

# Hospitality 2024

Neuroscience and Technology  
Enhance the People Experience in  
Hotels

Worldwide report on the technological  
development of hotels and the perception  
of neuroscience as a new market trend.

# HOSPITALITY 2024

The implementation of a People Experience focused on employee happiness and satisfaction results in a positive impact for both the guest and the overall sustainability of the hotel.

This report demonstrates that the importance of People Experience in hotels is crucial to achieving sustainability, because it improves the guest and employee experience: a satisfied employee contributes directly to overall operational efficiency.

A hospitality-oriented People Experience promotes a corporate culture that respects and supports the well-being of employees. A positive working environment is directly reflected in the attention and care that staff give to guests, thus enhancing the overall experience.

Efficient staff management not only improves the guest experience, but also reduces operational waste: it improves working time management, reduces turnover, and optimizes processes, making the whole business more economically and environmentally sustainable.



# NEUROSCIENCE FOR THE GUEST EXPERIENCE

THE USE OF NEUROSCIENCE IN THE HOTEL INDUSTRY REVEALS CONSIDERABLE POTENTIAL IN ENHANCING THE GUEST EXPERIENCE.

This discipline offers a scientific approach to better understand and meet the cognitive and emotional needs of guests.

Through the analysis of neurological responses, hotels can adapt the environment and services to create a more engaging and memorable experience. The optimization of spaces, choice of colors, smells, and tactile sensations are influenced by understanding neural reactions, allowing them to create a welcoming and comfortable environment.

In addition, the use of neuroscience makes it possible to personalize services by tailoring staff interactions to the sensory preferences of customers. This targeted approach, based on the understanding of neural responses, improves guest satisfaction, positively influencing loyalty and the overall success of the hotel.



The integration of technology, in particular predictive maintenance, and machine learning, revolutionizes the operational efficiency of hotels. Predictive maintenance, through sensors and constant monitoring, makes it possible to predict and prevent failures or problems in hotel equipment.

This proactive approach reduces downtime and maintenance costs, and significantly improves overall efficiency.

Machine learning, through the analysis of historical data, identifies patterns and trends in maintenance, enabling hotels to optimize schedules, predict maintenance needs, and improve resource efficiency.

These technologies not only enable more efficient maintenance, but also reduce long-term costs and improve the guest experience, ensuring a functional and high-quality hotel environment, resulting in a positive impact on overall operations.

# Technology Improves Operational Efficiency

A man with curly hair, wearing a red sweater, is sitting on a couch and looking at a tablet device. He is smiling and appears to be engaged with the content on the screen. The background is a blurred indoor setting, possibly a living room or a hotel lobby.

# VDA · telkonet

VDA Telkonet presents itself as the largest global player active in the development of EMS and GRMS solutions for the Hospitality market.

The Group defines the future of the industry by placing the person at the centre of smart technology development and ensuring the right balance between maximising comfort and saving energy.

A world leader in the development of IoT technologies, the group acts as a solution provider capable of supporting its customers at every stage of project development, from consulting to engineering to delivery and service.

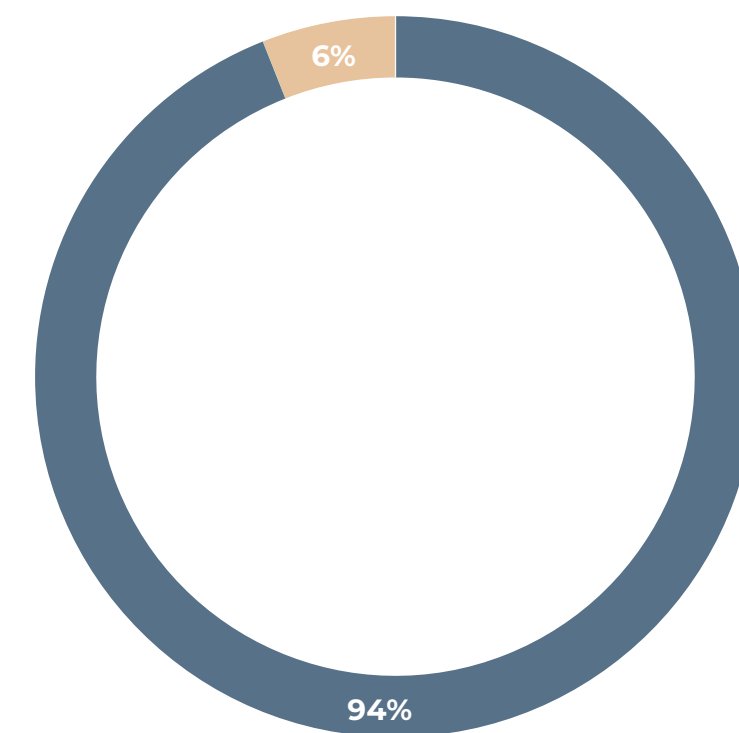
With around one million smart rooms installed in more than 50 countries, more than 60 years of experience, two in-house R&D teams and 40 engineers with both hardware and software experience, the Group demonstrates an in-depth knowledge of the areas in which it operates and is the ideal strategic partner for the global hotel market.

