

ASIAN HOSPITALITY IN THE AGE OF TOURISM 4.0

Stephanie M.F. Lee

Technological and Higher Education Institute of Hong Kong, Hong Kong

Aojia Zhang

The Hong Kong Polytechnic University, Hong Kong

INTRODUCTION

As technology advances and increasingly technology-savvy customers today seek better guest experiences, the hotel industry has undergone dramatic changes. There is increasing evidence in studies of current hotel industry trends that guests demand more personalized attention and entertainment (Kaliappen & Hassan, 2022). With this in mind, technological innovation has a massive effect on creating a remarkable guest experience, hence guest satisfaction could be achieved. In the hotel industry context, personalized digitalization and luxury hospitable experiences have been intensively researched separately in tourism and hospitality academia.

The Emerging Digitalization Trend in Hotel Industry

Technological advancement keeps evolving to today's Tourism 4.0. The term Tourism 4.0 is derived from Industry 4.0, which refers to a variety of smart technologies including Big Data, Artificial Intelligence (AI), cloud technologies, Internet of Things (IoT), Virtual Reality (VR), Augmented Reality (AR), Blockchain, etc. (Hassan, 2022). Unsurprisingly, technology is one of the megatrends. The new wave of digital innovation has been affecting almost all sectors in some way, the hotel industry is no exception. In the hotel industry, digitalization has been a debatable topic for a long time. Some argue digitalization is not a necessary technology to adopt, instead, it is just a gimmick, which would not last for long in the hotel industry. Taking consideration of the nature of hospitality, traditionally, luxury hotels are characterized by professional butler services that offer personalized and anticipatory attention to hotel guests' needs. That is, hotels are places where guests can indulge themselves with the customized hospitable service

provided by hotel staff. There is no doubt that digitalization has penetrated the hotel industry for a considerable period, and digitalization is getting acceptable to customers. Digitalization will continue to develop and evolve, in other words, digitalization is here to stay. In today's hotel industry, increasing consumer power, technological advances, and increased competition pose threats to hoteliers. Hence, digital innovation is essential to sustain their business as well as to maintain the interest of guests in their hotels.

In particular, the impacts of the global pandemic in 2019 have leveraged more demand for digitalization. It is no surprise that service robots have been a significant help in co-creating guest experience in hospitality (Fusté-Forné & Jamal, 2021). To maintain a contactless service, robots provide product delivery for guests amid a pandemic, which is the way to ensure safety for both hotel guests and employees. It is recognized that the acceptance of adopting digitalization has increased. Kaliappen and Hassan (2022) suggested to remain competitive in a rapidly changing competitive climate in hospitality, hotels must undergo digital transformation to meet the changing demands of customers in the digital age. According to the audit firm "PwC", it is recognized the importance to navigate the opportunities and risks with the essential emerging smart technologies, for instance, artificial intelligence (AI), augmented reality (AR), blockchain, Internet of Things (IoT), robotics, and virtual reality (VR) (Likens, 2022). Many of these smart technologies have been adopted in many sectors, providing opportunities for the service-oriented hotel industry (Osei et al., 2020). Technology is the key to remain innovative in the competitive market (Koellinger, 2008). As smart technologies Tourism 4.0 are applied more widely and frequently, the hotel industry will continue to

grow and undergo significant changes (Wang et al., 2016).

A Hybrid Experience of “High-tech, Human-touch” is in Demand

According to Kaliappen and Hassan (2022), hotel guests are demanding more personalized attention and entertainment, it is understandable, especially the more experienced guests who naturally expect more services. To facilitate the ever-increasing demand for personalized services from guests, hoteliers are suggested to remain the high quality of offering guest experience with the realms of educational, entertainment, escapist, and esthetic based on the Experience Economy by Pine and Gilmore (2011). In addition, hotels in Asia have advised to identify their authentic Asian hospitality and bring it into business. Asian hospitality has consistently received high compliments for the service excellence worldwide (Sucher et al., 2013). Most importantly, emphasizing Asian hospitality is not only to offer an excellent servicescape but also fulfilling the growing interest of guests seeking authentic experience (Ateljevic & Doorne, 2005). It has been said that hotels could benefit greatly from implementing Asian hospitality in their business. Asian hospitality could differentiate hotels from the crowd, it also serves as a branding strategy to attract more business (Chon et al., 2020). Without a doubt, the global pandemic has accelerated the need for digitalization, in the meantime, human interaction and social experience are irreplaceable. The value of the human touch experience remains high. The authentic human-touch experience could dilute the coldness and indifferent digitalization feeling, resulting high level of guest satisfaction. Asian hospitality together with digitalization shape the experience that guests desired.

