Hospitality in 2025: AUTOMATED, INTELLIGENT... AND MORE PERSONAL

Presented by

Skift + ORACLE Hospitality

TABLE OF CONTENTS

Executive Summary	3
Executive Letter	4
Introduction	6
About Oracle Hospitality + Skift's "Guest Expectations for 2025" Survey	8
Comfort, Control, and Convenience: The Three "Cs" of Essential Hotel Technology	10
Automation for the People: Meet Guests Wherever They Are	14
The Generation Gap: One Service Size Does Not Fit All Guests	18
From Mobilized to Modernized: Alleviate Labor Shortages and Attract Talent	19
A Deeper Dive: Mixed Reviews on the Metaverse	22
Get Personal: Enhance the Traveler Journey With Deeper Intelligence	24
Ask an Executive: Envisioning the Future of Hospitality	28
The Great Unbundling: Drive Revenue With Customization	29
The Third Space: Leveraging Analytics for Ancillary Revenue	33
Conclusion	34

ABOUT SKIFT

Skift is the largest industry intelligence platform providing media, insights, and marketing to key sectors of travel. Skift deciphers and defines trends for global CEOs and CMOs across the travel industry through a combination of news, research, conferences, and marketing services.

ABOUT ORACLE HOSPITALITY

Oracle Hospitality brings more than 40 years of experience in providing technology solutions to independent hoteliers, global and regional chains, gaming, and cruise lines. Our hardware, software, and services enable customers to act on rich data insights that deliver personalized guest experiences, maximize profitability, and encourage loyalty.

ABOUT SKIFTX

SkiftX is Skift's in-house content studio. SkiftX produced this report in partnership with Oracle Hospitality.

MASTHEAD

Head of Studio, SkiftX / Jeremy Kressmann
Content Director, SkiftX / Alison McCarthy
Research Editor, SkiftX / Dan Marcec
Designer / Beatrice Tagliaferri

EXECUTIVE SUMMARY

There's no going back to business as usual. From technology demands to purchasing behaviors, the consumer has changed in the past two years. Hospitality operators have to invest now to ensure that they're anticipating and meeting guests' needs for the future — and justifying the rapidly increasing rates consumers are paying for hotel rooms.

Technology, labor, and service models that have been talked about for years have sprung into activation out of necessity, such as contactless, automation, and unbundling amenities and services from standard rates. Meanwhile, heavy investments in cloud technology and data security have enabled advanced technologies that seemed a long way off, not long ago. Artificial intelligence and predictive analytics, along with the rise of virtual reality and potential use of the metaverse, are being considered industry-wide in ways that would have been unimaginable five years ago.

Oracle Hospitality and Skift surveyed more than 600 hoteliers and 5,000 consumers across the world to better understand their expectations in hospitality for the next three years, asking questions such as:

- What are the "must-have" technologies from a guest satisfaction and hotel investment perspective?
- How will staff models change to address current labor shortages and long-term talent recruitment?
- How will automation and artificial intelligence enable hotels to provide more personalized guest services — before, during, and after their stay?
- How are hotels rethinking their revenue models to support guest demands for more customized experiences?

Tech comes and goes, and what's trending and hot today may change by 2025. The revolution underway is about something bigger. Technology isn't removing humanity from hospitality; it's allowing hotels to become more hospitable in a holistic sense. That means guest personalization at every stage of the travel journey. It means changing labor models to attract and retain workers by giving them tools that align with their interests and capabilities. And it means hoteliers are moving away from a "one-size-fits-all" approach to selling experiences and allowing travelers to choose the size that fits them.

The soul of the hospitality business will always lie in its ability to connect human beings — to each other and to the places they visit. By understanding how to use technology as a tool to best serve that purpose, the industry will set itself up to thrive in the years to come. ◆

EXECUTIVE LETTER

Alex Alt
Senior Vice President and General Manager,
Oracle Hospitality

Never has hospitality changed so much, so quickly.

In this tumultuous environment, we've all adapted in unprecedented fashion just to sustain business. But now the pressure is greater than ever to recapture revenue and elevate the guest experience, particularly in light of systemic staffing shortages in hospitality. As trying as some challenges might be, it's vital to keep in mind that tremendous opportunities await us as well.

Uncovering the latter is our foremost priority.

That's why Oracle Hospitality partnered with SkiftX to gather critical marketplace intelligence that sheds light on the factors and trends reshaping hospitality. Our research project surveyed more than 5,000 consumers and 600 hoteliers across the world, uncovering what guests really want in the coming years and identifying the actions hoteliers are taking to meet their needs. The combined insights from both comprise the narrative of *Hospitality in 2025: Automated, Intelligent... And More Personal*, which delves into topics such as technology's role in simplifying work for hotel associates, embracing new service models for greater profitability, and using artificial intelligence to deliver exceptionally personalized guest experiences.

Providing such information goes hand in hand with Oracle Hospitality's mission to develop pioneering technology solutions that help create the most memorable moments for guests and empower staff — freeing them from the mundane to pursue tasks that truly make a difference. From cloud-based technologies that power modern-day property operations to intelligent solutions that drive incremental revenue growth, Oracle Hospitality is focused on allowing hoteliers to achieve more with less.

Ultimately, it's our expectation that Oracle's technology and the perspectives shared in this report will inspire you to pave a new path forward, leading to profitable operations, fulfilled employees, and delighted guests.

Alex Alt
Senior Vice President and General Manager, Oracle Hospitality

ORACLE
Hospitality

Give your business a better platform for growth

Reach new heights with Oracle OPERA Cloud, the only complete hospitality platform that lets your entire business work as one.

Oracle.com/OPERACloud

INTRODUCTION

It's not news that the hospitality industry globally is anticipating a strong year in 2022, despite headwinds impacting the larger economy. Skift Research recently reported that hotel bookings are nearing pre-pandemic levels in many major markets, and in some cases, like the U.S., even exceeding them. Overall, the World Travel and Tourism Council forecasted that travel and tourism could reach $8.6 trillion this year, just 6.4 percent behind pre-pandemic levels.

But just because travel is on its way back to pre-pandemic booking volumes and revenue numbers, that doesn't mean the industry is "back to normal." As one example, continued labor shortages combined with rapidly increasing demand have left travel companies in a difficult position as they attempt to meet higher guest expectations. As another, continued inflation has the potential to alter consumer spending behaviors in the next 12 months, perhaps sooner than later.

Hotels have to find a way to be efficient and adaptable in the face of volatility across every aspect of their business in order to meet guest expectations, attract and retain employees, and ultimately drive revenue.

Hospitality technology has accelerated rapidly in the past two years, leading to increased interest in and usage of contactless features, self-service options, personalization, automated messaging, artificial intelligence, and virtual

reality. Guests now expect hotels to match conveniences they've started to enjoy while interacting with other restaurant, retail, and e-commerce companies.

This shift is reminiscent of smartphone adoption just 10 years ago, which doubled globally in a matter of three years, according to eMarketer estimates. Smartphone usage resulted in the explosive growth of digital advertising, social media, and time spent engaging with digital media formats.

The shift to mobile forced the travel business to reorganize its priorities — and it was slow to adopt. The hospitality business finds itself in a similar position today. Another parallel of today's technological uptake to the tipping point of the smartphone era is the fact that no type of hotel property or class is exempt.

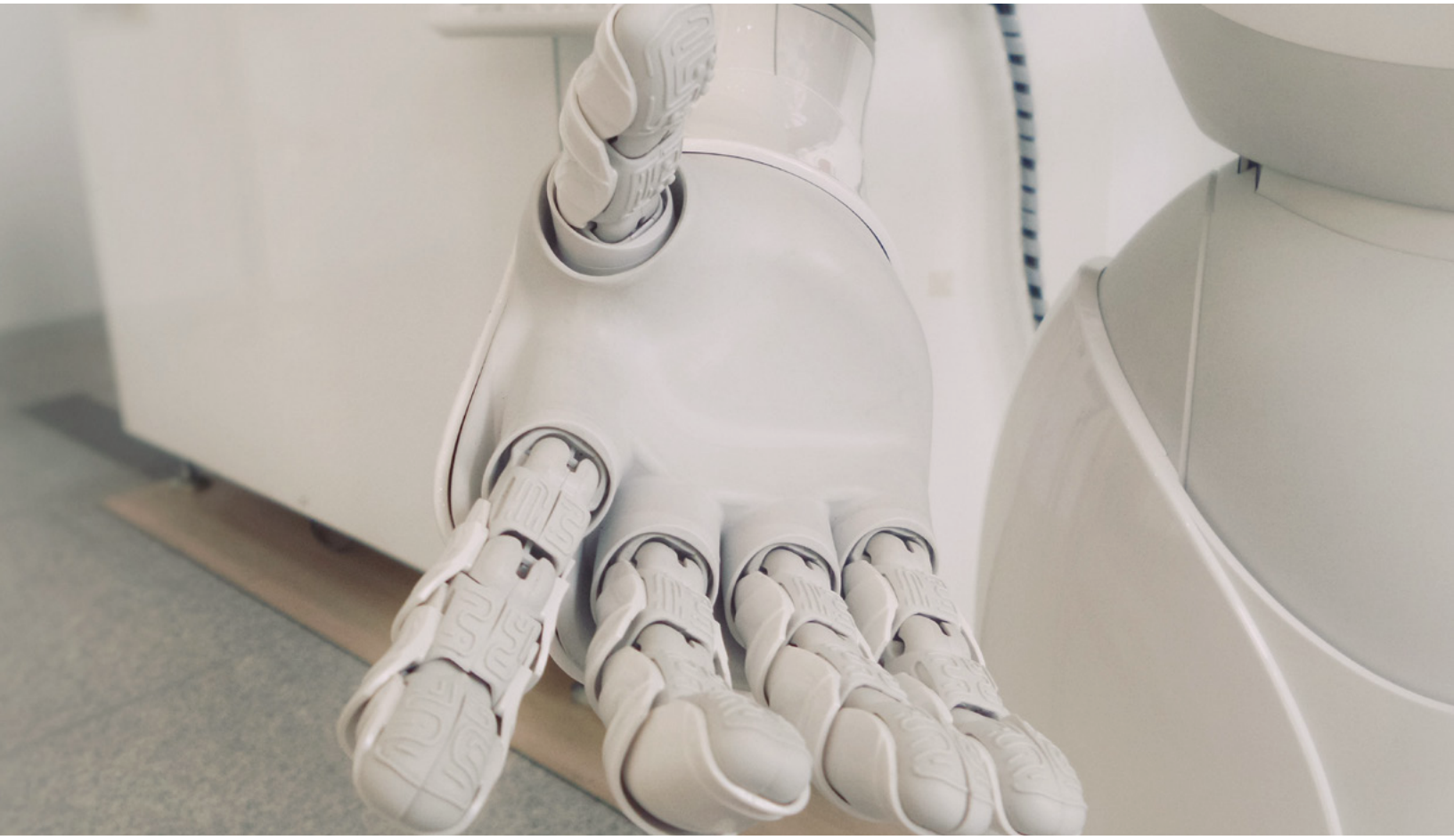
"The consumerization of IT has passed the inflection point, and it's not going back to normal," said Scott Strickland, executive vice president and chief information officer at Wyndham Hotels and Resorts, whose team oversees technology implementations for 9,000 hotels worldwide from roadside motel brands to luxury resorts. "There's a new baseline to satisfy a guest."