# 1 Technology in Hotels and Guest Experience

Nowadays, technology in hospitality is a fundamental requirement for hotels to survive in a highly competitive and ever-changing market. It constitutes an advantage that is increasingly sought after and demanded by travellers around the world and enables them to offer high levels of personalization during the guest experience.

The survey involved people responsible for the management of a hotel or hotel chain and those responsible for the installation of technological systems and equipment within a property, with the aim of obtaining a complete overview and understanding of the new requirements of tourism.

## Do you believe that proper technological functionality in hotels influences the guest experience?



- Yes
- No
- Not particularly
- I don't know

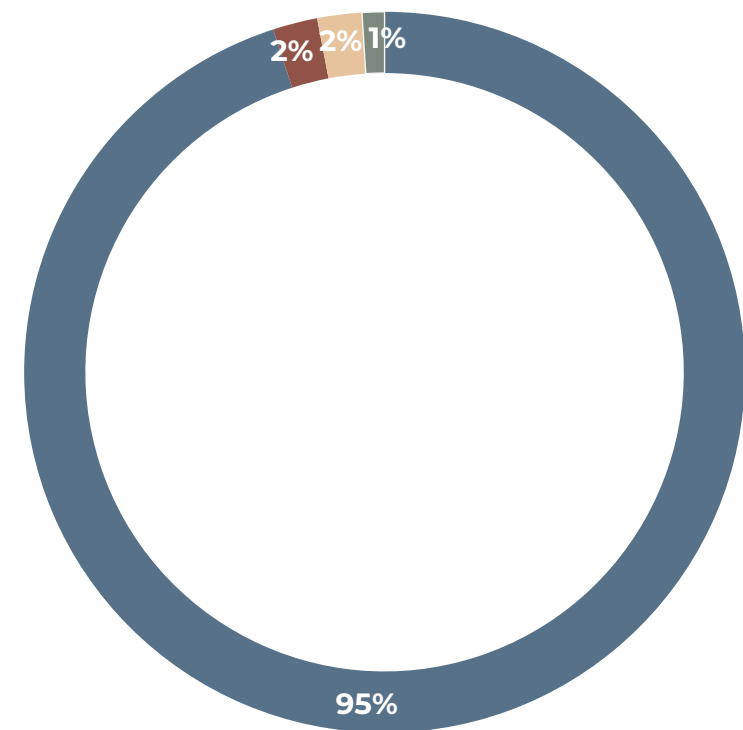
**94%**

94% of the participants agreed that technology in hotels makes a significant contribution to the guest experience. Technology directly influences this experience by simplifying check-in, check-out, and room access via digital keys or mobile devices, as well as the personalization of services. It also indirectly enhances the guest experience by optimizing the operational efficiency of staff, allowing them to devote more time and attention to guests.

Access to services such as high-speed Wi-Fi, smart devices in rooms and the use of apps to request local services further contribute to comfort and personalization of the guest experience.

2

# Technology to Improve Sustainability and Comfort in Hotels



■ Yes  
■ No  
■ Not particularly  
■ I don't know

If you could have a technology that provides you with real-time information on the status/functioning/malfunctioning of devices, would you recognize the advantage?

