to stay up with the quick changes in functioning during this new normal.

Related Literature

The traditional hotel industry has certainly been doing well in the past decade providing customer service through most traditional ways. However, the continuous growth of digital age following the pandemic outbreak of COVID19 has introduced a new service model which is the contactless service.

The cut throat competition in the hotel industry is bound to happen. Hoteliers are in a very tough position to survive in the market. So, in order for hotel brands to outsmart competition in the new normal, a renewed set of strategies should be adopted; embracing the technology, and making the shift to technological innovation. Safety protocols implemented by the government all led to significantly evolve from traditional to technological models.

We can expect the hospitality industry to grow or just thrive in this new normal, and the least that hoteliers could do is make a pause, evaluate their innovation and reflect on future strategies that is missing in their organization to be able to perform better than those that are way behind the usage of technology.

Evaluation of Existing Innovation

Compared with a similar study performed in 1997, the empirical findings in 2003 showed that IT was used not merely to replace the existing paper system but also to improve customer services and to enhance operational effectiveness. Unfortunately, the empirical findings also indicated that hotel decision makers did not seem to realize the importance of IT for the purpose of developing business strategies and, therefore, IT was generally not used in hotels for high-level business decision-making. (Law, R and Jogaratnam, G. 2005).

Prior studies have indicated that hotels do not always intend to take the lead in implementing a new kind of technology (Cho and Olsen, 1998; Sheldon, 1997).

According to Law, R. and Jogaratnam, G. (2005) IT is still largely being considered as a tool or simply an image instead of as an important constituent in the strategic planning process of a hotel. Sadly, the non-strategic incorporation of IT into hotel management hinders full IT utilization. This, in turn, may result in the loss of competitive power in regional and worldwide hotel markets. Most hotels do not seem to be in favour of adopting advanced software technologies such as Artificial Intelligence- based systems in assisting with either their daily business operations or long-term strategizing. Such a dearth in state-of-the-art IT facilities could be due to the transactional nature of the hotel business. Since providing quality customer services always remains the highest priority, hotel managers simply do not attempt to strive for high-tech applications as do engineering and military managers. In short, a reliable IT environment rather than high-end IT facilities is viewed as necessary in the hotel industry.

The COVID-19 pandemic has hastened the speed of technological uptake in hotels, where some facilities have introduced a new service model called 'contactless service', which can be understood as the economic form in which the realization of human-to-human interaction can be accomplished without contact, and ably supported by intelligent technology (Chiang & Trimi, 2020). During the outbreak, various operators within the service industries have implemented contactless service in which a smart hotel is one such example in the contemporary service landscape. The concept of a smart hotel refers to

an accommodation provider relying on big data, IoT, cloud computing, and other intelligent technology to achieve hotel management in specific forms, such as customer self-service technologies, robots, and voice or face recognition (Leung, 2019).

In conclusion, this study provided indicative evidence that (1) Sense experience (SE), feel experience (FE), and related experience (RE) have all positively impacted information sharing (IS); (2) Sense experience (SE) and feel experience (FE) positively affected customer satisfaction (CS). Feel and sense have been identified as two essential dimensions, which are in line with Brakus et al. (2009) but distinct from Cao et al. (2019).

In the smart hotel, visitors are served mostly by robotic labor. This whole new experience will be positive if customers can enjoy the benefits AI provides, such as intelligent room control unlocking. In contrast, consumers are frustrated with being misunderstood by the AI, for example, robots' failure to follow a heavy accent instruction. Hence, all these benefits and costs that AI brings about might reinforce or lessen consumers' effect. Also, feelings and reactions based on the environment and atmosphere of smart hotels directly induce sensory experience (Cao et al., 2019).

The findings provide key points of differentiation to incumbent hospitality experience expectations before the pandemic, where face-to-face and the physical elements of demonstrating hospitality have been the hallmarks of quality service experiences (Pillai et al., 2021). However, the pandemic has cast greater attention toward perceptions of safety and attuned guests' awareness of social distancing measures to instead minimize contact and interactions with humans (Lau, 2020). This significantly transforms how we envisage the new landscape of providing hospitality as characterized by a greater push toward technologically-centric services (Zeng et al., 2020). Then, the wider implications would be the effect of technology adoption on the human workforce, and how organizations can reskill these individuals to be deployed working in conjunction with robots and other technologies (Kim et al., 2021).

Use of Technology

Information technology (IT) investments play a critical role in managing hotels strategically. Efficient and timely deployment of new IT applications may offer opportunities for enhanced guest services to meet increasing customer expectations, improved cost control, more effective marketing strategies, and expanded opportunities for hotels (Lawand Jogaratnam, 2005; Piccoli, 2008). It is evident that IT investments will increase hotels' productivity, reduce their costs, and at the same time add value to the services and products offered to their customers. Therefore, investments into IT applications in hotels have increased over the past decades (Armijos et al., 2002; Ham et al., 2005; Piccoli, 2008).