Technology may be influencing every aspect of everyday life, but it's not a replacement for personal service and human-level hospitality. Hotels have to approach every investment and enhancement by examining what excites their guests, what inspires their employees, and ultimately, what will drive revenue for their business.

Meeting the guest expectations of the future is about more than another shiny new object. Features that many fear will take the heart and personal touch out of hospitality are in fact becoming the foundation for a more personalized and customized guest experience. Guest expectations combined with hotel applications identified throughout this report show that the hotel of the future will be automated, intelligent, and deeply personal, all at the same time. ◆

> "The consumerization of IT has passed the inflection point, and it's not going back to normal. There's a new baseline to satisfy a guest."
>
> **- Scott Strickland,** executive vice president and chief information officer, *Wyndham Hotels and Resorts*

ABOUT ORACLE HOSPITALITY + SKIFT'S "GUEST EXPECTATIONS FOR 2025" SURVEY

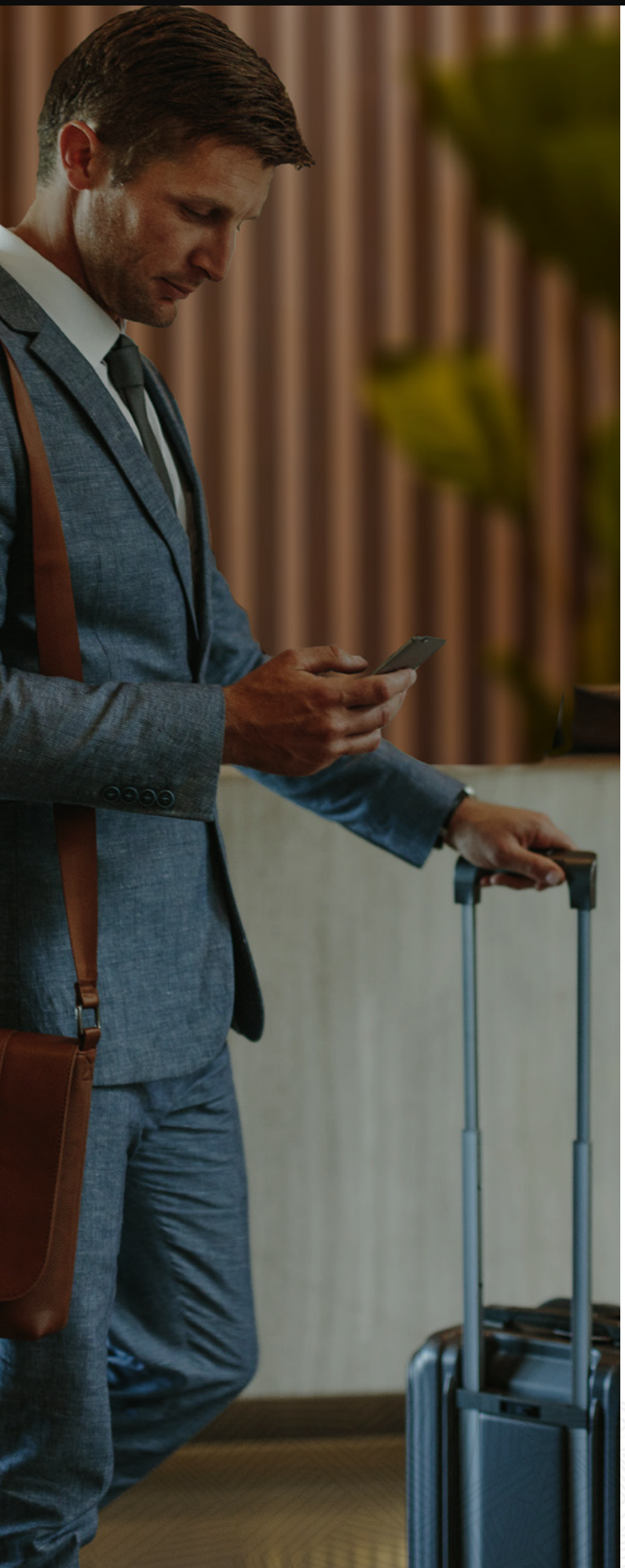


Imagining the future is hard, and predicting it is even harder. That's why this year's Oracle Hospitality and Skift research report has taken a different approach than a typical "future of X" study.

Building on the knowledge gained from partnerships in 2020 about a data-driven approach to recovery and the 2021 report about profitability strategies in a post-pandemic world, the 2022 edition of this partnership looks beyond the scope of post-pandemic recovery, exploring how guest expectations are likely to change in the next three years — alongside the hospitality industry's capabilities to meet these demands.

Instead of asking hypothetical questions about seemingly far-off concepts, the 2022 survey took a more direct and practical approach to capture guest sentiment today and to understand what hotels of the future will look like.

Conducted across nine global markets in five languages, more than 5,000 consumers responded about what they expect from the next phase of hotel technology and services, and more than 600 hoteliers shared what they are most likely to implement, where they are in their investment cycles for new features and models, and tangible evidence of what they plan to do. Unless otherwise noted, the data cited in charts and graphs throughout this report are sourced from this survey.



This research centered on four major themes:

- **Guest-facing technology**: Technologies introduced widely during the pandemic turned into must-haves — from contactless to mobile messaging — but the core of comfort, control, and convenience remain central to guest satisfaction.
- **Labor and operations**: Service models will never be the same, and technology that satisfies tomorrow's guests will also attract and retain the labor force of the future.
- **Automation and guest data**: Artificial intelligence that powers personalization throughout the customer journey will be a key driver for revenue and guest satisfaction.
- **Ancillaries, upgrades, and non-room revenue**: Unbundling amenities and services from the base room rate can maximize how hotels make money and empower guests to customize their own experience.

Coupled with supporting research on current trends and first-hand accounts with industry executives on the cutting edge of hotel technology, this report emphasizes the urgency to address technology upgrades and service models to meet future demands for guest expectations, operational efficiency, and revenue growth. ◆

COMFORT, CONTROL, AND CONVENIENCE: THE THREE "CS" OF ESSENTIAL HOTEL TECHNOLOGY

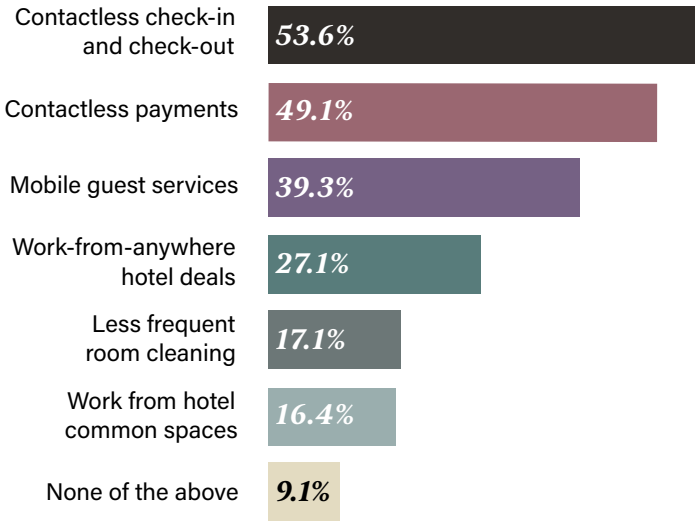
Envisioning hotel technology in 2025 is not as difficult as science-fiction novels or Silicon Valley executives might have had us believe. Features that guests are now saying they want the most have already been available for years. In some cases, they'd been implemented incrementally at hotels all over the world, depending on where you look.

Contactless, mobile messaging, artificial intelligence, voice activation — these technologies didn't just pop up out of nowhere, and none of them would be described as particularly "futuristic" at this point. Tech systems and service models that have become urgent and essential for hoteliers represent the culmination of a long buildup that surpassed a tipping point during the pandemic, and the imperative to implement them is now past the point of no return.

According to Oracle and Skift's survey, both guests and hotels agreed that contactless is king. More than 60 percent of hospitality executives worldwide said that "a fully contactless experience for all basic hotel transactions, including check-in/out, food & beverage, room keys, etc." would be the most likely feature or technology that the industry will adopt widely in the next three years. The next-highest response, positioned in the survey as "a self-service model, with hotel staff available only upon request," garnered 31.2 percent of executive responses.

Which of these hotel technologies or services popularized during the pandemic would you most like to see permanently adopted over the next three years?

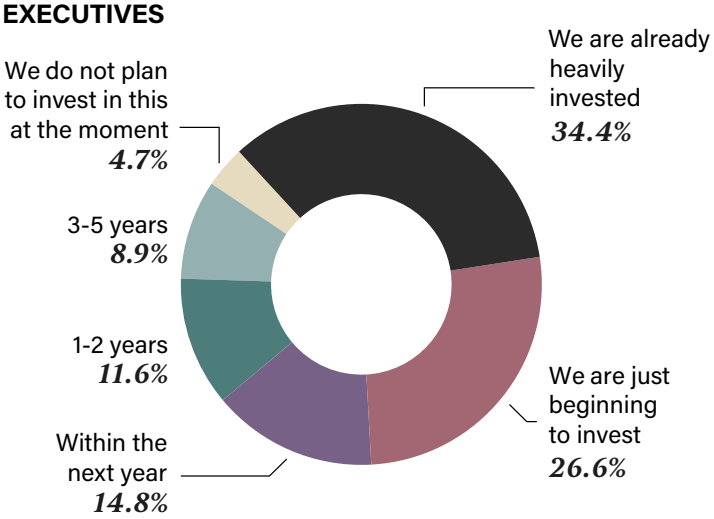
TRAVELERS



At the same time, more than half (53.6 percent) of travelers said that they'd most like to see contactless check-in and check-out remain a constant feature at hotels. Contactless payments were nearly as popular — 49.1 percent of travelers said they'd most like to see them permanently retained as they visit hotels in the future.

In what timeframe would you consider investing in contactless, self-service technology to reduce costs, assist guests, and increase operational efficiency?