Following this logic, the hybrid experience of integrating “High-tech, Human-touch” is in greater demand, it is supported by Davari et al. (2022). The demand for hybrid experience phenomenon is especially more evident in Asia. Naturally, customers have the expectation for Asian-ness hotel services separates hotels in Asian from other regions. That is, Asian hospitality, comes with sincerity, kindness, and Asian way of human-touch services (Chin et al., 2016). In addition, earlier, the property management company, Jones Lang LaSalle

denoted Asia leads the race in smart hotel technology (JLL, 2018).

Nevertheless, digitalization and experience were intensively researched in academia, to the best of the author’s knowledge, none of the academic papers has proposed the combination of adopting digitalization and the human-touch guest experience for the industry to maintain their competitive advantage. Therefore, it is imperative to explore the combination of the two unique paradigms (Tourism 4.0 and Asian hospitality) for the hotel industry to maintain competitiveness and achieve higher customer satisfaction. With this in mind, this paper theoretically contributes for more future studies in high tech and high touch, and how the combination results in remaining competitive and customer satisfaction. Practically, this study affirms high tech and high touch to be included in the business model of Asian hotels. More specifically, it maps out creating digital and gracious experience in the realms of entertainment, educational, esthetic and escapist. Consequently, it guides hotels in Asia to facilitate the needs of customer and survive in the fierce marketplace and yet remain competitive.

LITERATURE REVIEW

The Concept of Tourism 4.0

In the rapidly technological advancing era, tourism has paved its way for smart tourism, integrating smart technologies in the journey of travel. The term Industry 4.0 was the term used by the German government to describe the fourth industrial revolution of the high-tech strategy in 2011 (BMBF, 2018). In the era of Industry 4.0, connected computers are becoming more prevalent together with the use of the Internet of Things, cloud computing, and cognitive computing (Woliński, 2018). Park (2018) explains Industry 4.0 as a system that enhances productivity and intensifies industrial production by increasing automation and connectivity through using artificial intelligence (AI), big data, robotics, and the internet of things. In this sense, Industry 4.0 encompasses a variety of smart technologies, such as Big Data, Artificial Intelligence (AI), cloud technologies, Internet of Things (IoT), Virtual Reality (VR), Augmented Reality (AR), Blockchain, etc. (Hassan, 2022). Earlier, Rodič (2017) claimed that the paradigm of

Industry 4.0 has become global, which has penetrated many disciplines, including tourism and hospitality (Korže, 2019). Derived from the concepts of Industry 4.0, Tourism 4.0 becomes a new paradigm introducing new business models supported by technology such as big data, IoT, artificial intelligence, virtual reality, augmented reality, and so forth to build a collaborative tourism ecosystem in the tourism and hospitality context (Arctur d.o.o., 2019).

According to Korže (2019), the term Tourism 4.0 has been used by governments and tourism policymakers various countries, for instance, European countries including Portugal, (2016), Finland (2017), Italy (2017), Spain (2018), Turkey (2017), and Slovenia (2018). Whilst in Southeast Asian countries, Thailand (2017), Bali (2018), and Malaysia (2018) have adopted the term Tourism 4.0. Most importantly, the World Tourism Organization (UNWTO) used the term Tourism 4.0 in 2017 at the 22nd Session of the UNWTO General Assembly – Special Session on Smart Tourism. In academia, there are only five publications in research on Tourism 4.0 by the middle of 2019, none of them published in highly-ranked tourism journals (Korže, 2019). To the best knowledge of the author, until September of 2022, there was not much difference in terms of a number of publications. For improving the quality of service and experience in tourism and hospitality, more research needs to be done on Tourism 4.0.

Tourism 4.0 in the Hotel Industry

Hotels are competing more fiercely than ever before to stay competitive. To stay competitive in the market, hotels are not only providing quality hospitality services but also embracing digitalization to remain relevant in the market. Artificial intelligence (AI), Internet of Things (IoT), Robotics, Mobile Technology, Augmented Reality (AR) and Virtual Reality (VR) are the key smart technologies that have been used in hotels.

Artificial Intelligence (AI)

Artificial intelligence (AI) is applicable in many disciplines, the hotel industry is no exception. The hotel industry can benefit greatly from adopting artificial intelligence. A better understanding of the customer journey, better profiling of guests, and discovering what they want can boost the customer

experience (Lacalle, 2021). There are many ways in using artificial intelligence. Chatbots are one of the AI technologies that allow hotel industry to maintain its conversational hospitality. Chatbots are used to handle frequently asked questions, concierge services, and housekeeping requests, chatbots may be the perfect solution. Theoretically, it greatly frees up the human capital for taking care of more important tasks to offer great personalization service (Weldhen, 2019). In practice, for more advanced tasks, guests may look for in-person services instead of chatbots. Four Seasons has set a good example, to strike for a balance, Four Seasons Chat is a chatbot integrated with a humanized approach to provide personalized service together with technology, which has won awards for the industry-leading app (Martin, 2020). Most importantly, the other key attribute of AI is data analysis, which could help hoteliers to quickly analyze data, interpret it, and apply what it has learned to make improvements. As a result, it helps to better understand the target guests and their behavior. Furthermore, as of today's convenient digitalization, hotel guests make their bookings on online platform. The hyperdynamic pricing based on artificial intelligence, hotel rates are automatically updated on booking engines based on user data, therefore to adjust the rates to maximize profits for hotels (Lacalle, 2021). Hotelogix (2022) assured that hotels are beneficial with the integration of AI into guest experience.

