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How Artificial Intelligence Enhances the Hotel Guest Experience

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NOTE: The research findings featured in this study are derived from an online survey conducted by Starfleet Research in Q3 2018 on Hotel Guest Experience Management. The survey was completed by 280 qualified respondents across multiple job titles, hotel property sizes and categories and geographic regions. For more information, please contact research@starfleetmedia.com.

Executive Summary

This research study aims to understand the current state of the hotel industry as it relates to the use of artificial intelligence (AI) in enhancing the quality of the guest experience. Leveraging both primary and secondary research, the objective is to provide a broad view of technology innovation, industry adoption trends, and the benefits that early adopters are already achieving with AI. The study seeks to benchmark best practices for utilizing AI in the context of guest experience management and offer practical guidance to IT decision makers who may be looking to utilize AI at their hotel properties.

Chapter 1 (“Enhancing the Hotel Guest Experience”) looks at some of the key concepts related to the advent and proliferation of AI-enabled devices. It explores how devices for enhancing the hotel guest experience are rapidly evolving in terms of features and functionality.

Chapter 2 (“Meeting Guest Expectations”) examines the various demographic and technological forces that have given rise to heightened guest expectations. It looks at how AI-enabled solutions can play an instrumental role in meeting (and even exceeding) these expectations.

Chapter 3 (“Powering Guest Personalization”) explores how, given access to the right data, AI-enabled devices can facilitate relevant guest interactions and recommendations while automatically taking “best next actions” based on a guest’s stated and inferred preferences, interests and behaviors.

Chapter 4 (“Fueling the Guest Journey”) discusses how AI can play an important role in helping hotel operators hone in on the different elements of the guest journey — in part, by allowing them to monitor and assess hotel performance, identifying any issues that may need to be addressed.

Chapter 5 (“Working Hand in Hand with Hotel Staff”) explains the complementary nature of AI. It makes the point that, rather than replace customer service reps, front desk personnel, and other hotel staff, AI can make humans more valuable by enhancing their knowledge, performance and speed.

Enhancing the Hotel Guest Experience

1

*With Compliments
of the hotel*



Voice-activated speaker systems, or chatbots, and text-based personal assistants are in our homes and in our pockets. These devices book our appointments, monitor our home security, play our music, and create our shopping lists. They tell us when the cake is ready to come out of the oven and what the weather will be like the next day. We have come to rely on these devices for our convenience. They drive efficiency in our day-to-day lives. They practically serve as an extension of our own brains.

Now as these and other devices that harness the power of artificial intelligence (AI) make their way into the hospitality industry — somewhat belatedly in the minds of some observers — they are becoming part and parcel of the hotel guest experience.

With advances in AI, the devices are rapidly evolving in terms of features and functionality. Chatbots, for example, are becoming increasingly adept at recognizing not only speech but also intonation and context. Some systems have begun to incorporate such futuristic capabilities as “computer vision” to visually identify objects and people. The fact that these technologies are getting progressively smarter — literally, by the minute — is a hallmark of the so-called Fourth Industrial Revolution.

The era is marked by breakthrough technology innovation in such fields as artificial intelligence, robotics and the Internet of Things (IoT) — that is, the wireless linking of everyday objects. These technology innovations are fast becoming a mainstay of hotels and resorts across multiple sizes and categories, with new developments constantly raising the bar on functionality. They are driving competitive advantage and, in some cases, fundamentally changing the way that properties and guests interact and transact with one another.

