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# **Hotel Robots: An Exploratory Study of Generation Z Customers in China**

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# **Hotel Robots: An Exploratory Study of Generation Z Customers in China**

## **1 Introduction**

The world is increasingly embracing service robots in various aspects of people's daily life (Goel et al., 2022). Societal changes such as an increase of elderly population (Ivanov et al., 2020), global labor shortage (Tuomi et al., 2020) and the outbreak of COVID-19 (Zhong et al., 2022) have sped up the process. For instance, the increasingly elderly population often influences the supply of frontline employees as tourism industry has historically relied upon the younger people for the entry-level positions (Meier, 1991; Tussyadiah et al., 2022). Many service firms currently show eager interest in implementing service robots into their service provision process. Customers are also showing great interest in being served by service robots after experiencing the pandemic (Zhong et al., 2022) because service robots might reduce the infection risk and thus boost customers' willingness to book hotel rooms (Romero & Lado, 2021). Consequently, the increasing popularity of service robot adoption has stimulated constant discussion on how to reorganize the frontline service delivery, identify which tasks will be done by service robot, which by human employees, and how both parties can effectively collaborate to provide service (Tuomi, Tussyadiah & Hanna, 2021).

Ivanov & Webster (2019) initially identified the service tasks that robot is perceived as a more appropriate service delivery mechanism. Afterwards, researchers started to examine factors affecting customers' service robot adoption willingness. Among those, factors related to the service robot itself (e.g., robot appearance, gender, etc.), customers' demographic background (e.g., age, cultural background, etc.), and global environment (e.g., technology advancements, health crisis, etc.) have been found to affect people's robot service preference. For instance, Park (2020) identified service robots' morphology is critical to influence tourists' perception of robots in determining the consumption outcomes such as positive service encounter evaluation, revisit intention, etc. (Lu et al., 2021). Further, Seo (2022) suggested that customers indicated a higher satisfaction towards a female humanoid service robot than a male humanoid service robot. In general, the COVID-19 pandemic has increased people's willingness to use robots as part of frontline service delivery for safety concerns

(Kim et al., 2021; Romero & Lado, 2021; Zhong et al., 2022). Among those, Romero & Lado (2021) focused on a specific customer group, Generation Z customers, and suggested that adopting service robots leads to higher booking intentions when hotel service robot was implemented during the pandemic. The service organization (i.e., the process to organize tasks between robots and human resources for frontline service) with regard to this sector is yet to be explored.

As service robots have been widely introduced in hotel industry, there are also studies looking into robot adoption preference from employees' perspective. Some scholars have studied employee's adoption preference in the context of human-robot collaboration (Tuomi, Tussyadiah & Hanna, 2021). For instance, Wirtz et al. (2018) proposed a robot deployment model to predict how service robots could work alongside human employees and suggested that service robots are more suitable for tasks requiring cognitive skills whereas human employees are better suited for tasks requiring social skills. Further, Ali et al. (2022) studied the motivational factors and barriers affecting Generation Z employees' acceptance to work with service robots in hotels, highlighting the unique characteristics of Generation Z in affecting their technology usage as the future workforce. Some scholars also start to look at the negative aspects of service robot adoption in hotel industry (Fu et al., 2022) and suggest ways to mitigate such negative impact. For instance, Yu et al. (2022) suggested that employee skills such as tech-savviness and social skills could effectively lower their turnover intention.

