Assessment of Hotel Business Tools and Technologies Usage towards Guest Satisfaction in Tagaytay City, Philippines: Basis for an Excellent Service Provision

Lito Jr Luna Bajado

Graduate School The Philippine Women's University, Manila, Philippines

DOI: https://dx.doi.org/10.47772/IJRISS.2025.909000273

Received: 04 September 2025; Accepted: 11 September 2025; Published: 08 October 2025

ABSTRACT

This research investigated the impact of hotel business tools and technologies on guest satisfaction in Tagaytay City, Philippines, a rapidly growing tourist destination. Hotels globally are adopting technology to enhance guest experiences and satisfaction. Employing a convergent-parallel mixed-method approach, the study combined quantitative data from guest surveys and observational data on technology usage with qualitative insights from semi-structured interviews with hotel staff, managers, owners, and guests. Statistical analysis revealed a strong positive correlation between guest satisfaction and technology utilization. Guests particularly praised user-friendly interfaces and the high quality of information provided through technology, which enhanced access to accurate and up-to-date information, facilitated personalization, and fostered loyalty. However, the study also identified significant challenges, including inconveniences with booking systems, internet connectivity, and in-room technology, as reported by both guests and staff. These findings emphasize the critical need for continuous investment in staff training, technology upgrades, and seamless integration of various systems to prevent fragmented guest experiences. Ultimately, hotels prioritizing user-friendly interfaces, accurate information, and efficient service delivery through technology can significantly improve guest experiences and achieve a competitive edge in the evolving hospitality industry.

Keywords: Hotel Business Tools & Technologies, Guest Satisfaction, Information Quality, Service Quality, Technology Usage

INTRODUCTION

The global hospitality industry is undergoing a significant technological revolution aimed at enhancing guest experiences and driving satisfaction. This phenomenon is particularly evident in Tagaytay City, Philippines, a picturesque tourist destination known for its natural beauty and warm hospitality. As the city's tourism sector rapidly expands, drawing a diverse range of domestic and international visitors, competition among its numerous lodging options has intensified. To maintain competitiveness and meet the evolving demands of discerning guests, hotels in Tagaytay City must leverage cutting-edge tools and technologies.

The past decade has seen a transformative shift in hotel operations, with technology permeating every aspect of the guest experience, from online booking and smartphone check-ins to the adoption of artificial intelligence (AI) and Internet of Things (IoT) devices. This digitalization is not limited to luxury establishments; budget and upscale boutique hotels are also utilizing digital solutions to remain relevant. In a post-pandemic environment, the integration of technology has become even more critical, with increased importance placed on wireless communication and enhanced sanitary controls, such as contactless check-in, mobile room keys, and digital concierge services.

Assessing the effectiveness of hotel business tools and technologies in Tagaytay City is crucial for several reasons. Firstly, as a popular tourist hub, understanding how technology addresses the diverse needs of its visitors offers valuable insights for the broader hospitality industry. Secondly, with intensifying competition, technology enables hotels to offer personalized services that today's travelers increasingly demand, while also optimizing operations. Finally, effectively integrating various technological innovations into hotel operations

presents a challenge that requires in-depth investigation, including staff competency, system suitability, and financial implications. This research sought to clarify the complex relationships between the adoption of technology solutions and the subsequent increase in guest satisfaction, aiming to offer practical information and recommendations to stakeholders across the global hospitality environment.

The primary objective of this research was to evaluate the correlation between hotel business tools and technologies and guest satisfaction in selected hotels in Tagaytay City, Philippines. Specifically, the study aimed to answer the following questions:

1. What is the profile of the property in terms of years of operation, total number of rooms, total number of food outlets, and business tools and technologies being used?
2. What is the demographic profile of hotel employees in terms of age, gender, position, and years of hotel work experience?
3. What is the demographic profile of guest respondents in terms of age, gender, marital status, occupation, number of nights stayed, and frequency of stay?
4. What is the level of guest satisfaction in terms of information quality and system quality?
5. What is the level of usage of business tools and technologies by the respondents?
6. Is there a significant relationship between guest satisfaction and the business tools and technologies?
7. How do information quality, service quality, and usage of business tools and technologies affect guest satisfaction?
8. Based on the findings, what excellent service provision can be recommended?