Robotics

Artificial intelligent robot is one of the most popular applications of smart technology in use in hotels. Robots in hotels serve two major functions, one is for social purpose and the other one is for operation purpose. The social robots aim to socialize with guests in a way to engage with them for many reasons, for impression, entertainment, and connection with guests. For instance, humanoid robot Mario welcomes guests at Marriott hotel in Ghent, Belgium. Mario has achieved cult status and become local social media star. The artificial intelligent empowers Mario speaks 19 languages, it makes no challenges to communicate with guests all around the world. In addition to welcoming guests, Mario serves as an assistant to provide information about events, bus schedules, breakfast buffet, etc. (Hyland, 2017). Operational robots offer more value

to hotels in operation, which less the stress of workforce issues. Robots take over the tedious and repetitive tasks, freeing hotel staff for more important and human service work. Top hotels have adopted robots in helping operational work. Evidence could be found at Hilton's concierge robot named as Connie, Aloft's butler robot, Crowne Plaza's delivery robot named as Dash, Yotel Hotel's luggage-carrying robot named as Yobot and Henn-na hotel's front desk robot (Social Tables, n.a.-a). In Japan, the Henn-na hotel, the world's first robot hotel, which is well-known for its no human employees. Guests are greeted by robots at front desk and luggage is delivered by robots to the room (Hotel, 2022). In addition, operational robots also assist at room delivering items as per guests requested such as luggage, towels, toothpaste or beverage.

Augmented Reality (AR) and Virtual Reality (VR)

Augmented Reality has emerged as an imperative technology in hotel industry in recent years, AR enhances the appeal of the physical environment of the hotel offering guests' experience of exploring the surrounding area at hotel (Revfine, 2022). The use of Augmented Reality in hotels, AR technology enables more interactive hotel stay by accessing information of the hotel and restaurant, translate written signs, navigate around the destination by applying the AR app on mobile devices. The AR makes the hotel stay experience more enjoyable through the interaction and gamification of the app. Taking the example of Best Western hotel, hotel guests could see themselves next to characters from Disney films with the AR technology (Juegostudio, 2019). In addition, hotels are encouraged to develop their own AR games in referencing to Pokemon Go that allow hotel guests exploring the hotel and local area more enjoyable with the gamification. Whilst virtual reality is commonly used in hotel industry for offering virtual hotel tours. The virtual tour allows potential guests to preview the hotel room, facilities, and even the local surrounding area prior booking or arrival, it largely enhances guests' satisfaction. It is said that to experience the virtual hotel tour best with a VR headset, however, with Facebook's 360-degree video technology, they can also be accessed by those without a headset (Juegostudio, 2019).

Mobile Technology

With the rapid growth of mobile technology, it is also widely used in hotel industry in terms of check-ins, checkouts, room keys to control room temperature, lighting, and curtain etc. (Korže, 2019). More services are provided via mobile technology such as food and beverage ordering system, payment, loyalty system and guest messaging platform to enhance guest satisfaction and engagement during their stay (Criton, 2020). According to research, 67% of hotel guests prefer having a digital key for check-in and room access over traditional plastic keycards. More importantly, with the use of mobile technology leads 7% incremental guest satisfaction score (Boberg, 2022). With the impact of global pandemic COVID-19, some guests are in demand for contactless service. Mobile technology is the strategy that hoteliers should consider facilitating the needs of guests in times of pandemic. However, the adoption of mobile technology in the hotel industry has been slow. It is believed that in the future, mobile technology will continue playing a vital role and become increasingly prevalent in the hotel industry (Bookingfactory, 2022).

Internet of Things (IoT)

Internet of Things (IoT) connects with various devices such as mobile technology, robotics, chatbot and so forth that enable to deliver a more seamless personalized experience for guests with cost efficiency (Social Tables, n.a.-b). According to the report of McKinsey, by 2023, it is predicted that there are 43 billion connected IoT devices, which is almost three times more than in 2018. Virtuality in every industry will be impacted by IoT, and hotel industry is no exception (Hotel Tech Report, 2022). According to Hotel Tech Report (2022) that hotel industry is catching the trend, 70% of hotel executives have active IoT projects of their property, majority of them using IoT data to predict guest needs in order to improve guest experience. On hotel operation, IoT assist on guestroom automation and in-room features, hotel chain integration, smart solutions for maintaining building and logistics and energy management (Mistry, 2020). For instance, the IoT technology enable the occupancy sensors to adjust lightings and temperature at meetings. In addition, the radio frequency identification (RFID) is use to track inventory such as linens. It is expected

that virtually every device in hotel is connected and will help serve guests efficiently.