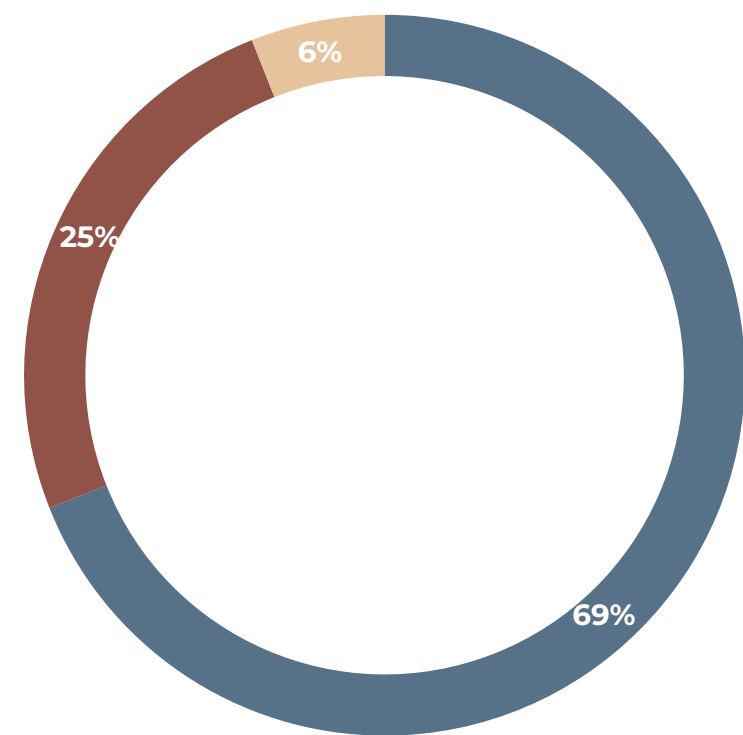
## 95%

95% of the respondents expressed high appreciation for technology in hotels that provides real-time information on the status, operation, and potential malfunctions of devices. This figure underlines the importance of transparency and efficiency in the hospitality sector.

The ability to instantly monitor facilities, equipment and rooms allows hotels to promptly address any problems, preventing breakdowns during guests' stays. This approach not only increases safety and comfort, but also facilitates efficient resource management and predictive maintenance, contributing to environmental sustainability.

3

# It is important to recognize guests' preferences to improve the service offered



- Very important
- Important
- Neutral
- Not very important
- Not important

## How important do you think it is to recognize guest preferences to improve the overall hotel experience?

**94%**

94% of the participants emphasized the importance of recognizing and respecting guest preferences to improve the overall hotel experience.

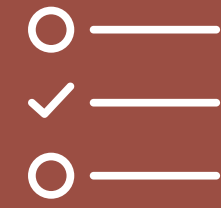
This underlines the increasing focus on personalization of services, seen as a tool for guest loyalty and differentiation from market competitors.





72%

Customer feedback



25%

Surveys



30%

Data analysis



26%

Staff intuition

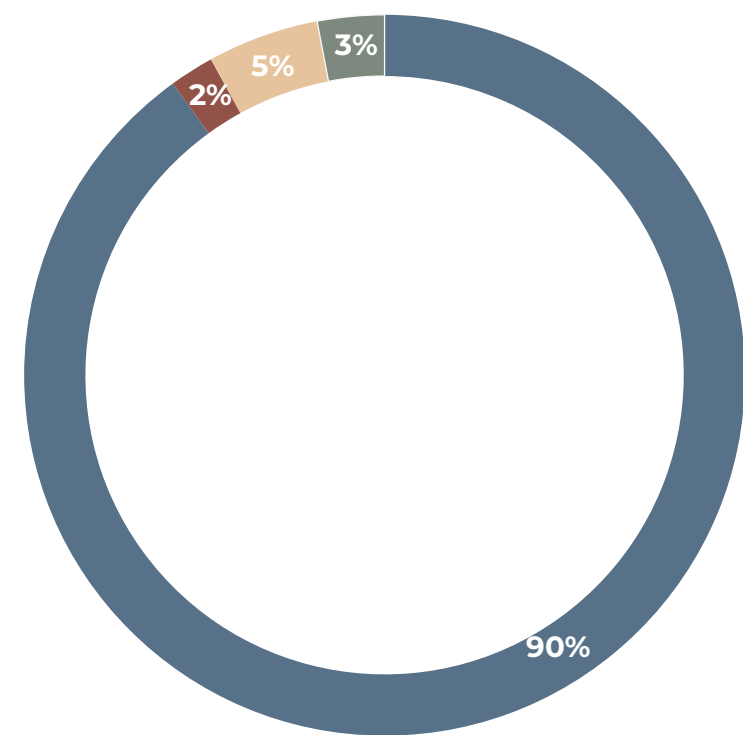
4

## How are guests' preferences detected?

72% of guests use customer feedback as a tool to recognize preferences in hotels, while 30% rely on data analysis and 25% on surveys.

