Research Article

Guests' Acceptance of Robotic Services in Kuching Park Hotel, Sarawak

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Abstract
This study investigates the factors influencing guests' acceptance of robotic services at the Kuching Park Hotel in Sarawak, highlighting the integration of technology in hospitality settings. The primary aim is to assess guests' perceptions and the effectiveness of robotic services in enhancing the guest experience. The study used a quantitative research design, collecting data from approximately 112 respondents through structured questionnaires. The analysis aims to comprehend guests' attitudes, satisfaction levels, and reservations about robotic services. The findings reveal significant insights into the acceptance levels of robotic services among hotel guests, identifying key drivers and barriers to adoption. The study contributes to academic and practical understanding by offering evidence-based recommendations for hoteliers considering implementing robotic services to improve guest experiences and operational efficiency. The implications of this research extend beyond the specific context of Kuching Park Hotel, offering valuable insights for the broader hospitality industry as it navigates technology integration into service delivery.

Keywords:
Robotic Services, Hotel Guests, Guest Acceptance, Hotel Industry, AI

1 Introduction

Frontline service organisations are increasingly introducing robots (McLeay et al., 2020). Robot technology has increased with improvements in artificial intelligence, sensors, computer vision, speech recognition, and other fields. Robots are becoming more intelligent, more mobile, and less expensive thanks to advancements in sensors, navigational systems, and machine learning for a broader range of services frequently performed in dynamic environments and call for the ability to navigate through congested and occasionally restricted areas (Collins, 2020). Consumer evaluation of hotel service robots by Tussyadiah et al. (2018) highlights the importance of knowing how customers will react to hotel service robots, given the trend of using artificial intelligence and robotics in tourism and hospitality operations. In the hotel industry, service robots create novel consumer interactions and service experiences (Kuo et al., 2017).

In the evolving landscape of the hospitality industry, the integration of robotics has become a prominent trend, driven by rapid advancements in artificial intelligence, sensors, and machine learning. These technological advancements have paved the way for the introduction of service robots to enhance customer interactions and experiences within dynamic service environments. The significance of understanding guest reactions to such innovations is underscored by studies like those of Tussyadiah et al. (2018), which emphasise the importance of consumer evaluations in adapting AI and robotics in hospitality settings. As service robots increasingly become part of the guest experience, their potential to offer personalised, efficient services is becoming a focal point of research, with scholars like Zhang et al. (2021) and Jörling et al. (2019) delving into the nuances of human-robot interactions within the tourism and hospitality sectors.

The impetus for this research is further strengthened by the unique challenges and opportunities presented by the COVID-19 pandemic, which has expedited the adoption of contactless and automated service solutions in the hospitality industry, highlighting the potential of robotics in ensuring health safety and operational efficiency. In this context, the Kuching Park Hotel in Sarawak emerges as an exemplary setting for this study. The hotel's pioneering adoption of robotic services in Malaysia offers a unique opportunity to explore guest acceptance in a real-world environment where traditional hospitality services are augmented by robotics. This setting reflects the broader industry's shift towards technological integration. It serves as a microcosm for examining the specific dynamics of guest interactions with service robots in a post-pandemic world.

Furthermore, the backdrop of labour shortages and operational challenges faced by the hotel industry, as described by sources like Jun (2022), underscores the relevance of exploring alternative service models that leverage robotics. The Kuching Park Hotel's initiative to incorporate robotic services represents a proactive response to these industry-wide challenges, making it an ideal research setting to investigate the implications of such innovations on guest satisfaction and acceptance. By focusing on the Kuching Park Hotel, this study aims to contribute to the emerging knowledge on integrating robotics in hospitality, offering insights that could guide future implementations across the industry. Through this research, the technical feasibility of

robotic services and the nuances of guest perceptions, preferences, and acceptance are explored, which are crucial for successfully integrating technology in enhancing the hospitality experience.