The null hypothesis posited that there is no significant relationship between the usage of hotel business tools and technologies and guest satisfaction. The findings of this research are expected to benefit the Department of Tourism Region IV-A, Tagaytay City's Local Government Unit, the broader tourism and hospitality industry, hotel owners/managers, hotel employees, hotel guests, academic institutions, and future researchers by providing data-driven insights for strategic decision-making and continuous improvement in service delivery.

METHODS

Research Design

This study employed a convergent-parallel mixed-method research design to gain a comprehensive understanding of the dynamic relationship between hotel business tools and technologies and guest satisfaction. This design allowed for the simultaneous collection and analysis of both quantitative and qualitative data. The quantitative strand involved collecting data through guest surveys and observational data on technology usage to assess guest satisfaction ratings and identify correlations between specific technologies and satisfaction levels. The qualitative strand utilized semi-structured interviews with hotel owners, managers, staff, and guests to explore their experiences, perceptions, benefits, and difficulties regarding hotel business tools and technologies. The integration of these two data types aimed to bridge research gaps by offering an extensive perspective that considers both broad patterns and individual stakeholder interactions.

THEORETICAL FRAMEWORK

The research adopted the End-User Computing (EUC) Satisfaction framework. This framework provides a user-centric approach, shifting the focus from mere technology presence to its usability and user-friendliness from the guest's perspective. By emphasizing guest perception and interaction, EUCS helps identify pain points such as confusing booking systems or mobile applications that could hinder the guest experience. EUCS ensures technology functions as an enhancement tool, not a barrier, allowing for an understanding of the user experience and bridging the gap between technology adoption and guest satisfaction. Key antecedents of user satisfaction, as postulated by DeLone & McLean (1992), are information quality and system quality, representing the semantic and technical levels, respectively. Information quality is evaluated by attributes like content, accuracy, format, and timeliness, while system quality primarily encompasses ease of use.

CONCEPTUAL FRAMEWORK

The conceptual framework proposed hotel business tools and technologies usage as the independent variable, with guest satisfaction as the dependent variable. This framework suggests that the efficient use of technology leads to favorable experiences, which, in turn, result in guest satisfaction. The approach also incorporated information quality and service quality as mediating variables, dissecting how technology influences overall guest satisfaction through these factors. The ultimate product expected from this research is an "excellent service provision," providing strategic guidance to hotels on how to leverage technology for superior service and increased guest satisfaction.

Respondents and Sampling

The study's respondents were selected using a stratified sampling method from a diverse group of seven hotels in Tagaytay City: Taal Vista Hotel, Estancia Resort Hotel, Twin Lakes Hotel, Splendido, Nami Hotel, Hotel Casiana, and Tagaytay Country Hotel. This approach ensured representativeness by focusing on two main criteria: the number of employees per shift and the average number of guests daily.

- **Hotel Stakeholders (Employees):** A total of 65 employees across the seven hotels were identified, resulting in a recommended sample size of 56 hotel stakeholders. The distribution was: Tagaytay Country Hotel (7), Estancia Resort Hotel (4), Taal Vista Hotel (14), Nami Hotel (3), Twin Lakes Hotel (11), Splendido (9), and Hotel Casiana (8).
- **Hotel Guests:** A total population of 465 guests was noted, with a recommended sample size of 211 guests. The distribution was: Tagaytay Country Hotel (19), Estancia Resort Hotel (11), Taal Vista Hotel (59), Nami Hotel (4), Twin Lakes Hotel (46), Splendido (40), and Hotel Casiana (31).

Sample sizes were calculated based on a 5% margin of error and a 95% confidence level, with an assumed response distribution of 50%, utilizing Raosoft for determination.

Instrumentation

Primary data were collected using a mixed-method survey questionnaire consisting of Likert-scale questions and open-ended questions. The questionnaire was divided into three parts:

- **Part I:** Respondents' Profile: Gathered demographic information for properties (years of operation, number of rooms/food outlets, technologies used), hotel employees (age, gender, position, work experience), and guests (age, gender, marital status, occupation, number of nights, frequency of stay).
- **Part II:** Business Tools and Technologies: Assessed guest satisfaction in terms of Information Quality (accuracy, ease of location, timeliness, comprehensiveness, trustworthiness, clarity, relevance, consistency, personalization, overall enhancement) and System Quality (user-friendliness, navigability, responsiveness, technical issues, security, access speed, overall enhancement, intuitive interface, reliability, efficiency). It also evaluated Technology Usage (familiarity with features, confidence in using apps/websites, knowledge of in-room tech, adaptability to new features, active exploration, understanding utilization for enhancement, frequency of use, overall understanding). A 5-point Likert scale was used for these sections (Strongly Agree/Very Familiar to Strongly Disagree/Not Familiar).
- **Part III:** Interview Questions: Consisted of open-ended questions for hotel owners/managers, staff, and guests, delving into objectives, benefits, effectiveness, challenges, daily interactions, training, issues, perceptions, and suggestions for improvement.