4b

# How are guests' preferences detected?



- Yes
- No
- Not particularly
- I don't know

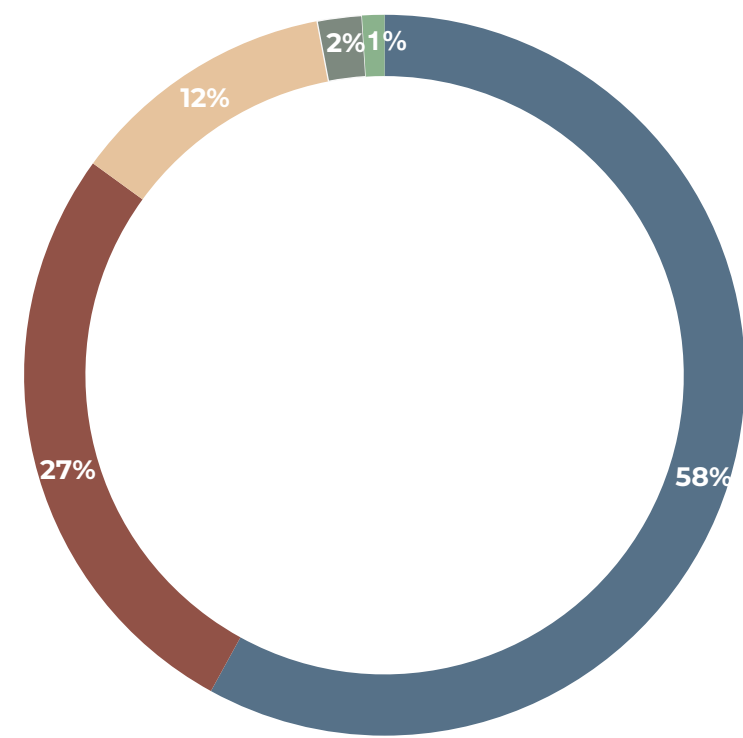
**Would you find it useful to have a database that allows you to recognize and monitor guest preferences, improve operational efficiency and generally the hotel sustainability?**

**90%**

90% of operators in the hotel industry recognize the benefit of having a database to monitor key points of their business: guest preferences, operational efficiency and generally improving the sustainability of the hotel, reducing waste and optimizing resources. In an experience-oriented industry, a solid data base becomes crucial for long-term success.

5

# Does monitoring the guest's surroundings enhance the in-room experience?



- Very important
- Important
- Neutral
- Not very important
- Not Important

## In your opinion, how important is to be able to detect the Sleep Quality Index for guest comfort within a hotel room?

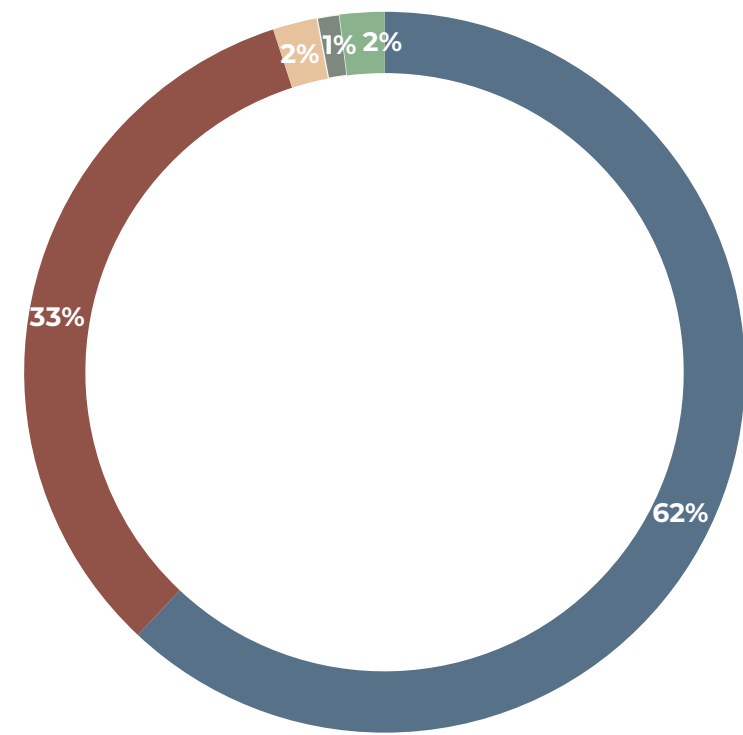
**85%**

The Sleep Quality Index is fundamental to the comfort of the guest and is closely linked to his or her well-being. This measurement goes beyond simply providing comfortable beds; it is about personalizing the sleep experience. By monitoring guests' sleep, the environment can be optimized according to their preferences by adjusting temperature, lighting, and noise.

