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Smart hotel attributes and its effect on guest acceptance

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Abstract

In the era of rapid economic development, smart hotels rely on modern information technology, the Internet, big data, artificial intelligence, Internet of Things and other high-tech, and enter a period of rapid development. This has brought great convenience to people's travel life and contributed to economic development. An adapted instrument was used to 385 regular hotel guests, using a descriptive correlation approach. The findings revealed that the respondents agreed on smart hotel attributes especially with regards to the convenience and control; and agreed on the acceptance to the smart hotel especially with regards to the perceived usefulness. The result revealed that those who assessed interest, activities, and lifestyle as very true have higher assessment on smart hotel attributes and higher level of guest acceptance. The research results show that hotels should integrate these technologies to continuously meet the needs of guest experience and industry development, improve the environment for global tourism, and promote the development of China's tourism strategy. Hence, it was recommended that Smart Hotel Management may be promoted as an application of intelligent technology in the hotel industry. It can expand the source of customers, increase the market share through personalized and diversified services, and then establish the efficient and intelligent market image of the hotel, and enhance the core competitiveness.

Keywords: smart hotel, smart services, smart technology, attributes, guest acceptance

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1. Introduction

With the rapid development of modern information technology, high and new technologies such as the Internet, big data, artificial intelligence, and the Internet of Things have gradually penetrated all aspects of people's lives, bringing unprecedented convenience and speed to people's lives, and making people's lifestyle a reality. a huge change. The hotel industry is no exception. Smart hotels supported by emerging technologies such as the Internet, big data and artificial intelligence, with their efficient and intelligent management and services, not only meet the fast-paced work and life needs of today's society, but also realize consumption experience of high-tech. In recent years, the construction of smart hotels is in full swing. According to statistics, smart hotels across the country grow rapidly at a rate of 10%-15% every year, and quickly occupy the industry market, bringing a huge impact on traditional hotels and leading the development of the hotel industry today. direction.

Intelligent hotel refers to the integration of modern computer technology, communication technology, control technology, etc., committed to providing high-quality service experience, reducing labor and energy costs, and forming a new generation of hotels that are safe, energy-saving, efficient and comfortable (Guan, 2022). Intelligent facilities refer to automated and intelligent devices and equipment supported by high-tech, which are the basis of smart hotels, including intelligent check-in and check-out systems, hotel intelligent navigation systems, intelligent catering management systems, intelligent access control systems, and intelligent video. Under the control of the network and communication system, these intelligent facilities realize the intelligentization of hotel management and service functions. With its informatization and intelligence, smart hotels save operating costs to a certain extent, improve work efficiency and management level, and enhance the experience of intelligent services for guests. Compared with traditional hotels, there are many advantages and characteristics, but overall, It is still in the early stage of development, and there are still some problems that need to be improved and improved.

Lack of industry norms, construction and services are difficult to evaluate. Jin (2015) believes that the current situation of blind construction and lack of standards makes the hotel present a situation of complicated customer experience and difficult hotel operation and management. Smart hotels are new things in recent years, but there is neither unified construction norm, nor unified evaluation and measurement standards for intelligent facilities, intelligent management and intelligent services of smart hotels, which makes different hotel companies based on their own The understanding and construction ideas of smart hotels are carried out to carry out the construction or renovation of smart hotels, which leads to the wide variety of smart hotel facilities, uneven management level and service quality, which not only causes repeated development, serious waste of resources, but also leads to customer satisfaction with smart services.

Emphasis on facilities and light on services, lack of humanistic feelings. Pang (2018) believes that the ultimate core thinking of hotels must be oriented by consumer demand, with the purpose of enhancing customer stickiness and helping hotels maximize their benefits. At present, most of the smart hotel constructions are keen on new technologies and new facilities, and they emphasize brand promotion in marketing strategies, especially new and newly renovated hotels blindly pursue high-tech facilities and equipment upgrades. The core element of smart service. In addition, smart hotels replace manual services with intelligent and automated services, but it reduces the emotional and cultural exchanges between customers and service personnel. One of the important connotations of tourism is cultural and humanistic experience, which naturally leads to a decline in customer satisfaction and further It will lead to a decline in the attractiveness of smart hotels.

Convergence of facilities and services, lack of features. At present, most of the construction and management of smart hotels highlight intelligence, which leads to the convergence of smart hotels in terms of

infrastructure and services. Hotels are uniform in service and lack characteristics. Different hotels provide customers with similar experiences and poor customer experience, resulting in consumption. "Aesthetic fatigue" will affect the development of smart hotels in the long run.