The above smart technologies conclude the Tourism 4.0 applied in hospitality. Smart technologies are progressing and evolving for enhancing hotel experiences. For instance, Metaverse, which is defined as “a collective, persistent, and interactive parallel reality created by synthesizing all virtual worlds to form a universe that individuals can seamlessly traverse” (Gursoy et al., 2022, p. 529). Simply put, in the metaverse, the digital avatars of an individual could experience the virtual worlds via augmented reality (AR), virtual reality (VR), and mixed reality (Ball, 2021). Scholars view metaverse as a driver to facilitate the co-creation of transformational experiences and values for hotel guests (Buhalis et al., 2022).

The Concept of Asian Hospitality

Wan and Chon (2010) defined the concept of Asian hospitality emerged as a means of differentiating luxury hotels operating in the region from Western hotels and signaling the fulfillment of certain expectations regarding the style and quality of service offered. Asian-ness of sincerity, kindness, forgiveness, balance, a keen eye for minute details, and the initiative to provide services are incorporated in Asian hospitality (Chin et al., 2016). Scholars recognized there has been a consistent increase in the number of compliments received by the Asian hospitality industry worldwide (Sucher et al., 2013). Asian hotel chains have shown a significant growth worldwide, making the awareness of Asian hospitality well-known (Sucher et al., 2013). Earlier in 2000, in the hotel industry worldwide, Asian services have intensified growth, resulting in intense competition (Kandampully & Suhartanto, 2000). Number of academic papers in hospitality have made accolade to the Asian cultural and collectivism values (Sucher et al., 2013). The beauty and uniqueness of Asian hospitality has been recognized as a growing trend in the hotel industry in the past decade for quality and service excellence (Stebbing, 1990). With the growing demand for Asian hospitality, the Asia's time has come, the shift made towards Asia (Chon, 2019). Consequently, hospitality in Asia is the world's leading industry due to its beauty and uniqueness (Sucher et al., 2013).

Asian Cultural Values

The Asian hospitality is influenced by its long rooted historical and rich cultural (Hong, 2009; Wan & Chon, 2010). It was said that Asian hospitality integrated the influence from its uniqueness in terms of geography, culture social and the professional services. Also, the constituencies of Asian cultural values are from history, religion, ethics, and values. In other words, the integration of local historical and cultural background makes the Asian hotels special (Sucher et al., 2013). The Asian cultural values are deeply rooted in the Asian service providers, who are the agent to accelerate the Asian cultural values into visibility, resulting an impressive yet memorable guest experience (Mohsin, 2006; Syer, 2011). The service offered by Asian service providers were described as warm, caring, respectful, and yet detail-oriented. In a similar vein, scholars characterized Asian service providers with a hospitable heart and service-minded spirit (Mohsin, 2006; Wan & Chon, 2010). According to the Asian Hospitality Service Framework of Sucher et al. (2013), the characteristics of Asian hospitality includes warmth, empathy, humility, moral, courtesy, helpful, modesty, respect, kindness, sincerity, loyalty and friendly. The characteristics are embedded in the “soul” of Asian that lead to the highest level of service standard (Sucher et al., 2013).

Collectivism Values

Another element makes the Asian hospitality unique is the inherent collectivism values. Collectivism is a shared characteristic feature among Asian. Among all forms and levels of collectivism, one element is crucial: the relationship between individuals and groups. Various forms of collectivism share and reflect this relationship, revealing the distinct features of Asian ways of life as opposed to Western ways. Unlike the western individualism, collectivism refers to the emphasize of the relationship of individual, groups and community. The collectivism values refer to the family concept of taking care of parents and family members with respect, which is one of the core Asian traditions (Mohsin, 2006). Asian are taught to be attentive to observe and listen, which make them skilled for service industry (Sucher et al., 2013). The family care extends to guests, providing excellent

service in Asian way. This makes the Asian hospitality unique and desirable.