EXECUTIVES



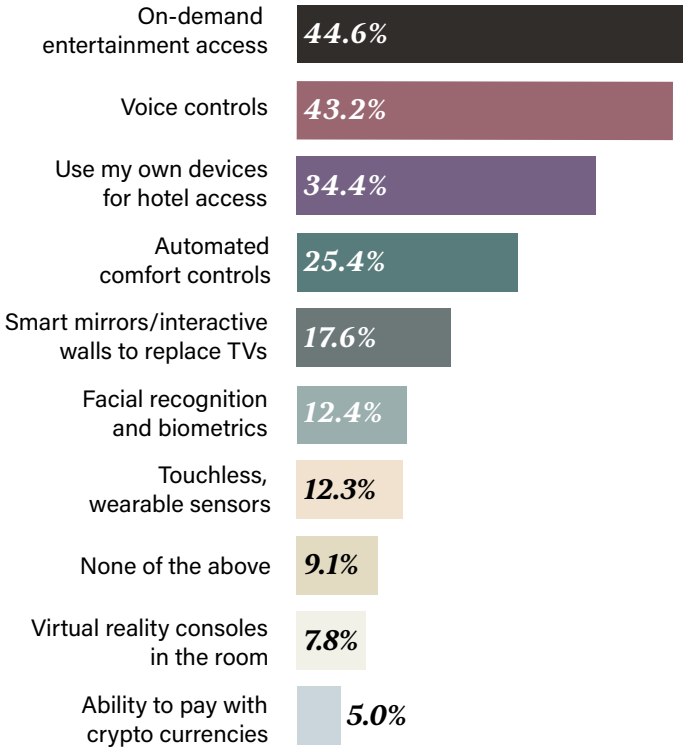
Enthusiasm on the part of hoteliers may in part be due to the fact that they're already on a clear path to adopting contactless. Over one-third (34.4 percent) of executives said they are already heavily invested, with another 26.6 percent in early stages. Only 3.7 percent said they do not plan to invest in this technology.

The data on contactless is illustrative of a broader shift in the cultural mindset. Guests are not interested in technology solely for its own sake — it has to do something that enables a better experience.

Tellingly, the technologies voted most popular among travelers in Oracle and Skift's survey all share a common ability to provide personalized customer service throughout their journey. Travelers worldwide said that on-demand entertainment access — defined in the survey as "an in-room entertainment set-up that allows me to seamlessly access personal streaming or gaming accounts" — was the No. 1 "must-have" to create an amazing hotel stay in the future.

Which of the following technologies would be a must-have for you in the future to create a more amazing hotel stay?

TRAVELERS



What sounds like a relatively simple amenity — and not terribly flashy one — can make or break a stay. While the delivery of these services may look different than in the past, ultimately travelers still simply want the comforts and convenience they enjoy at home (or that they can get at short-term rentals, which may be someone else's home).

Hotels have to give guests the ability to control their own environments and give them a smooth transition from their everyday lives. For example, no parent wants to spend the first hour of vacation with the kids screaming for their favorite show while they fumble around with the in-room entertainment system — or have to explain that "we can't watch that show here."

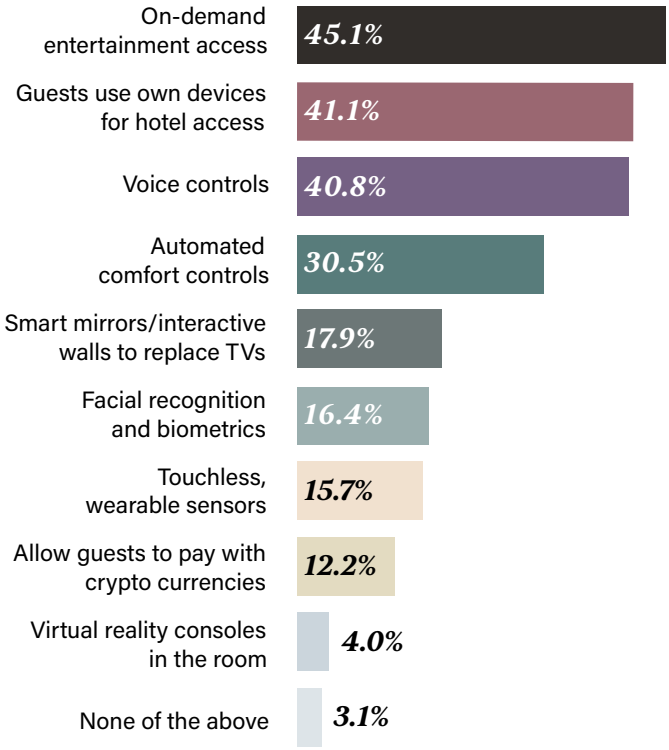
"In the digital age, almost everyone has expectations due to what they experienced outside the hotel industry, and we need to ensure that we provide a similar experience to our guests when they come to our property," said Sanjay Sharma, head of IT for Jumeirah Group. "We need to ensure that we are present in the preferred channel of our guests."

Beyond wanting hotels to meet their entertainment needs, guests showed strong interest in personalized amenities and services throughout the hotel. Nearly as many (43.6 percent) said they'd like voice-activated controls for all amenities in their rooms (such as lights, curtains, door locks, sinks, showers, TVs, etc.), and 34.4 percent want to use their own devices for access throughout the hotel. In addition, 25.4 percent said they were interested in room controls that auto-adjust temperature, lighting, and even digital art, based on pre-shared preferences.

Hotelier sentiment aligned with these expectations. Over the next three years, more than 40 percent of executives worldwide said they expected to implement on-demand entertainment access, voice controls, and the ability for guests to use their own devices to access their room and other areas of the property in place of a physical room key. In fact, 47.7 percent said that they were in some stage of the shift to replace key cards, and another 16.4 percent expect to begin that journey within the next year.

Which of the following technologies do you believe your hotel is most likely to implement by 2025?

EXECUTIVES



"Guests know they can watch Netflix or pay for Starbucks using their mobile phone, and they want that same experience at the hotel," said Wyndham's Strickland. "Now it becomes a matter of leveraging the mobile device as the hub device for our guests — and for our franchisees." ◆

> "In the digital age, almost everyone has expectations due to what they experienced outside the hotel industry, and we need to ensure that we provide a similar experience to our guests when they come to our property."
>
> **- Sanjay Sharma,** head of IT, *Jumeirah Group*

AUTOMATION FOR THE PEOPLE: MEET GUESTS WHEREVER THEY ARE

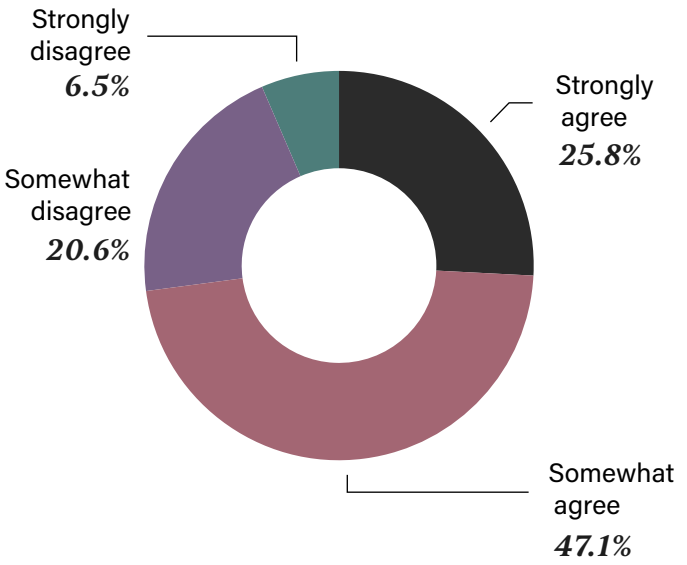
Travelers and executives alike indicated that technology will be an important key to unlocking a more hospitable experience for many guests. Automation is often pinned as a "replacement" for human activities across industries, a sort of bogeyman that threatens the very existence of the social order. Hoteliers that cling to a misconception that hospitality and personal service are mutually exclusive from technology are already falling behind in meeting modern guest expectations and increasing hotel profitability.

Automated services are excellent replacements for mundane activities that require more time and attention from staff than necessary. Automating simple requests can free up hotel staff to provide more direct, one-on-one service at any given time, empowering them with knowledge to make guest interactions more intimate and meaningful.

It's true that many guests enjoy the ability to check in, go to their room, text for service, and leave the property without ever interacting with another person or the hotel staff. According to the Oracle and Skift survey, about 26 percent of travelers said they "strongly agree" that they'd be more likely to stay at a hotel offering self-service technology to minimize contact with other people. This trend underscores the

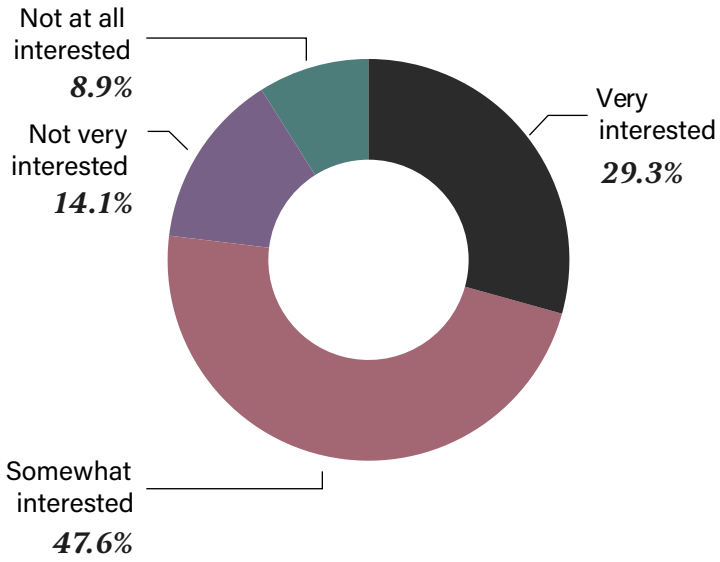
I would be more likely to stay at a hotel offering self-service technology that minimizes contact with the staff and other guests.

TRAVELERS



How interested are you in staying at a hotel that uses automated messaging or a chatbot to provide support for most customer service requests (through a mobile device, kiosks, etc.)?

TRAVELERS



need for contactless technologies and easy-to-use digital amenities that guests recognize from their home lives.

What's even more important, however, is the plurality of travelers that "somewhat agreed" with this question. Almost half of all consumers (47.1 percent) said they would be more likely to stay at a hotel that offered self-service, but they also like a personal greeting from time to time.

No-touch service is great when everything's going right. A vast majority of the time, everything should be going right for most guests. (If it's not, there are probably bigger issues than technology investments.) When it's not, people need another person for assistance.

Let's take a familiar example of a time with a lot "going wrong" — the pandemic. About one-third of travelers said that their biggest service complaints during the past two years were the perceived lack of availability among staff, long lines at check-in/out, or overcrowding on the property. These responses, coupled with their preferences for contactless check-in and payments, mobile service, and other digital opportunities to engage with staff, suggest that they don't want to be forced to find someone when they need something — especially when there's an easier solution.