The functional development of intelligent facilities is insufficient, and the input-output ratio is low. Wu (2016) believes that the operation of smart hotels is a huge and complex system, and the functions of smart hotels will be improved with the continuous development of information technology. Smart facilities are the largest investment in smart hotels. With the rapid development and replacement of high-tech, the investment in smart facilities continues to increase. At present, most hotel companies are blindly pursuing high-tech facilities in the construction of smart hotels, coupled with the lack of high-tech management talents, resulting in Insufficient development and use of high-tech facilities, resulting in waste of resources, low input, and output benefits. On the other hand, the marketing activities based on the intelligent platform are an important means for the hotel to deepen the communication, promote the purchase, and achieve high profits. However, due to the insufficient development of the intelligent facilities and the platform, the hotel has not made the intelligent management platform play the maximum function, which not only affects the platform promotion and application, and lead to low hotel efficiency.

The results of this paper show that Chinese consumers' acceptance of smart hotels is affected by the following aspects: intelligent attributes, human service quality, value attributes, catering attributes and hotel geographical attributes, while hotel infrastructure has no significant impact on customer satisfaction. The results of the dimension division of the attribute factors of smart hotels, and the conclusions on the influence of attribute factors of smart hotels on customer satisfaction, further enriched the theory of influencing factors of hotel customer satisfaction, and further optimized the attributes of smart hotels for smart hotel managers. Factors to improve customer satisfaction have certain enlightening significance, as well as promote social and economic development.

1.1 Objectives of the Study

This study aims to evaluate the Smart Hotel Attributes and its effect on Guest Acceptance in China. Specifically, it determined the smart hotel attributes in terms of convenience and control, maintenance, and safety, Untact environment and personalization; assess the level of acceptance of the guest to the smart hotel in terms of technology readiness, perceived ease of use and perceived usefulness; test the significant relationship of smart hotel attributes and guest’s acceptance.

2. Methodology

Research Design - The researchers used the descriptive correlation approach of the study that could describe data and characteristics about the population, or the phenomena being studied. The researchers employed a descriptive relevant research approach, by verifying the passengers who stayed in at different time periods, as it was the most appropriate way to determine the significant relationship between respondents on hotel occupancy and the impact effect of smart hotel customer occupancy. A standardized questionnaire was used using questions raised by the researchers and the impact of smart hotels on hotel occupancy. Descriptive correlation methods designed to measure the relationship between two or more variables.

Participants of the Study - The main respondents of the study are guest who were able to experience checking in a smart hotel. A Sample size of 385 guests was utilized in this study. Furthermore, researcher employs a random sampling technique. Simple random sampling is a basic sampling technique, where researchers select a group of subjects (one sample) from a larger population (one population) for research.

Research Instrument - The questionnaire was adopted from the study of Kim and Han (2020) titled Hotel of the future: Exploring the attributes of a smart hotel adopting a mixed-methods approach and Yang et al. (2021) titled How to enhance hotel guests’ acceptance and experience of smart hotel technology: An examination of

visiting intentions. The instrument underwent with validation and pilot testing. It was validated by Hongmei Li, a manager from Wenyuan hotel. In addition, the result of reliability statistics showed that the computed Cronbach's alpha value of 0.861 signifies that the instrument for smart hotel attributes has strong or excellent internal consistency as well as the questionnaire for level of guest acceptance with 0.847 which signifies good in the rule of thumb.

Data Collection Procedure **-** Researchers visited the hotel and provided questionnaires through the assistance of the Human Resource Department and endorsed to hotel staff and guests. The researchers applied for permission from the Hotel Administration for approval, and the survey was conducted on 385 guests through the questionnaire star mini program, which took a total of 20 days. After collecting all the data, the investigators analyzed the data to explain the respondent's appropriate response.

Data Analysis **-** The data gathered were tallied, interpret, and analyzed using different statistical tools. To present and describe the profile of the respondents, frequency, percentage distribution was used. While weighted mean and rank was used to determine the factors affecting smart hotel properties and guest acceptance. Furthermore, Kruskal Wallis was used for the non-parametric test and Pearson-r product moment correlation was used to test smart hotel properties and reception customer impact relationships.

Ethical Considerations **-** Ethical consideration is present in this research to maintain confidentiality with the responses and willingness of the respondents to participate in this study. This fully notifies the individual in the assessment of the evaluation. Participants must know the intent of the project, who or what organization is supporting it, how it will be used if its participation has potential adverse consequences, and if access to the outcomes is granted. People are free of pressure to participate in the assessment and do no harm. About the confidentiality, nobody may access identity information. Protection also guarantees that such information is removed from any study or written document.