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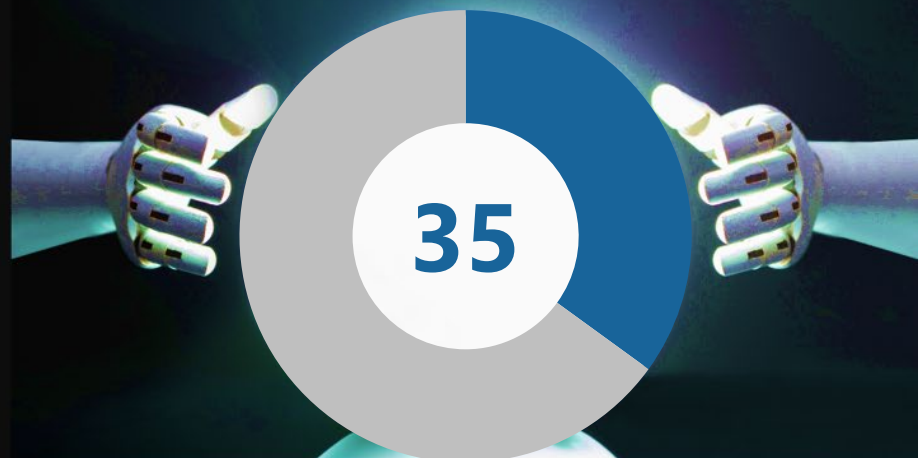
AI-enabled devices assume a myriad of different forms. Some forms are currently drawing more attention than others. Robotic butlers, concierges and luggage handlers have generated significant media buzz, more for the “surprise and delight” novelty aspect than for the actual benefits they deliver. Over time, these robotic additions to hospitality guest services teams, whether resembling Star Wars droids or lifelike humanoids, may come to play a valuable role in enhancing the guest experience.

For now, the bigger opportunity (and primary focus area for most hotels) are mobile and voice-activated assistants that offer guests an easy and intuitive way to interact with hotels. The fact that people are already accustomed to receiving information and recommendations from digital platforms makes the transition easy and inviting; familiarity always helps overcome the most common hurdles associated with technology adoption.

Using only voice commands, guests can control room TV, lighting, music and temperature (with settings remembered for future visits). They can make requests to hotel staff and access room service. Other in-room devices, including digital room assistants and wall displays with touchscreen interfaces, are also gathering steam.

“For now, the bigger opportunity (and primary focus area for most hotels) are mobile and voice-activated assistants that offer guests an easy and intuitive way to interact with hotels.”

Average percentage by which AI-enabled concierge services, answering guest queries by text and/or voice, have reduced calls to the human concierge desk at several leading hotel brands



Artificial intelligence improves in performance with the addition of increasingly large volumes of data and increasingly sophisticated algorithms. It improves as it learns more and more about guests' wants, needs and preferences, continuously augmenting its knowledge base.

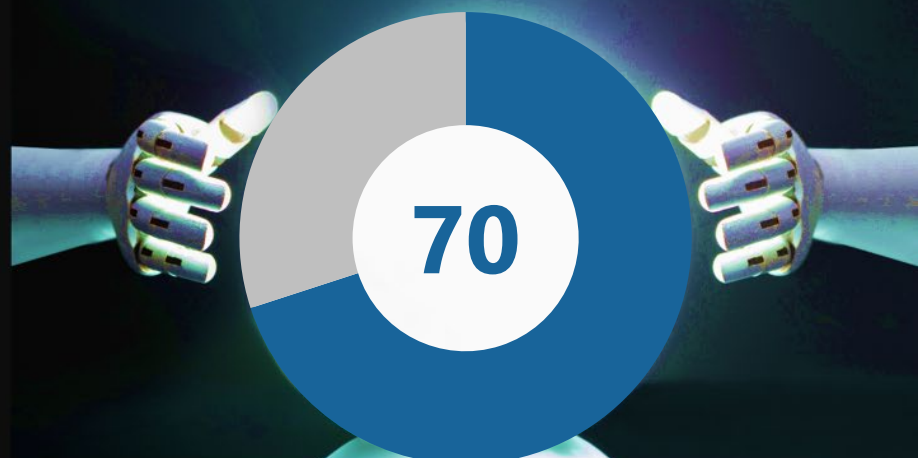
What makes an AI-enabled system "smart" is the ability to leverage natural language understanding and machine learning to gain knowledge and insights that enable it to progressively improve the quality of its responses and predictive capabilities.

The system learns from current interactions with hotel guests and also from the mountains of logs and transcripts of past interactions with guests. The more data — including booking data, POS transaction data, property usage data — the more accurate and useful the responses tend to be and the better the ability to address complex issues.

Ultimately, voice-activated speaker systems and text-based personal assistants can acquire the capacity to engage in meaningful conversations, make optimal recommendations (in some cases, even without being explicitly programmed to do so) and interact with guests in ways that blur the line between human cognition and machine computation.

“The system learns from current interactions with hotel guests and also from the mountains of logs and transcripts of past interactions with guests.”

Average percentage of guest requests now handled automatically by AI-enabled response technology in hotels where it has been implemented



As AI-enabled devices prove out their value in hotel settings in ways that would have been all but unimaginable only a few years ago and readily dismissed by most people as pure science fiction, they are assuming a greater share of responsibilities.