The self-made questionnaire underwent validation by industry professionals and academicians to ensure its validity and reliability. The Instrument Validity was confirmed by significant values surpassing the 0.05 threshold, with correlations ranging from 0.909 to 0.980, indicating strong relationships between responses and intended constructs. Reliability Statistics showed excellent internal consistency, with Cronbach's alpha values of 0.978 for Information Quality, 0.962 for System Quality, and 0.926 for Technology Usage.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue IX September 2025

Data Gathering Procedure

The data gathering procedure utilized a methodical process under the convergent-parallel design. Approval was requested from the selected hotels in Tagaytay City. Quantitative data were collected via a structured questionnaire administered through Google Forms. Respondents were given the option to scan a QR code or receive an email link. Eligibility criteria included being at least 18 years old, having prior hotel stay experience, and having used business tools and technologies of the selected hotels. Consent forms, explaining research objectives, confidentiality, and anonymity, were presented, and participation was voluntary. Qualitative data were collected concurrently through interviews or open-ended survey questions. Data collection ensured real-time response monitoring and a high retrieval rate.

Statistical Treatment (Quantitative Strand)

A descriptive correlational research strategy was chosen for the quantitative data to understand associations between variables without manipulation. This design is consistent with previous research evaluating technology adoption's influence on service-related outcomes in hospitality. The statistical treatment involved a multifaceted approach, integrating measures such as weighted mean, standard deviation, and Spearman's rho correlation, alongside frequency and percentage analysis. Frequency and percentage analysis provided a qualitative description of response distribution, while the weighted mean emphasized perceived importance. Standard deviation measured agreement/disagreement among participants, adding statistical strength.

Data Analysis (Qualitative Strand)

An analytical-qualitative research approach was used, aligning with the convergent parallel design and thematic analysis to delve deeper into the "why" behind the data. The widely recognized Braun and Clarke's thematic analysis was employed for qualitative data, offering an adaptable, rigorous, and analytically rich structure to uncover complex frameworks of guest experiences with hotel business tools and technologies. After separate analyses, both qualitative and quantitative data were rigorously integrated and interpreted to triangulate results and provide a well-rounded understanding of technology's influence on guest satisfaction.

Ethical Considerations

To ensure ethical conduct, strict confidentiality was maintained by omitting all respondent identities from the final report. Respondents were informed of their rights and responsibilities under the Data Privacy Act of 2012, and their agreement to the consent form indicated their voluntary participation and understanding of confidentiality and anonymity protections. The researcher adhered to the facts discovered during the research, avoiding personal interpretations or judgments in the conclusions.

Results

The data gathered from 56 hotel stakeholders and 211 hotel guests in Tagaytay City revealed key insights into property profiles, respondent demographics, guest satisfaction levels, technology usage, and the relationship between these factors.

Property and Respondent Profiles

- **Years of Operation:** A majority of hotel stakeholders (39.3%) worked in properties with 1–5 years of operation, suggesting a contemporary approach to technology, though potentially with limited established standards. Conversely, 33.9% worked in properties with 16–20 years of operation, indicating a blend of newer and more established hotels.
- **Total Number of Rooms:** Most participants (35.7%) operated in establishments with 50 rooms or fewer, while 7.1% were in properties with 151–200 rooms, highlighting the diverse scale of hotels in Tagaytay City.
- **Total Number of Food Outlets:** The highest percentage of participants (35.7%) worked in properties

with 4 or more food outlets, suggesting a focus on diverse dining options that can enhance guest experience but also increase operational complexity.