3. Results and Discussion

Table 1 presents the assessment on smart hotel attributes in terms of convenience and control. The composite means of 4.09 indicates that the respondents agreed on the above indicators. A smart hotel would enable me to request and receive products/services conveniently got the highest mean of 4.16. It was followed by high-technology products and services available at a smart hotel seem to be convenient and would go through a simple process to operate high-technology products and services employed at a smart hotel.

Nowadays, the level of science and technology is getting higher and higher, and more and more new technologies are applied to real life, and the use of high-tech in smart hotels provides great convenience and control, allowing travelers to have a better living experience, adding It is fun and convenient when traveling, so the score is higher. The application of intelligent technology can maintain the stability of service quality and university quality. Through the application of intelligent technology, related work can be repeated according to hotel settings and customer instructions, and there will be no unstable problems such as omissions that may be caused by human beings, and the effect of explanation varies from person to person, and there will be no mistakes that may occur in manual introduction. Negative emotions such as boredom and resistance from routine work. Wang (2019) believes that "based on the use of robots in hotels, we find that in addition to hardware sales or rental sales models, smart data services and potential future business models are more valuable." The low-cost elevator control solution and the overall solution for new retail are affirmed. In addition to commercial service robots.

Meanwhile, items such as high technologies available at a smart hotel would enable me to hold a lot of control over requesting and receiving products/services regardless time and place (4.05), high technologies available at a smart hotel would enable me to hold a lot of control over requesting and receiving products/services what I wanted (4.04) and interactions with advanced technologies (e.g., AI speaker) and robots available at a smart hotel seem to be clear and understandable (4.00) rated the least.

Table 1

Assessment on smart hotel attributes in terms of convenience and control

Indicators	VM	VI	Rank
1. A smart hotel would enable me to request and receive products/services conveniently.	4.16	Agree	1
2. I would go through a simple process to operate high-technology products and services employed at a smart hotel.	4.12	Agree	3
3. High technologies available at a smart hotel would enable me to hold a lot of control over requesting and receiving products/services regardless time and place.	4.05	Agree	7
4. A smart hotel would enable me to be connected for assistance with no regard to time and place.	4.10	Agree	6
5. High-technology products and services available at a smart hotel seem to be convenient.	4.12	Agree	2
6. High technologies available at a smart hotel would enable me to hold a lot of control over requesting and receiving products/services what I wanted.	4.04	Agree	8
7. Interactions with advanced technologies (e.g., AI speaker) and robots available at a smart hotel seem to be clear and understandable.	4.00	Agree	9
8. Advanced technologies and robots employed at a smart hotel would offer the benefits of convenience.	4.11	Agree	4
9. High technologies available at a smart hotel would give me more control to process a check-in/out.	4.10	Agree	5
Over-all Mean	4.09	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

The high-tech applications of smart hotels can allow customers to get corresponding services in the fastest time and in different locations, which is more convenient and efficient. The use of intelligent robots has also made this idea a reality, so it is not surprising to have such a high score. However, because the intelligent hotel has certain technical support and operation technology in operation and service provision, the service may be terminated if it encounters a failure. Unlike manual services, which are simple and convenient, an intelligent hotel may not be able to let me It is easier to request and receive products/services, so it ranks lowest. Zou (2021) believes that the application of intelligent technology is less flexible than traditional human services in emergency handling. For example, in the case of a critical incident for a guest, due to the application of intelligent technology and the reduction of room service personnel, the response processing time of the hotel will increase, causing danger. Another example is that in the event of a guest slipping, sudden illness, etc., intelligent technology can only play an alarm function, and cannot take timely treatment measures like traditional manual services.

Table 2 presents the assessment on smart hotel attributes in terms of maintenance and safety. The composite means of 4.07 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is Advanced systems for hotel maintenance would be available at a smart hotel (4.25) followed by I would be immediately alerted and saved in case of any emergency at a smart hotel (4.12) verbally interpreted as agree. The high-tech application of smart hotel locks can indeed be smarter and more convenient than humans and can provide a more efficient environment and safer living conditions, so respondents agreed. Intelligent technology, such as cleaning robots instead of manual cleaning, is very convenient and fast. Humans need to clean with the naked eye, but robots can quickly identify harmful substances and dust through advanced technology, so the ranking is the highest.