This is particularly true in the area of hotel guest services. By being able to respond to guest inquiries far faster than their mere mortal service rep counterparts — and by being able to field any number of inquiries simultaneously, with virtually no capacity constraints — the devices are shortening guest wait times in very significant ways while providing immediate access to information and services. Faster service response time and faster problem resolution time are, of course, top drivers of overall guest satisfaction. Having the ability to improve guest satisfaction by even a few percentage points may be reason enough for any hotelier to embrace the promise of AI-enabled guest response systems.

More than a promise, artificial intelligence has been shown to dramatically reduce the need for human assistance when it comes to answering questions (owing to a vast repository of information, both internal and external, at their digital fingertips) and resolving problems that commonly arise during a guest stay. Several leading hotel groups report that their AI-enabled concierge services, answering guest queries by text and/or voice, have reduced calls to the human concierge desk by 35 percent or more, freeing associates on property from routine tasks.

According to research conducted for this study, an average of 70 percent of guest requests are now handled automatically by AI-enabled response technology in hotels where the systems have been implemented. The results in terms of time savings, cost savings and guest relationship enhancement make for a strong business case for investing in hotel technologies that harness the power of artificial intelligence. Although still in its infancy, AI has more than proven out its value in the context of hotel guest services.

“More than a promise, artificial intelligence has been shown to dramatically reduce the need for human assistance when it comes to answering and resolving problems that commonly arise during a guest stay.”

Meeting Guest Expectations

2



Hotels and resorts have always sought to handle the ongoing deluge of guest requests in a time-sensitive and satisfactory manner. After all, their reputations largely depend on the degree to which they are able to consistently deliver a high level of customer service. Their capabilities in this area serve as key performance metrics for measuring success.

The challenge today lies in the fact that guest expectations have risen dramatically. Indeed, the very concept of the hotel guest experience has changed in recent years, reflecting demographic and technology changes.

We live in an economy of convenience. Increasingly, hotel guests have come to expect a seamless and frictionless experience throughout their stay with a property. Patience is a virtue, or so goes the proverbial phrase, but many guests have become impervious to this virtue. They have grown accustomed to the luxury of technology-enabled access to information and services in multiple aspects of their lives, from working, shopping and traveling to news and entertainment, and they expect that luxury to extend to their hotel experience.

They expect lightning-fast responses to their inquiries to the front desk, for example, whether those responses are produced by a human or by an advanced speech-enabled IVR service. The truth is that a large percentage of people today actually prefer to interact with a machine, given the choice.

In fact, according to recent surveys, 40 percent of American internet users today say that they would rather use digital customer services than speak to a human CSR on the phone. In a hotel setting, that preference may be even higher. Nearly all segments of hotel guests are now reasonably comfortable with using guest-facing technologies. Even guests who normally like to interact with hotel staff are often happy to augment those interactions with technology options.

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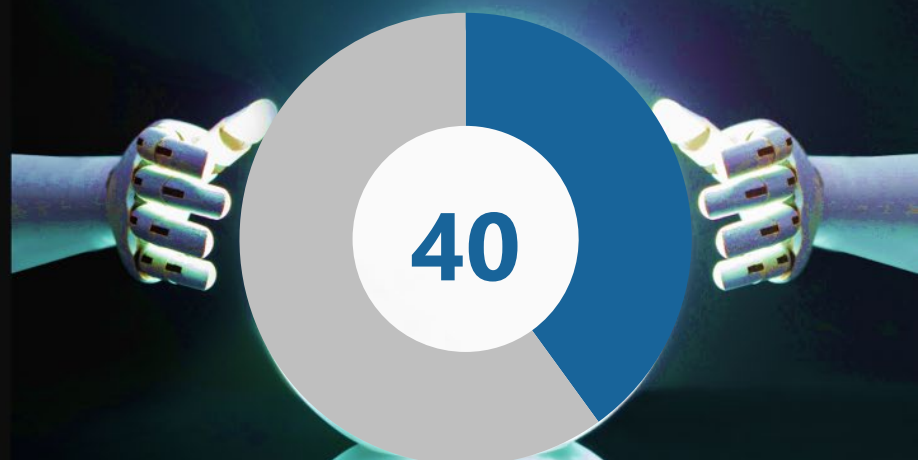
Millennials, in particular, who now account for nearly 75 percent of all hotel guests, expect nothing less than state-of-the-art platforms, applications and interfaces. Spending an average of \$4,000 per year on travel, they inhabit an always-on technology environment. Smartphones, tablets, laptops and voice-activated speakers are their constant companions throughout the course of their day. The guest service expectations of Millennials tend to be especially high in a hospitality environment, given the inherent promise of superior guest services that is the cornerstone of upscale hotels and resorts.