2 Literature Review

2.1 Overview of Guest Acceptance

The acceptance of service robots in the hotel industry is a multifaceted issue influenced by various factors, including perceived usefulness, ease of use, anthropomorphism, and cultural differences. A study by Said et al. (2023) integrates the Technology Acceptance Model 3 (TAM3) with the human aspects of humanoid service robots (HSRs), finding that perceived usefulness and ease of use are direct determinants of users' intentions to re-patronize HSRs. The study also highlights the importance of anthropomorphism, perceived intelligence, and safety in HSRs for their reuse.

Cross-cultural differences play a significant role in accepting service robots (Conti et al., 2015). For example, Eastern cultures, influenced by Buddhism and Confucianism, are more receptive to the idea that non-human entities, like robots, possess a spirit or mind. This contrasts with Western perspectives, where humans are seen as unique entities, making it harder for Westerners to treat robots as human-like. Cognitive differences between these cultures also influence how robots are perceived and interacted with; East Asians view robots as both competent and warm, whereas Westerners view them as competent but cold (Dang & Liu, 2021). In short, guest acceptance of new technology is critical because preferences are inferred from a guest's behaviour, perceptions and cultural background.

2.2 Overview of Robot Service

Service robots in the hotel industry can improve guest experiences, increase operational efficiency, and reduce costs. From the demand side, economically, hotel robots can help hotels cope with seasonal employment and labour costs (Zhong et al., 2020). They can provide 24/7 assistance, perform routine tasks such as delivering food and beverages, and handle check-in and check-out processes. The hospitality industry, struggling to survive and recover during the coronavirus disease 2019 (COVID-19) pandemic, is carefully resuming leisure services by gradually instilling contactless technology to deliver food using robots and bringing innovation at a "safe" distance and space. In short, service robots in the hotel industry can improve service quality and provide a safer experience for guests.

From the previous study, using robots in hotels has received greater attention from scholars. Thus, the number of studies investigating the use of service robots in the hospitality and tourism industry is significantly increasing (Ivanov et al., 2022). The Henn-na Hotel in Japan, which is fully run by automated humanoid robots, was the first hotel in the world to adopt robots in the tourism and hospitality sector (Chung-En, 2018). There are many examples regarding the use of robots in the hospitality and tourism industry

(Tung & Law, 2017), such as the use of robots as waiters instead of humans in a restaurant in China (Van-Doorn et al., 2017), a robotic bellboy in a hotel in the USA (Gretzel & Murphy, 2019), service robots as frontline employees (Wirtz et al., 2018), a robotic butler that delivers service to hotel guests (Tung & Au, 2018) and a keyless and cashless hotel in which robots provide all services (Ivanov et al., 2017). The literature on acceptance models is examined here to offer theoretical support for the suggested model to investigate guests' attitudes toward robots that deliver hotel services.

2.3 Research Hypothesis

2.3.1 The usefulness of service robots

There is comprehensive literature on the relationship between the usefulness of service robots and guest acceptance. The scientific literature repeatedly shows that when customers view a product or service as valuable, they are more likely to create favourable attitudes toward the development, especially in the computer-mediated world (Song & Kim, 2022). Consumers' acceptance or rejection of new technology is heavily influenced by usefulness, and usefulness requirements are essential in customers' adoption of service robots (Wirtz et al., 2018). Customers perceive whether service robots can provide accurate and efficient services as applicable (Song et al., 2022). As a result, users are likely to compare the usefulness of humanoid robots to that of human personnel, self-checkout, kiosks, and conversational agents like Siri and Alexa (Brengman et al., 2021). So, people's ideas about how helpful a service robot is will continue to change. In this way, it is important to figure out how valuable people think the current service robot is because that makes people want to interact with it. Therefore, the hypothesis is related:

H1a: Usefulness significantly influences customer acceptance

2.3.2 Ease of use service robot

Perceived usability refers to how simple consumers find it to utilise service robots (Song et al., 2022). During the service encounter between the customer and the service robot, perceived ease of use is the most important indicator for assessing the service process. However, perceived utility is the most critical signal for evaluating the service outcome (Park et al., 2021). In the experience service setting, customers can easily access pre-service information. In contrast, in the credence service setting, customers are more likely to need clarification about the ongoing interaction process with the service robot due to a lack of understanding of that setting; i.e., their perceived ease of use may be lower. In addition, it is typically more challenging for clients to assess the service outcome in a credible service environment after having experienced that service (Mitra et al., 1999). In other words, customers' perceived utility is higher in the experiential service \ setting. The hypothesis could be reframed as:

H1b. Ease of use significantly influences customer acceptance

2.3.3 Time-saving of service robot

The use of service robots in restaurants would be beneficial and improve service quality for the following reasons: supporting background tasks, freeing up time for human employees, standardising service quality, reducing service failures, not experiencing any physical and psychological issues (like getting tired, feeling bad, or getting sick); expanding service capacity; implementing the task correctly and on time; saving time and working faster; and being able to perform complex tasks (Seyitoglu et al., 2021). Customer happiness is the antithesis of service failure. Service failure can range from low quality to unpleasant manners to late delivery. Service robots will help hoteliers from a service failure, making them take time to solve that problem. Therefore, the hypothesis is as follows:

H1c. Time-saving significantly influences customer acceptance.

2.3.4 User-friendly service robot

Perceived user-friendliness of the service robot is the degree to which the user feels that using the service robot will be free from complexity and difficulties in terms of being easy to learn, operate, and comprehend, which is comparable to the perceived ease of use of the service robot (Kim et, al., 2014). The capacity of service robots to address consumers' social-emotional and relational requirements is crucial in consumers' adoption and perception of service robots since service robots may engage consumers on a social level, like human employees (Wirtz et al., 2018). Pieskä et al. (2012) acknowledge that a user-friendly service robot is simple to train simple to use, enables users to be effective in their jobs by eliminating mistakes, and, as a result, increases the users' happiness and overall work-life quality. The following theory is therefore proposed:

H1d. User-friendly service robots have a significant influence on customer acceptance.

3 Methodology

3.1 Research Design

A quantitative method was employed in this study to ensure the reliability of the results, with a structured questionnaire serving as the research instrument. Kuching Park Hotel in Sarawak was selected as the focus of this study due to its pioneering use of robotic services in Malaysia, including features like smart self-check-in, smart room access, smart room service, smart self-check-out, and smart dining experiences. The targeted demographic for this study consisted of guests who had experienced a stay at Kuching Park Hotel, Sarawak, specifically individuals aged 18 and older who voluntarily provided their responses. Online questionnaires were used for data collection, and the survey link was disseminated to the identified target respondents.

3.2 Instrument Development

In this research, the questionnaire has three (3) parts: robotic services experience, customer acceptance, and demographic. The sources of a questionnaire for robotic services experiences (12 items) and guest acceptance (4 items) were adapted from Stock and Merkle (2017b), Lin and Mattila (2021b) and Zhong et al. (2020b).

3.3 Sampling and Data Collection

In this study, a sample was drawn from the population of guests aged 18 to over 56 years who had experience staying at Kuching Park Hotel, Sarawak, within the past six months. Non-probability sampling, specifically convenience sampling, involved individuals who were readily accessible for participation. Surveys served as the primary method for data collection, with questionnaires as the main instrument. Online data collection was facilitated through Google Forms. The survey distribution commenced on 15 March 2023 and concluded on 10 June 2023, leveraging the social media platforms of Kuching Park Hotel, such as Facebook, TikTok, and Instagram, as the primary data sources.