Although scholars begin to investigate robot service issues with regards to Generation Z cohorts (Ali et al., 2022; Goh & Okumus, 2020; Romero & Lado, 2021), little light has been shed on their preference towards robot service by taking into account the cultural backgrounds (Li et al., 2010), different consumer expectations (Ayyildiz et al., 2022), robot capabilities (Tuomi et al., 2021), and other factors that might influence human-robot interaction in service encounters (Lu et al., 2020). Moreover, although several studies have looked at service robot adoption in tourism industry, they fail to capture the full extent of frontline service organizations as most of work is either using structural equation modelling or experimental design. Thus, more research is required to fully explore robot service delivery

preferences in various cultural and consumption contexts, e.g., in the context of Generation Z customers in the accommodation sector in the Chinese market. To fill the aforementioned research gaps, drawing upon self-determination theory (Deci & Ryan, 1985), this study aims to: (1) identify the service contexts when and where Generation Z customers in China prefer service robots over human employees as a service delivery mechanism in hotels; (2) explore the motivational factors that lead to such preferences; and (3) provide theoretical and managerial implications regarding service robot implementation and service design for the potential customer segment and future leaders in tourism industry.

## **2 Literature Review**

### *2.1 Hedonic Versus Utilitarian Consumption of Hotel Service*

Suggested by previous work, the consumption of service offers different levels of utilitarian or hedonic attributes ranging from the high utilitarian level to the high hedonic level (Liu et al., 2022; Parsa et al., 2020). Utilitarian-dominant service consumption mainly includes elements emphasizing functionality and cost-effectiveness, whereas hedonic-dominant service consumption includes emotional, interactional and cognitive elements (Prebensen & Rosengren, 2016). Guided by Self-determination Theory, one of the most fundamental motivation theory that measures how social backgrounds and individual differences affect various types of motivations (Deci & Ryan, 1985), the core value for utilitarian-dominant service consumption places more weight on the functionality, usefulness and fulfilment of the basic needs, while the core value for hedonic-dominant service consumption emphasizes more on pleasure-seeking such as enjoyment, playfulness and fun, and making decisions based on their feelings (Miao et al., 2014). In the same vein, the consumption of hospitality service offerings is also a multifaceted concept with several behavioural determinants and drivers. Broadly put, hospitality management literature agrees that many hospitality products and services can be seen to include both hedonically and utilitarianly driven types of consumption (e.g., Lee & Kim, 2018; Miao et al., 2014; Parsa et al., 2020), with the accommodation sector being no exception. These two concepts have been investigated extensively in tourism and hospitality (Lee & Kim, 2018; Prebensen & Rosengren, 2016; Wu

& Yang, 2018). However, the hedonic- and utilitarian-value structures might differ in driving customers' choice (Parsa et al., 2020). Furthermore, how both values of hospitality consumption can motivate customers to choose robotized hotel service has not been thoroughly understood.

## *2.2 Generation Z Customers in China*

Current research suggests that generational differences play a critical role in technology adoption (Ali et al., 2022; Priporas et al., 2017). Generation Z are the first digital natives, who were born in 1995 or afterwards (Priporas et al., 2017), currently comprising approximately one third of the global population, and are growing in impact and purchasing power, particularly in travel industry (European Travel Commission, 2020). Generation Z are technology savvy and have a higher tendency to accept innovative services (Bravo et al., 2020). On the other hand, research has also pointed out that they have a tendency towards being perceived as having social phobia (Ran, 2020) that is, they avoid social activities and enjoy being alone, which is caused by either fear, anxiety or boredom. They are ideally the potential future customers and managers of the hotel industry. Thus, a general understanding of their robot service preference can enhance the acceptance of robotics systems in near future.

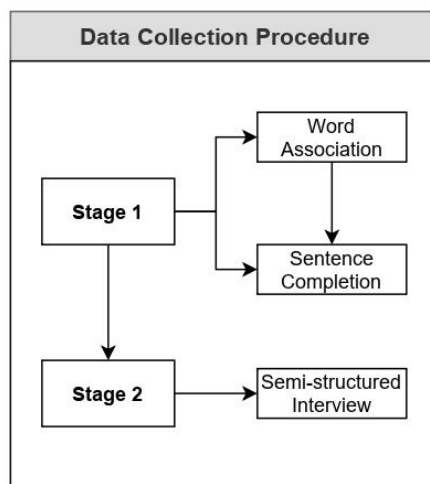
Differences exist between Generation Z customers in China and their counterparts (Serravalle et al., 2022). Unlike their peers in the West, they spend more and save less (Zheng, 2017). According to a report released by McKinsey & Company, Generation Z in China account for 15 percent of their household's expenditure compared with 4 percent in the United States and the United Kingdom (Francis & Hoefel, 2018). The vast majority are not yet drawing a salary, but they are big consumers. Given the increased use of service robots to provide and produce tourism and hospitality service experiences, combined with the growing purchasing power of Generation Z customers in China and their inherent tendency towards technologically-mediated service, it is interesting to note this customer segment has seldom been researched in the hospitality industry to figure out their service preference regarding service robot