This approach not only improves the comfort of the stay but can also contribute to customer loyalty and positive reviews. In an industry where customer experience is crucial, sleep quality assessment is a significant step towards meeting guest expectations.

5b

# Does monitoring the guest's surroundings enhance the in-room experience?



- Very important
- Important
- Neutral
- Not very important
- Not Important

## In your opinion, how important is It to be able to detect the environmental comfort in the hotel room is for the guest's experience?

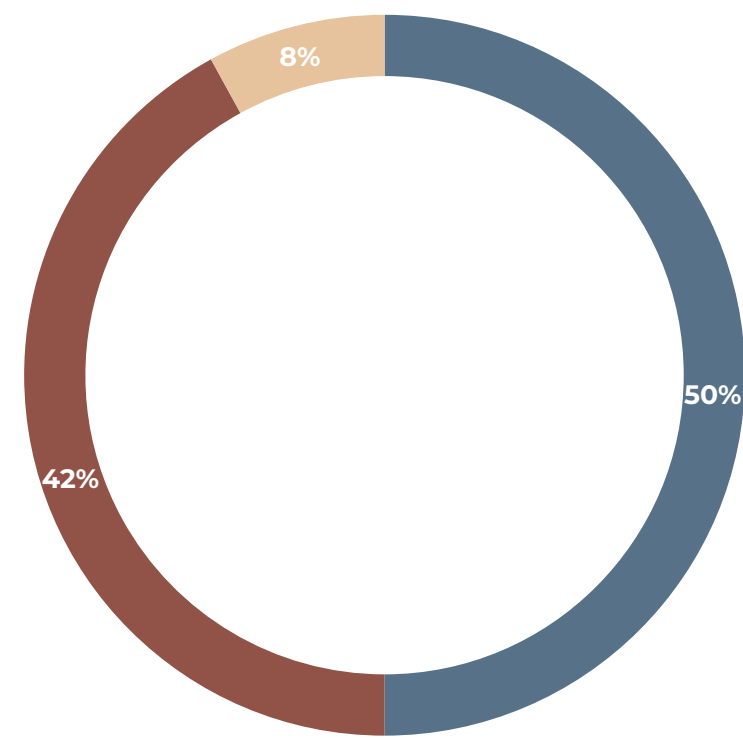
**95%**

95% of respondents agree that noting the environmental comfort in the hotel room is important for the guest experience. Creating an environment in which guests feel comfortable, relaxed, and satisfied during their stay is key to ensuring a good experience.

Environmental comfort refers to all those elements that contribute to guest well-being, including temperature, lighting, sound insulation, air quality, design and furnishings, beds and linen, amenities, safety, cleanliness, and maintenance.