Customers may also have different IT needs and expectations. For instance, business travelers may expect hotels and airlines to provide online check-in. On the other hand; leisure travelers may request more in-room entertainment amenities. Meeting and incentive travelers may require specific IT applications for their meetings and conventions. Put it simply, each customer segment may need and request different types of IT applications (Victorino et al., 2005). According to a recent AHLA (2008) survey, hoteliers' perceptions indicate that the most important technologies to customers are Wi-Fi hotspots, in-room entertainment systems, and kiosks for airline check-in/boarding passes, respectively. Berezina and Cobanoglu (2010) reveal that the most important in-room technologies for male travelers are express check-in/check-out, high-speed internet access, and easily accessible electrical outlets, whereas easily accessible electrical outlets, guest control panel, and high-speed internet access were identified as the most important in-room technologies for female travelers, respectively.

The link between IT sophistication and company performance has received some attention in the literature over the years. Bu´rca et al. (2005) advocate that in order to call a firm technologically sophisticated, a company should possess a robust scientific- technical base; new technology should quickly make existing technologies obsolete and new IT applications should create new demand or revolutionize markets and demands.

Bu´rca et al. (2006) investigate the relationship between service practices, service performance, business performance, and IT sophistication. According to McCormick, Eamon (2021), a Deloitte study highlighted the necessity of "digitally enabled passenger experiences" and cooperative competition in which cruise operators would work with other travel industries such as hospitality and tourism. While value and port locations are still top considerations for cruisers, things such as modern fitness facilities, nice community spaces, and quality restaurants are now expected as well. In fact, cruisers rated high quality restaurants with greater importance than luxury hotel guests did. Deloitte proposes a "passenger first framework" in which there are five elements. 1.) "Engage me" - personalized and authentic experience, 2.) "Hear me" - listen to needs and make situations more favorable, 3.) "Empower me" - enable the customer to have the experience they desire, 4.) "Delight me" - with moments that surprise and delight beyond expectations, and 5.) "Know me" - know and remember the passenger, their preferences, and their needs. All these steps are crucial in converting customers into loyal repeat cruisers that will provide revenue and "word of mouth" marketing for years to come.

According to Ng, Rachel (2020), with new safety protocols and far fewer passengers on board, a handful of jumbo ships like MSC Grandiosa and Royal Caribbean International's Quantum of the Seas have resumed sailing from European and Southeast Asian ports. How they're doing it—and what passengers think—previews how the $150 billion industry might chart a recovery in 2021 and beyond. In late 2020, cruise ships still aren't docking or taking off from United States ports. On November 22, the U.S. Centers for Disease Control and Prevention warned that "all people avoid travel on cruise ships, including river cruises, worldwide, because the risk of COVID-19 on cruise ships is very high." But in Europe and Asia, a few cruise lines resumed operations this summer. German-based Hapag-Lloyd Cruises was one of the first, sailing out f Hamburg starting in July. New safety precautions onboard included a mandatory health questionnaire, staggered boarding, daily temperature checks, and reducing its passenger load by 60 percent.

Before boarding, each guest—limited to residents of Germany, Austria, and Switzerland—had to provide proof of a negative COVID-19 test. The company also installed an onboard testing lab and hired doctors and nurses to travel with the ship. Cold fog machines that spew antiviral disinfectant were used to clean cabins and public areas. So far, after 30 completed trips carrying more than 4,000 guests, no COVID cases have been reported.

Finland's Tallink Silja line resumed voyages in May and hasn't had any known outbreaks. Though the company operated overnight cruises between Nordic countries before the pandemic; it's currently offering only two-hour nature trips around the northern Baltic Sea region. It prepped for "new normal" voyages by installing handwashing stations, limiting ship capacity, and adding plexiglass shields to customer stations. Masks are recommended during boarding and disembarking.

Other lines, including Royal Caribbean, MSC Cruises, and Dream Cruises, require temperature checks, a slate of COVID tests onboard, and timed reservations for pool and gym access. Buffet stations are no longer self-serve, and safety muster drills (training on evacuation protocols) are streamed on stateroom

TVs instead of happening in person. Crew members are usually tested and quarantined prior to boarding the ship.

Seats in its massive auditorium are blocked off and dining tables are spaced out to allow for more social distancing. "People were doing the same things as before," said Balabaeva (2020). "Food and entertainment were still good, and we got more space onboard, so that's a plus." Many of these new practices—like limiting capacity or restricting sailings to people from certain countries—are being implemented temporarily, and aren't economically sustainable in the long term, said Chris Gray Faust, managing editor of online industry publication Cruise Critic. "The current measures are a way to help get this industry back on its feet, while still delivering a safe and healthy experience," she said. Whatever happens, travelers are eager to return to the seas. According to a recent Cruise Critic reader survey, 81 percent of U.S. cruisers will book a future cruise, and nearly half of respondents are already looking to book one, even if it won't sail for months to come. "Bottom line: When the industry is ready to return safely," said Gray Faust, "it will have cruisers ready to sail."

Customer Changes

According to Bilgihan, A. et al (2016), advances in technology and in subsequent guest-related amenities have the potential to improve the guest experience and also increase both guestroom revenues and ancillary room revenues. Innovative technologies will be one of the prime differentiators of hotel companies in the twenty-first century.