Asian Hospitality in Hotel Industry

The Asian hospitality brand is known for its excellence in Asian customer-centricity of luxury services over the years (Fakfare et al., 2015) and its rapid development (Tan et al., 2014). In addition to having earned a reputation for excellent service, Asian hotel brands have been recognized for its in excellence among the best and fastest growing hotel brands worldwide (Magazine, 2020). In the study of Fakefare et al. (2015), the integration of Asian-ness such as the physical environment, hotel design and guest's interaction made the Asian hotels more authentic and outstanding compared to non-Asian hotels in delivering excellent services. The Asian hotel brands, for instance, Amman, Dusit Thani, Mandarin Oriental, Marco Polo, Peninsula, and Shangri-La, have successfully extending their businesses globally. Taking the example of Shangri-La-La Paris, the traveler review remains the same from (Tripadvisor, 2022) to the review in 2013 which mentioned by Sucher et al. (2013), Shangri-La Paris was ranked at the top in customer satisfaction in the traveler review platform "TripAdvisor" because of their "Excellence of service". In general, travelers expressed the same opinions, stating Asian staff provided outstanding services that made guests feel welcomed and well-treated (Sucher et al., 2013). Asian hospitality emphasizes customer service and guest satisfaction, according to Wattanacharoensil et al. (2014). Mattila (2000) pointed out the success of Asian hotels due to its integration of Asian hospitality together with the western services standard and efficiency, providing customized caring services.

The influence of Asian cultural and collectivism values together with excellent services create competitive advantage for making Asian hotels unique, successful and profitable (Qingxue, 2003). In view of the growing demand for authentic cultural experience, it differentiates Asian hotels from the crowd (Yi et al., 2017). The authenticity of

Asian-ness plays a significant role in attracting more guests (Chon et al., 2020). Sucher et al. (2013) suggested the Asian hospitality serve the branding strategy to live out the uniqueness of the geography, culture, religion and history, it is also agreed with Lam et al. (2015). Undoubtedly, the Asian-ness elements do not only demonstrate on the intangible services by the hospitality-minded heart and service-minded staff, but also found on the tangible products such as the Asian design and decoration, and handmade products, tangiblizing the Asian style of outstanding services.

METHOD

This study adopted integrative literature review approach in acknowledgement that the phenomenon of high-tech and high-touch in the context of future hotel industry (Torraco, 2016). There are three stages involved in this study, including identification, analysis and synthesis. The first stage is to identify the topic of Asian hospitality in the age of tourism 4.0, attempts to use keywords and phrases in major scientific databases. This involved looking up the keywords "High tech High touch hotel" on the Web of Science and Google Scholar search engines. The search was conducted in April 2023 and a total of 20,607 published works were identified, including English peer-review papers, conference papers, theses, books in tourism and hospitality context from 2003 to 2023. In the second stage, critical analysis and examination of the existing literature to fit the investigation's specific scope and identify the research gap for the future hotel industry. In the final stage, it involved synthesis of relevant literature. Based on excellence, applicability, and clarity, the synthesis process severely narrowed down the scope and generated a total of 17 published works was chosen, 10 from google scholar and 7 from Web of science (see Figure 1 and 2). Among the 7 chosen articles from Web of science, there is 1 duplicated with the record of Google scholar, making total chosen record of 16 (see Table 1).

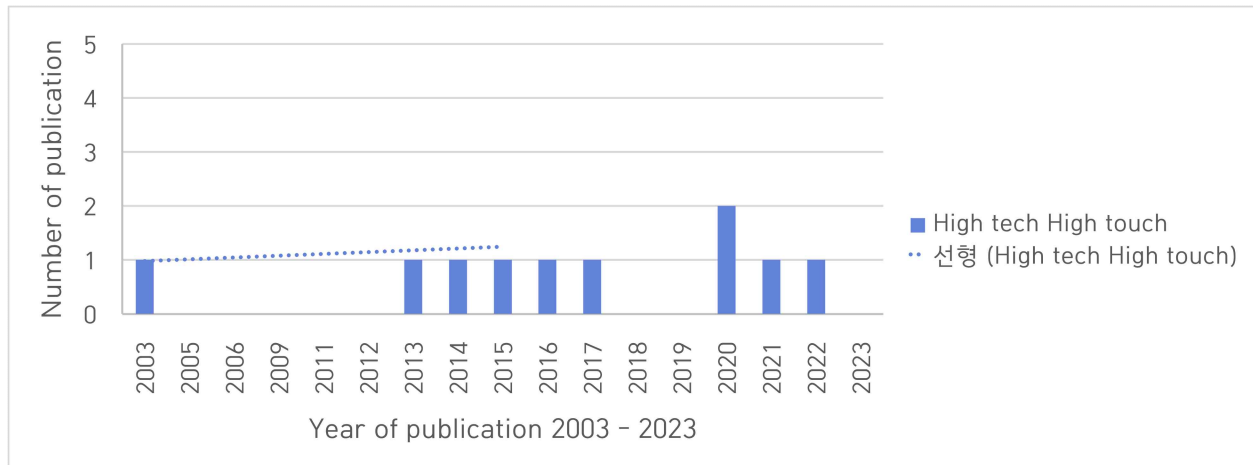


Figure 1. Article selection (Google Scholar)