Table 2

Assessment on smart hotel attributes in terms of maintenance and safety

Indicators	VM	VI	Rank
1. Harmful materials and dust would be easily detected and eliminated at a smart hotel.	3.85	Agree	5
2. I would be immediately alerted and saved in case of any emergency at a smart hotel.	4.12	Agree	2
3. High technologies employed at a smart hotel (e.g., door-lock by facial recognition) would provide a high level of security.	4.04	Agree	4
4. High technologies employed at a smart hotel would maintain good hygiene.	4.10	Agree	3
5. Advanced systems for hotel maintenance would be available at a smart hotel.	4.25	Agree	1
Over-all Mean	4.07	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Chen (2018) recognizes that guests are consumer services. Establish files for senior member customers, using intelligent information and communication technology, first identify the identity of guests, so as to understand their habits and hobbies, so that the hotel can provide guests with consumption services based on the information that guests know. The use of intelligent information and communication technology to provide guests with consumer services can not only allow guests to experience the mind of the hotel, but also increase the profit of the hotel.

Meanwhile, least on the rank is High technologies employed at a smart hotel would maintain good hygiene (4.10) followed by High technologies employed at a smart hotel (e.g., door-lock by facial recognition) would provide a high level of security (4.04) a Harmful materials and dust would be easily detected and eliminated at a smart hotel (3.85) verbally interpreted as agree. Although high-tech can provide face recognition and cleaning functions, it does not necessarily ensure complete safety and hygiene, and there is also the probability of face recognition failure, so these three rankings are low. If the hotel's intelligent system fails, it is likely to cause great obstacles like elevator failure, so it ranks the lowest. Zou (2021) believed that the shortcoming of smart hotels lies in the application of smart technologies, which cannot differentiate treatment for people with special needs, which is not conducive to the development of personalized services. For example, the voice room housekeeper has become a decoration for guests with language barriers; the camera of the guest room faces brushing system brings more embarrassment to the guests with leg disabilities, short stature, and facial disabilities.

Table 3

Assessment on smart hotel attributes in terms of Untact environment

Indicators	VM	VI	Rank
1. It would ease the burden of speaking with people I do not know.	4.03	Agree	1
2. At a smart hotel, I will be more relaxed without having interactions with humans (i.e., hotel associates).	3.85	Agree	3
3. At a smart hotel, no emotional exhaustion interacting with humans is anticipated.	3.48	Moderately Agree	4
4. At a smart hotel, my stay would be kept private and not disturbed by other people.	4.02	Agree	2
Over-all Mean	3.84	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Table 3 presents the assessment on smart hotel attributes in terms of maintenance and safety. The composite mean of 3.84 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is it would ease the burden of speaking with people I do not know (4.03) followed by at a smart hotel, my stay would be kept private and not disturbed by other people (4.02) verbally interpreted as moderately agree. Living in a smart hotel can indeed reduce the chances of communicating with people and improve the efficiency of work to a certain extent, and the private information of customers will be more confidential, so the ranking is high.

The application of intelligent hotel technology reduces the communication between people and stores the data in the informatization, which greatly prevents the exposure of personal information that may be caused by human reasons, and helps the privacy of customers, so it ranks the highest. Sun (2019) believed that high-quality service is the cornerstone of the hotel's survival. However, in the traditional hotel industry, problems such as high turnover rate, uneven talent quality, and emotional service personnel are not uncommon, and artificial intelligence just solves this problem. Hotel intelligent robots can accurately and accurately record guest check-in, personal preferences, guest history files, etc., reducing work errors caused by human factors; through the most accurate computing power, robots can insert various hotel concepts and activity promotions; Under the circumstances, artificial intelligence can greatly help the hotel to provide efficient and convenient services. Guests only need to rely on APP, smart card, or self-service robot at the front desk to complete the check-in and check-out automatically; way to provide customers with personalized services. Meanwhile, least on the rank is at a smart hotel, I will be more relaxed (3.85) and at a smart hotel, no emotional exhaustion interacting with

humans is anticipated (3.48) verbally interpreted as agree.

Whether you can be more relaxed in a smart hotel because of the reduced interaction with people depends on your personality, it has nothing to do with whether you live in a smart hotel, let alone emotional exhaustion. The communication between people in intelligent hotels is reduced. In the application of intelligent hotel technology, if a system failure or other reasons cause customers to check in or adapt to difficulties, the complicated operation may cause discomfort to customers. Li (2019) believes that after booking a hotel, guests can use their electronic ID card to check in on the mobile APP and then arrive at the hotel. Directly brush your face and take the elevator to the floor where the room is located and continue to use face recognition to open the door. In the room, guests can use the smart housekeeper to control the temperature in the room, TV, lighting, curtains, and other services, and can also use intelligent robots. If you want to go to a restaurant for dinner or go to the gym for a workout, you only need facial recognition, you only need to pay directly through the mobile app at checkout.