However, it is important for hoteliers to answer questions such as which technology amenities do their guests desire when choosing overnight accommodations? Further, what are the importance levels assigned by guests of these various technology amenities? This study aims to answer the question of how leisure travelers may differ or be similar to business travelers with regard to in-room technology amenities. However, it is important for hoteliers to answer questions such as what technology amenities do their guests seek when they arrive in their rooms? What are the levels of importance assigned by guests to these various technology amenities? Recognizing guests' needs and answering those needs are important for hotel operators to remain competitive. Is the traditional view that claims leisure quests expect to be entertained in the guestroom and business travelers expect to use technology to improve or enhance their work still valid? The results of the study indicate that while business and leisure travelers may have different motivations or purposes for travel, their attitudes towards the importance of in-room technology amenities are quite similar. It has been suggested in the past that business travelers have a higher level of sophistication in the use of technology and, therefore, might place a higher importance on these amenities provided by a hotel. These study results indicate that leisure hotel guests' expectations for in-room technology are equally important to those of the business traveler and suggest that they are equally sophisticated.

The results of this study provide an insight into the changing attitudes towards in- room entertainment technology that many hotel developers should take note of. One recommendation would be to avoid designing hotel rooms specifically for business or leisure travelers. The results of study indicate that leisure travelers place the same importance on in-room technology as business travelers, and any attempt to reduce services levels to either would negatively affect guest satisfaction. A beach resort of a chain hotel should have the same in-room technology as a downtown property of the same chain. (Bilgihan, A, et al, 2016)

Financial Aspect

Driesens (2017) argued "as the world becomes more digital, companies will be faced with an ever-growing need to adopt a robust corporate digital responsibility approach to protect both customers and employees". More assertively, Lobschat et al. (2020) argued "organizations must determine how to operate responsibly in the digital age".For ConPolicy (2020), the business case for companies addressing corporate digital responsibility revolves around enhancing reputation, creating competitive advantage, motivating employees, and shaping its own future. In looking to explain the growing importance of corporate digital responsibility, Driesens (2017) identified "four drivers", namely, "the increasing concerns from customers and governments about the use and abuse of personal data; the impact and challenges of automation and robotics; the potential for unethical use of new technologies; and finally, the so-called digital divide". In order for hotels to create and maintain competitive advantage, self-service technologies integrated into the hotel's website must meet customers' increasing expectations and requirements to generate customer satisfaction and purchase intention (Beldona et al., 2018). Thus, the internet can be seen both as an operation and a marketing tool for hotels (Noone and Mattila, 2009; Pham et al., 2018). Hotel website integrated self-service technologies are expected to bring about benefits not only for hotels but also for customers (Xiang et al., 2015b). For hotels, hotel website integrated self-service technologies help overcome challenges from a lack of experienced staff short on necessary skills in serving customers (Pham et al., 2018).

Although hotels have paid considerable attention to and invested in self-service technologies integrated on their website, many customers have not actually conducted their transactions with hotels via these technologies (Beldona et al., 2018). A number of reasons for this phenomenon may be in play and one of them could be customer technology readiness where the overall emotional state created by factors that motivate or hinder the use of new technologies is impacting the customer's approach to these transactions (Pham et al., 2018).

Many studies suggest that technology readiness has an impact on customer purchase intention (Elliott et al., 2012). However, very few studies have been conducted in the online hotel business environment. Furthermore, no studies have used Parasuraman and Colby's TRI 2.0 scale to explain customer purchase intention in an expanded international research environment involving newly emerging countries such as Vietnam.

Innovativeness is viewed as a trend towards being a technology and thought leader (Parasuraman, 2000; Parasuraman and Colby, 2014). It represents the level at which people want to experiment and use new technology products and services to become thought leaders on technology-related issues. Therefore, hotels must invest their resources in hotel website integrated self-service technologies to serve these two groups of customers. Hotel website integrated self-service technologies should include functions for searching information, booking rooms, reserving restaurants or entertainment services, making payments, check-in, and check-out. Such investment will help these two groups of customers perceive values and utilities created by hotels' websites, which, in turn, will increase customer purchase intention.

Changes in value creation

According to Lam, C. and Law, R. (2019), Sales and marketing teams in selected upper-upscale and luxury branded hotels in Asia were assessed on whether they had the necessary requirements for successful digital transformation to compete for their customer and channel share in the digital era.

Five key performance areas of technology implementation, innovation adoption, data maturity, customer-centricity and level agility were used for the assessment and results were as follows:

- **Stage of technology implementation:** Hotels were at the efficiency/functional level.
- **Innovation adoption stage:** Hotels were a late majority.
- **Data maturity level:** Hotels were data-aware and somewhat data-guided but not data-savvy.
- **Degree of customer-centricity:** Hotels were between being responsive and being engaged with their customers.
- **Level of agility:** Hotels were at a non-agile stage.