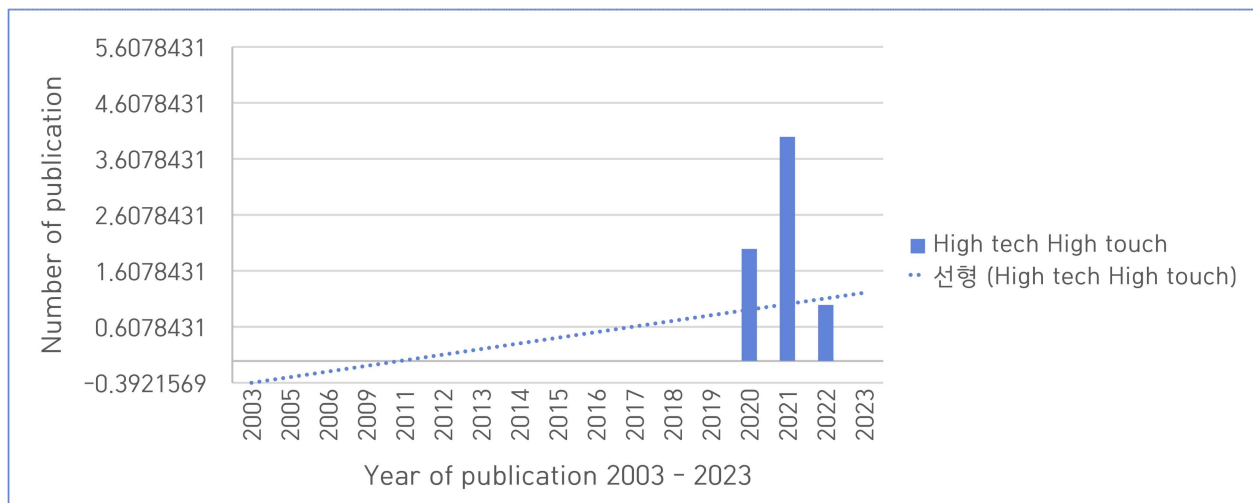


Figure 2. Article selection (Web of science)

Table 1. Results of search on scientific database (Google scholar and WOS) in 2023

No.	Authors	Title	Journal	Database
1	Zeng et al. (2020)	From high-touch to high-tech: COVID-19 drives robotics adoption	Tourism geographies	Google scholar & WOS
2	Davari et al. (2022)	Hotel experiences during the COVID-19 pandemic: high-touch versus high-tech	International Journal of Contemporary Hospitality Management	Google scholar
3	Brochado et al. (2016)	High tech meets high touch in upscale hotels	Journal of Hospitality and Tourism Technology	Google scholar
4	Neuhofer et al. (2013)	High tech for high touch experiences: A case study from the hospitality industry	Information and Communication Technologies in Tourism 2013: Proceedings of the International Conference in Innsbruck, Austria, January 22-25, 2013	Google scholar
5	Lee et al. (2003)	Technology, service quality, and customer loyalty in hotels: Australian managerial perspectives	Managing Service Quality: An International Journal	Google scholar
6	Ivanov and Webster (2017)	Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies—a cost-benefit analysis	Artificial Intelligence and Service Automation by Travel, Tourism and Hospitality Companies—A Cost-Benefit Analysis	Google scholar

<i>No.</i>	<i>Authors</i>	<i>Title</i>	<i>Journal</i>	<i>Database</i>
7	Kim et al. (2021)	Preference for robot service or human service in hotels? Impacts of the COVID-19 pandemic	International Journal of Hospitality Management	Google scholar
8	Neuhofer et al. (2015)	Smart technologies for personalized experiences: a case study in the hospitality domain	Electronic Markets	Google scholar
9	Giebelhausen et al. (2014)	Touch versus tech: When technology functions as a barrier or a benefit to service encounters	Journal of Marketing	Google scholar
10	Choi et al. (2020)	Service robots in hotels: understanding the service quality perceptions of human-robot interaction	Journal of Hospitality Marketing & Management	Google scholar
11	(Ivanov et al., 2022)	Biosecurity, crisis management, automation technologies and economic performance of travel, tourism and hospitality companies - A conceptual framework	Tourism geographies	WOS
12	Bharwani and Mathews (2021a)	Post-pandemic pressures to pivot: tech transformations in luxury hotels	Tourism economics	WOS
13	Liu and Hung (2021)	A multilevel study on preferences for self-service technology versus human staff: Insights from hotels in China	Worldwide hospitality and tourism themes	WOS
14	Liu and Hung (2020)	A comparative study of self-service technology with service employees: a qualitative analysis of hotels in China	International journal of hospitality management	WOS
15	Kelly and Lawlor (2021)	Adding or destroying value? User experiences of tourism self-service technologies	Information technology & tourism	WOS
16	Bharwani and Mathews (2021b)	Techno-business strategies for enhancing guest experience in luxury hotels: a managerial perspective	Journal of hospitality and tourism insights	WOS