acceptance (Romero & Lado, 2021). Thus, it is important to explore specific use-contexts in which Generation Z customers in China prefer service robots over human employees and in doing so inform both hospitality and tourism management theory and guide practitioners' service provision design efforts.

### 3 Method

This study followed an exploratory sequential research design including two qualitative methods: projective techniques and semi-structured interviews, to reach its objectives (see Table 1). Different qualitative methods are commonly used to triangulate findings (Lincoln, 1995). Purposive sampling was used to recruit respondents from researchers' own social networks. Two general selection criteria were established: (1) respondents needed to have been born from 1995 and afterwards; and (2) respondents needed to have had prior interactions with service robots during their recent hotel stay. Data collection was carried out in January 2022 and generally lasted for approximately 20 to 25 minutes. Suggested by Donoghue (2000), in general it is challenging to perform projective techniques with statistically significant sample, which restricts the generalization of results to a larger sample size. Thus, a well-defined subsection must be selected instead of aiming at a large sample size (Wassler & Hung, 2015; Webb, 2002). In total, 33 respondents completed the projective techniques related questions in the first stage, while 15 out of 33 respondents agreed to be interviewed in the second stage.

**Figure 1** Data Collection Procedure



Projective technique method is “a structured-indirect way of investigating the whys of situations” (Webb, 1992, p. 125), which is increasingly accepted in tourism field. It can provide ambiguous stimuli to accurately measure respondents’ perception while also allowing them to freely respond in their own expressions (Prebensen, 2007; Wassler & Hung, 2015). In addition, it can also effectively overcome communication barriers such as unwillingness to disclose certain emotions, inability to express themselves or unconsciously pleasing interviewers (Hussey & Duncombe, 1999). Participants were requested to provide their overall evaluation of human-robot interactions, contexts in which service robots would be the more preferred service mechanism over human employees, and the preferred appearance of service robots as a service delivery mechanism.

Following Donoghue (2000), at least two distinct sub-categories of projective techniques should be used to ensure that the findings are reliable and valid in a qualitative research. Thus, word association and sentence completion were adopted in this study (see Table 1). First, word association techniques were provided as stimuli to explore what in the participants’ mind consciously or subconsciously regarding the general impression and evaluation of their interaction with service robots (Devers & Frankel, 2000). Second, sentence completion was then adopted as a follow-up question to solicit the preferred service contexts delivered by service robots (Webb, 2002). Data collected from projective techniques was initially checked for synonyms, then coded for frequencies, and finally translated from Mandarin to English.

**Table 1** Projective Techniques Used

Technique	Stimulus
Word association	What comes into your mind when you think of your interaction with a service robot during your recent hotel stay?
Sentence completion	You will choose service robots over human employees when (1) _____ (2) _____ (3) _____.



Technique	Stimulus
	You prefer service robots with features of (1) _____ (2) _____ (3) _____ as service delivery mechanisms.