Using Howell's (1982) conscious-competence model, hotels were placed in the quadrants of conscious-incompetence and conscious-competence with respect to what they need to do to be competitive in the digital battleground. The findings implied the Sales and Marketing teams in branded upper upscale/luxury hotels in Asia were not ready for the digital era not just technologically but also in terms of their processes, people, culture, and mindset. A Horwath report (Tutek et al., 2015) presented the top trends affecting the supply side of the hotel industry. The top three trends were 1) increased pace of technological revolution; 2) digital channels, specifically social and mobile; and 3) loyalty-integrated customer experiences based on insight. The report identified technology as game changing, affecting the way by which the industry was operating. The leveled playing field has democratized the customer, who has become spoilt for choice. A holistic approach is to look at systems, processes and people. Having the right systems is the "what" of digital transformation, to ensure solutions are in place that matches the hotels' needs to manage operations, to distribute and to connect with target customers. Right processes are the "how" and need to be seamlessly embedded into standard day-to-day business processes and operations so that the digital toolset becomes part of the way-of-working of users. (Lam, C. and Law, R., 2019)

Before making a notable investment in terms of money and effort, management can investigate the possible values and willingness to pay for each proposed service innovation. To further conclude the trainings should be provided to employees to ensure that they understand the system being used in RHR (Djubo). This training should be conducted at the beginning of the employees' career in the company so that in time the person masters the skills required to use and assist contactless technology development in the property. (Miasan, I., 2021)

Structural Changes

Hospitality organizations face challenges of a turbulent and unstable environment due to high technology, globalization, intensified competition, open international markets, rapid changes in the world economy and high pressure to increase profitability in the challenging situation (Daghfous & Barkhi, 2009; Al-Ababneh, 2014), forcing them to implement service innovation as a way to meet changes in customer needs and survive in the market. Consequently, service innovation in the hospitality industry became a vital technique for business survival, competitiveness, business excellence, growth and success (Ottenbacher, 2007; Orfila-Sintes & Mattsson, 2009).

Innovation can take two basic forms: product innovation that refers to the changes in the products or services and process innovation that refers to the changes in the production and delivery to offer products/services. The degree of innovation, however, takes two major forms: minor changes or incremental innovation and major changes or radical innovation (Tidd, 2001).

Furthermore, innovation can be classified into four categories (Wikhamn, Armbrecht & Wikhamn, 2018); these are:

1. **Process innovation:** it encompasses substantial changes in equipment, techniques and/or software by implementing an improved or new delivery approach.
2. **Product innovation:** it introduces an improved or new good/service in terms of its intended uses and characteristics.
3. **Organizational innovation:** it offers new business practices or workplace organisation, external relations by implementing a new work organization method.
4. **Marketing innovation:** it involves alterations in the product/service design, promotion, placement or pricing by introducing a new marketing method.

According to Al-ababneh, M., et al (2021) this study also revealed that service innovation improves service recovery performance indirectly through empowerment. These results supported the positive arguments that claim service innovation can create an appropriate environment for empowerment which, in turn, improves the service recovery performance at work. The explanation of the previous findings that service failure was effectively recovering by empowerment in a service innovation environment. Implementing service innovation needs to consider empowerment as a crucial aspect of service innovation implementations where increasing employee empowerment in their jobs may strongly induce positive subsequent personal outcomes (e.g., performance, trust, commitment, satisfaction, competency and positive moral values).

An organization's capability to adopt/implement up-to-date ICT may depend on its structure, leading to the implementation of varying operational frameworks and procedural reforms (Song, B. and Choi, D, 2018). Prior studies have indicated that the success of an organization is determined by its ability to identify, cope with, and even utilize the crises and/or opportunities arising from ICT (Burgelman, R.A.,, and Rosenbloom, R.S., 1989). Consequently, ICT has a significant influence on organizations, as a key dimension of external environmental changes (Allen, T.J.; Lewis, P.R., 1993)

Digital transformation is difficult for non-ICT-oriented organizations which lack awareness of advancements in ICT. They have no ideas for developing innovative ICT applications and no experience of obtaining the competitive advantage of sustainability from ICT applications. It provides clear evidence that the sensing–seizing–transforming process provides critical assistance for organizations in developing DCs for new IT- generated content and/or services and gaining the competitive advantage of sustainability. It shows that no matter how a non-ICT-oriented organization like the NPM transforms itself in pursuit of sustainable development, it cannot become an ICT-oriented organization.

The NPM has recognized that ICT applications are necessary for sustainability, and has thus enhanced the position of its IT department within the organizational hierarchy; however, although the NPM has some awareness of the role of ICT applications in securing sustainability, its IT department continues to make a limited contribution. Consequently, although the NPM's IT department played an important and proactive role at the beginning of the organizational transformation process, and even takes a dominant role in developing ICT capabilities, it will be unable to assume a leadership role within the organization after transformation is complete. (Hsu, Che- Chuan, et. Al., 2018).

Objectives of the Study

This study refers to management preparation for innovations in the new normal, which includes implementing different technical models. Specifically, it aims to determine the following:

1. To study the efficiency of digital practices being used in the cruise industry and some other high-end hotels in other parts of the world; how hotels could perform even better by fully embarking on reco-

mmended new technological innovations.

2. To maximize the existing innovation as a response to the problems of a COVID-19 that hotels may adopt. As a result, it will follow a model that will evaluate existing innovations in a specific hotel and how they might be utilized.

3. To do a detailed assessment of existing innovation, assessing the benefits and drawbacks, and identifying the unique method that will benefit hotel operations in the new normal.

4. To encourage senior management hoteliers to embrace technology advancements that will undoubtedly provide them a competitive edge over those who are not fully accepting these currently available advancements used in the cruise industry.