The questionnaire was disseminated to a select group of customers via social media in collaboration with the hotel. Subsequently, the collected data were analysed, and a report of the findings was generated. One hundred twelve respondents, meeting the inclusion criteria, participated in the empirical analysis. These respondents were informed about the purpose and scope of the study, and their consent was secured before the commencement of study procedures. The selection of an appropriate and representative sampling frame was crucial to ensure the validity and reliability of the research outcomes.

3.4 Data Analysis

This research study analysed and verified the data using the Statistical Package for the Social Sciences Software (SPSS) to determine guests' acceptance of robotic services at the Kuching Part Hotel in Sarawak. After entering the raw data, demographic analysis, reliability analysis, normality test, Pearson correlation analysis, and multiple regression analysis were performed. Hypothesis testing was conducted to determine if the coefficients were statistically significant (Cohen et al., 2003), and the fit of the regression model was evaluated by examining the residuals and assessing goodness-of-fit statistics. The results of the regression analysis were interpreted, and conclusions about the relationships between the variables were drawn (Kuznetsov, 2010).

4 Findings

4.1 Demographic Background

Table 1 provides a snapshot of the participant's demographics, offering insights into the gender distribution, age groups, marital status, usage frequency of hotel robotic services, and monthly income ranges of the respondents in the study.

Table 1: Demographic information

Demographic Information		Frequency	%
Gender	Female	58	51.8
	Male	54	48.2
Age	19-25 years old	36	32.1
	26-35 years old	49	43.8
	36-45 years old	21	18.8
	46-55years old	5	4.5
	56 years old and above	1	0.9
Marital status	Married	37	33.0
	Married and have children	18	16.1
	Single	57	50.9
Frequency of use of hotel robotic service in a year	1 to 3 times	94	83.9
	4 to 5 times	16	14.3
	6 to 10 times	2	1.8
Monthly income (range)	MYR1,500 - 3,000	55	49.1
	MYR3,001 - 5,000	45	40.2
	MYR5,001 - 10,000	10	8.9
	More than MYR10,000	2	1.8

In terms of gender, 58 participants (51.8%) identified themselves as female, while 54 participants (48.2%) identified themselves as male. This distribution shows a nearly balanced representation of genders among the participants. The age distribution is as follows: 36 participants (32.1%) were between 19-25 years old, 49 participants (43.8%) were between 26-35 years old, 21 participants (18.8%) were between 36-45 years old, 5 participants (4.5%) were between 46-55 years old, and 1 participant (0.9%) was 56 years old and above. This indicates that the majority of participants were relatively young, with a significant concentration in the 26-35 age group, reflecting perhaps a younger demographic's interest or availability for the study.

Regarding marital status, 37 participants (33.0%) were married, 18 participants (16.1%) were married and had children, and 57 participants (50.9%) were single. These figures highlight diversity in marital status, with just over half of the participants being single. This variety in marital status could suggest differing personal circumstances that might influence the participants' responses to the survey questions. The participants were asked about their frequency of using hotel robotic services in a year. The majority, 94 participants (83.9%), reported using the service 1 to 3 times, 16 participants (14.3%) used it 4 to 5 times, and only 2 participants (1.8%) used it 6 to 10 times. This

overwhelmingly shows a low to moderate use of hotel robotic services among the participants, indicating that while there is engagement, it is not frequent.

The participants' monthly income was categorised as follows: 55 participants (49.1%) had a monthly income between MYR1,500 and MYR3,000, 45 participants (40.2%) had a monthly income between MYR3,001 and MYR5,000, 10 participants (8.9%) had a monthly income between MYR5,001 and MYR10,000, and 2 participants (1.8%) had a monthly income of more than MYR10,000. This income distribution suggests that the majority of participants fall within the lower to middle-income brackets, which could be reflective of the general population's income distribution or the specific demographic attracted to the study.