Table 4 presents the assessment on smart hotel attributes in terms of personalization. The composite mean of 4.06 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is at a smart hotel, my own likes/dislikes (e.g., music during an exercise or dining) would be well recognized and adapted during the stay (4.11) verbally interpreted as agree. If you live in a smart hotel, you will indeed get better services, such as those you like. The hotel can accurately grasp the preferences of customers and provide corresponding services, so it ranks the highest. Smart hotels can quickly and easily provide the kind of services that customers want, which is very popular with hotel customers.

Table 4

Assessment on smart hotel attributes in terms of personalization

Indicators	VM	VI	Rank
1. At a smart hotel, I would be able to use my preferred language to communicate with AI systems and robots.	4.02	Agree	3
2. At a smart hotel, my own likes/dislikes (e.g., music during an exercise or dining) would be well recognized and adapted during the stay.	4.11	Agree	1
3. At a smart hotel, my own preference of room arrangement (e.g., view from the room, floor) can be easily reflected through my profile in system	4.04	Agree	2
Over-all Mean	4.06	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Li (2019) believes that artificial intelligence technology represented by robots meets the needs of children and teenagers for novel and cool technology experiences. The intelligent voice control in the room, which uses voice control commands to create your own comfortable and exclusive space, is also generally welcomed by guests. In short, the technological experience of artificial intelligence has become an important means for many hotels to attract customers. Therefore, if the experience of artificial intelligence technology is lower than the guest's expectations, even if the robot cannot meet the needs of the guest, it will greatly reduce the satisfaction of the guest. Meanwhile, least on the rank is at a smart hotel, my own preference of room arrangement (e.g., view from the room, floor) can be easily reflected through my profile in system (4.04) followed by At a smart hotel, I would be able to use my preferred language to communicate with AI systems and robots (4.02) verbally interpreted as agree.

As for whether a smart hotel can provide customers' preferred language or room arrangement, and whether it meets their preferences, it is not the first consideration, so the ranking is naturally at the back. Commitment is the willingness to work hard in order to achieve a specific objective. Committing to continual development would necessitate all-out effort, time allocation, and even sacrifice. "Without involvement, there will be no commitment," remarked Steven Covey, and this is especially true in attaining a company's aim. The collaborative team effort begun by top management is required to foster deeper commitment, which will finally lead to the corporation's success (Borbon, 2019). Lei (2016) believed that in the new era of rapid change, people have changed from the pursuit of commonality to the pursuit of individuality, and hotel intelligence can carry out

"private customization" for guests. When guests book a hotel, they will relate to a professional intelligent robot. After entering the hotel, guests can use their smart cards to identify them. The rooms will be automatically set according to the guests' habits, and the guest's check-in information will be automatically obtained, and the guest's native language will be defaulted. For example, when a guest is resting outside, he is physically and mentally exhausted. Currently, there is an intimate room control system to serve him. Just say a word to it, and you can adjust to the most comfortable mode. In 2015, China's first fully intelligent the private custom hotel operates in Chengdu, Sichuan, and the one-card card covers all hotel businesses, truly realizing intelligent paperless check-in, intelligent access control, and intelligent guest rooms.

Table 5

Assessment on guest acceptance in terms of technology readiness

Indicators	VM	VI	Rank
1. I can usually figure out new high-tech products without help from others	3.83	Agree	3
2. I can keep up with the latest technological developments in my areas of interest	3.92	Agree	1
3. I enjoy the challenge of figuring out high-tech gadgets	3.86	Agree	2
4. I have fewer problems than other people in making technology work for me	3.80	Agree	4
5. In general, I am among the first in my circle of friends to acquire new technology when it appears	3.59	Agree	5
Over-all Mean	3.80	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Table 5 presents the assessment on Level of Guest Acceptance in terms of Technology readiness. The composite mean of 3.80 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is I can keep up with the latest technological developments in my areas of interest (3.92) followed by I enjoy the challenge of figuring out high-tech gadgets (3.86) verbally interpreted as agree. Many people living in smart hotels are interested in new technologies and are naturally interested in the achievements and challenges brought by the development of high-tech latest technologies, so the second and third items are ranked first. Sun (2019) believed that virtual portrait technology and biometric technology have become the forefront of the hottest topic in the hotel industry. At present, virtual portrait technology and biometric technology are still in the preliminary stage of exploration in China's owned hotel brands, but the development trend should not be underestimated. In addition to improving the hotel service quality and enhancing the customer experience, artificial intelligence also has a wide range of application prospects in the background of the hotel, such as human resource management and financial management.