After the projective technique stage, semi-structured interviews were conducted with a subset of participants who took part in the previous stage. The goal of the interviews (n=15) was to identify the motivational factors in relation to the choice made in projective technique stage. To reduce infection risk of COVID-19, all the interviews were conducted in Mandarin via WeChat video call, recorded, transcribed, and anonymized by one of the authors. Data collection ended when it reached the “theoretical saturation” point in which no new information emerged (Strauss and Corbin, 1998). The data was subsequently deductively coded in NVivo. Open coding and axial coding were conducted to determine key themes. Themes were later translated from Mandarin to English. Two independent researchers were invited to validate the accuracy of the established coding schema.

## 4 Findings

### 4.1 Findings of Projective Techniques

Table 2 lists the findings of the projective techniques. First, word association indicated an overall positive evaluation of human-robot interaction. Generation Z tourists in China perceive their interaction with service robots as efficient (N=22), easy to use (N=7), novel (N=6), and interesting (N=3). In addition, they also consider their interaction with service robots as private (N=4) and social phobia friendly (N=3). However, they believe that interaction with service robots is less smart (N=7). In terms of the preferred context in which service robots are the preferred service delivery mechanism, sentence completion results demonstrate that service robots can perform better than human employees in repetitive tasks such as food delivery (e.g., room service delivery, take-out food delivery), item delivery (N=8) (e.g., luggage delivery, private stuff delivery, etc.), check-in (N=7), information consulting (N=6), and hotel navigation (N=5), which is consistent with previous work.

In terms of the sentence completion results, it is interesting to find that service robots are preferred in late night service (N=6) and when they avoid human contact (N=4), which coincides with the word association results that service robots help to eliminate social phobia. Regarding the preferred appearance for service robots, Generation Z customers highlight both hedonic and utilitarian needs for robot appearance design. Overall, they prefer service robots as smart (N=7) and non-humanoid (N=3), but gender difference exists in their preferences. For instance, females prefer those with a level of anthropomorphism such as cute (N=9) and pretty (N=4). On the contrary, males prefer those that could satisfy their utilitarian need, such as a touch screen (N=6) and large storage space (N=4).

**Table 2** Findings of Projective Techniques (N=33)

Evaluation of Human-robot interaction	Frequency	Preferred service context	Frequency	Preferred appearance	Frequency
Efficient	22	Food delivery	21	Cute	9
Easy to use	7	Item delivery	8	Mechanical	7
Less smart	7	Check-in	7	Smart	7
Novel	6	Information guide	6	Installed with touch screen	6
Private	4	Late night service	6	Large storage space	4
Interesting	3	Hotel navigation	5	Pretty	4
Social phobia friendly	3	Eliminating human contact	4	Non-humanoid	3

#### 4.2 Respondents' Information

Table 3 details the key characteristics of respondents (e.g., age, education level, employment status, travel behavior, interview order) for semi-structured interview stage. The majority of respondents are university students (N=9) and hold a bachelor's degree (N=10). More than half of the respondents are male (N=8). The respondents travel at least once per year and mainly for leisure purposes (N=13). The hotel they stayed in installed with service robots were mainly upscale and upper-midscale hotels.

**Table 3** Respondents Information ( $N=15$ , Male=53%)

<b>Interview Order</b>	<b>Age (Years Old)</b>	<b>Gender</b>	<b>Education Level</b>	<b>Working Status</b>	<b>Travel Purpose</b>	<b>Hotel Ratings</b>	<b>Travel Frequency/Year</b>
1	22	Female	Bachelor's degree	Student	Leisure	4 stars	3-5
2	21	Female	Bachelor's degree	Student	Leisure	3 stars	3-5
3	21	Female	Bachelor's degree	Student	Leisure	4 stars	1-3
4	26	Male	Bachelor's degree	Employed	Business	4 stars	Over 5
5	21	Male	Bachelor's degree	Employed	Business	5 stars	Over 5
6	24	Male	Master's degree	Student	Leisure	5 stars	Over 5
7	22	Male	Bachelor's degree	Student	Leisure	4 stars	Over 5
8	24	Male	Bachelor's degree	Employed	Leisure	5 stars	1-3
9	24	Female	Master's degree	Student	Leisure	5 stars	1-3
10	26	Female	Ph.D.	Student	Leisure	5 stars	1-3
11	27	Male	Ph.D.	Part-time Student	Leisure	4 stars	1-3
12	23	Female	Master's degree	Student	Leisure	5 stars	1-3
13	26	Male	Bachelor's degree	Employed	Leisure	4 stars	3-5
14	24	Female	Master's degree	Employed	Leisure	5 stars	1-3
15	26	Male	Bachelor's degree	Employed	Leisure	5 stars	3-5