5c

# Does monitoring the guest's surroundings enhance the in-room experience?



- Very important
- Important
- Neutral
- Not very important
- Not Important

## In your opinion, how important is it to be able to detect the hotel room air quality for the guest experience?

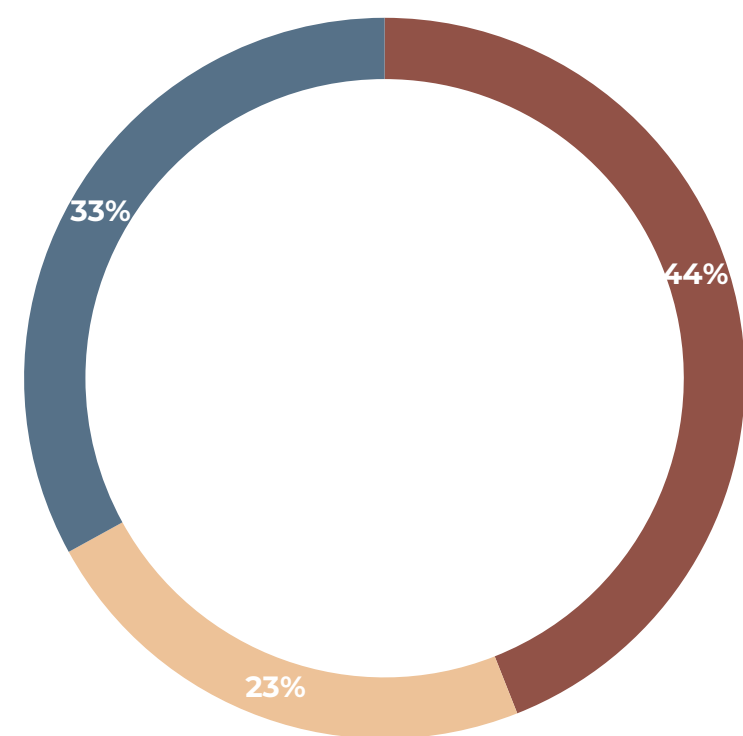
**92%**

The ability to detect and maintain air quality in the hotel room is extremely important to the guest experience from the perspective of comfort and well-being, health, sleep, productivity and concentration, hotel image, reviews, and loyalty.

For these reasons, many hotels invest in air quality management through high quality heating, ventilation, and air conditioning (HVAC) systems as well as regular cleaning and maintenance of the systems.

6

# Optimizing Guest Experience: The Power of Neuroscience



■ Yes  
■ No  
■ I don't know

**Are you aware that today there is a science capable of objectifying emotions and defining KPIs to evaluate the guest experience in hotels?**

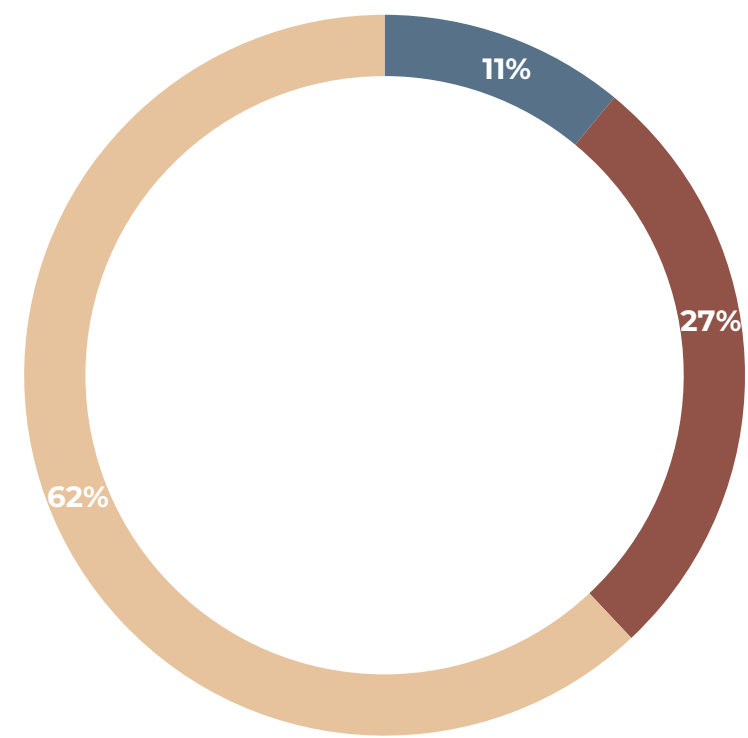
**67%**

It is certain that the guest experience remains among the main objectives of hotels (heads in beds theory), but how do you evaluate it? 67% are unaware of the existence of the scientific discipline of neuroscience, which is capable of objectifying guest emotions and making them measurable through key performance indicators (KPIs).

Using such indicators, it is possible to obtain quantitative data that immediately communicates the value of the experience to the accommodation facility, allowing it to act accordingly. Lack of knowledge may result from poor information dissemination, lack of awareness, complexity of the issue and ineffective communication.