Based on the literature review of the chosen articles, it indicated that high technology and high touch will be the trend to facilitate the emerging demand from customers in the context of hotel. Notably, the emerging demand for high tech and high touch will likely continues even post COVID-19 pandemic (Zeng et al., 2020). Earlier, there is controversy about high-tech is just a gimmick and it will not stay long. Furthermore, there is a concern of high-tech is the replacement of high-touch. Davari et al. (2022) asserted that high-tech and high-touch are indeed coexist especially in the service industry like hotel. To be precise, technologies play an important role in creating unique and personalized services, and facilitating and co-creating high-touch experiences (Bharwani & Mathews, 2021b; Kelly & Lawlor, 2021; Neuhofer et al., 2013). High technologies adoption such as humanoid robotics, artificial

intelligence and automation (Choi et al., 2020; Ivanov & Webster, 2017; Ivanov et al., 2022; Kim et al., 2021; Zeng et al., 2020) resulted in personalized experience and customer experiences enhancement (Bharwani & Mathews, 2021a; Liu & Hung, 2020; Neuhofer et al., 2015). It is most important to note that hotel employees (Davari et al., 2022) and guests (Brochado et al., 2016) exhibit a positive attitude toward high-tech and high-touch services.

DISCUSSIONS

In view of the evidence of literature above, high-tech and high-touch is the coping strategy to enhance hotel organizational competitiveness and customer satisfaction by facilitating the emerging demand of customers. With this in mind, hotels in Asia are proposed to adopt a hybrid business model to strive for a balance in high-tech and human-touch

to maintain competitiveness as below:

A Hybrid Conceptual Model of “High-tech, Human-touch” for Asian Hotels

Guest Experience: The Economy of Experience

Guest experience is an essential element to succeeding in a fiercely competitive market in the 21st century. Pine and Gilmore (2011), the scholars of Experience Economy advocated that the creation of experience differentiates undifferentiated products and services, and most importantly, experience creates distinct values that engage and create a memorable experience, ultimately leading to satisfaction. Based on Pine and Gilmore (2011) model, there are four different realms: Educational, Entertainment, Escapist, and Esthetic, all of which are divided into two categories: involvement and connection. The concept of involvement refers to active and passive participation, whilst connection refers to absorption and immersion. A great experience can be created by using the four realms. As the experience economy evolves, in the updated edition of *The Experience Economy: Competing for Customer Time, Attention, and Money*, Pine and Gilmore (2019) advocated robust, cohesive, personal, dramatic, and transformative for better experience design.

In the context of hotel industry, hotel is a service industry, guest experience is the critical element that determine the guest satisfaction. According to Shin and Jeong (2022), guest experience is the core of hotel services that is jointly determined by objective service characteristics offered by hotels and subjective perceptions of guests. A great hotel experience, guests are not only evaluating the objective services characteristics received from hotels and their perceptions, but also taking consideration of the four realms of experience economy. When the performance exceeds the perception, that leads to positive great experience, resulting in positive satisfaction. In other words, the guest's overall experience makes a guest satisfied and helps distinguish the hotel from the crowd. It is said that customization is essential for a great experience. It is well recognized that tourism and hospitality are the sector where customization is particularly important for creating memorable great experience (Korže, 2019). In the times of turbulence, global COVID-19 has brought massive disruptions to global economy, hotel industry is one

of the industries experiencing the hit seriously. It is a challenge for the hotel industry to maintain great guest experience when there is a demand for contactless services. Without a doubt, the experience still matters in the pandemic era, more services and values could be offered in the era of Tourism 4.0. In the earlier report of PricewaterhouseCoopers (2018), 82% of leading corporations have the tendency to place their focus on boosting guest experiences in technology. It also indicated that leading corporations had the insight to invest in digital guest experience before the global pandemic. The spread of COVID-19 virus urged the emergency of digital guest experience. Hotels are recommended to adapt more digitalization to keep the alignment with the environment.

Digital Experience

In the hotel industry, smart technology aims to improve resource management efficiency and enhance the guest experience to maximize both competitiveness and satisfaction (Buhalis & Amaranggana, 2015). According to Huang et al. (2017) Tourism 4.0 does not only critically affect hotel competitiveness, but also affects the guest's experience. Hoteliers must embrace digitalization to facilitate the needs of guests and align with the business environment. The smart technologies that have been discussed in this study are Artificial intelligence (AI), Internet of Things (IoT), Robotics, Mobile Technology, Augmented Reality (AR), and Virtual Reality (VR). These smart technologies empower hoteliers to offer a more personalized digital experience based on the data analysis of their customer journey and most importantly their behavior and interaction could enhance a desirable experience for guests.