- **Business Tools and Technologies Used:** The Property Management System (PMS) was the most frequently used business tool (32%), underscoring its essential role in hotel operations and efficiency. Online Booking Engines (16.8%) and Mobile Applications (14.4%) were also widely used. The Electronic Menu was the least used technology (1.6%).
- **Hotel Employees' Age:** The majority of hotel stakeholders (58.9%) were aged 22-27 years old, indicating a workforce generally considered technology-comfortable, likely in entry-level positions.
- **Hotel Employees' Gender:** The employee sample was predominantly female (55.4%).
- **Hotel Employees' Position:** The most represented position was Front Desk staff (14.3%), highlighting their pivotal role in guest interaction and the use of hotel business technology like PMS.
- **Hotel Employees' Work Experience:** Most participants (58.9%) had 6 to 10 years of hotel work experience, suggesting an optimal blend of operational knowledge and adaptability to new technologies.
- **Guest Age:** The largest group of guests (39.8%) was aged 21-25 years old, a demographic known for its tech-savvy nature and preference for digital integration in travel.
- **Guest Gender:** The guest sample was predominantly female (60.7%).
- **Guest Marital Status:** A significant majority of guests (79.1%) were single, suggesting greater travel flexibility and a need for tailored marketing strategies focused on unique experiences and social opportunities.
- **Guest Occupation:** The largest occupational group among guests (22.3%) was business owners, indicating the importance of the business traveler segment and the need for hotels to cater to their specific requirements like reliable internet and efficient check-in/out.
- **Guest Number of Nights Stayed:** Most guests (62.1%) stayed for 2–4 nights, indicating a moderate duration of interaction with hotel services and technologies.
- **Guest Frequency of Stay:** The highest percentage of guests (41.7%) reported staying "sometimes," while only 4.3% reported staying "always," highlighting diverse staying habits and the need for hotels to understand varying levels of familiarity with their technologies.

Level of Guest Satisfaction

- **Information Quality:** Guests were "Very Satisfied" with the information quality provided by hotel business tools and technologies, with an overall mean score of 4.357 (SD=0.807). The ease of locating information, its relevance, and its ability to enhance the overall experience received the highest ratings (mean ~4.42).
- **System Quality:** Guests were also "Very Satisfied" with the system quality, yielding an overall mean score of 4.329 (SD=0.770). The user-friendliness of hotel technologies received the highest satisfaction rating (mean = 4.42, SD=0.749), emphasizing the importance of intuitive design.
- **Technology Usage:** Guests reported being "Very Familiar" with the technology offered by hotels, with an overall mean score of 4.249 (SD=0.826). They demonstrated a good understanding of how to utilize technological features (mean=4.37), but familiarity with *various* technological features was slightly lower (mean=4.07), suggesting a need for better communication about available technologies.

Relationship between Guest Satisfaction and Business Tools and Technologies

A strong positive correlation ($\rho = 0.626$) was found between guest satisfaction (encompassing information quality and service quality) and the level of usage of business tools and technologies in hotels. With a p-value of 0.000 (less than α=0.01), the null hypothesis was rejected, confirming a significant statistical relationship. This indicates that as guests' familiarity and interaction with these technologies increase, so does their overall satisfaction.

Impact of Information Quality, Service Quality, and Technology Usage on Guest Satisfaction (Qualitative Themes)

Qualitative analysis revealed several key themes:

- **Theme 1. Information Accuracy for Guests:** Accurate information about hotel amenities, convenient online booking platforms, and clear reservation details are crucial for enhancing guest satisfaction. Manager/Owner 1 highlighted the benefit of complete information (restaurant, pool, souvenir shop) and competitive pricing communicated through booking. Manager/Owner 2 emphasized the "ease of information, ease of access" and real-time reservation visibility.
- **Theme 2. Ease of Understanding for Guests:** Clear, user-friendly technology interfaces are paramount, especially for guests working remotely, ensuring accurate and easily accessible tools for transactions. Guest 1 confirmed a "very clear" and "hassle-free" booking experience on one hotel's website. Manager/Owner 3 noted that guest familiarity with tools leads to more bookings.
- **Theme 3. Timeliness:** Speed and easy access facilitated by business tools are critical for service delivery and overall guest satisfaction. Staff 4 emphasized that quick service, like bill-out after 1 minute, prevents complaints. Guest 1 praised the "very user friendly" website and "very fast check-in process".
- **Theme 4. Availability for Guests' Personalization:** Technology integration serves as a guide for building rapport with returning guests, gathering information for tailored product/service suggestions, and extending service personalization. Manager/Owner 3 stated that systems make it easier for returning guests. Manager/Owner 4 noted that systems help gather guest information for offers and that "personalization of service is also one of the main factors why our guests love to keep coming back here".
- **Theme 5. Reliability for Operational Efficacy:** Reliable technology streamlines operations, reduces staff workload, and addresses human limitations, particularly in room monitoring and staff communication. Manager/Owner 1 mentioned technology for marketing (e.g., WiFi, Netflix). Manager/Owner 4 stated that systems "minimize the workload of your staff". Staff members confirmed that tools like Symphony and Opera simplify tasks such as monitoring arrivals/departures, room status, and managing details. Manager/Owner 4 added that the system remembers if a guest has stayed before, aiding human limitations.
- **Theme 6. Service Integration:** Automated operations offer convenience and speed compared to traditional methods, facilitating booking, addressing requests, and enhancing tech accessibility. Staff 2 and 7 highlighted the helpfulness of technology for guest booking and monitoring reservations in advance. Staff 7 noted immediate addressing of guest concerns through technology. Guest 1 reported a smooth experience with hotel services, including WiFi access and key cards.
- **Theme 7. Rating:** While overall service was rated as "satisfactory or fair" (Guest 2: "6 over 10 if tungkol sa technology"), satisfaction was often linked to the completeness of technology integration. Staff 1 indicated that complete technology integration satisfied guests.
- **Theme 8. Inconveniences:** Despite satisfaction, challenges included functionality issues (booking system errors, payment system hiccups, internet connectivity problems, intercom malfunctions), user-friendliness problems (room technology malfunction, difficulties operating automated amenities), and user experience concerns (work delays for guests, outdated technology). Guest 3 provided several detailed accounts of encountering booking errors, payment system glitches, unreliable Wi-Fi, and confusing in-room technology.
- **Theme 9. Business Tools and Technologies:** Limitations: Further limitations included operational capability (shifting modes, incomplete instructions), cost considerations, technology adaptation (newness of conversion, gradual transition, other priorities), training resources (extemporaneous learning, OJT, supervisor-only guidance), hardware/software concerns (WiFi, PC/OS malfunction, payment integration), and human errors (overlooked tasks due to verification failures).

DISCUSSION

The findings of this research provide compelling evidence for a strong positive correlation between the utilization of hotel business tools and technologies and guest satisfaction in Tagaytay City. This aligns with the

premise that technology serves as a major factor in shaping the modern guest experience. Guests' high satisfaction with information quality (mean 4.357) and system quality (mean 4.329) directly supports the End-User Computing (EUC) Satisfaction framework, which emphasizes usability and user-friendliness as crucial for positive user perception.

The qualitative data provided rich context for these quantitative results. Information accuracy, ease of understanding, and timeliness emerged as pivotal aspects of information quality, enhancing the guest experience by enabling informed decisions and reducing frustration. Similarly, the availability of personalization options and the reliability of operational efficacy were strongly linked to system quality, fostering guest loyalty and repeat business by creating tailored and efficient service delivery. The ability of systems to guide bookings, offer personalized suggestions, and streamline staff workflows (e.g., room monitoring, reservations) directly contributed to guests feeling valued and efficiently served. The observed "Very Familiar" level of technology usage (mean 4.249) further reinforces that guests are increasingly comfortable incorporating digital tools into their hotel experience, particularly the younger demographic (21-25 years old) who are technology natives.

However, despite the overall high satisfaction and familiarity, the study unveiled several critical areas for improvement, largely captured under the themes of "Inconveniences" and "Limitations of Business Tools and Technologies." Guests and staff reported issues with booking and payment systems, internet connectivity, and the complexity or malfunction of in-room technology. These challenges highlight that while technology offers immense potential, its effective implementation requires continuous attention to functionality, user-friendliness, and constant updates to avoid outdated systems. The perceived cost of new systems, challenges in technology adaptation (e.g., gradual transitions, resistance to change), and inadequate staff training resources were also identified as significant barriers. The qualitative feedback underscores that even with advanced tools, issues like Wi-Fi unreliability or confusing interfaces can significantly detract from the guest experience, leading to work delays or frustration.

The implications for hotels in Tagaytay City are clear. To maintain and enhance their competitive edge, hotels must not only invest in cutting-edge technology but also ensure its seamless integration, user-friendliness, and reliability. The emphasis on staff training is paramount, as proficient employees can effectively leverage technology to deliver superior service and troubleshoot common issues, thereby preventing fragmented guest experiences. Furthermore, the findings suggest a need for hotels to understand and cater to the nuanced preferences of their diverse guest demographics, especially the tech-savvy younger travelers and business owners who expect highly functional and personalized digital services. The transition towards "smart hotels" that balance traditional hospitality with modern technological advancements is crucial for the industry's future.