4.2 Pearson Correlation Analysis

Table 2 presents a Pearson's correlation analysis that explores the relationship between independent variables such as usefulness, ease of use, time-saving, and user-friendliness with the dependent variable, guest acceptance of robotic services. This analysis aims to measure the strength and direction of these relationships and provide insights into how different aspects of robotic services may impact guest acceptance in a hotel setting. According to Pallant (2016), the value of the correlation coefficient from .10 to .29 is considered weak, .30 to .49 is considered moderate, and .50 to 1.0 is considered strong.

Table 2: Pearson's correlation analysis

Independent variable	**Guest acceptance**	
	Sig.	**Pearson correlation**
Usefulness	0.00	0.75
Ease of use	0.00	0.50
Time-saving	0.00	0.41
User-friendly	0.81	-0.02

Note: Correlation is significant at the 0.05 level (2-tailed)

The table provides two key pieces of information - the significance level and the Pearson correlation coefficients. The significance level determines whether the observed correlations are statistically significant, with a threshold of 0.05 or less indicating significance. On the other hand, the Pearson correlation coefficient, which ranges from -1 to +1, measures the strength and direction of the relationship between two variables. A coefficient close to +1 indicates a strong positive relationship, while a value close to -1 signifies a strong negative relationship.

The analysis shows a strong positive correlation between perceived usefulness and guest acceptance, with a coefficient of 0.75 and a significance level of 0.00. This suggests that guests are more likely to accept robotic services if they perceive them as useful. Similarly, ease of use also shows a strong positive correlation with guest acceptance

(coefficient of 0.50, significance level of 0.00), suggesting that the simpler the robotic services are to use, the more acceptable they are to guests.

Time-saving, with a correlation coefficient of 0.41 and a significance level of 0.00, indicates a moderate positive relationship with guest acceptance. This implies that the ability of robotic services to save guests' time has a favourable but less pronounced impact on their acceptance compared to usefulness and ease of use.

However, the analysis finds that user-friendliness does not show a statistically significant relationship with guest acceptance, as indicated by a correlation coefficient of -0.02 and a high significance level of 0.81. This finding is interesting as it suggests that the user-friendliness of robotic services, as perceived by guests, does not significantly influence their acceptance. This could imply that factors such as the novelty of the technology or its effectiveness in performing service tasks might overshadow user-friendliness considerations.

These correlation results suggest that usefulness, ease of use, and time-saving positively affect guest acceptance. Hence, hypotheses H1a, H1b, and H1c in this study are accepted. However, hypothesis H1d is rejected because user-friendliness is not significantly associated with guest acceptance.

4.3 Multiple Regression Analysis

Table 3 shows the tolerance and VIF (Variance Inflation Factor) to measure the multicollinearity (Pallant, 2007). Tolerance is an indicator of how much of the variability of the specified independent is not explained by other independent variables in the model (Pallant, 2007). This study's tolerance value is between 0.48 and 0.78, not less than 0.20. Therefore, the value does not violate the multicollinearity assumption. This is also supported by the VIF value between 1.28 and 2.09, which is below the cut-off of 10. Hair et al. (2011) recommended that multicollinearity is a concern if the VIF value is higher than five and the tolerance value is below 0.20. Thus, multicollinearity is fine in this present study.

Table 3: Multicollinearity analysis

Variables	**Collinearity Statistics**	
	Tolerance	**VIF**
Usefulness	0.60	1.66
Ease of use	0.48	2.09
Time-saving	0.60	1.66
User-friendly	0.78	1.28

Tables 4 to 6 summarise multiple regression analyses of usefulness, ease of use, time-saving, and user-friendliness in predicting guest acceptance. The result showed that a combination of usefulness, ease of use, time-saving, and user-friendliness contributed 58% (R2 = 0.58) prediction on guest acceptance.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.76	0.58	0.57	0.41

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.00	4	6.00	35.98	0.00
	Residual	17.17	103	0.17		
	Total	41.17	107			

Table 6: Summary of multiple regression analysis

Variable	Unstandardised B	Standardised Beta	*T*	*p*
Usefulness	0.61	0.65	7.95	0.00
Ease of use	0.22	0.16	1.76	0.07
Time-saving	0.04	0.03	0.31	0.76
User-friendly	-0.15	-0.11	-1.54	0.13