Generally speaking, they expect their inquiries to be addressed and service requests to be fulfilled almost immediately. Their level of satisfaction can plummet quickly if they have to wait longer than they deem to be acceptable to, for example, place an order with room service or book a reservation through the concierge or ask the front desk about a charge. It is also worth noting that guests have become accustomed to self-service options. They expect to be in control of hotel services, including not only being able to check in and check out, but also, for example, being able to set and monitor housekeeping status via a mobile app or in-room device.

Guests on the whole expect a hotel to be at their beck and call. They expect staff to lavish them with personal attention and pamper them with personalized services. This is particularly true with respect to upscale properties that pride themselves on their guest services.

“The guest service expectations of Millennials tend to be especially high in a hospitality environment, given the inherent promise of superior guest services that is the cornerstone of upscale hotels and resorts.”

Percentage of American internet users today who say that they would rather use digital customer services than speak to a human CSR on the phone



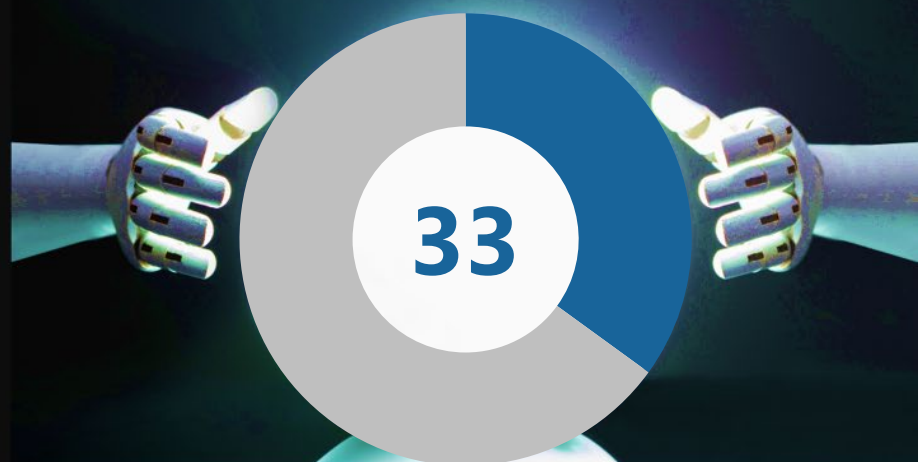
The only question is whether the attention and services are facilitated “the old-fashioned way” — via uniformed staff with requisite smiles on their faces — or “the next-generation way” — that is, through technology enablement. While research suggests that the latter option is becoming increasingly preferred by an ever-growing percentage of the guest population as well as by a growing number of hotels, the truth of the matter is that this is not an either/or proposition. The reality of the situation is that in the future hotel services will likely be best facilitated by some combination of the two, both human and machine, working in harmony with one another, each doing what they do best.

Traditional staff roles are likely to remain in place, even if the scope of their responsibilities and areas of accountability change somewhat with further advances in AI-enabled devices, including voice-activated speaker systems and text-based personal assistants.

At the same time, these devices already offer hotels a plethora of new opportunities to meet and even exceed the wave of rising guest expectations. This starts with the fact that artificial intelligence makes it possible to reduce the latency between guest requests and hotel response time quite dramatically. One major hotel group reports an average response time of only 5 seconds with its AI-enabled guest communications system.

“In the future hotel services will likely be best facilitated by some combination of the two, both human and machine, working in harmony with one another, each doing what they do best.”

Percentage by which AI-enabled technology has been shown to improve hotel guest response and service time and/or decrease problem resolution time



Artificial intelligence also improves guest service fulfillment time while decreasing problem resolution time by an average of one-third, according to research conducted for this study. That percentage will likely increase over time as artificial intelligence is used to tackle more complex guest experience management tasks and take on any number of additional responsibilities that directly influence customer satisfaction rates.