### 4.3 Findings of Semi-structured Interviews

Data were analyzed drawing on a priori themes established in literature on hedonic and utilitarian consumption in hospitality contexts. Drawing on self-determination theory, four motivational factors according to different levels of hedonic and utilitarian needs are identified, namely 1) experienced hedonic value-driven, 2) utilitarian hedonic value-driven, 3) task-relevant value-driven, and 4) utilitarian value-driven. Details of coding, categorization, and examples of interview are listed on Table 4.

**Table 4** Analysis of Open Coding

<b>Coding</b>	<b>Categorization</b>	<b>Corresponding Scenarios</b>	<b>Interviews Examples</b>
A1. Novel experience A2. Interesting interaction	Experienced-hedonic value	<ul style="list-style-type: none"> <li>Information guide</li> <li>Hotel navigation</li> <li>Reception</li> </ul>	<ul style="list-style-type: none"> <li>“Greetings with reception service robot were a lot of fun because it could talk like a human being and have facial expressions” (#3).</li> <li>“It can serve as a hotel guide. You can follow it and navigate the hotel, it was an interesting experience” (#11).</li> <li>“The service robot can provide necessary information” (#8).</li> </ul>
B1. Spicing up the service B2. Killing time	Utilitarian-hedonic value	<ul style="list-style-type: none"> <li>Take-out delivery</li> <li>Check-in</li> </ul>	<ul style="list-style-type: none"> <li>“It has spiced up the take-out food delivering experience because it talked to me when arrived” (#15).</li> <li>“Talking with a service robot could make me feel less bored when waiting for check-in” (#11).</li> <li>“I think being served by a robot can not only streamline the check-in process, but also enhance the overall interactions in delivery process” (#14).</li> </ul>
C1. Efficient C2. Problem-solving	Task-relevant value	<ul style="list-style-type: none"> <li>Luggage delivery</li> <li>Room service delivery</li> </ul>	<ul style="list-style-type: none"> <li>“I don’t really mind who finally provides the service as long as my food is efficiently delivered” (#8).</li> <li>“I don’t have a strong preference in terms of service provision mechanism as long as they solve my problem” (#6).</li> </ul>
D1. Private concern D2. Avoiding embarrassment D3. Security concern	Utilitarian value	<ul style="list-style-type: none"> <li>Late night service</li> <li>Private stuff delivery</li> <li>Eliminating human contact</li> </ul>	<ul style="list-style-type: none"> <li>“I only want to stay in a private space to enjoy my own time without talking with strangers, even the hotel staff” (#2).</li> <li>“I think maybe because of the personality. I don’t enjoy socializing; thus, I prefer to use service robot to eliminate human talk. Sometimes the hotel employees will ask me to give them good review, but the robot won’t” (#13).</li> </ul>

D4. Reducing infection risk of COVID-19			<ul style="list-style-type: none"><li>• “I don’t want human employees to serve me, particularly at night for security concern” (#12).</li><li>• “I think using service robot is more reassuring because it can reduce the infection risk of Covid-19” (#4).</li><li>• “It is embarrassing to ask hotel employees to delivery private stuffs, that’s why I prefer to use service robots” (#15).</li></ul>
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The first theme is driven by experienced-hedonic value. This group of Generation Z tourists in China is mainly in search of playfulness. Results suggested that service robots were more preferred for specific tasks such as reception, information guide, and hotel navigation because they could spice up tourists' experience. For instance, one respondent mentioned that "greetings with reception service robot were a lot of fun because it could talk like a human being and have facial expressions" (#3). Previous research has found similar results, whereby adding anthropomorphic characteristics to service robots may positively impact customers' evaluation of the overall service experience (Lv et al., 2021). Further, previous studies have asserted that service robots work particularly well for well-defined, relatively simple tasks (Tuomi, Tussyadiah, & Stienmetz, 2020).