Meanwhile, least on the rank is I can usually figure out new high-tech products without help from others (3.83) followed by I have fewer problems than other people in making technology work for me (3.80) In general, I am among the first in my circle of friends to acquire new technology when it appears (3.59) verbally interpreted as agree. However, people who live in smart hotels are not necessarily those who are talented in high-tech, new technology and other fields, so they are not necessarily better at technical issues, and they are ranked at the back. Sun (2019) believed that at the present stage, the unstable AI technology leads to weak guest experience and lack of repeated experience. Since the application of AI in the hotel industry is still in a novelty stage, the technical instability will reduce the customer experience effect. The service characteristics of the hotel itself determine that the new technology must have a high repeated reliability, even one in thousands of the failure rate, will bring great trouble to the hotel.

Table 6

Assessment on guest acceptance in terms of perceived ease of use

Indicators	VM	VI	Rank
1. The amenities of a smart hotel will be clear and easy to understand using the given instructions	4.00	Agree	1
2. The interaction with smart hotel amenities will require little effort	3.58	Agree	4
3. The amenities of a smart hotel will be easy to use	3.90	Agree	3
4. Desired information will be easily accessed to through smart hotel amenities	3.91	Agree	2
Over-all Mean	3.85	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Table 6 presents the assessment on Level of Guest Acceptance in terms of perceived ease of use. The composite mean of 3.85 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is the amenities of a smart hotel will be clear and easy to understand using the given instructions (4.00) followed by Desired information will be easily accessed to through smart hotel amenities (3.91) verbally interpreted as agree. The high-tech facilities of smart hotels are one of the important conditions for attracting customers to stay, and the clear and easy-to-understand instructions and information provided by high-tech equipment make customers feel comfortable and convenient to live in, so these two items come first. Li (2013) believes that the core technology that distinguishes smart hotels from general information systems or projects is cloud computing, Internet of Things, mobile communication technology and artificial intelligence, and it is the integration and integration of these four technologies that make smart hotels possible.

Lin (2018) believed that guests do not need to queue at the front desk, but only download the corresponding APP client. After paying the deposit and room fee, they can choose to switch the door by fingerprint, facial recognition or mobile phone client. This feature helps customers "flash up" without queuing at the front desk, especially during peak occupancy. It can not only reduce the labor expenses of the hotel, provide high quality and advanced services, but also ensure the safety of guests, avoid the risk of losing the room card, the wrong room card and the risk of sending the stolen room card, and is committed to providing worry-free, efficient, convenient and intimate service. Meanwhile, least on the rank is the amenities of a smart hotel will be easy to use (3.90) followed by The interaction with smart hotel amenities will require little effort (3.58) verbally interpreted as agree.

For those who are not familiar with these high-tech facilities, it is not necessarily easy to use, and sometimes there are some obstacles in communication or use, so these two items are ranked last. Sun and Li (2021) believed that although AI can improve the operational efficiency of hotels and provide standardized services, it is difficult to provide personalized services for guests. For example, in addition to checking in, leaving the front hall of the hotel, there is also a very important duty is to deal with customer complaints. This work is hard to address with AI. The complaining guests want to be respected, valued, and understood and comforted. Effective communication and emotional communication between people can help guests to relieve bad emotions and develop problem solutions, which the hotel industry calls a service remedy. Good service remedy can not only deepen the guests' good impression of the hotel, but also form a halo effect and improve the guest satisfaction.

Table 7

Assessment on guest acceptance in terms of perceived usefulness

Indicators	VM	VI	Rank
1. Smart hotel amenities will be effective	3.97	Agree	3
2. It will be convenient to stay at a smart hotel by using smart hotel amenities	4.00	Agree	2
3. My travel needs will be satisfied at a smart hotel by using smart hotel amenities	3.94	Agree	4
4. Overall, smart hotel amenities are useful	4.09	Agree	1
Over-all Mean	4.00	Agree	

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Moderately Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Table 7 presents the assessment on Level of Guest Acceptance in terms of perceived usefulness. The composite mean of 4.00 indicates that the respondents agreed on the above indicators. Among the enumerated indicators, highest on the rank is Overall, smart hotel amenities are useful (4.09) followed by It will be convenient to stay at a smart hotel by using smart hotel amenities (4.00) verbally interpreted as agree. The high-tech facilities of smart hotels are recognized by everyone, and the convenience and comfort brought to customers are undoubted. Secondly, the intelligent and novel experience brought by high-tech is also a point to attract customers, so these two are in the forefront. Intelligent hotel is a hotel with intelligent equipment and can realize intelligent functions. It can provide consumers with a more technological and more humanized customer experience. For example, customers who enter the store can automatically identify the smart card without any procedures; the guest room will be automatically set according to the guests' habits; the interactive TV system

and IP telephone system can automatically access the guest occupancy information, the default guest native language, etc.