Artificial intelligence can further enhance the in-room guest experience, where expectations are also on the rise, by seamlessly integrating technology-enabled amenities into the overall guest experience. Utilizing individual guest preference data captured during previous hotel stays, artificial intelligence can automatically set up a guest room with a level of precision that would elude human efforts.

IoT devices can update the room with personalized music, temperature and lighting settings, anticipate the need for room service or specific information requests and predict which hotel or outside services and activities would likely be of interest to guests on an individual basis and be most likely to elicit a favorable response. It can customize these services and activities and calculate the optimal time to send invitations and notifications via email, direct messaging or a mobile app.

Even the best human concierge and guest services managers would be hard pressed to replicate that capability.

“IoT devices can update the room with personalized music, temperature and lighting settings, anticipate the need for room service or specific information requests and predict which hotel or outside services and activities would likely be of interest to guests.”

Powering Guest Personalization

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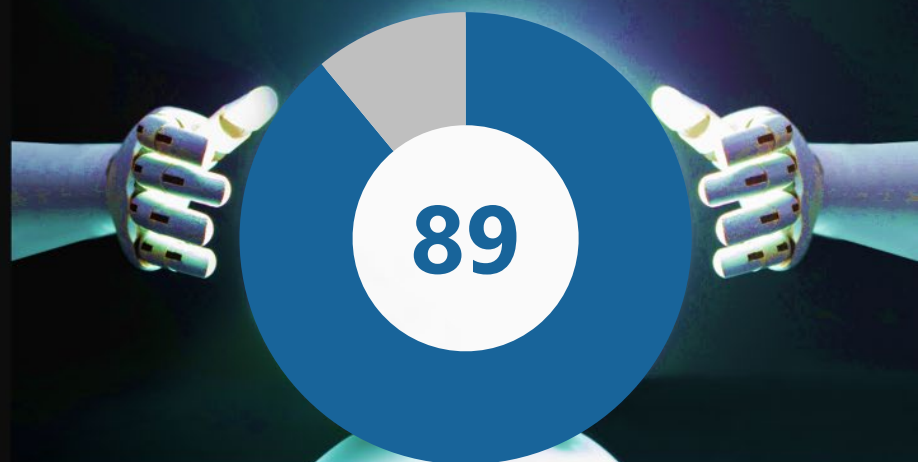


Guest personalization is the North Star toward which every hotel group today is navigating. Most hotels have no choice but to move rapidly in the direction of guest personalization, given the need to not only meet rising guest expectations, as discussed in the previous chapter, but to also maintain competitive parity. Some degree of guest personalization is quickly becoming table stakes, the minimum ante that hotels have to put on the table just to stay in the game. In past years, many hotel groups have invested heavily in creating more unique and differentiated physical places, including upgraded guest rooms with the latest comforts and amenities, some of which are technology-enabled. Now the focus has shifted to providing guests with exceptional and memorable stay experiences enabled through the power of personalization.

At this point, it seems clear that the future success of many hotels and resorts, at least those operating in certain categories where service quality ranks as a key point of competitive differentiation, will rest squarely on how well they can gain a deep understanding of their guests on an individual basis and, importantly, how well they can act upon that understanding to improve the overall quality of the guest experience. In fact, 89 percent of hoteliers “agree” or “strongly agree” that targeted personalization – i.e., presenting guests with highly relevant messages, offers and services at the right time – is one of the most effective ways to improve the guest experience and, ultimately, guest satisfaction, loyalty and favorable brand advocacy.

“The future success of many hotels will rest squarely on how well they can gain a deep understanding of their guests on an individual basis and, importantly, how well they can act upon that understanding to improve the overall quality of the guest experience.”

Percentage of hoteliers who “agree” or “strongly agree” that targeted personalization – i.e., presenting guests with highly relevant messages, offers and services at the right time – is one of the most effective ways to improve the guest experience



And here artificial intelligence is poised to make all the difference in world, with some hotel groups already effectively leveraging AI-enabled tools in their efforts to drive guest personalization. Guest personalization is about data. It is a function of capturing and leveraging a vast ocean of guest profile information.

Ideally, this information should include hundreds or thousands of data points gleaned about a guest's activities, from hotel booking to hotel check-out and everything in between. All of the booking data, geo-demographic data, transaction data and behavioral data should reside in a centralized data repository, which should also include the complete folio history of charges incurred and payments made by an individual guest during a stay, or over any specified period of time, across all of the hotel group's properties.