Gracious Experience

As Asian hospitality is well recognized in service excellence worldwide (Sucher et al., 2013). Guests can indulge themselves with the Asian way of personalized gracious experience. In addition, guests are privileged to experience local authentic Asian cultural experiences with being treated as family members, which could enrich the guest journey in a way of aligning the Economy Experience model (Pine & Gilmore, 2011). For instance, to learn a new culture (Educational),

engage in smart technologies and digital experience (Entertainment), enjoy the Asian landscape, design, etc. (Esthetic), and completely involved in the journey, escaping from the daily routine (Escapist).

With this in mind, the combination of Tourism

4.0 and Asian hospitality could largely enhance guests' experience. Hence, a business model is proposed for hoteliers to strengthen the hotel's competitiveness and achieve higher levels of customer satisfaction (Figure 3).

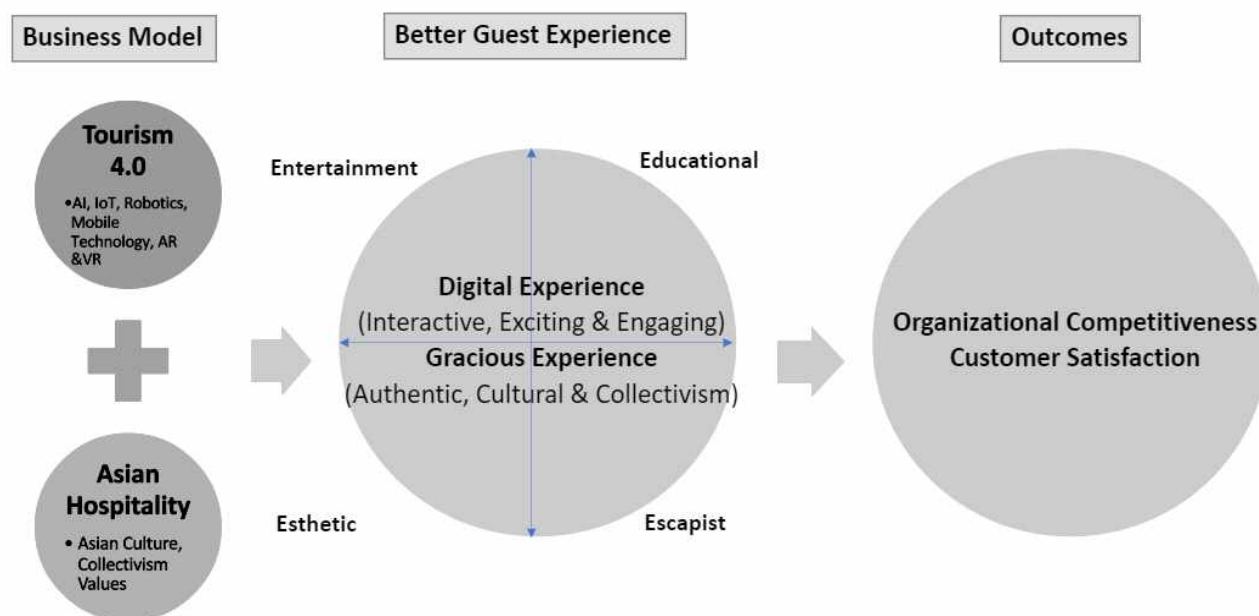


Figure 3. Proposed Hybrid Model of “High-tech, Human-touch”

This model provides insights for hoteliers to revisit their Tourism 4.0 adoption (high-tech) and Asian hospitality (human-touch) identity, which helps to create digital experience and gracious experience. Untimely, the business model leads hotels to remain competitive and satisfy customers. Theoretically, this paper contributes to more understanding and knowledge about the combination of tourism 4.0 and Asian hospitality academically. This study also set future research direction to encourage researchers to identify more drivers for advancing Asian Hospitality in the age of Tourism 4.0 together with an in-depth implementation plan for the hotel industry to maintain organizational competitiveness and achieve customer satisfaction. Practically, this paper provides a framework for hoteliers, especially hotels in Asia, to include tourism 4.0 technologies and Asian hospitality into their business model to outstand from the crowd and stay top of the mind in the target customer. In particular, this paper maps out merging digital experience and gracious experience into the four experience realms for better guest experience.

CONCLUSION

The growing customer demand for digitalization and personalized human-touch services, hotels in Asia are advised to offer better guest experience with the integration of digitalization and gracious experience. The business model consists of two key components, that is Tourism 4.0 and Asian Hospitality. The Tourism 4.0 includes the adoption of AI, IoT, Robotics, Mobile technology and AR and VR smart technologies, which offers an interactive, exciting and engaging digital experience for hotel guests. Notably, having digitalization alone is not sufficient, only pairing up with Asian hospitality could lift the guest experience to a higher level. Hotels in Asia are encouraged to strengthen the authentic Asian cultural and collectivism value in their offering, live the Asian hospitality to the fullest. Thus, hotels in Asia could maintain organizational competitiveness and customer satisfaction with the hybrid model of “High-tech, Human-touch”.

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