Theoretical Framework

Diffusion of Innovation Theory

The theory was developed by E.M. Rogers, a communication theorist at the University of New Mexico, in 1962. is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system.

Integrating previous sociological theories of behavioral change, it explains the passage of an idea through stages of adoption by different actors. The main people in the diffusion of innovations theory are:

- **Innovators:** People who are open to risks and the first to try new ideas.
- **Early adopters:** People who are interested in trying new technologies and establishing their utility in society.
- **Early majority:** The early majority paves the way for use of an innovation within mainstream society and are part of the general population.
- **Late majority:** The late majority is also part of the general population and refers to the set of people who follow the early majority into adopting an innovation as part of their daily life.
- **Laggards:** As the name indicates, laggards lag the general population in adopting innovative products and new ideas. This is primarily because they are risk- averse and set in their ways of doing things.

Adoption of a new idea, behavior, or product (i.e., "innovation") does not happen simultaneously in a social system; rather it is a process whereby some people are more apt to adopt the innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation. There are five main factors that influence adoption of an innovation, and each of these factors is at play to a different extent in the five adopter categories.

1. **Relative Advantage** - The degree to which an innovation is seen as better than the idea, program, or product it replaces.
2. **Compatibility** - How consistent the innovation is with the values, experiences, and needs of the potential adopters.
3. Complexity - How difficult the innovation is to understand and/or use.
4. **Triability** - The extent to which the innovation can be tested or experimented with before a commitment to adopt is made.
5. **Observability** - The extent to which the innovation provides tangible results.

The diffusion of innovations theory is extensively used by marketers to promote adoption of their products. In such cases, marketers generally find an early set of adopters passionate about the product. These early adopters are responsible for evangelizing its utility to mainstream audiences.

Disruptive Innovation Theory

According to Merriam Webster, disruption is "to cause (something) to be unable to continue in the normal way: to interrupt the normal progress or activity of (something)." If this definition is applied to business, then really anything that enters a market and is successful can be seen as "disruptive." At least that's how the term is often used today. But this isn't how Christensen defined it when writing in the 1990s.

According to Christensen, disruptive innovation is the process in which a smaller company, usually with fewer resources, is able to challenge an established business (often called an "incumbent") by entering at the bottom of the market and continuing to move up-market.

This process usually happens over a number of steps:

1. Incumbent businesses innovate and develop their products or services in order to appeal to their most demanding and/or profitable customers, ignoring the needs of those down market.
2. Entrant's target this ignored market segment and gain traction by meeting their needs at a reduced cost compared to what is offered by the incumbent.
3. Incumbents don't respond to the new entrant, continuing to focus on their more profitable segments.
4. Entrants eventually move upmarket by offering solutions that appeal to the incumbent's "mainstream" customers.
5. Once the new entrant has begun to attract the incumbent business's mainstream customers in masse, disruption has occurred.

Disruption can come in different varieties: Low-end disruption and new-market disruption.

- Low-end disruption refers to businesses that come in at the bottom of the market and serve customers in a way that is "good enough."
- New-market disruption refers to businesses that compete against non- consumption in lower margin sectors of an industry. Similar to low-end disruption, the products offered are generally seen as "good enough," and the emerging business is profitable at these lower prices. The main difference between the two types lies in the fact that low-end disruption focuses on overserved customers, and new-market disruption focuses on underserved customers.
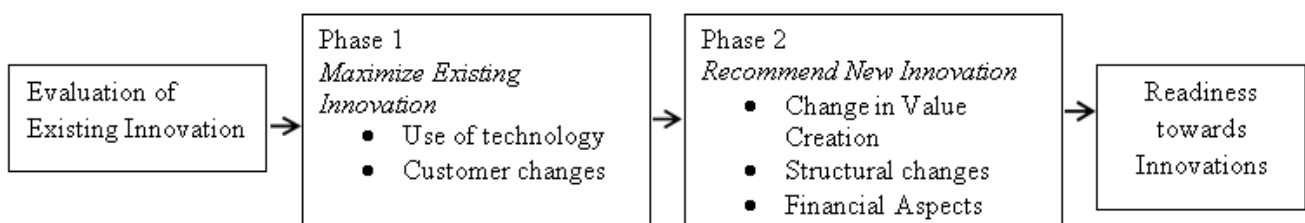
Conceptual Framework

Figure 1.1 Innovative Readiness relative to Existing and New Technologies

Technology plays a significant part in our lives. It has also become a part of hotel management's everyday activities. Because of COVID-19, technology has become more vital than ever as hotels reopen and move toward full occupancy. It will be critical to the recovery process as hotels reopen and strive toward full

occupancy. Communication is made more accessible by technology, especially in the hospitality and tourist industry, since many operations are enormous and scattered across the country. Numerous hotels rely on sophisticated communication tools to keep different departments and members of staff in the loop and respond to guest demands more swiftly and effectively. For managers, the Digital Transformation Framework is an elaborate model that focuses on four dimensions: "Technology Use," "Structural Change," "Financial Aspects," and "Changes in Value Creation." A digital transformation plan is built on these four cornerstones. The usage of technology refers to an organization's attitude toward new technologies and its capacity to use these technologies. In addition, a company's IT strategy and future technical ambitions are included. Whether a company wants to be a leading company in innovation adoption, with the capacity to set its technological standards, or if it wants to rely on already established standards and perceive technologies as a tool to complete business operations, must be determined by the company (Matt, 2015). In terms of innovation, the previously described methodology began with defining the function of technology. It then defined what changes were required in the organizational structure and value creation model, while financial elements might be both a driver and a restraint.