A single consolidated view of each guest profile record, both at the property and multi-property level, is essential. Every detail, from the food and drinks a guest orders to their usage of various hotel services and in-room amenities to every interaction, transaction and documented experience that takes place between the guest and the hotel property, updated on a continuous basis, can help paint a more robust, comprehensive portrait of the guest and can better inform how a hotel can serve them best. In short, access to large volumes of guest data, integrated from multiple sources, is needed to build the foundation for guest personalization.

With that foundation in place, and given the right technology capabilities, a hotel can understand a guest's personal preferences, interests and behaviors at a granular level. It can facilitate relevant interactions and recommendations and take any number of other types of actions based on a guest's stated and inferred preferences, interests and behaviors, that are designed to make the guest feel special and appreciated.

“Artificial intelligence is poised to make all the difference in world, with some hotel groups already effectively leveraging AI-enabled tools in their efforts to drive guest personalization.”

The most obvious of these actions might range from presenting a guest with a complimentary welcome tray with their favorite wines and desserts upon their arrival to suggesting relevant restaurant bookings, specific hotel services and local cultural events. The ability to cater to a guest's unique wants and needs by presenting them with relevant offers and special "surprise and delight" perks based on their characteristics and attributes and everything that is known about them should be commonplace.

Room customization is an important element of guest personalization. Artificial intelligence can make it possible for people to enter a guest room for the first time and find everything exactly as they like it, from the lighting and temperature control settings, to the blinds opening automatically in the morning to their favorite music playlists already cued up for their morning yoga routine to streaming content tailored to their preferences already featured on the TV screen.

How about their preferred fitness routine, which they themselves selected during their previous visit, projected onto a full-length mirror? These kinds of preprogrammed in-room settings speak to the next wave in pampering hotel guests. And the more often guests return to the hotel, and the lengthier their stays, the more the hotel will know about them and improve their guest experience through personalization.

Taking personalization to the next level, a hotel should be able to look into the future and actually predict guest wants and needs, as well as their likely requests and even potential issues that may arise, even in advance of their arrival. In a way that almost feels like science fiction, a hotel should be able to anticipate and proactively address guest needs before they even present themselves.

“Artificial intelligence can make it possible for people to enter a guest room for the first time and find everything exactly as they like it, from the lighting and temperature control settings.”

Of course, all of this is easier said than done — or at least that can be said to be the case until now, before the advent of next-generation hospitality solutions that effectively utilize artificial intelligence in the context of guest experience management, giving hotels the opportunity to enable personalization in ways that would not have been previously possible.

Given the ability of machine learning to sift through enormous volumes of data and make strategic decisions based on guest characteristics and behaviors that automate “best next actions” much faster and more accurately than any human or team of humans, it is not hard to imagine all the ways that hotels can tailor the experience they offer guests.