6b

# Optimizing Guest Experience: The Power of Neuroscience



- Yes, we have already implemented solutions
- Yes, we are considering implementation
- No, we have not considered these technologies

## Have you already implemented or considered implementing Neuroscience and Technology to improve the people experience?

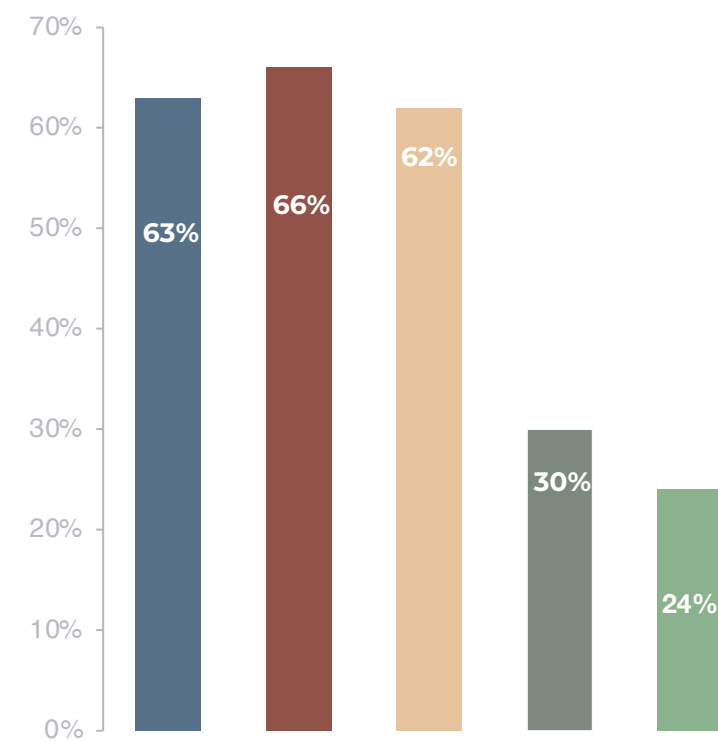
### 27%

Although neuroscience-based technology can improve the guest experience, only 27% of the respondents are considering the implementation of these solutions.

This could be related to several factors: complexity of the topic, cost, limited awareness, resistance to change, specificity of the sector. Nevertheless, around 90% of respondents say they find it useful to have a database available to recognize and monitor guest preferences.

7c

# Optimizing Guest Experience: The Power of Neuroscience



- Customization of services
- Operational efficiency
- Safety and well-being of guests
- Human resources management
- Reception/Check-in/Check-out

## In your opinion, what areas do you think could benefit from neuroscience and technology applications in the hotel?

In the survey, according to the respondents, the areas that can benefit from neuroscience in hotels are operational efficiency, guest safety and well-being, and personalization of services. This finding recognizes the great value of neuroscience-based technology as a tool to improve the experience of the person in the hotel, not just the guest.

While the personalization of services and wellbeing are central to those working in the sector, equal importance is given to operational efficiency which directly influences the lives of those working in the hotel because it optimizes internal operations and improves productivity.





Talking today about guest experience denotes an exclusive approach to hospitality, where the guest is not the only user of the spaces. On the contrary, this survey reveals a desire to have a much more global approach, giving equal importance to the well-being of the guest and the operator working in the hotel. An all-round hospitality culture in the creation of a welcoming and positive environment, not only for the guest, but for all those who experience it daily is fundamental to providing a high quality and welcoming service, resulting in a positive guest experience. Therefore, employee satisfaction and commitment are key elements for the success of the hotel industry.

Sustainability cannot be separated from the centrality of the person. Equalizing the value of the guest experience with that of the worker is the first step to ensure sustainable development that considers both the environment and human well-being.



# People centric Hospitality

VDA · telkonet

## Hospitality Report 2024

### Contact us

VDA GROUP SPA  
Viale Lino Zanussi n. 3  
33170 Pordenone (PN) - Italia  
T. +39 0434 516111  
info@vdagroup.com

VDA GROUP UK & IREL AND  
Unit 5, Orbital 25 Business Park,  
Dwight Road, Watford, WD18 9DA, United Kingdom  
T. +44 (0) 1923 210678  
ukenquiries@vdagroup.com

VDA MIDDLE EAST FZ LLC  
Design House – Plot N 78-0  
AL Sufouh First, PO Box 37830  
Dubai – United Arab Emirates  
T. +971 4 3914416  
info\_mea@vdagroup.com

VDA ASIA PACIFIC LTD  
191/36 , 23rd floor CTI Tower - Ratchadaphisek Road, KlongToei,  
Bangkok 10110 – Thailand  
T + 66 (0) 2 260 6213-6  
info\_ap@vdagroup.com

TELKONET INC.  
20800 Swenson Drive, Suite 175  
Waukesha, WI 53186  
T. (414) 302-2299

DISTRIBUTION CENTER  
1501 Paramount Dr., Suite #E  
Waukesha, WI 53186