CONCLUSION

This research definitively established a strong positive correlation between the usage of hotel business tools and technologies and guest satisfaction in Tagaytay City, Philippines. Guests expressed high satisfaction with both the information quality and user-friendliness of hotel technologies, recognizing their multifaceted role in enhancing the overall experience. Key contributions of technology include access to accurate and current information, intuitive interfaces for broad accessibility, and personalized experiences that cultivate loyalty and repeat business.

However, the study also underscored areas requiring diligent attention. Inconveniences related to booking systems, internet connectivity, and in-room technology were noted challenges for both guests and staff. These findings highlight the critical need for continuous investment in staff training, technology upgrades, and the seamless integration of various systems to ensure a cohesive and positive guest experience.

In essence, technology has become an indispensable cornerstone of guest satisfaction in the modern hospitality industry. Hotels that strategically prioritize user-friendly interfaces, accurate information provision, and efficient service delivery through technological solutions can significantly elevate guest experiences and secure a competitive advantage. As the industry continues to evolve, future-oriented hotels are poised to embrace cutting-edge advancements such as AI-powered personalization, augmented reality experiences,

voice-controlled interfaces, and biometric authentication. These innovations promise to usher in an era of hyper-personalization, seamless interaction, and unparalleled convenience, fundamentally revolutionizing the hospitality landscape.

RECOMMENDATIONS

Based on the research findings, the following recommendations are provided for hotels in Tagaytay City to

improve guest satisfaction through strategic technology implementation:

1. **Prioritize User Experience and Staff Training:**

   - Invest in Intuitive Interfaces: Select technologies with user-friendly interfaces that are easy for guests of all technical abilities to learn and navigate.
   - Focus on Accessibility and Multilingual Support: Consider technologies that cater to guests with disabilities (e.g., screen readers) and offer interfaces in multiple languages for international visitors.
   - Provide Clear Instructions: Develop clear and concise user guides or tutorials for guests on how to effectively use hotel technologies.
   - Comprehensive Staff Training: Regularly train staff on all implemented technologies, covering functionality, troubleshooting common guest issues, and leveraging technology for personalized service. Establish ongoing support, including refresher courses and resources for new technologies or updates.
   - Cross-training: Cross-train staff on various technologies to ensure consistent guest support.

2. **Ensure Accurate and Real-Time Information Delivery:**

   - Data Accuracy and Real-Time Updates: Implement robust systems to ensure all information delivered through technology platforms (websites, mobile apps, in-room devices) is accurate, up-to-date, and reflects real-time data, especially for room availability, menus, and event schedules.
   - Personalized Information: Explore technologies that enable personalization based on guest preferences, such as recommending activities or restaurants tailored to their interests.

3. **Strategies for Seamless Technology Integration:**

   - Centralized Management System: Invest in a central management system that integrates various hotel technologies (Property Management System, Point-of-Sale, mobile app) to streamline operations and improve data exchange.
   - API Integration: Utilize open Application Programming Interface (APIs) to enable seamless communication and data exchange between different technologies.
   - Standardized User Interface: Strive for a consistent user interface across all digital touchpoints (website, app, in-room devices) for a more intuitive guest experience.

4. **Embrace Future-Oriented Technologies:**

   - AI-Powered Personalization: Utilize guest data to personalize experiences, such as automated room adjustments based on preferences and hyper-targeted service recommendations.
   - Augmented Reality (AR) Experiences: Offer virtual tours of rooms and hotel amenities using AR, allowing guests to explore nearby attractions and book activities through interactive AR destination guides.
   - Voice-Controlled Interfaces: Implement voice-activated systems for controlling room temperature, lighting, and making service requests, enhancing convenience and accessibility.
   - Biometric Technology: Implement contactless check-in/out, secure room access, and personalized payment options through biometric technology.

- Enhanced Room Features: Add phone service instructions, integrate smart TVs and tablets, offer various connection speed options, and consider virtual reality for entertainment and transportation booking services.
- Integrated Mobile Apps: Develop comprehensive mobile applications for check-in/out, activity booking in nearby places, and overall smart room control.

5. Continuous Improvement and Feedback Loop:

- Regular Guest Feedback: Actively solicit guest feedback on their technology experiences to identify
  areas for improvement and ensure technology evolves with expectations.
- Maintain Backup Systems: While embracing technology, maintain traditional/manual operations as backups to ensure continuity in case of technological glitches.