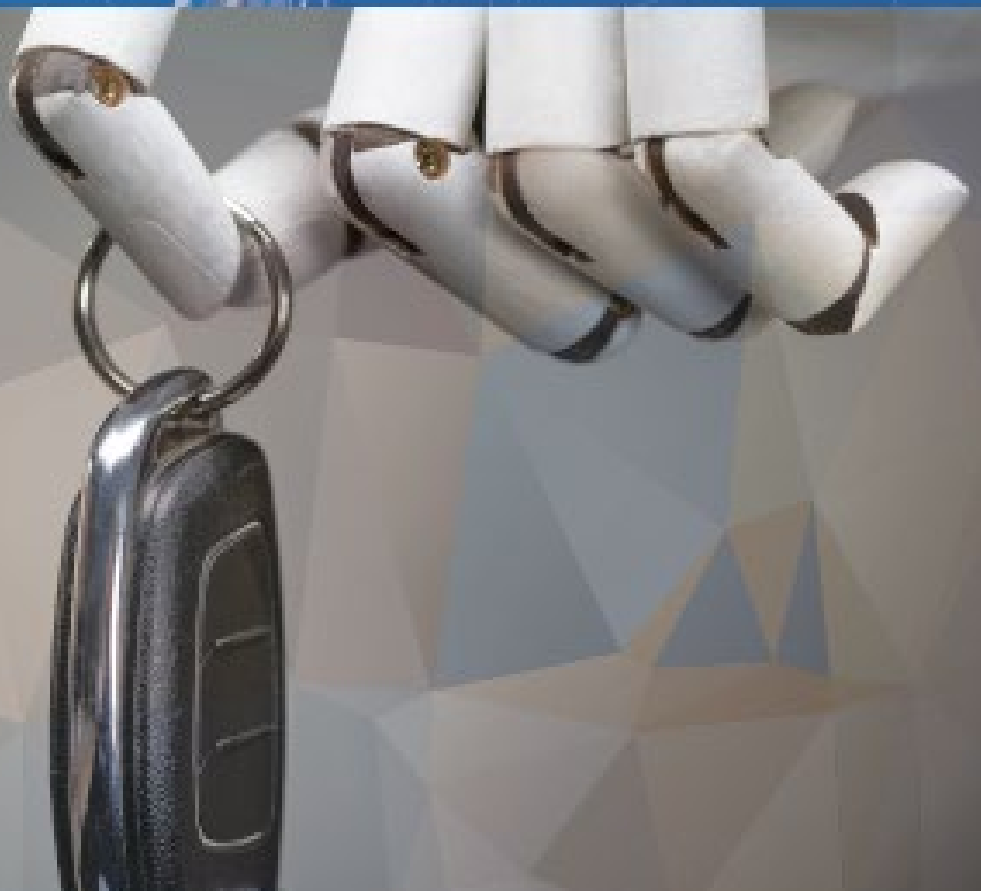
If a guest checked out late the last three stays and requested a nanny service, an AI-enabled solution should be able to anticipate that the same may happen again and automatically offer the guest a late checkout or suggest the same nanny service in advance of any actual request. If a guest visited a nearby sports club during a previous visit, or in any other way expressed a desire to exercise, then the hotel may want to present that guest with a special pass to a nearby club.

The important point is that hotels now have the capacity to automatically match guest preferences and tastes to related opportunities, and even automatically alert hotel staff, who can then act upon those opportunities with high-touch customer services.

“Machine learning can be used to sift through enormous volumes of data and make strategic decisions based on guest characteristics and behaviors that automate ‘best next actions’.”

Fueling the Guest Journey

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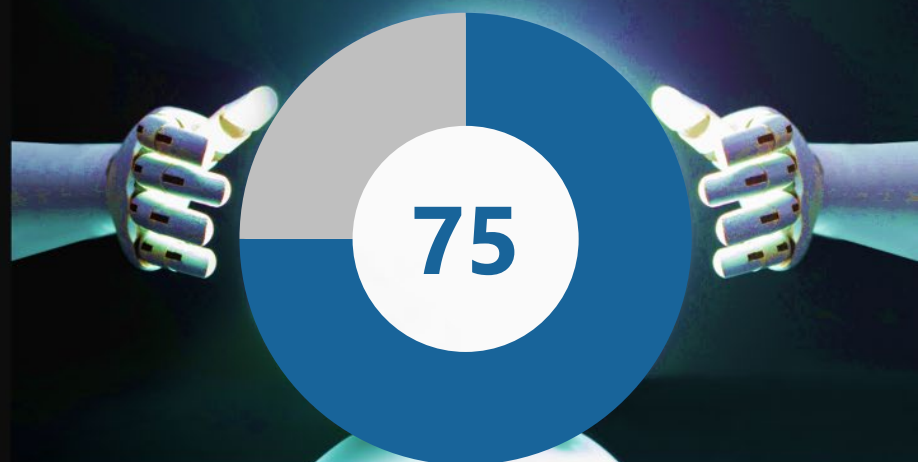
Friction is desirable in many circumstances. Land vehicles, for example, need friction in order to accelerate and decelerate. When it comes to guest satisfaction, however, friction is rarely desirable and hotels strive to put the brakes on any friction that may impede or otherwise negatively effect the guest experience. Guests may experience friction in their interactions and transactions with a hotel across all parts of the property, all touchpoints and all phases of *the guest journey*.

The guest journey is the record of every interaction and transaction, both digital and in-person, that a guest has with the hotel throughout the entire course of their stay. Hoteliers have become increasingly focused on tracking and analyzing the guest journey, from the moment the guest first steps foot in the hotel lobby to the time they check out of the property. Arguably, the guest journey begins much earlier, at the point when a guest first sets out to research and explore their stay options and on through the booking process. An argument can be made that the guest journey continues even after they check out of the hotel.