Qian (2015) believed that now, customers can make an appointment online, confirm and pay the deposit through the online bank, they will receive the room number and the corresponding password and password. When a customer arrives at the hotel, they can open the room door through the password and login to the smart hotel system. When the door of the room opens, the system will automatically record the stay time, and charge the hotel according to this time. Meanwhile, least on the rank is Smart hotel amenities will be effective (3.97) followed by My travel needs will be satisfied at a smart hotel by using smart hotel amenities (3.94) verbally interpreted as agree.

And whether or not to live in a smart hotel is not a necessary condition for travel, and whether the high-tech facilities of the hotel will bring other effects to customers is not necessarily, so these two items are ranked at the bottom. Driven by the Internet, the future hotel services will bring greater convenience to the guests. With the concept of "Internet +", the hotel industry to break through the traditional terminal intelligence, upgrade the hotel occupancy experience and improve the experience of the hotel is the new change of the whole hotel industry in the "Internet +" era, and also a new driving force to gain new competitive advantages in the future. However, due to the economic conditions and personal preferences of customers all directly affect the selection of the hotel, because some passengers do not have to stay in the intelligent hotel, the ranking is low.

He and Huang (2019) believed that different from user experience design is that customer experience design emphasizes omni-channel, cross-channel experience, because customers in the process of using a service or product, is likely to not only contact a single contact, a channel, but in the unconscious through multiple contacts, and use the service across multiple channels.

Table 8

Relationship between smart hotel attributes and level of guest acceptance

Convenience & Control	rho-value	p-value	Interpretation
Technology readiness	.693**	0.000	Highly Significant
Perceived ease of use	.647**	0.000	Highly Significant
Perceived Usefulness	.744**	0.000	Highly Significant
Maintenance and Safety			
Technology readiness	.642**	0.000	Highly Significant
Perceived ease of use	.625**	0.000	Highly Significant
Perceived Usefulness	.769**	0.000	Highly Significant
Untact environment			
Technology readiness	.598**	0.000	Highly Significant
Perceived ease of use	.588**	0.000	Highly Significant
Perceived Usefulness	.650**	0.000	Highly Significant
Personalization			
Technology readiness	.670**	0.000	Highly Significant
Perceived ease of use	.673**	0.000	Highly Significant
Perceived Usefulness	.765**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 8 displays the association between smart hotel attributes and level of acceptance. It was observed that the computed rho-values indicates a very strong direct correlation and the resulted p-values were less than 0.01 alpha level. This means that there was a significant relationship exists and implies that the better the smart hotel attributes, the more that the guest accepted it. Hotels began to pursue the development of intelligence, the purpose is to provide consumers with thoughtful, convenient, comfortable, and satisfactory services to meet consumers' personalized and information-based service needs. Smart hotels have begun to rise. It has a complete intelligent system, relying on humanized hotel facilities, hotel management, hotel services, etc., using high-tech equipment, in the process of hotel informatization and intelligent construction, considering consumption. To meet the needs of consumers for hotels, smart hotels are committed to bringing more intelligent experiences to consumers.

Huang (2020) considers that the smart hotel's smart service is the key to its success. Based on the findings of study into the overall evolution of the hotel industry, it can be determined that the entire cognition of intelligent service for the hotel can be split into three levels: first, intelligent management; second, intelligent service. Second, there's smart management. Finally, there's command and control. The hotel's clever service is a complete manifestation of all three. In light of the major meaning of smart hotel architecture, we should strive for environmental preservation and emphasize the hotel's humanization in addition to the hardware of current technology.

With the development and progress of science and technology, hotels, as the carrier to provide personalized services for consumers, and their internal requirements are continuously enriched and extended. Wisdom hotel rely on big data such as new technology, using cloud computing, Internet of things and artificial intelligence technology, due to the changing consumer needs and habits, wisdom hotel broke the traditional hotel business model and service concept to improve management efficiency and user experience, this is undoubtedly the development trend of the future hotel industry.