Nearly 30 percent of travelers said that they are "very interested" in staying at a hotel that uses automated messaging for most customer service requests, qualified by the idea that it's much easier to find help through text and chat than tracking down a person who can assist. Only about 9 percent said that they absolutely want to speak directly with a human for all of their service needs.

Meanwhile, about half of all travelers (47.6 percent) are interested in automated messaging services, but they acknowledged that it depends on the service request. In reality, most guest stays will end up in this middle ground, with some simple requests more easily fulfilled via a mobile device or a chatbot, and others requiring a more direct interaction.

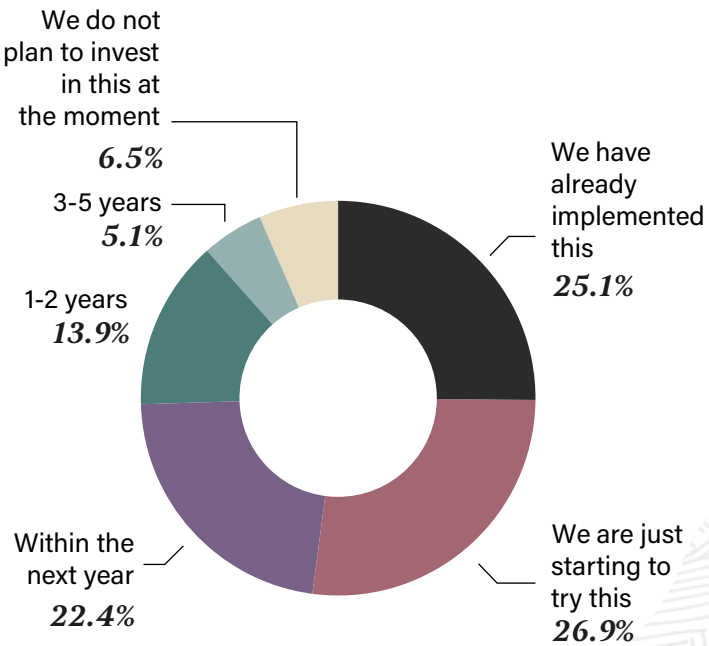
"It's important to look at technology not as a way to replace something, but as a way to allow your guests to have choice because of personal preferences to interact with the hotel through a mobile device," said Gustaf Berman,

chief information officer and executive vice president, hotel engineering, Montage International.

Trends driving the popularity of short-term rentals have also played a huge role in evolving guest expectations. It's not that people want to serve themselves in every instance for every trip, but the simplicity offered by vacation rental platforms like Airbnb and Vrbo or business travel models like Sonder has permeated the psyche of hotel guests. From digital check-in, to online, 24/7 access to a host, to immediate availability of every amenity or service that particular property offers, guests now expect all of that from a hotel platform as well.

In what timeframe would you consider implementing automated messaging (through guests' mobile devices, kiosks, etc.) to collect and distribute customer service requests?

EXECUTIVES



Hoteliers are catching on — for example, to the value mobile messaging systems can provide. More than half of executives responded to Skift and Oracle's survey saying they've already implemented automated messaging for customer service requests or are in the experimentation phase. Another 22.4 percent said they'd consider it in the next year.

> "It's important to look at technology not as a way to replace something, but as a way to allow your guests to have a choice."
>
> **- Gustaf Berman,**
>
> chief information officer and executive vice president, hotel engineering,
>
> *Montage International*

Mobile services mean more availability of staff, for anything at any time. Self-service technologies and chatbots can address and redirect guest requests more efficiently, meaning guests can have their needs met faster. If hotels introduce the options and clearly explain when it may be appropriate to use these features, guests are more likely to understand their additive value.

As an example in practice, Wyndham's Strickland noted that a common chatbot use case for a guest will be something along the lines of "I need more towels."

Given the choice to request via an automated system, it doesn't make much sense for a guest who just got out of the shower — and realized they only have a clean hand towel — to make a call, possibly get put on hold, and perhaps feel embarrassed and compelled to explain why they need more towels.

Instead, automatic requests like this can go directly to housekeeping, and the system will immediately flag the room where the guest needs a towel — bypassing any manual documentation and keeping the front desk agent or housekeeping manager focused on a task in which they may already be engaged.

"The beauty of chatbots is that they allow guests to communicate requests and engage any hotel department via their own mobile devices," wrote Laura Calin, vice president, strategy and solutions management, Oracle Hospitality, in a recent blog post. "Especially at a time when a labor shortage is disrupting so many markets, chatbots can fulfill a critical role by doing the work of their human colleagues and responding faster to guest inquiries."

Efficiencies gained from these automated interactions add up. Strickland explained that his team is putting a product on the shelf for Wyndham's franchisees that answers about 25 different common questions or requests.

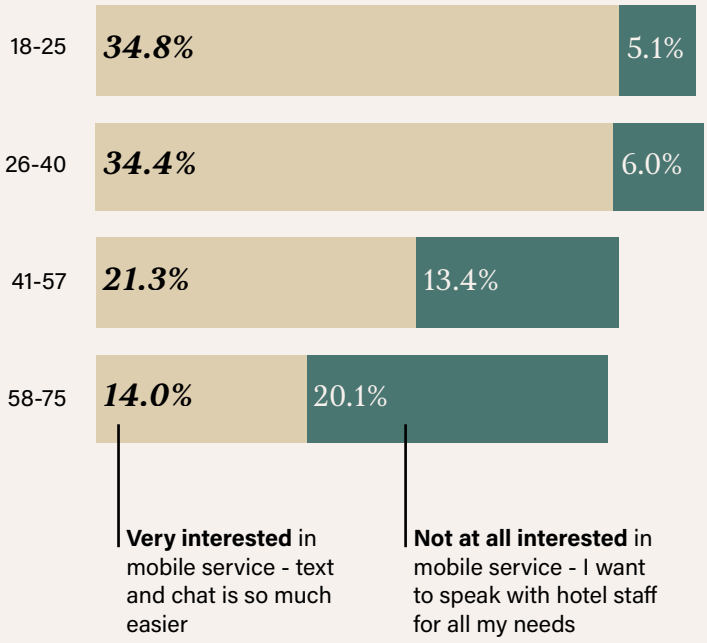
"That chatbot can handle 60, 70, 80 percent of those chats 'auto-magically' for you," he said, with the more complicated requests being kicked over to a person. That's 60, 70, 80 percent of the staff's time back to focus on more complicated tasks or just being available for friendly, personal service requests. ◆

THE GENERATION GAP

One Service Size Does Not Fit All Guests

One interesting, if not surprising, finding from the Oracle and Skift survey was a huge generational difference when it came to interest in mobile messaging services. Nearly 35 percent of both Gen Z and millennial travelers said they were "very interested" in staying at a hotel that uses automated messaging for most customer service requests, as compared to 21.3 percent of Gen X travelers and just 14.0 percent of baby boomers.

Interest in Mobile Guest Services, by Age Group



At the same time, more than 20 percent of baby boomers said they want to speak with hotel staff for all their needs, in comparison to only about 5 percent of Gen Z travelers. Responses in relation to self-service models, with staff only available upon request, followed similar trendlines. Less than 5 percent of Gen Z and millennial travelers said that they "always want to be greeted at the door with a smile," in comparison to 9.4 percent of Gen Xers and 11.4 percent of baby boomers.

The generational differences reiterate that there's a balance to strike — but the takeaway for hoteliers is probably not what the conventional wisdom would suggest.

While these statistics reinforce stereotypes that younger people are more comfortable with technology, they don't clearly state that all boomers want to be treated exclusively with white glove service, and that all Gen Z travelers want to be left alone. In practice, it doesn't matter how old a traveler is or how they generally feel about a technological idea. Some of these individuals may change their tune once they have the opportunity to become more familiar with the use cases.

Supporting the example that one size rarely fits all, Gen Z travelers were actually the most likely to say that they were upset when there wasn't an attendant at the front desk while they traveled during the pandemic. Nearly 25 percent of travelers aged 18 to 25 agreed with this statement, in comparison to 13.9 percent of baby boomers. Perhaps that could be attributed to a greater concern about Covid-19 transmission while traveling among older guests, but it belies the assumption that all younger travelers want to live exclusively in their digital worlds, and all older guests want to be bombarded with flowers, candy, and champagne as they cross the hotel threshold.

New technology doesn't change the fact that hotels have to take the initiative to know each of their guests intimately. Opening new lines of communication through mobile messaging services offers all guests more opportunities to connect in the ways they feel most comfortable, enabling hotels to build deeper and more meaningful relationships with their customers.

FROM MOBILIZED TO MODERNIZED: ALLEVIATE LABOR SHORTAGES AND ATTRACT TALENT

The labor crisis — from staff shortages, to wage inflation, to employee dissatisfaction — is driving lower levels of guest satisfaction and is a significant risk to profitability in the coming years.

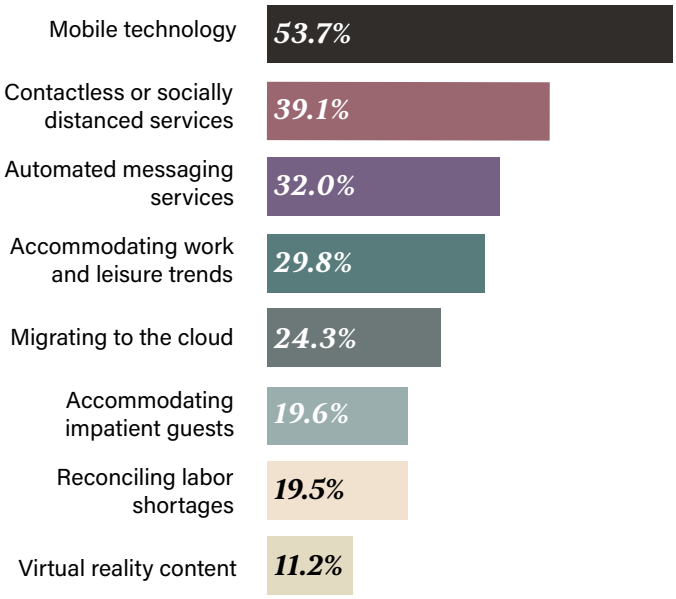
Even with some of the operational changes that surfaced during the pandemic either getting smoothed out or becoming more normalized, the influx of demand that's been building market by market on the leisure side over the past year, coupled with the pent-up desire among business travelers to get back on the road more regularly, will squeeze even the most efficient properties. That's why now is a critical time to consider how technology can fill any gaps and set up hotel organizations to scale their efficiencies as they look toward the future.

"As pedestrian as it may sound, hotels need applications that are intuitive and don't take three months to learn," said Alex Alt, senior vice president and general manager, Oracle Hospitality. "A lot of the associate-facing technology that's present in the industry today is marked by either a lack of mobility or complexity of the user interface that hinders the associate's ability to get out, interact, and personalize the guest experience."