Note: p < .05 (significant at the 0.05 level, 2-tailed)

The multiple regression model developed R2 = 0.58, F (4, 103) = 35.98, p = 0.00 for all four predictors. Only one predictor, usefulness (β = 0.65, p = 0.00), shows a significant value, indicating that the usefulness variable significantly affects guest acceptance. The unstandardised B coefficient of 0.61 indicates that for every unit increase in usefulness, guest acceptance is predicted to increase by 0.61 units. The standardised Beta coefficient of 0.65 suggests that usefulness is the strongest predictor among the independent variables, substantially impacting guest acceptance.

In summary, among the independent variables, usefulness is the most influential predictor of guest acceptance. It has a significant positive effect on guest acceptance. Ease of use (β = 0.16, p = 0.07), time-saving (β = 0.03, p = 0.76), and user-friendliness (β = -0.11, p = 0.13), on the other hand, show weaker or non-significant relationships with guest acceptance based on the provided regression analysis.

5 Discussion

5.1 The Relationship Between Service Robot Experience and Guest Acceptance

This study's first set of inquiries was used to identify its primary goal: to ascertain whether customers accepted service robots as useful. The question was designed to draw attention to the service robot experience, and it offered our respondents the chance to rate the statement about visitor acceptance on a scale from strongly agree to disagree strongly. Additionally, the discussion was predicated on Hypothesis 1, described below:

H1: Service robot experience significantly influences guest acceptance

H1a. Usefulness significantly influences guest acceptance

H1b. Ease of use significantly influences guest acceptance

H1c. Time-saving significantly influences guest acceptance

H1d. User-friendly significantly influences guest acceptance

Hypothesis 1 examines how customers experience the robot service in the Kuching Park Hotel in Sarawak, Malaysia. In particular, the primary concern is how useful, easy to use, saves time, and friendly the service robot is. The analysis shown in Table 4 highlighted that three service robot experiences significantly positively influenced guest acceptance. However, there is one service robot experience that did have a significant negative influence on guest acceptance. According to the findings, H1a is proven related ($p=0.00$), and the correlation showed a positive outcome ($r=0.75$). The result for H1b also supports the relationship based on the regression analysis ($p=0.00$), and the result proved a positive correlation ($r=0.50$). Time-saving also does have a positive influence on job offer decisions (H1c). This correlation ($r=0.41$) and regression analysis ($p=0.00$) support the hypothesis. The last dimension of the guest experience, H1d, has a positive significant value ($p=0.81$), and the correlation stated the negative correlation ($r= - 0.02$).

5.2 Theoretical Implication

The study presented in the manuscript contributes significantly to the existing knowledge on adopting technological innovations in the hospitality industry, particularly concerning robotic services. By integrating nuanced human-robot interaction dynamics, this research extends the Technology Acceptance Model (TAM) and offers a fresh perspective on the complex process of guest acceptance of robotic services. This study highlights the critical roles of perceived usefulness and ease of use in determining technology acceptance and the unique aspects of robotic interactions, such as anthropomorphism and cultural perceptions. The novel integration of human-robot interaction factors into technology acceptance theories enriches the theoretical framework. It opens up new avenues for future studies to explore the complex interplay between technological attributes and human perceptions in the context of service robotics.

5.3 Practical Implication

The practical implications of this study provide hoteliers and practitioners in the hospitality sector with insights on how to navigate the integration of robotic services. The study's findings on guest acceptance offer a strategic lens through which hospitality providers can tailor the deployment of robotic services to enhance guest experiences. Recognizing the importance of perceived usefulness and ease of use, hotel managers are encouraged to focus on these aspects when introducing robotic services. This could involve intuitive design features, clear communication of benefits, and seamless integration into the service flow to elevate guest satisfaction and acceptance. Moreover, the study's focus on cultural nuances in robot reception suggests a customized approach

to robotic service deployment, considering the diverse cultural backgrounds of guests. By considering guest perceptions and cultural sensitivities, this nuanced application of robotic services redefines service excellence in the hospitality industry, marking a new era of personalized, efficient, and culturally attuned guest experiences.