The second theme is driven by utilitarian-hedonic value. As suggested, customers' robot service adoption is motivated by the perceived usefulness and ease of use of the service robots (Shin & Jeong, 2020). In the same line, this study found that for some repetitive service tasks such as take-out-food delivery, check-in, etc., service robots were the preferred delivery mechanism over human employees because they were considered as the faster, more efficient, and convenient mode of service delivery, but also because they add fun elements when performing the service (Tuomi, Tussyadiah & Hanna, 2021). Previous research has emphasized modern hospitality consumers' increasing desire for convenience in service delivery (Tuomi & Tussyadiah, 2020). Indeed, quite a few respondents mentioned that they preferred to use service robots for take-out food delivery and hotel check-in. For instance, one respondent mentioned that "talking with a service robot could make me feel less bored when waiting for check-in (#11)". Another respondent said that "I think that being served by a robot not only can streamline the check-in process, but also enhance the overall interactions in the delivery process" (#14).

The third theme is driven by task-relevant value. Those customers place more emphasis on the task itself instead of the delivery mechanism. Service scenarios mentioned by participants mainly relate to service contexts such as room service delivery and luggage delivery. For

instance, one respondent mentioned their experience of room service delivery by a service robot. In that scenario, the participant clearly stated that “I don’t mind who finally provide the service as long as my food is efficiently delivered” (#8). Similar statement also came from another male respondent. He mentioned that “I don’t have a strong preference in terms of service provision mechanisms as long as they solve my problem” (#6).

The last theme is driven by utilitarian value, and is particularly relevant for late-night service, delivery of private belongings and items, and eliminating human contact. This group of respondents emphasize the functionality, usefulness, and fulfilment of basic service needs when service robots are used. Service robots can substitute human employees when they are not available, particularly late at night. However, this was perceived to come at the price of privacy, whereby respondents also expressed their concerns during their stay when served by service robots. One female respondent indicated that, “I don’t want human employees to serve me, particularly at night for security concern” (#12). Thus, for these customers, service robots could fulfill the basic service needs without a privacy invasion as a more preferred medium. Avoiding embarrassment is also an important factor in robotized service choice but less mentioned in previous work. As Generation Z customers tend to be more prone to experiencing social phobia (Ran, 2020), the presence of human employees can sometimes trigger feelings of embarrassment, while the adoption of service robots can minimize human interactions and consequently, reduce the feelings of embarrassment (Pitardi et al., 2021) while still fulfilling the service needs like delivery of private items. As put by one participant: “I only want to stay in a private space to enjoy my own time without talking with strangers, even the hotel staff” (#2).

## **5 Discussion**

Extant research has focused on service robots’ role in the broader service management context. However, little light has been shed on the specific hospitality and tourism service contexts where service robots outperform human employees and the factors that motivate the

choice, particularly with a focus on Generation Z tourists in China. According to our findings, service robots can replace human employees in certain types of service tasks, allowing human employees to focus on more complex and dynamic service encounters. Specifically, the results suggest that service robots are more preferred when executing routine tasks due to efficiency gains and ease-of-use. This echoes previous research which has found that service robots can both support and substitute human employees in service provision (Tuomi, Tussyadiah, & Stienmetz, 2020). Moreover, this study also suggests technology to play a key facilitating role in providing dynamic, always-available service. Leveraging what is dubbed as *nowness*, hospitality service managers looking to use emerging technology such as service robots should consider the value-added of using service robots alongside frontline service employees (Buhalis & Sinarta, 2019).