Indeed, the utility of technology that improves guest experience starts with staff efficiency. Nearly 54 percent of executives said that they are focused on mobile technologies intended to streamline the front desk experience as their No. 1 priority in the next three years, followed by contactless technologies (39.1 percent) and automated messaging (32.0 percent). Offering contactless check-in and mobile messaging as an option to guests not only creates opportunities to meet guests where they are, but also helps to alleviate the impact of labor shortages and builds a more efficient service model going forward.

Thinking about your business strategy for 2025, which of the following will be your highest priorities in the next three years?

EXECUTIVES



As hotels migrate their property management systems to mobile devices from static terminals, they give their staff more ability to be on the move throughout the hotel. With solutions such as Oracle's OPERA Cloud — a mobile-enabled property management system that simplifies IT and centralizes data to make information accessible to everyone anytime, anywhere — staff have the opportunity to log issues in real time, whether that's a guest issue or a maintenance issue. That saves themselves the time of writing something down, running off to a workstation to document it, and then having to get back to whatever they were doing.

A simple, straightforward example is a housekeeping application that gives staff visibility into which rooms are vacant and ready for cleaning at any given time.

"We're really intrigued with the mobilization of the property management system," said Berman. "It all ties back to the associate's ability to perform their jobs more efficiently."

Greater efficiency is good for the guest, it's good for the bottom line, and it leads to talent attraction and retention as well. The labor shortage in the industry is due in part to the unfortunate reality that hospitality was hit much harder than other sectors by the pandemic, and it has a lot more hiring back to do. Many of the individuals who were furloughed or laid off found jobs in other fields.

The silver lining for hoteliers is that they have an opportunity to flex their technology gains as a selling point for their employees as well. People are drawn to hospitality because

> "Hotels need applications that are intuitive and don't take three months to learn. A lot of the associate-facing technology that's present in the industry today is marked by either a lack of mobility or complexity of the user interface that hinders the associate's ability to get out, interact, and personalize the guest experience."
>
> **- Alex Alt,** senior vice president and general manager, *Oracle Hospitality*

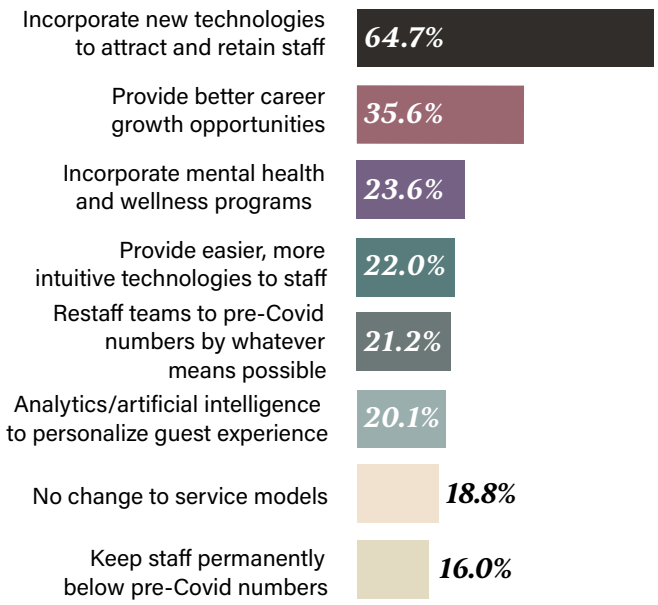
the goal of their work is to help people live a better life — whether that's for vacation or business.

"We're focused on taking away the tasks that are mundane and easily automated," said Dan Kornick, chief information officer, Loews Hotels. "The goal is not to reduce staff — even with robotic process automation, it's about assisting [staff] in the task that they need to do. The goal is to make our staff able to provide a better service, feel less stressed about what they're having to do, and have the freedom to provide that right service."

Executives across the industry are well attuned to this opportunity. Nearly two-thirds of respondents to the Oracle and Skift survey said that incorporating new technologies, such as mobile, contactless, virtual, personalization, gamification, and more, would help them bring in the next generation of hotel staff.

Which of the following best reflect your 2025 labor strategy?

EXECUTIVES



For instance, chatbot solutions like Oracle's OPERA Cloud Digital Assistant provide easier ways for staff to communicate with each other behind the scenes, facilitating tasks more quickly and easily — such as updating a room's status, checking arrivals, or viewing sales activities — allowing hoteliers to spend more time engaging with their guests.

In addition, something as simple as being able to trade shifts online can be impactful to associates. Berman also noted that keeping track of tips or commission-based compensation information by filling out an Excel spreadsheet leaves a lot of room for error. Automating that information saves management from having to sequester themselves in a room to run spreadsheets and ensure they get it right.

Solutions like Nor1's CheckIn Merchandising provide visibility into staff and management of front desk staff incentives, according to a recent blog post by Renelle Boudreau, director of revenue, Fairmont Tremblant. In order to pay commissions, she wrote, hotel staff had to enter every guest folio manually to ensure the upsell was paid — with Nor1, it's automatic.

Nor1's automation also greatly shortens the learning curve required to become a proficient salesperson, Boudreau's team reported, simplifying work and enhancing staff productivity.

"As soon as [employees] come to the corporate world, we force them to unlearn what they already know about technology," said Jumeirah's Sharma. "If we can provide the same environment that we provide to the consumer, that they're using in their personal lives, to do their operations job effectively in the office space, we will be able to retain them." ◆

A DEEPER DIVE

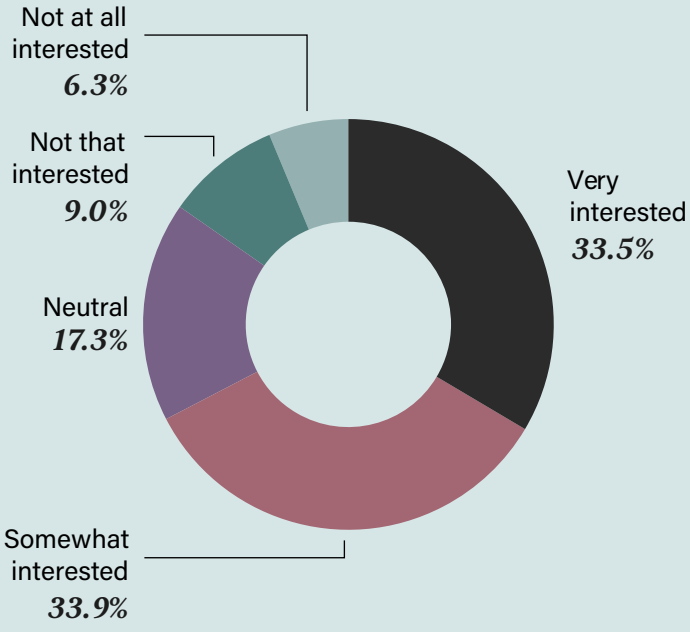
Mixed Reviews on the Metaverse

As hoteliers consider future technology investments, there's no question that virtual reality and metaverse applications for the hotel business will be a consideration. But unlike the other technologies that are "must-haves" today, VR technology is still in the warm-up phase.

For example, both travelers and hoteliers showed a high level of interest in virtual reality. More than one-third of travelers that responded to Oracle and Skift's survey said they want to explore a hotel virtually before they book. Meanwhile, almost half of executives said they are already developing VR maps of their hotels, or are planning to do so within the next year to accommodate such a feature.

How interested are you in using a virtual reality/metaverse experience to tour a hotel (rooms, events venue, conference rooms, etc.) before booking?

TRAVELERS



On the conference and events side of the business, metaverse meetings are all the buzz. Nearly half — 46.4 percent — of consumers that identified as frequent business travelers said that they were "very interested" in attending conferences remotely from their home or office through a metaverse experience. One-third of hospitality executives said they "want in on the ground floor" on VR events and conferences.

As showrunners start to experiment with virtual conferences, there's much more than just the technology to consider. Just like in real life, they may be responsible for attendee safety, even if they're not physically in the space.

"While the potential for fantastical metaverse venues has generated a lot of buzz, what's less talked about is the complexity of making these spaces accessible and easy to navigate," wrote Angela Tupper, deputy editor for Skift Meetings. "Event organizers have a responsibility to ensure they aren't risking the safety of their attendees when they ask them to ignore their real-world surroundings in favor of a VR venue."

It's reasons like these that VR and metaverse-related hotel amenities were among the least popular technology upgrades guests expect or hoteliers expected to implement by 2025.

Just 7.8 percent of consumers said a VR console in the room was a "must-have" technology in the next three years, trailed only, notably, by "ability to pay with crypto" (5.0 percent). Meanwhile, only 4.0 percent of executives said they expect to implement VR consoles in the room at their hotel in the next three years, and just 11.2 percent said investing in the metaverse is among their three highest priorities. Although the latter may be higher than some might expect, it was still the least popular response.

Mixed Reviews on the Metaverse, cont'd.

Dan Kornick, chief information officer for Loews Hotels, spoke about many of the technological advancements he's seeing across the industry on a spectrum between the conceptual and the practical. Conceptually, there's clear value in a lot of these things, but the practicality and the complexity make them less likely to be widely adopted anytime soon. The metaverse falls into this category at the moment.

"The amount of investment focus [on the metaverse] from the big tech companies is crazy, and what I've been trying to figure out in my head is how it plays into hospitality," he said. "People are thinking about it, but I'm not sure they know how to monetize it. If someone is in the metaverse and in your hotel, is that a good thing or a bad thing? Does it take away from the guest experience? I don't know if there have been a lot of those types of conversations yet."

One thing that's for certain — the foundational technologies supporting connectivity between property systems and increasing overall bandwidth and data processing capabilities will be essential to getting metaverse applications off the ground as well. Regardless of how ubiquitous the metaverse is in three years' time, hotels need to consider these types of implementations now as they lay the groundwork to be prepared for the future.

GET PERSONAL: ENHANCE THE TRAVELER JOURNEY WITH DEEPER INTELLIGENCE

The power of technology to enable more personalized service at the property level extends across the customer journey. Travelers indicated that they're very interested in personalized advertising, offers, amenities, room controls, and, of course, special treatments that make their entire experience seamless.

In concept, offering options like these to customers sounds like an easy decision, but in practice, effective personalization requires collecting specific data from consumers based on the guest service or business objective. There are great benefits for travelers, but getting it right requires investment in advanced technologies like artificial intelligence and machine learning to process, analyze, and activate the vast volumes of data that are coming in by the second.

