

# Revolutionizing Hotel Room Comfort: Leveraging Google Nest Intelligent Systems to Improve Guest Experience

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## ABSTRACT

Technological advances have brought significant changes to the hospitality industry, especially in efforts to improve guest comfort and experience. One of the latest breakthroughs is the use of intelligent systems such as Google Nest to manage the hotel room environment, making it a Smart Hotel Room. This research aims to discuss how the use of Google Nest has revolutionized hotel room comfort and substantially improved the guest experience. Google Nest enables hotels to manage energy efficiently, regulate room temperature, and provide guests with a more personalized experience. We'll discuss some of the benefits of using Google Nest for hotel room comfort, such as better temperature control, better energy management, better security, and integration with property management systems to increase operational efficiency. This research approach uses qualitative methods through analysis of various journals. The results of this research demonstrate a better understanding of how intelligent systems like Google Nest have revolutionized hotel room comfort and substantially improved the guest experience. With thoughtful and innovative implementation, hotels can continue to leverage this technology to create better lodging environments in the future.

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## 1. INTRODUCTION

In terms of trends, the second generation of Google Nest is now available in Indonesia. Google Nest is Google Assistant technology that can speak in Indonesian is one of the one advantage of Google Nest. Google Nest brings many hardware, software, and artificial intelligence (AI) improvements as the successor to Google Home devices. Google Nest functions include listening to news, setting alarms, timers, agenda reminders, and answering user questions. A number of Indonesian users reported that they can use Indonesian to communicate with their regular Google Nest.

The author has an idea/idea to analyze the unresearched benefits of developing research related to hotel rooms using Google Nest. With this smart hotel room/smart hotel room, it is hoped that it will be able to provide a future view as a controller of a smart hotel room system that can be applied in real life in daily life. With the help of Google Nest, the design of this smart hotel room is

part of the Smart Hotel system. Some hotels today use electronic devices in their rooms, which allow customers to manually turn the TV on and off via the remote. Often, electronic equipment switches are installed in different rooms from other rooms, which leads to less efficiency due to having to push switch buttons throughout the room.

Therefore, Google Nest Hub is one of the devices that uses voice commands to control the guest room. Nest Hub's built-in voice assistant makes the hands-free experience easier and smoother for every guest. Positive impact of using Google Nest for hotel rooms: guests can easily control amenities without using a remote or other touch device, improve guest comfort, and increase innovation in health protocols by reducing contact or touch with furniture that can cause the virus. The negative impact of using this device is that it is flammable if exposed to heat and damage the device if placed not following the instructions provided.

With this problem, the main goal of the author is to conduct research on the use of smart hotel room systems (Smart Hotel Room) by using Google Nest as a voice command without manual operation. The use of Google Nest has been tested in several hotels in Indonesia and is considered very efficient as an automatic controller.

## 2. RESEARCH METHOD

The method carried out for this study is a qualitative method. The research technique used in this journal is qualitative descriptive. This descriptive qualitative approach was chosen by the author because the author wanted to comprehensively understand the benefits of *the Google Nest* intelligent system. The data used is secondary data, which is data obtained indirectly through various media. Data was taken from intermediary media in the form of journals by reading 15 journals in 2019-2023 specifically with the topic "*Google Nest*". The writing of this journal uses qualitative analysis techniques by reading and analyzing data. The results of the analysis of this journal are in the form of a reckonative description.

## 3. RESULTS AND DISCUSSIONS

Based on the results of the journal's research observations, Google Nest Hub works with hotels to provide the ability to record voice and turn it into commands that allow visitors to access hotel facilities without touching their hands. During the Corona pandemic, tourists must be careful and disciplined in following health protocols. Tourists try to reduce physical contact in public places, including in hotels. Some hotels have touchless features with amenities, such as elevators and room doors. Many people still fail to use that technology. According to Travel and Leisure, Google work with these hotels to provide Google Nest Hub in every room. With this device, guests can make room service requests, view restaurant hours, request information about the hotel, and even set up lighting in the room through voice.

Guests can also have special requests. Set an alarm schedule and ask for extra towels, for example. This Google Nest Hub can also be used by guests who want to enjoy entertainment. In addition, guests can connect the app with Bluetooth on their phones. With all these advanced features, guests' identities will be safeguarded. The Google Nest Hub doesn't have a camera, and people who use it don't need to sign up. In addition, Google ensures that no sound is stored, and the microphone feature can be enabled or disabled. The results of the study show that the use of Google Nest intelligent system in hotel rooms has brought significant changes in the hospitality industry, especially in improving guest comfort and experience. The following are the main results found in this study:

### **Comfort and Better Temperature Regulation**

With its smart thermostat, Google Nest improves the comfort of hotel rooms. This thermostat can learn the energy usage patterns and temperature preferences of guests, allowing for more efficient and personalized temperature settings. With the ability to automatically adjust the temperature according to the guest's preferences, hotel rooms become more comfortable and pleasant to live in. Google Nest helps reduce complaints about uncomfortable room temperatures and better comfort. This increases guest satisfaction levels, which can improve the hotel's reputation and strengthen guest loyalty.