This study found the dimensions defined by (Matt, 2015) o be meaningful, but only for the hotel business. The primary drivers are a shift in consumer behavior and requirements, which result in changes in financial aspects, which are also sources of restriction, while the intended value creation for the consumer is the goal that leads to the use of technologies and significant reforms. See Fig. 1.2.

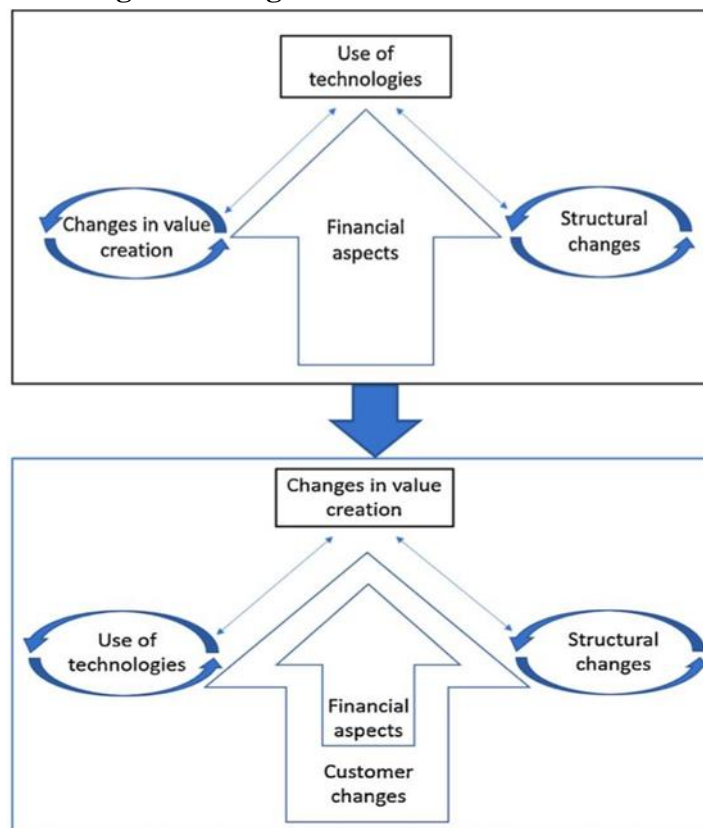**Figure 1.2 Digital Transformation Model**

Figure 1.2 is a modified and enhanced model of (Matt, 2015). As it can be seen in the above figure that the main focus of this enhanced model is shifted from the use of technologies to changes in value creation which means that the hotel industry must focus on value creation for its customers. It can only be happened

by implementing the use of technology and by doing a tremendous structural change within the business model. The variables utilized for innovation are the same, and also added a new variable is the evaluation of current innovation so that it has a foundation in the process of preparation for innovations.

In addition, they reorganize the framework in a simplified sequence and procedure, which results in technological innovation adaptablity. The driving factors are adjustments in consumer preferences and objectives, the use of technology, and the financial aspect, which is both a driver and a constraint, resulting in the development of a second phase that will primarily recommend innovation and enhance value creation for the customer, as well as structural changes in their hotel operating system, and the cost that it takes to embrace technology fully.

Senior management must take the initiative to design and implement strategies to achieve a lasting shift in mentality, skills, systems, and procedures while evaluating the hotels' digital capability. In addition, each present innovation must be evaluated regarding its functionality and how it may be further enhanced after reaching phases 1 and 2.

However, it is essential to note that evaluating technological readiness does not ensure the same results for every hotel. This report will provide insight into the current status of hotel digital transformation and provide recommendations for the future to address this need.

Definition of Terms

For the purpose of clarity and interpretation, the following terms are defined operationally.

Cruise Ship Industry. A mixture of maritime transport, travel and tourism services facilitating the leisure activity of passengers paying for an itinerary and, potentially, other services on board, and includes at least one night on board on a seagoing vessel having a capacity of at least 100 passengers.

Customer Changes. The new experience ushered by innovations provided by hotels or resorts to guests before, during, and after their stay.

Evaluate. Determining the condition and functionality of a certain existing innovation in the hotel or resort.

Financial Aspect. Cash needed or to be considered in implementing the innovation to the hotel or resort.

Hotel. An establishment that provides lodging and usually meals, entertainment, and various personal services for the public in Iloilo City.

Maximize. Making the most out of the existing innovation in the hotel or resort by means of exploiting all the possible functions it can offer not just to the management and employees but to the guests in effect.

Readiness. The preparedness of the hotels and resorts in Western Visayas in terms of technological innovations.

Resort. A place that is a popular destination for vacations or recreation, particularly in Boracay Island.

Structural Changes. The process or equipment that needs to be adapted into the hotel or resort which would make tasks easier, economical and efficient for management, employees and guests.