5.4 Limitation

This investigation encountered several methodological constraints. First is the Data Accessibility and Privacy Concerns. The reluctance of respondents to engage with the study was attributed to concerns over privacy, confidentiality agreements, and data ownership issues. This was particularly pronounced when data solicitation involved direct messaging, which was misconstrued as fraudulent by some respondents despite assurances of academic intent and confidentiality. The apprehension towards sharing information, compounded by the impersonal nature of digital communication, underscores the need for more robust strategies to establish trust and verify the legitimacy of academic inquiries.

Second is the Respondent Engagement and Survey Fatigue. The study further grappled with a pronounced lack of interest from potential respondents, attributed to survey fatigue and a general disinterest in the subject matter. This disengagement not only jeopardises the quantity of the data collected but also raises concerns about its quality and representativeness. The challenge of motivating participation and ensuring thoughtful, accurate responses necessitates innovative approaches to survey design, including the incorporation of engaging elements and the clear articulation of the study's value to the participants and the broader community.

5.5 Future Recommendation

The study examines the increasing use of robots in the hospitality sector, specifically at the Kuching Park Hotel in Sarawak, and how this affects guest acceptance and satisfaction. The study found that robots can transform hospitality by improving operational efficiency and guest experience. Future research should explore the dynamics of human-robot interaction in different hospitality settings, including guests' age, cultural background, and technological expertise. This will better understand how guests accept and respond to robotic services.

Further exploration is also needed to understand the impact of robots on human employment in the hospitality industry. The study suggests that robots could change the labour dynamics in the industry, so future research should investigate strategies for integrating robots and human roles. This could include examining training programs for staff to work alongside robots, understanding the impact on job satisfaction, and exploring new roles that may emerge from the increasing use of robots in hospitality.

6 Conclusion

The growing acceptance and interest in service robots among Malaysians, particularly among the younger, more technologically adept demographic, reflects the broader trend toward automation and digitalisation in various sectors. Similar to previous studies by Tussyadiah and Park (2018), this enthusiasm for service robots is seen as a means to enhance convenience and boost productivity, demonstrating a recognition of these technologies' utility to everyday life and work.

However, the conversation around integrating service robots is nuanced, encompassing concerns such as potential job displacement. This is similar to Acemoglu and Restrepo (2020), who highlighted the impact of automation and robotics on the job market. Despite these apprehensions, there is an understanding that the expansion of the robotics industry could also lead to the creation of new types of jobs, necessitating a shift in the skills workforce. Education and targeted awareness campaigns are crucial in shaping public perception and addressing misconceptions or concerns about service robots. These initiatives can help acclimate society to the benefits and challenges posed by these technologies.

The guest experience is pivotal in accepting service robots within the hospitality sector. Guests' perceptions of the value and utility of service robots are significantly influenced by their direct interactions with these technologies. Positive experiences can reinforce the perceived usefulness of service robots, enhancing their acceptance. Conversely, negative encounters can diminish their perceived value, hindering acceptance. Emotional and psychological factors further complicate this dynamic, as personal experiences, emotional connections, and psychological predispositions can profoundly impact how individuals assess the value of service robots. Goods or services that evoke positive emotional responses, align with personal goals, or enhance self-perception will likely be valued more highly.

In this context, understanding the diverse perspectives on service robots across different demographic segments—including age, education level, technological familiarity, and personal experiences—is essential for tailoring approaches to technology integration and acceptance strategies. This understanding can guide the development of more effective education and awareness campaigns and better design and deployment of service robots to meet the needs and expectations of various user groups.

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