There is an important relationship between the environment of a hotel and the acceptance of guests. Whether the hotel environment is hygienic, safe, convenient, comfortable, and whether the service method is convenient are all factors that guests consider when staying. The convenience and intelligence brought by smart hotels. The hotel's smart service is primarily intended to improve client experience and deliver more personalized treatment. As a result, the hotel's smart service is also a key driving factor in the development of a smart hotel. The author believes that hotel intelligent service can truly improve the customers' personal experience through intelligent management, management, and control, and that modern construction technology can also help the hotel provide a convenient, fast, safe, comfortable, and humanized service experience.

Smart hotel attributes have advantages that other hotels do not have in terms of convenience and control. The sense of experience and convenience brought by them are not found in other hotels. This unique style has a lot to do with the level of guest acceptance, and it is easy to attract some customers to choose for a long time live. Wang (2020) believes that the expectation gap refers to the customer's expectations before arriving at a smart hotel and after having a real experience with the smart hotel. The problem is that smart hotels and unmanned hotels use artificial intelligence smelting wisdom as a unique selling point for advertising, which causes the customer's expectation of artificial intelligence smelting wisdom to be too high, causing the customer's tolerance of smart hotel intelligence defects to be too low, affecting the customer's experience.

The attributes of smart hotels are very different from traditional hotels in terms of maintenance and security. Through the automatic identification information of technical machines, the risk of personnel flow is reduced, and the probability of the outbreak of the new crown is also reduced to a certain extent, effectively preventing hotel employees from taking advantage of their own rights. Bringing in foreign personnel will have a certain impact on the acceptance level of guests.

Because of its own special management and service methods, smart hotel attributes have some unique advantages, which can give full play to these advantages to carry out personalized management of hotels, thereby improving guest acceptance. The intelligent system design matches the five-star hotel. Smart hotels are complete, advanced, practical and economical. The intelligent system design is adapted to the actual situation of the project construction site. Intelligent system selection of equipment brand is the mainstream, mature, safe and reliable. Design according to the Grade A standard of intelligent building. Sun (2021) believes that front desk self-service station technology can achieve seamlessly connect with hotel management. Room status monitoring, report management, order management, membership management, etc., can be associated with the hotel PMS system to achieve effective data integration and management. Make management more large-scale and professional.

Finally, smart hotel product design with intelligent customer experience as the core is the primary task of the development of smart hotels. Hence, Luo (2015) believed that customers with the help of portable Internet

terminal system one-stop hotel stay, intelligent consumption, intelligent store interactive system such as intimate intelligent service is not only technology brings new feeling, but also can integrate into the concept of personalized service, is the premise to improve the quality of hotel service quality. Strengthen the development of intelligent systems to maximize benefits. Hotel enterprises should carry out construction and transformation according to the connotation of smart hotels, and should fully consider the actual needs of customers in the construction of intelligent facilities, avoid blindly pursuing high-tech, and more importantly, fully develop and utilize the functions of intelligent facilities, continuously strengthen product research and development, and continuously improve and optimize product functions. In particular, it should fully carry out the development and utilization of big data and artificial intelligence systems in intelligent management and marketing, timely construct major correlation factors and their interrelationships that affect hotel operations and profits according to market changes and customer needs, and formulate detailed marketing strategies and marketing plans to maximize hotel benefits.

4. Conclusion and Recommendations

4.1 Conclusion

- The respondents have varied on their interest, activities and lifestyle referring to their psychographic profile of the respondents.
- The respondents agreed on smart hotel attributes especially with regards to the convenience and control.
- The respondents agreed on the acceptance to the smart hotel especially with regards to the perceived usefulness.
- The result revealed that those who assessed interest, activities, and lifestyle as very true have higher assessment on smart hotel attributes and higher level of guest acceptance.
- A significant relationship exists and implies that the better the smart hotel attributes, the more that the guest accepted it.

4.2 Recommendations

- Hotel managers and decision makers may timely provide accurate information about the operation of each link of the hotel.
- Smart Hotel, to achieve true wisdom, intelligent facilities and smart services (the core is customer needs and experience) may be invest more on high technology, deeply excavate customer behavior habits, pay more attention to customer experience and needs.
- Smart Hotel Management may be promoted as an application of intelligent technology in the hotel industry. It can expand the source of customers, increase the market share through personalized and diversified services, and then establish the efficient and intelligent market image of the hotel, and enhance the core competitiveness.
- Smart hotels Management in terms of intelligent facilities and services, smart hotels may highlight the high degree of integration of science and technology, culture and nature according to the geographical factors, natural environmental and cultural factors of the hotel in the design and construction.
- Future researchers may conduct further study focusing on the influence of technology of smart hotel in their green practices of the hotel.

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