Technological Innovations. A new or improved hotel or resort amenity, equipment, facility or process whose technological characteristics are significantly different from before. In particular, this pertains to the different computer programs (microsoft office, front office and reservation system, accounting and inventory systems, payroll system, track and trace system and facial recognition system) that aid in speed and ease of processing transactions for management, employees and guests. Moreover, amenities and equipment which are digital in nature (electronic locksets, energy saving devices, electronic safety deposit boxes, credit card terminals, wifi hotspots, artificial intelligence virtual agents and personal voice

assistants, radio frequency identification bracelets and real-time language translation) which creates value for guest's positive experience.

Value Creation. Not being related to making a profit for the hotel or resort, but rather goes beyond that and is turned towards creating conditions for sustainable business in the going concern concept.

Western Visayas. The setting or the region where the respondents are found.

Significance of the Study

Technological advancements are gradually becoming more critical in hotel operations. It improves the efficiency and convenience of the hotel's service, thereby transforming an ordinary guest experience into a satisfied customer perceived value. If a hotel can bridge the gap between hotel service and new technologies, it may strengthen the hotel brand and attract more people by using successful technological solutions utilized in the cruise industry and other smart hotels across the globe.

Hotel top management. This study could provide relevant data in pursuing new and interesting technological ideas that would help them operate efficiently. It will contribute to advantages to make their hotel brand grow in the market and gain competitive advantage.

Hotel employees. Embracing hotel technology will deliver long-term benefits to the hotel employees such as workload efficiency, and minimize discomfort to the hotel guests.

Hotel Guests. People naturally crave for convenience, all the more for the hotel guests who are paying a dime for a hotel stay. As this study will look into variables such as customer changes and behaviors, it could offer an analysis that will be most practical, safe, and satisfying for a guest. An improved communication especially in the new normal will be prioritized as technology facilitates sophisticated communication platforms that will allow hotel staff to accommodate guests more efficiently. Not only that, but enhances guest experience too by making all hotel process easier and time conscious.

Software Developers. Advancement in technological innovations will showcase not just the topnotch service of the hotel, but the software developers behind it will be applauded for their creation. It will give more opportunities for the developers to offer their skills and knowledge to hotel in order to fill the gap technological innovation.

OTAs (Online Travel Agencies). As hotel guests favor the use of online transactions, it will lead to increase bookings in hotel partners such as the OTAs (Online Travel Agencies), thus will help them grow their brand and create more campaigns and advertisements that will then be beneficial as well to the hotel as it could drive more hotel guests.

Future researchers. Other researchers in the field of hospitality management would gain significant benefits from the findings of this research paper. The methodology, major findings, conclusions and recommendations in this study may be used as basis and guides when conducting related studies in the future

Scope and Limitation

This research seeks to analyze current technology in a hotel, maximize its use, identify possible benefits of future technological advances based on the cruise industry, and result in preparedness for technological improvements. The topic of this study is the hotel industry's readiness to respond to available technology advancements. The appraisal of innovations currently employed in hotels is one of the variables covered. The first step would then be to maximize current innovations by utilizing technologies and consumer improvements in hotel experiences. The second phase involves a new technology proposal with changes

in value generation, structural modifications, and financial factors. As an outcome, people will be more willing to try new things.

The study's setting is comprised of three distinct hotel groups in Western Visayas, namely Robinsons Hotels and Resorts, Henann Hotels and Resorts, and Zuri Hotels and Resorts Corporations. We chose these three hotels to have a good representation of the three categories in terms of star rating. Among Robinsons Hotels and Resorts properties, Go Hotel represents the company's value chain property. A 3-star hotel with full-service amenities, Zuri Hotels is a full-service establishment. Also, in Boracay, the 4–5 star, Henann hotels and resorts grab a more significant market with their premium location.

The data collecting will be completed in two weeks. For the first two days, the three hotels will be evaluating their present technology to see whether it can be improved upon. After that, we will perform Phase 1, which involves optimizing existing ideas. After that, we will recommend new improvements and finalize the preparation for innovations in each of the three main hotel categories during the second week of work.

In this study, the participants are the hotel managers and different department heads (finance, sales, marketing, and IT) who will play a vital role in decision making when presenting these new technologies to their respective CEO and Presidents of these three hotels.

Researchers who want to discover features, frequency patterns, trends, and classifications may consider descriptive research. It is especially beneficial when little is known about a topic or issue. Unfortunately, because our study is new, there are no past research papers to compare it.

Methodology
Research Design
The research approach was qualitative and descriptive in nature, using in-depth structured interviews, data collection, and rating scale based on maximizing existing innovations. This approach was selected to collect as much data as possible and obtain an accurate representation of the technological innovation, systems, processes, and structural situation on each department of three different hotels. The objective was to explore technology and readiness in digital transformation with the sample respondents to see if there were any need to maximize existing innovation and or adapt the latest technological trends especially in cruise industries that would provide more useful system which is cost efficient and can be very timely into the situation in this new normal for hotel operations. Sources of the Study

There are different models used to gather data information, but this study uses the primary data source because data are collected firsthand by the researcher for a specific purpose which is to evaluate the readiness of the three hotels to new technological innovations.