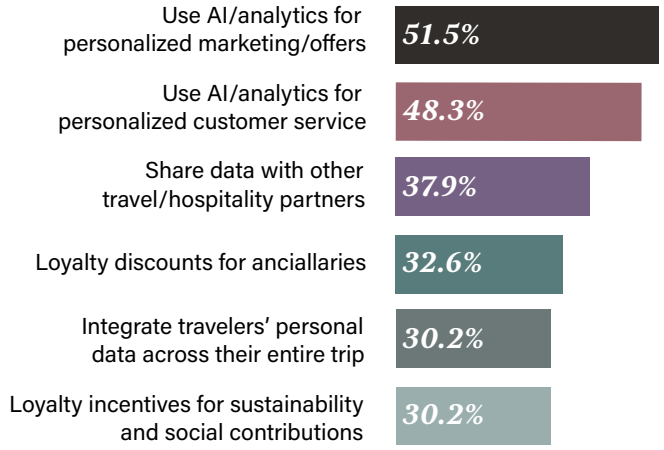
"The future of hotel technology is about a service culture and a personalized approach at the end of the day, whether it's through technology or through that high touch experience," said Kornick. "And knowing the customer and that data is really the key, the holy grail to it all."

Hoteliers are attuned to this challenge and opportunity. As they strategize to improve and customize the guest experience, about half of executives told Oracle and Skift that they plan to use artificial intelligence and analytics to learn about guests' behaviors so that they can offer more personalized marketing and advertisements (51.5 percent) as well as more personalized customer service before and during their trip (48.3 percent).

Meanwhile, data integration that gives them insights into a more holistic view of their customers' travel journey was also a priority. About 38 percent of hoteliers said they will prioritize aggregating related travel information — for example, when a guest's flight lands, their Uber is on the way, or where they have off-property dinner reservations. Just over 30 percent said they were working with other providers to aggregate personal information like health passports, dietary restrictions, accessibility needs, and so on.

Which of the following best reflect your plans to personalize the guest experience in the next three years?

EXECUTIVES



"Thus far, personalization has been relatively superficial, limited to recognizing by name, making generic offers, and perhaps capturing a few basic preferences," said Alt. "The next frontier will be deeper understanding of guest preferences, and then operationalizing those preferences with bespoke offers and tailored experiences. This is made possible by deep integration between loyalty systems, property systems, and brand mobile apps."

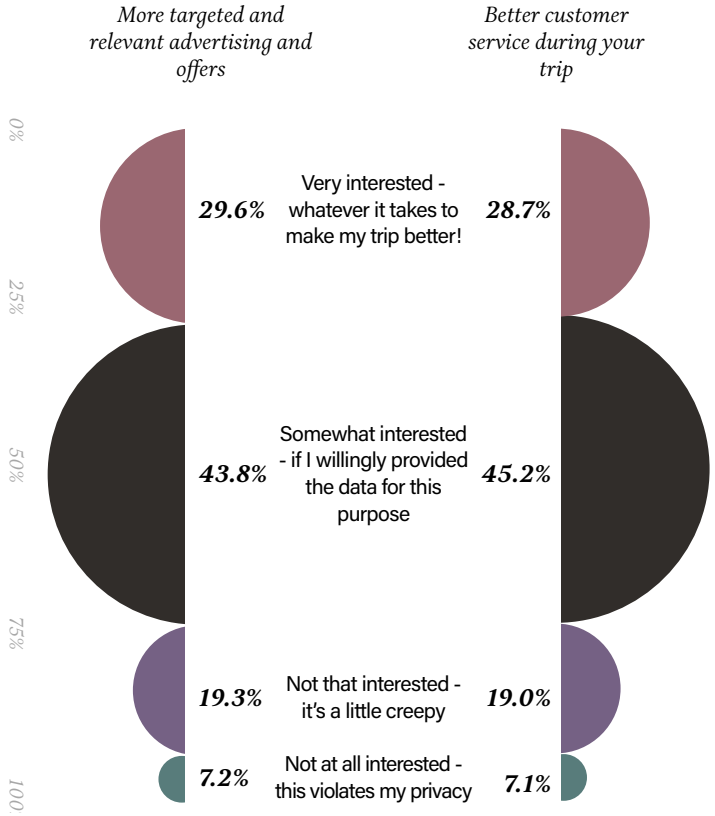
Not everyone is comfortable with the idea of automated or AI-based services. Like any other customer benefit, hoteliers that are transparent and forthcoming about how they are gathering data — and how they plan to use it — can communicate the possibilities, and of course, show the value to them. People are less apprehensive when they understand how something works. Similar to mobile messaging for guest services, sometimes all it takes is one exchange.

"Practically, [data privacy concerns] are a problem of education — it's a process," said Gunnar von Hagen, corporate director of operations and central project management, Lindner Hotels. "Once travelers know how to use these things, they get used to it."

On the whole, travelers don't see the idea of AI as quite so scary — especially if it comes with the promise of a more personal experience. According to Oracle and Skift's survey, consumers were generally positive about giving away their personal data if it meant that hotels would put that data to use not only in a responsible way, but also in a way that benefits them directly.

How interested are you in hotels using artificial intelligence to analyze your travel information for the following purposes?

TRAVELERS



About three-quarters of travelers were either "very" or "somewhat" interested in AI that would analyze their data as a means to provide more personalized offers and customer service. Among those, approximately 30 percent said they're happy with whatever it takes to make their trip better.

More tellingly, about 45 percent said they were interested, but with the caveat that they are given the opportunity to consent for its use with the explicit purpose of using that data to present better offers and advertisements or provide more personalized service.

Like customer service technologies on property, there's no one-size-fits-all solution. Different guests will have different levels of comfort. That's why an initiative that's grounded in consent and compliance is critical.

"We are living in a permissionless innovation age," said Sharma. "We are innovating things much faster than the ability of authorities to create some boundaries around that, but incidentally, we need to comply."

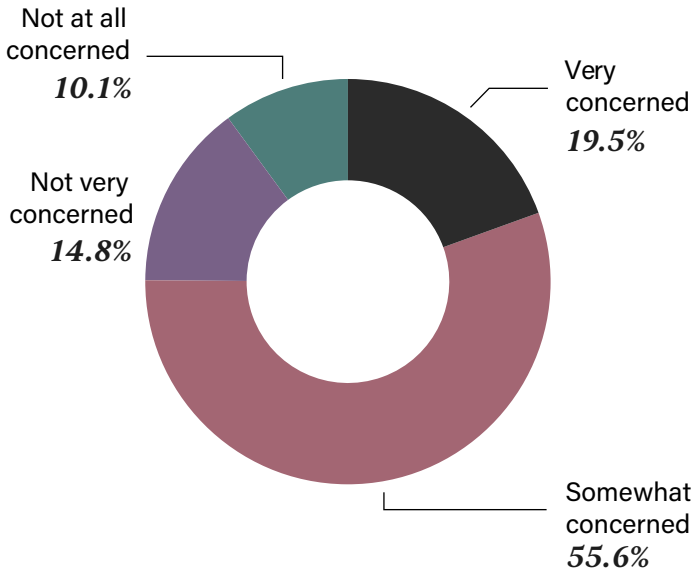
Even when they freely offer their information, travelers continue to be quite cautious about data security. Nearly 20 percent said that privacy and security of the personal data they provide to hotels and other travel providers "keeps them up at night."

More than half (55.6 percent) also said they were "somewhat concerned" about data security. However, those consumers indicated they are willing to make trade-offs and trust that companies are using their information responsibly.

Hoteliers are even more concerned about data security than guests — understandable since they represent the front lines of defense between this information and enterprising parties aiming to take it or use it nefariously. More than one-quarter of executives (27.5 percent) are kept up at night thinking about their customers' data security, and almost 40 percent see this as one of the most challenging problems for their business. Just 10.7 percent said they aren't worried about it at all.

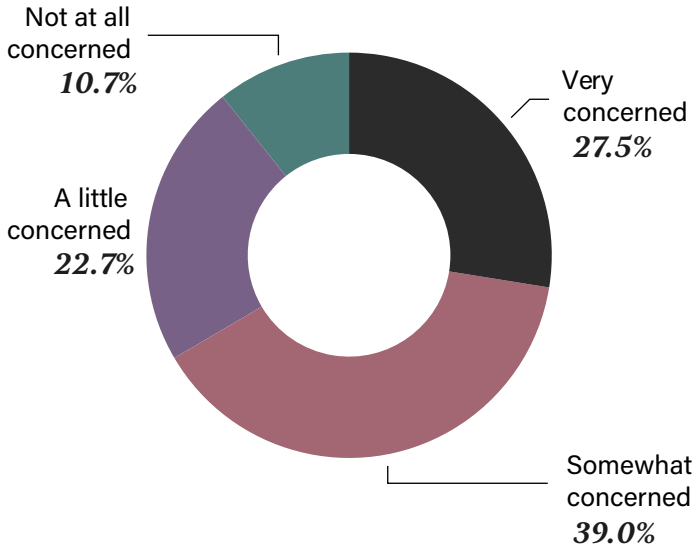
How concerned are you about the privacy and security of the personal data you provide to hotels and other travel providers?

TRAVELERS



How concerned are you about data security?

EXECUTIVES



According to the Financial Times, the hotel and hospitality business is the third-most targeted industry by hackers. The riches of customer data collected that are opening the doors to personalization also increase the risk.

More than 90 percent of executives said they already have, or are considering, investments in cloud technology to improve data security. More than 25 percent said they are already running the highest cloud security available, and another 33 percent are in the implementation phase now.

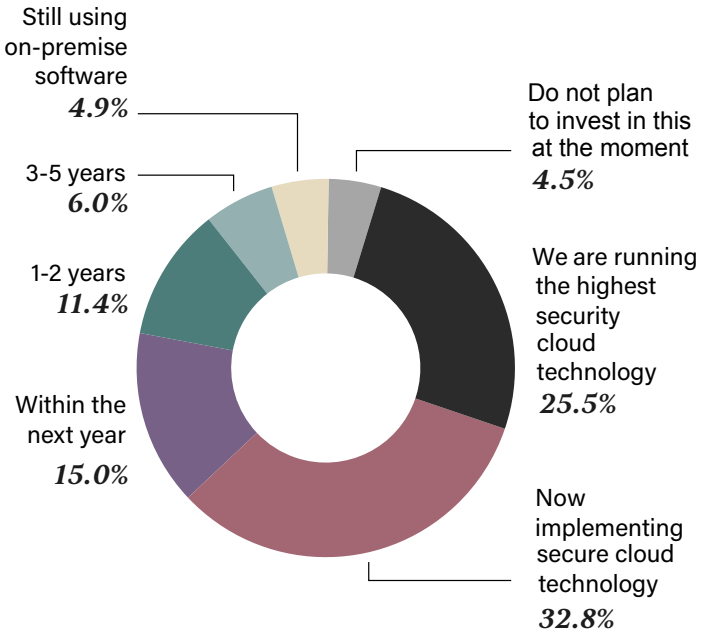
Cloud is not only important from a security perspective. Central management and control of data flows are critical to ensuring that customer information is being treated with the same care unilaterally across the organization, in contrast to when the information is stored in individual computer terminals at individual properties.