### **Easy Interaction and Better User Experience**

Additionally, smart systems like Google Nest make it easier to interact and improve the guest experience. Using voice commands or a mobile app, guests can easily control different parts of the room without the hassle of searching for buttons or switching between devices. This convenience enhances the overall impression of a luxurious and modern hotel room. Smart systems like Google Nest strive to make the user experience simple and easy to understand. With an easy-to-use interface and clear navigation, guests from different backgrounds can quickly understand and use the features. The use of Google Nest not only improves the visitor experience but also improves the efficiency of using hotel facilities. Temperature setting

Automation and easier controls allow hotels to manage resources and energy consumption more efficiently, reduce operational costs, and increase environmental value. It helps reduce the distractions that guests may experience during their hotel stay by providing easier interaction and a better user experience. Its easy-to-use and intuitive features allow guests to focus on the activities they want, increasing overall satisfaction levels.

### **Enhanced Security and Privacy**

Google Nest also provides an integrated security system to improve the security of hotel rooms. With connected security cameras, hotel staff can monitor important areas, improving guest safety. In addition, these smart devices have strict privacy policies, making visitors feel safe during their stay. Google Nest smart devices have the ability to detect suspicious or unusual events, such as unanticipated movement or fires. Thus, hotels can improve the safety and protection of guests by taking preventive measures or responding quickly to emergency situations. Google Nest helps hotels manage their facilities and rooms more efficiently and securely. This includes the use of reprogrammable digital locks to monitor door access, and activity log logging to keep track of people entering and exiting the room.

### **Personalize the Guest Experience**

Intelligent systems have the ability to customize the visitor experience, which is one of its great advantages. Google Nest can remember guest preferences, such as temperature settings and recommendations for activities around the hotel, so that each guest can have a hotel experience tailored to their needs and desires. Smart systems like Google Nest can change the ambiance of hotel rooms according to the preferences and needs of guests. For example, guests can ask for a calm and relaxed atmosphere to relax after a busy day or a cheerful and vibrant atmosphere to celebrate a special moment. Hotels can use the data collected by Google Nest to provide room service that is more tailored to their guests' needs. For example, visitors can order their preferred food or beverage before arriving, or they can request room service tailored to their dietary preferences or allergies. Personalize the guest experience with Google Nest helps increase guest satisfaction and strengthen their loyalty to the hotel. By feeling valued and cared for, guests are more likely to have a more positive stay experience and return to the hotel for their next visit.

### **Energy Efficiency and Sustainability**

In addition, the use of smart systems such as Google Nest brings environmental benefits. Hotels can significantly reduce energy use with automatic temperature regulation and more efficient energy management. This not only reduces the hotel's operating costs but also reduces the carbon footprint. Google Nest has an energy monitoring feature that allows hotels to monitor and analyze their energy usage. This data can help hotels find areas where they can make improvements to reduce energy use and improve overall efficiency. Hotels can reduce operational costs in the long run by improving energy efficiency. While initial investment in technology like Google Nest may be necessary, large reductions in energy and operational costs will be seen over a longer period of time, resulting in a significant return on investment for hotels. Hotel adoption of smart technology like Google Nest can help the sustainability of the hospitality industry as a whole. Hotels that lower energy consumption and improve their operational efficiency can set an example for others and help drive the industry towards greener practices.

### **Improving Competitiveness and Hotel Image**

In general, the use of smart systems such as Google Nest gives hotels a competitive advantage. Hotels that use this technology have a greater chance of attracting more customers due to their reputation as providers of contemporary, comfortable, and safe stay experiences. This enhances the hotel's image as an innovative place that pays attention to guest and environmental demands. Hotels created by Google Nest may appeal to technology customers, such as millennial visitors and young professionals. This can help hotels expand their market share and attract new customers who are looking for a stay experience that suits their preferences and lifestyle. Google Nest can provide a positive experience in a hotel room, which can lead to positive testimonials from guests. This testimony can improve the hotel's reputation and increase the number of recommendations guests give to others, which in turn increases the hotel's appeal to subsequent guests. The use of smart technologies such as Google Nest can also help hotels with sustainability practices; they can reduce their environmental impact and make a positive contribution to environmental conservation, which can improve their image and reputation.

Therefore, intelligent systems like Google Nest have started a major revolution in hotel room comfort and guest experience. These innovations are helping the hospitality industry as a whole, transforming how hotels operate and interact with guests. Implementing smart systems like Google Nest in hotel environments faces a number of challenges that need to be overcome in order to be successfully implemented. One of the main issues is ensuring that Google Nest can be integrated with the hotel's existing technology infrastructure. This includes ensuring that Google Nest is compliant with the property management system (PMS), existing hardware, and has the necessary internet and network connectivity. To implement Google Nest, hotel employees need technical skills and an understanding of intelligent systems. They also need to be given adequate training to ensure they can operate and maintain the system properly and help guests take advantage of its features. The use of Google Nest intelligent systems in hotel rooms improves the guest experience and operational efficiency of the hotel. Hotels can improve the lodging environment with better temperature control, better energy management, a more customized guest experience, and improved security. However, there are a few things to keep in mind when using this smart system. First and foremost, hotels must ensure that guest privacy is protected, so they must ensure that the use of guest data and information is well maintained. Nonetheless, installing a smart system may require a high initial cost, but it will ultimately be profitable in the long run. With these things in mind, Google Nest's intelligent system is expected to continue to raise the standard of comfort, efficiency, and security in the hospitality industry, improve the guest stay experience, and drive the growth of the hotel business.