Primary data are collected in a number of ways. However, this research used the most common techniques which are using in-depth structured interviews, data collection, rating scale based on maximizing existing innovations. Primary data collection is the only suitable method to be used in this research as it directly addresses the topic and provides information that is not available elsewhere.

Population of the Study
The sample in this study consisted of 3 hotels from three different categories from the value chain, full service, to luxury segments namely Robinsons Hotels and Resorts, Zuri Hotels, and Resorts Corporations and Henann Group of Resorts respectively.

Previous studies found that cruise industry technological innovation models tended to be more effective

strategy in the cruise operations in the new normal.

Given that this study aimed to assess the readiness of hotels specifically in those different tiers located in Western Visayas. The sample was chosen deliberately from the upper-management of the branded hotel sector that had corporate-led technology and customer communication initiatives. The hotels were managed by the different corporate offices applying tier-based strategy, so differences in the findings would be due to hotel- level factors.

The interviewees consisted of hotel managers and different departmental heads of finance, sales, marketing, and IT which will be the major contributors in decision making in presenting these new innovations to their respective CEO's and Presidents. These roles were selected because in the context of hotels leveraging technology to address the gap in hotel service and digital technologies, which could lead to further improvement of each hotel brands and could drive more guests by practicing effective technological systems being used in the cruise industry.

Data Collection

Interview questions were sent ahead of the actual interviews so that the respondents knew what to expect. All interviews were semi-structured and open-ended to accommodate flexible scenario-based input. Each interview lasted between 20-30 min. All data were recorded, collated, rated, and analyzed by content analysis.

Initially, evaluation was done directly from the hotel's existing innovations, without any pre-conceived framework. Then on the first phase which is the rating scale of each innovation, the hotel's management will have to agree or disagree if they have already maximized the specific technology based on the lists of innovation. The second phase was done according to the responses of each interview question to allow the researchers to compare across different innovations in each department of the hotels and resorts and that of cruise ship industries. The researchers will then discuss the possible changes of technological innovation considering their financial capabilities that will benefit not just the company but also its employees and guests

Research Instrument

In this research, researchers utilized some kinds of instrument. The research instrument is consisted of three parts. Part 1 of this research is the evaluation of existing technological innovations in each of the respondent's hotel such as application software, equipment and services system, guest room amenities, and internal information system. This part is

answerable by "yes" or "no" for the technological availability and usage of technologies.

Table 2.1 Evaluation of hotels existing Innovation

Category	Item	Technological Availability		Usage of technology	
		YES	NO	YES	NO
Application software/system	Microsoft Office 365				
	Property Management System				
	Website Booking Engine				

	Channel Manager (Online bookings)				
	Point of Sale System				
	Accounting System				

Part II: Phase I of this research, maximized specific technology based on lists of available innovations. The correspondents can either answer *"agree"* or *"disagree"* on maximization of technology with corresponding reasons based on their answers.

Table 2.2 Maximize specific technology based on list of available innovation

List of Technology Innovation	Existing Usage	Maximization of Technology		Remarks/ Reason
		Agree	Disagree	
Application software/systems				
Microsoft Office 365	- Team Collaboration - Task & Project Management - Office Application - Business Application Platform - E-mailing and Calendaring - File Storage - Analytics - Presentations - Workplace chats, meetings (online)			
Property Management System	- Manage reservations and bookings - Check in/check out - General financial accounting - Business report generation - Housekeeping management - Room chart management - User management			

Part III: Phase II of the research instrument is the existing innovations in a cruise ship which the researchers gathered, based on the three variables which are the value creation, structural changes, and financial aspects.

Table 2.3 Recommendation of latest cruise ship technological innovation to your hotel

CRUISE SHIP INNOVATION	VALUE CREATIONS	STRUCTURAL CHANGES	FINANCIAL ASPECTS		RECOMMENDATION
			Low cost	High cost	
Mobile online check in	• Less contact involved, due to stringent health protocols • Streamline of check-in and check-out process • Reduces front desk friction • Increase guests' satisfaction and loyalty • Delivering level of digital convenience to travelers • Offers contactless experience guests are seeking • Gives the property a competitive advantage	• Optimizing the efficiency of operational teams • Add another source of revenue • Saves time by automating repetitive tasks • Bridging language barriers between hotel staff and foreign travelers • Hotel reception can focus on the hospitality rather than the administrative components of check in • Reduces the chance of human error • IT employees monitoring		X	YES
Touch-free tools	• Safe alternatives to wearing gloves.	• Less workload for Front office employees	X		YES
	• Gives the property a competitive advantage	• Optimizing the efficiency of operational teams			

Conclusion and Recommendations

The study underscores the importance of technological readiness for hotels and resorts navigating the post-pandemic landscape. It recommends a dual strategy: optimizing existing technologies (like Microsoft Office 365 and property management systems) to boost efficiency and guest satisfaction and adopting newer innovations (such as mobile check-in and touchless tools, inspired by the cruise industry) to streamline operations and enhance the guest experience. Significantly, the study emphasizes the need for substantial investment in digital transformation, encompassing technological upgrades, structural changes, financial considerations, and a reassessment of value creation. By embracing existing and emerging technologies, hotels can meet evolving customer expectations, improve operational processes, and ensure a safe and seamless guest journey, ultimately positioning themselves for success in a rapidly changing digital environment.

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