The same features that enable security in the cloud environment — a seamless, rapid ability to constantly upgrade and improve the applications without any downtime — is also the only way artificial intelligence and machine learning can work at scale. Guest data, just like the guest, is not in one place all the time. In order to benefit from the deeper insights that artificial intelligence and machine learning can provide, hotel staff have to be able to stream data in real time coming from everywhere.

"The rapid and secure flow of information across disparate applications in an ecosystem is the technical task at hand," said Alt. "Data privacy and security will be a barrier in certain markets to collecting, sharing and actioning guest preferences, but could be freed, at least partially, by the guests' willingness to opt in if they expect and desire personalization on the backend." ◆

In what timeframe would you consider investing in cloud technology to improve your data security?

EXECUTIVES



ASK AN EXECUTIVE

Envisioning the Future of Hospitality

What's something we aren't talking about enough right now that you believe will be integral in hospitality by 2025?

Gustaf Berman, Montage International: With blockchain technology, I think there's going to be a point where customers are going to have the ability to control what data they get to share with companies. I will be able to say "for this day, I'm going to share these attributes with this organization. And when I'm done with that stay, there's no need for you guys to hold onto it."

Sanjay Sharma, Jumeirah Group: The volume of data. Imagine if our beach operations were to be monitored by drones, while robots who are assisting our employees deliver seamless service and manage back-office operations. The kind of data produced for generating insights for our employees would be huge. As of now, I'm not sure whether we are ready for that kind of world.

Alex Alt, Oracle: Complete digitization of significant parts of the guest experience, across all segments of the market, including check-in/out, upgrade, room assignment and reassignment, key cutting, housekeeping requests, room service orders, payments, etc. Despite what some will say about this being "the death of true hospitality," it will in fact be the rebirth of the next generation of hospitality.

Scott Strickland, Wyndham Hotels & Resorts: On-property retailing. We believe selling additional services — from pizzas to tour experiences to upgraded Wi-Fi — will be critical.

Gunnar von Hagen, Lindner Hotels: Our customers will see that we have to share responsibility for sustainability. This common understanding will be extremely high by 2025. It's a bit of discussion we are leading, because the discussion has to be led, but together we will drive this to a totally different level.

Dan Kornick, Loews Hotels: When you look at how much of an investment Facebook and all of the other tech players are putting into the metaverse, I haven't heard many conversations about how this is going to affect us in hospitality. Maybe we won't talk about it, maybe we shouldn't be, but I think we ought to be.

THE GREAT UNBUNDLING: DRIVE REVENUE WITH CUSTOMIZATION

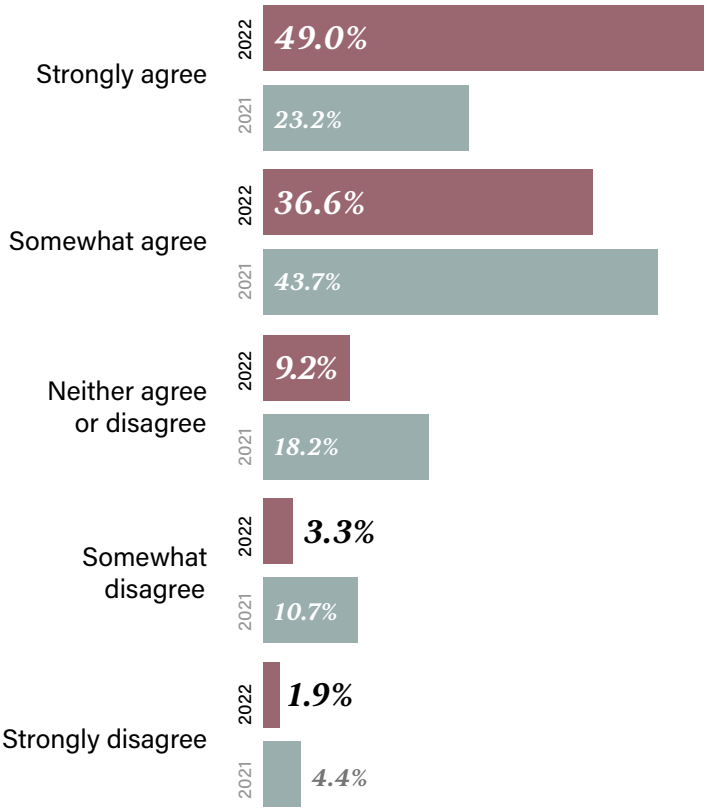
The personalization and customization of the guest experience goes beyond marketing and customer service. In times where every dollar counts, everything can come at a price. For hotels, there is a huge opportunity to utilize intelligence to better understand exactly what each individual customer wants to pay for every time — and what they're willing to pay more for — allowing them to drive more revenue via ancillaries, upgrades, and non-room items.

The concept of "unbundling" is not exactly popular in the hotel industry. It's best known by its parallel application in the airline business, where passengers purchase a certain fare class and have the ability to add any number of amenities and services a la carte — whether that's a seat preference, or Wi-Fi, or club access.

There are several realities that the hotel business has to face. First and foremost, some level of unbundling has already happened. No one's talking about posting a bare room and asking guests to pay for pillows, just like airlines aren't selling pretzels and water to basic economy passengers. Hotels are already selling rooms at different prices, they're offering early check-in or late check-out, and they offer spa services or other packaged deals. The question is how thoughtfully they're optimizing what guests want to pay for and how they can turn that into incremental revenue.

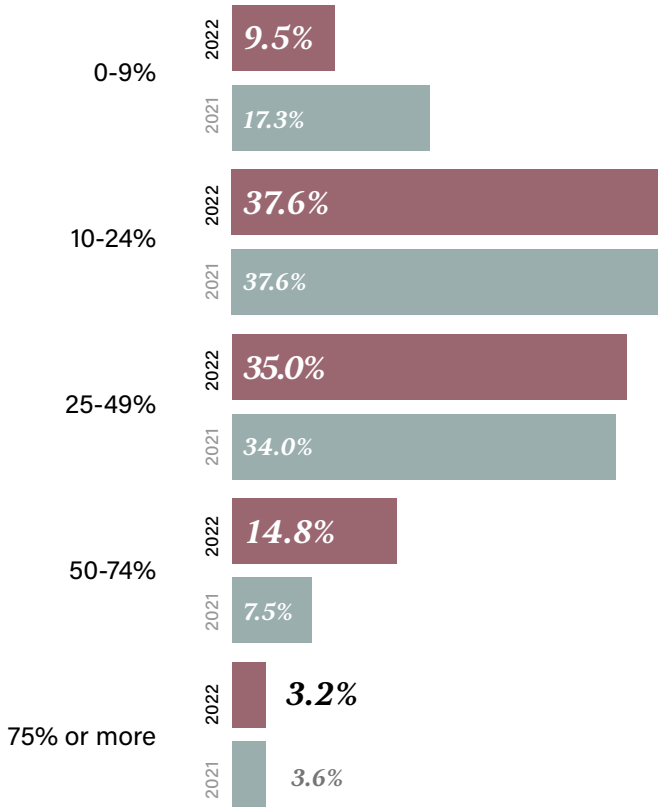
We expect non-room revenue to represent an increasing share of our hotel's annual revenue over the next three years.

EXECUTIVES



What percent of your hospitality business do you estimate will come from non-room revenue in the next three years?

EXECUTIVES



In general, the business is quickly realizing this. The percentage of hoteliers who "strongly agreed" that non-room revenue would become an increasing share of revenue more than doubled from 2021 to 2022. In the most recent Oracle and Skift study, 49.0 percent of executives "strongly agreed" that "special amenities and upgrades are critical to our revenue strategy." By comparison, only 23.2 percent of hoteliers in the 2021 survey shared such an enthusiastic response.

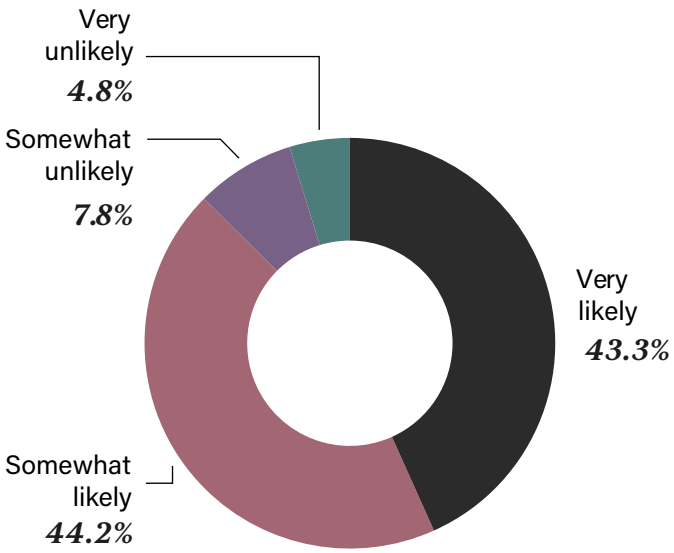
In addition, the percentage of executives that believe non-room revenue will become a significant portion of their revenue is also rising. Most notably, about 18 percent of hoteliers believe that more than half of their revenue will come from ancillary sources other than the room rate, in comparison to just over 11 percent in the previous year.

"There are so many accommodation combinations, which are so explicit in nature," said Sharma. "We need to allow our guests to curate a very personalized bundle for them."

The parallel reality is that consumer demand is there. Nearly 90 percent of consumers are either enthusiastic about or open to the concept of unbundling. According to Oracle and Skift's survey, 43.3 percent of consumers said they would be very likely to book a hotel that allowed them to pay for only the amenities they use, agreeing that they never use everything included in the rate that they pay for. Another 44.2 percent said that they'd be "somewhat likely" depending on the hotel — once again reinforcing the importance of understanding individual customer preferences.

How likely would you be to book a hotel that allowed you to pay only for the amenities that you use?

TRAVELERS



This general sentiment underscores the need to go even deeper to understand what guests might want on an individual level. A one-size-fits-all approach is easy for the hotel and the guest, but it's not optimized for either.

Unlocking upgrade, ancillary, and non-room revenue opportunities involves not only a willingness to test new models and experiment based on guest preferences, but also the dedication to ensuring that the information is being analyzed to understand which attributes can and should be unbundled.

"Upselling is one of the most successful tools in the hotel industry to make additional revenue, and the better the data is, the better we can do that before or on arrival," said von Hagen. "We can tie it all together using the same technology that's driving the labor efficiencies, employee empowerment, and guest personalization."

As an illustration, executives said that electric car sharing was an amenity they were least likely to have today but most likely to consider for the future — more than 45 percent said this was on their radar as a potential offering down the road.

Consider this: How often does a traveler rent a car only to drive to the hotel, and then maybe use it once to drive to a family member's house or a restaurant? Instead of paying $1,000 for that car rental for a week, they might be more than willing to add $100 to their stay for an airport shuttle and use of an electric car at their convenience — no riding to the rental car center, no extra gas surcharges, and no concern about the car not being available.