By implementing these recommendations, hotels in Tagaytay City can leverage technology to create exceptional, personalized, and efficient guest experiences, thereby strengthening their competitive position in the dynamic hospitality market.

REFERENCES

1. (PhD), P. O. (2023). Cashless payment system on financial inclusion in Nigeria. INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS, 06(10). https://doi.org/10.47191/ijmra/v6-i10-30
2. Abad, J. S., & Alonsozana, V. M. (2020). Faith tourism in Tagaytay City: Basis for destination marketing. International Journal of Research - GRANTHAALAYAH, 7(11), 195-206. https://doi.org/10.29121/granthaalayah.v7.i11.2020.353
3. Abdullah, O., Sufi, T., & Kumar, S. (2023). Service quality perspective and guest satisfaction in food and beverage outlets of five-star hotels of Delhi-NCR. Technology and Social Transformations in Hospitality, Tourism and Gastronomy, 67-78. https://doi.org/10.1079/9781800621244.0006
4. Ahmed, J., Talukdar, A., Khan, M. M., & Ahmed, A. (2021). MiStay: Web-based hourly hotel accommodation service. Tourism Review. https://dx.doi.org/10.1177/20438869211053015
5. Al-Hyari, H., Al-smadi, H. M., & Weshah, S. R. (2023). The Impact Of Artificial Intelligence (Ai) On Guest Satisfaction In Hotel Management: An Empirical Research Of Luxury Hotels. Geographica Pannonica. https://dx.doi.org/10.30892/gtg.482spl15-1081
6. Alicia, A. P., & Tj, B. I. (2023). Peranan Front Desk Agent dalam Memberikan Pelayanan Kepada Tamu di Ascent Premiere Hotel and Convention Malang. DOI: 10.47134/pjpp.v1i1.1898. https://doi.org/10.47134/pjpp.v1i1.1898
7. Anderson, E. W., & Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. Marketing Science, 12(2), 125-143.
8. Ayyildiz, T. (2020). Otel Yöneticileri Bakiş Açisiyla Deneyim Modülleri Ve Deneyim Boyutlari. Experience Modules and Experience Dimensions from the Perspective of Hotel Managers. https://dx.doi.org/10.15295/BMIJ.V8I3.1586
9. Bharwani, S., & Mathews, D. (2021). Techno-business strategies for enhancing guest experience in luxury hotels: a managerial perspective. Worldwide Hospitality and Tourism Themes. https://dx.doi.org/10.1108/WHATT-09-2020-0121
10. Bhatt, S., Dani, R., Girsa, D., Kuksal, R., Joshi, K., & Gupta, A. (2022). Uses of social media and computer technologies for guest satisfaction and recommendation analysis using machine learning in hotels industries. 2022 7th International Conference on Computing, Communication and Security (ICCCS). https://doi.org/10.1109/icccs55188.2022.10079660
11. Buhalis, D., & Sinarta, Y. E. (2020). Digital transformation in the tourism industry: E-tourism and smart tourism during and after the COVID-19 pandemic. Tourism Review, 75(4), 798-812.
12. Buhalis, D., Leung, R., & Law, R. (2011). E-Tourism: Information Technology for Strategic Tourism Management. International Journal of Hospitality Management, 30(2), 350-362.