### **4. CONCLUSION**

From this study, the conclusion is that the use of intelligent systems such as Google Nest in hotel rooms has improved the guest experience. This technology can help hotel rooms give guests more control and personal comfort. Factors such as automatic temperature setting, customized lighting, and the ability to easily access information and services through smart devices have improved guest satisfaction and improved the stay experience. Additionally, the adoption of this technology provides hotels with the opportunity to improve operational efficiency and provide services that can be tailored to guests' personal preferences. Therefore, the implementation of intelligent systems such as Google Nest has taken the hospitality industry in a more innovative direction and focused on a better guest experience, as well as changing the way hotel rooms look comfortable. Key benefits of using Google Nest Hub in hotels include: With its smart thermostat, Google Nest learns guests' energy usage patterns and preferences, providing more efficient and personalized temperature settings. Guests can control different parts of the room using voice commands or a mobile app, making interaction easier and improving the overall user experience. Google Nest provides an integrated security system, with connected security cameras and strict privacy policies, making guests feel safe during their stay. It can remember guest preferences, allowing for a more customized hotel experience, thereby increasing guest satisfaction and loyalty. Hotels can significantly reduce energy use through automatic temperature regulation and more efficient energy management, thereby lowering operational costs and reducing carbon footprint. Hotels that adopt smart technology like Google Nest

can attract more customers, improve their reputation, and contribute positively to environmental conservation.

By implementing Google Nest Hub, hotels can improve guest comfort, user experience, security, and energy efficiency while improving their competitiveness and sustainability.

## REFERENCES

- Angkasa, E. K., Oktavio, A., & Wijayadne, D. R. (2023, March). THE INFLUENCE OF THE INTERNET OF THINGS AND EXPERIENCE ON GUEST REVISIT INTENTION ASTON INN JEMURSARI HOTEL SURABAYA. *Journal of Hospitality Management*, Vol. 9, No. 1.
- Dalgic, A., & Birdir, K. (2020). Smart Hotels and Technological Applications.
- Guo, Q. (2022, September). Research on the Challenges and Countermeasures of Smart Hotel Management Based on Big Data Technology.
- Han, D., Hou, H. C., Wu, H., & Lai, J. H. K. (2021, April). Modelling Tourists' Acceptance of Hotel Experience-Enhancement Smart Technologies. *Sustainability*.
- Herlian, E., & Wardani, A. P. (2024, January). Application of Smart Home System in Residential Houses. *Journal of Technoscience*, Vol. 04.
- Izza, S., & Styawan, S. A. (2023, January). Miniature Smart Home Based on Internet of Things Using Google Nest. *Journal of Electrical Engineering*, Vol. 6 | No. 01.
- Kim, J. J., Lee, M. J., & Han, H. (2020, October). Smart Hotels and Sustainable Consumer Behavior: Testing the Effect of Perceived Performance, Attitude, and Technology Readiness on Word-of-Mouth. *International J. Environ. Res. Public Health*.
- Koo, B., Curtis, C., Ryan, B., Chung, Y., & Khojasteh, J. (2023, September). Psychometric approaches to exploring the characteristics of smart hotel brand experiences: Scale development and validation. *International Journal Of Hospitality Management*, Volume 56.
- Mikolaj, D. (2020). The concept of a smart hotel and its impact on guests' satisfaction, privacy and the perception of the service quality.
- Nam, K., & Dutt, C. S. (2021, October). The adoption of artificial intelligence and robotics in the hotel industry: prospects and challenges. Volume 31.
- Putri, R. N. P., Situmorang, R., & Mehrotra, A. (2023, September). HUMANS vs ROBOTS: THE APPLICATION OF SMART TECHNOLOGY IN THE HOTEL INDUSTRY. *Journal Management and Entrepreneurship*, 25 (2).
- Sapatnekar, A., & Raman, R. (2023, November). Smart Hotel Room Management with IoT for Guest Counting and Service Personalization.
- Stylos, N., Fotiadis, A. K., Shin, D., & Huan, T.-C. T. (2021, September). Beyond smart systems adoption: Enabling diffusion and assimilation of smartness in hospitality. *Journal Of Hospitality Management*, Volume 98.
- White, C., & Gilmore, J. N. (2022, October). Imagining the thoughtful home: Google Nest and logics of domestic recording. Pages 6-19.
- Yang, H., Song, H., Cheung, C., & Guan, J. (2021, August). How to enhance hotel guests' acceptance and experience of smart hotel technology: An examination of visiting intentions. *International Journal Of Hospitality Management*, Volume 97.