But just because this could be a really great benefit that they might want to bundle into their room in lieu of a car rental doesn't mean a hotelier should go out and buy a bunch of electric cars and park them out in the lot. Guessing — or even manually tracking — which attributes should be included (or not) in a rate is neither efficient nor scientific. That's where artificial intelligence and machine learning providing automatic, real-time insights create value.

For example, Oracle Hospitality's Nor1 automatically offers upgrades to guests at the time of booking, pre-arrival, and then at check-in. The machine learning-based solution dynamically selects, sorts, and prices offers for each guest based on a variety of factors to present an individualized offer.

Dave Van Saun, director, ancillary revenue at Great Wolf Resorts, noted how the technology gives multiple opportunities to engage the guest at the right time from booking through check-in.

"Deal-focused guests might get tunnel vision and be so focused on getting the best rate that they miss ancillary offers in the booking path," said Van Saun in a recent interview. "That's where eStandby is really valuable... to reach that guest in a pre-arrival email when they might be more receptive... and CheckIn Merchandising is our last chance at the front desk to engage a guest who wasn't paying attention in the booking path. It's definitely complementary to our other core booking tools."

All of this adds up to more flexibility and more opportunity, if hoteliers are listening. And these tools can enable and empower staff as well.

"If I know enough about you to be able to customize that interaction either towards your preferences or on something that the hotel has to offer, that's putting power in the hands of the associate to provide a more personalized experience," said Alt. ◆

> "Upselling is one of the most successful tools in the hotel industry to make additional revenue, and the better the data is, the better we can do that before or on arrival."
>
> **- Gunnar von Hagen,** corporate director of operations and central project management, *Lindner Hotels*

THE THIRD SPACE

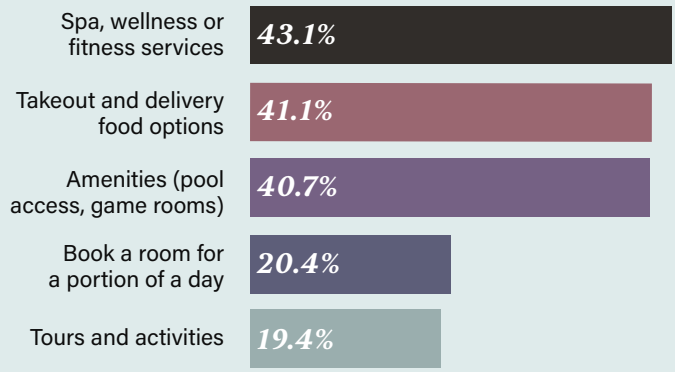
Leveraging Analytics for Ancillary Revenue

As hotels use intelligence and analytics to better refine their capabilities to define what attributes their guests might add onto the room, they can also open doors to additional revenue streams from non-guests.

Unsurprisingly, consumers are very interested in using hotel amenities for their daily activities. More than 40 percent of respondents to the Oracle and Skift survey said that they'd be interested in spa service, takeout options, and access to special amenities like a pool or a game room, even when they're not staying on property.

Which of the following amenities or services would you be willing to purchase from a hotel or resort WITHOUT purchasing a room?

TRAVELERS



While an exclusive hotel spa should be reserved for guests, there's little harm in analyzing when it might be an opportune time to open for locals during off-season or weekday downtimes. As hotel food & beverage outfits were forced to optimize or streamline their operations during the pandemic, it's worth evaluating the contribution of maintaining a ghost kitchen as an additional revenue source.

Furthermore, the "third space" concept has become even more popular through places like Starbucks, and indeed, the lifestyle hotel, as the digital age made remote work more possible. Now in the post-pandemic hybrid work model, these spaces are in high demand. For example, one Accenture study found that consumers would be willing to pay up to $100 a month for access to a café, bar, hotel, or retailer with dedicated work space.

Hotels have a unique advantage over other retail or quick-serve restaurant establishments in that they typically have additional room to spare — whether that's a more spacious lobby, bar, or coffee shop; meeting rooms and event spaces that could be rented out as offices during off-peak conference periods; and most importantly, private spaces, i.e. rooms, that they can rent for portions of a day. In fact, more than 20 percent of consumers said they'd be interested in making partial-day room reservations.

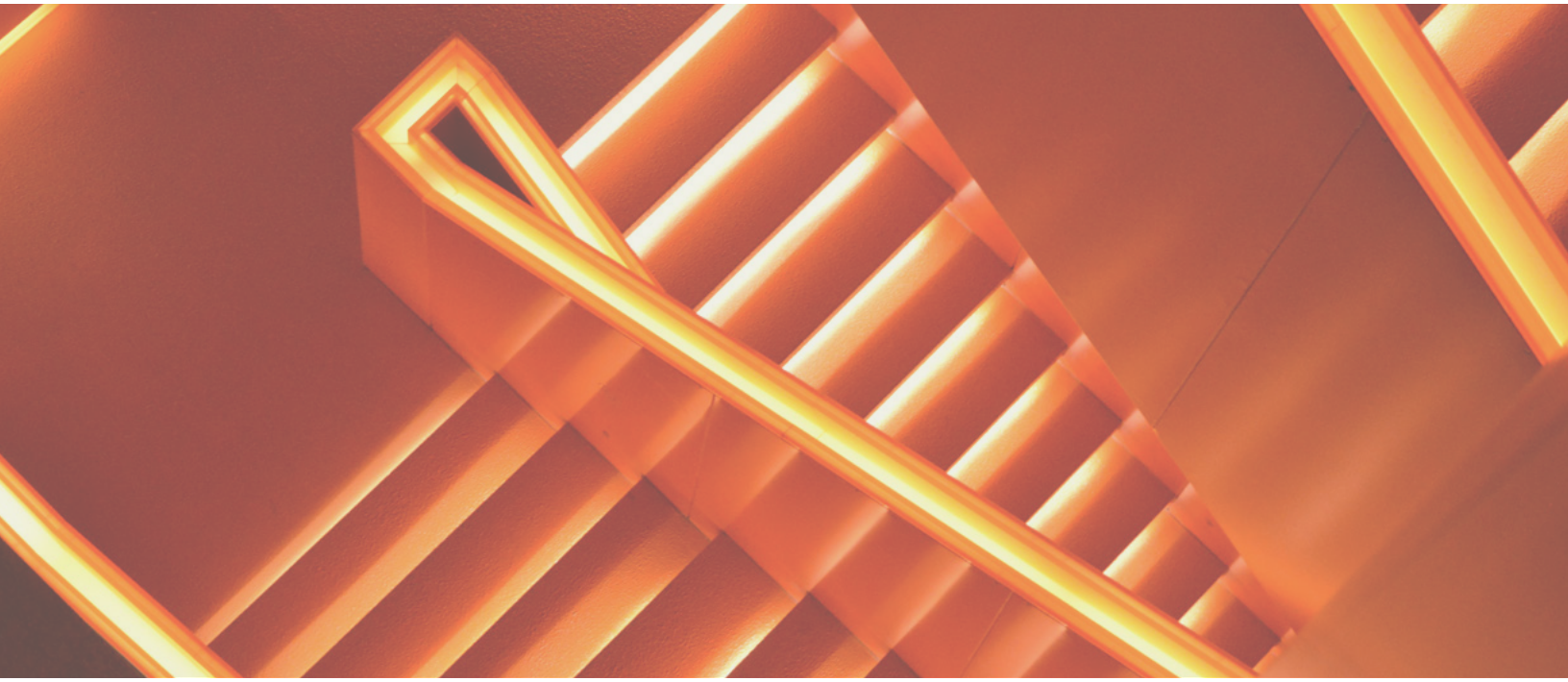
Nearly half of executives (49.2 percent) said they're already offering partial bookings, and 45.6 percent said they book temporary offices as well.

While ancillary revenue streams abound, customer touchpoints that go beyond the traditional view of a hotel guest may be a bridge too far for some hoteliers who want to maintain a narrow view of their service models.

This may be short-sighted. As the tools become more sophisticated to analyze and action customer data wherever it comes from, hotels could be leaving significant revenue opportunities on the table.

"Understanding the most valuable attributes is not a human decision — it's about listening to the data and being able to rapidly A/B test and iterate," said Oracle's Alt. "But I think we're just scratching the surface."

CONCLUSION



The future of the hospitality business will be driven by technologies that enhance hotels' ability to communicate with and serve guests in a more personal way. Any vision of a completely automated hotel experience with the absence of human interaction doesn't align with what guests say they want.

Skeptics of new technologies that are now being widely adopted often lean on an argument that these features take away from some prototypical guest experience that existed in the past.

The irony is that they're right, but not for the right reasons. New technology does take away a lot from the guest experience of the past. It removes friction from manual processes and gives customers more choices to interact and ask for what they want, allowing hotels to offer more customized, individual service.

"I am worried about some of the brands that say technology defies the essence of hospitality," said Alt. "I have no doubt that hoteliers will find ways to surprise and delight their guests pre-stay, in-stay, post-stay — I just don't think it has to be by taking a credit card and swiping it through a reader or making small talk while they find a room to assign a guest."

The key is not to get hung up on what the technology is or what it might represent, but rather to focus on desired outcomes and business goals and work backwards to find the right tools. Automated, intelligent, contactless: It doesn't matter what it's called, what matters is how it's used.

"If you ask anyone [about the future of the industry], they will definitely name some technologies to you — they will say they are interested in lab-grown dairy products, the metaverse, Web 3.0, artificial intelligence, robotics, and private LTE networks," said Sharma. "But these are just technologies. Whatever we introduce, it needs to do just two things: First, it needs to make our customers or guests happy, and second, it needs to make our operation invisible — invisible to our colleagues and invisible to our guests."

No one is arguing with the idea of giving guests more choices, increasing engagement with employees, and understanding how to optimize revenue. By reframing the hotel technology conversation around opportunities rather than disruptions, hoteliers can enable a seamless approach to guest services that leads to more personalized hospitality, better staff and operational efficiency, and greater profitability. ◆

ABOUT SKIFT

Skift is the largest intelligence platform in travel, providing media, insights, and marketing to key sectors of the industry. Through daily news, research, podcasts, and Skift Global Forum conferences, Skift deciphers and defines the trends that matter to the marketers, strategists, and technologists shaping the industry.

SkiftX is Skift's in-house content marketing studio, working collaboratively with partners like Adobe, Airbnb, Hyatt, Lyft, Mastercard, and many more on custom projects to engage the world's largest audience of travel influencers and decision makers.

Visit skiftx.com to learn more or email skiftx@skift.com.

ABOUT ORACLE HOSPITALITY

Oracle Hospitality brings more than 40 years of experience in providing technology solutions to independent hoteliers, global and regional chains, gaming, and cruise lines. Our hardware, software, and services enable customers to act on rich data insights that deliver personalized guest experiences, maximize profitability, and encourage loyalty.

Visit oracle.com/hospitality to learn more.