13. Chen, A., Wen, B., & Huang, C. (2020). Investigating Guest Preferences for Technology Usage in Hotels. Journal of Hospitality and Tourism Technology, 12(3), 251-265.
14. Cheong, F., & Law, R. (2023). Human employees versus robotic employees: Customers and hotel managers' perceived experience at unmanned smart hotels. https://dx.doi.org/10.1080/23311886.2023.2202937
15. Foteva, M. (2020). Modern Changes In Hotel Service. https://dx.doi.org/10.36997/TC2020.641
16. Gursoy, D., & Chi, C. G. (2020). Impact of COVID-19 on guests' attitudes toward technology adoption in hotels. Tourism Management Perspectives, 36, 100722.
17. Hwang, K. M., & Kim, Y. J. (2019). The adoption of POS systems in hotels and their effects on operational efficiency and guest satisfaction. International Journal of Hospitality Management, 81, 92-103.
18. Jaimes, J., Erdem, M., Chen, C., & Doyle, W. (2019). An Assessment of Generation Z's Preferences for Guest-Facing Hotel Technologies.
19. Kim, J. W., & Jeong, M. Y. (2019). The impact of in-room technology adoption on hotel guest satisfaction and loyalty. International Journal of Hospitality Management, 80, 302-312. https://doi.org/10.1016/j.ijhm.2018.12.008
20. Kozmal, H. (2020). The Effect of Applying Technology at the Guest Room on the Guest's Choice of the Hotel: Applied to Luxor & Aswan Governorates' Hotels. https://doi.org/10.21608/jaauth.2020.48020.1087
21. Lal, A. K., & Rathore, D. (2022). A new era for instant billing and enhance business- Utilization billing software (POS/PMS). NOLEGEIN Journal of Information Technology & Management. https://doi.org/10.37591/njitm.v5i1.853
22. Lončar, J., & Čerović, S. (2023). The Factors Influencing Overall Guest Experience In Hotels In Southeast Europe. TEME. https://dx.doi.org/10.22190/teme220318009l
23. Mwangi, Z. M., & Kaluyu, V. (2023). Hotel and Manager Characteristics and Technology Orientation Strategy. The Tides Journal, 5(3). https://dx.doi.org/10.59952/tuj.v5i3.293
24. Nurulloevich, S. A., & Oh, H. (2022). Budgeting practices of Korean tourist hotels: Comparison of upscale hotels and budget/mid-priced hotels. Journal of Tourism Sciences, 46(1), 191-208. https://doi.org/10.17086/jts.2022.46.1.191.208
25. Özen, I. A., & Katlav, E. Ö. (2023). Aspect-based sentiment analysis on online customer reviews: case research of technology-supported hotels. Journal of Hospitality and Tourism Technology. https://dx.doi.org/10.1108/jhtt-12-2020-0319
26. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64(1), 12-40.
27. Peng, W., & Zhang, M. (2020). Is personalized service no longer important? Guests of smart hotels may have other preferences. Journal of Service Science and Management, 13(03), 535-557. https://doi.org/10.4236/jssm.2020.133035
28. Prasetya, R., & Nugraha, Y. (2023). Pembuatan Dan Sosialisasi Pemanfaatan Sistem Informasi Untuk Hotel Harris Vertu. Creation and Socialization of the Use of Information Systems for the Harris Vertu Hotel. https://dx.doi.org/10.30998/ks.v1i3.1282
29. Rusman, J., Romiger, R., & Gallaran, F. B. (2022). Aplikasi Reservasi Pantan Toraja Hotel. Infinity Journal. https://dx.doi.org/10.47178/infinity.v2i1.1687
30. Sakunthala, A. (2023). How many businesses use CRM software to enhance customer interactions? Advances In Management, 16(3), 38-42. https://doi.org/10.25303/1603aim038042
31. Sigala, M. (2020). Business models and technology in the COVID-19 era. International Journal of Information Management, 102192.
32. Szymanski, T. (2023). A software-defined deterministic Internet of things (IoT) with artificial intelligence (AI) for quantum-safe cyber-security. https://doi.org/10.36227/techrxiv.22349290.v1
33. Wang, Y., & Lee, C. K. (2018). The use of IoT in hotels to improve the guest experience. Journal of Hospitality & Tourism Management, 39, 1-11.
34. Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of hotel review websites in terms of user-generated content and platform features. Journal of Hospitality & Tourism Research, 41(2), 222-243.

35. Yakovleva, D. M. (2023). Experience in the use of smart technologies in the hotel industry. https://dx.doi.org/10.33920/igt-2-2309-04
36. Yıldırım, Y., & Okatan, D. (2023). Otel İşletmelerinde Kullanılan Endüstri 4.0 Uygulamalarının Müşterilerin Hizmet Kalitesi Algılamalarına Etkisi. The Effect of Industry 4.0 Applications Used in Hotel Businesses on Customers' Perceptions of Service Quality. https://dx.doi.org/10.54282/inijoss.1275753
37. Yousif, M., Hassell, L., & Pantanowitz, L. (2022). Impact of COVID-19 on the adoption of digital pathology. Digital Innovation for Healthcare in COVID-19 Pandemic: Strategies and Solutions, 95-107. https://doi.org/10.1016/b978-0-12-821318-6.00018-9
38. Zhang, W., & McLellan, A. (2020). Less searching, more reading: How AI-enhanced discovery tools can help researchers stay current. https://doi.org/10.26226/morressier.5f5a04c62c3338b5c13cd033