In terms of humanizing the appearance or behavior of service robots, prior research has found support for anthropomorphizing service robots to increase key behavioral outcomes such as willingness to pay or first-visit intention in service delivery contexts (Yoganathan et al., 2021). However, this study contradicts current literature and indicates that non-humanoid robots are more preferred for Generation Z tourist for hotel service. Moreover, gender differences seem to also exist in the preferred level of anthropomorphism for service robots as a service delivery mechanism, whereby females seem to be more hedonic-driven whereas males are more utilitarian-driven (Seo, 2022).

## **6 Conclusion and Implications**

### *6.1 Theoretical and Practical Implications*

This work contributes to the literature in four critical ways. *First*, this study provides a theory-driven understanding of robot service preference in tourism field. By integrating self-determination theory, this study has identified how different levels of hedonic and utilitarian values drive customers consumption of robot service. *Second*, this study identifies the service



scenarios and tasks in which service robots outperform human employees. Specifically, it explains the reasons when and where service robots should be adopted as a service delivery mechanism in tourism and hospitality industry, which has not been adequately documented in previous work. *Third*, this research focusses on a specific segment: Generation Z tourists in China, to figure out their technology preference when COVID-19 becomes a new norm. As suggested, different generational customer cohorts (e.g., Generations X, Y, and Z) tend to adopt different consumption behaviours. Considering the specific needs and wants of Generation Z customers is therefore important, as these may be quite distinct from other tourist segments. *Last*, unlike previous work on robot service preference, which is mainly based on either structural equation modelling or experimental design, this study captures the full extent of frontline service organizations by using a mixed method approach including two qualitative methods. The unstructured data helps to capture a more narrative view of how customers' choices towards service robots are motivated.

In line with the work of Kim et al. (2022), this study also offers proper design guidelines for promoting service robot applications in tourism industry. Given the customers' increasing willingness to adopt service robots, hotel managers should understand customers' service preferences and prioritize tasks between robots and human resources for a more efficient service, rather than simply look for a one-size-fits-all mode of operation. *First*, as Generation Z tourists tend to avoid interactions (Ran, 2020), the adoption of service robots as part of service delivery processes could be motivated by eliminating feelings of embarrassment to some extent. Hospitality service managers should carefully consider their customer base, particularly in relation to Generation Z, and where suitable, offer service robots as an alternative means of completing key touchpoints in the customer journey (Tuomi, Tussyadiah & Hanna, 2021). *Second*, robot manufacturers should also be aware of the differences of tourists' preferences for robot usage based on their gender or hedonic vs. utilitarian tendency. For tasks that satisfy people's hedonic consumption experience, service robot manufacturers

can add cute and non-humanoid features, while for tasks that satisfy people's utilitarian needs, a larger storage space and screen will be necessary.

## 6.2 *Limitation and Future Research*

As is always the case, the findings presented herewith come with limitations due to its exploratory nature. *First*, because of the exploratory nature of this study, the data interpretation is unavoidably subjective, therefore, the results can be confirmed by using a more rigorous research method. *Second*, this study only focuses on the preference of Generation Z customers in China in the hotel sector. As previously mentioned, differences may exist between Generation Z tourists in China and their counterparts in other countries and other service delivery contexts such as restaurants or attractions, or even different types of hotels in the same sector (e.g., budget or luxury). Future research should have a closer look at the difference between service robot user groups and service delivery contexts. *Last*, this study indicates that gender difference may exist in the preference of service robot's anthropomorphism level, however, this study fails to dig into the effect of gender differences on varying levels of anthropomorphic attributes (i.e., visual, vocal and verbal cues). Thus, future research should adopt experimental design and other quantitative methods to explicitly examine the interrelated effect of gender differences and different anthropomorphic attribute cues on customers' service delivery preference and most suitable scenarios for using service robots over human employees.

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