By meticulously mapping the guest journey at an individual or narrowly-defined customer segment level, it becomes possible to identify patterns that speak to shortcomings with the current state of the guest experience and pinpoint specific opportunities for improvement. Of course, conducting this exercise is no easy feat.

“It becomes possible to identify patterns that speak to shortcomings with the current state of the guest experience and pinpoint specific opportunities for improvement.”

Percentage of hoteliers who “agree” or “strongly agree” that AI-enabled technology can significantly enhance the guest experience across all stages of the guest journey



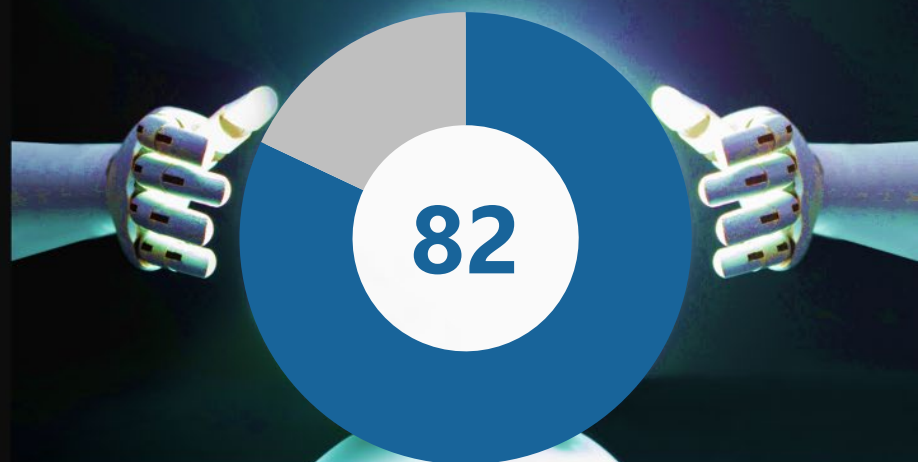
In fact, until now, performing an in-depth analysis of this intensity, at scale, has been next to impossible given the time, effort and expertise involving advanced analytic modeling techniques and specialized tools. The good news is that artificial intelligence can help automate the process of sifting through massive amounts of data, making sense of the findings and then meticulously assessing all the different factors that have an important impact on the quality of the guest experience. This means, among other things, dissecting all the drivers of guest satisfaction at a granular level, which may include unexpected sub-attributes of service quality perception.

As machine learning moves from buzzword to functional reality in the hospitality sector, it seems all but certain that it will play an increasingly important role in helping hotel operators hone in on the different elements of the guest journey, monitor and assess performance, and flag shortcomings that need to be addressed. In some cases, it may even resolve issues without the need human intervention and also suggest new innovations to improve guest satisfaction.

Today 82 percent of hoteliers cite the ability to “capture data from which hoteliers can generate actionable insights for improving business processes and driving innovations that further enhance the guest experience” as a top benefit of an AI technology initiative. To be sure, hoteliers believe that artificial intelligence is here to stay and that the evolution of related technologies will progressively improve the overall guest experience.

“As machine learning moves from buzzword to functional reality in the hospitality sector, it seems all but certain that it will play an increasingly important role in helping hoteliers hone in on the different elements of the guest journey.”

Percentage of hoteliers who cite the ability to “capture data from which hoteliers can generate actionable insights for improving business processes... that further enhance the guest experience” as a top benefit of an AI technology initiative



These technologies may be both internal-facing as well as guest-facing solutions, the most important of which may also represent the most simple use case: smartphone messaging apps. Indeed, guests interacting with a hotel via a messaging app on their smartphones has proven to be the most effective way for hotels to stay connected with guests through all phases of the journey.

Let's face it: A hotel's only real currency is its relationship with its guests. Ease of communication is key to facilitating that relationship. This explains the groundswell of activity around hotels offering guests the ability to text or message with them through any number of communications channels. These include established messaging channels like WhatsApp and Facebook Messenger (now available to developers) as well through their own proprietary messaging apps and bots — or, in some cases, through other third-party technologies.

Large hotel companies have gravitated toward launching their own proprietary messaging apps. The additional functionality adds value to their native apps, which in many cases offer features like mobile check-in and check-out and keyless room entry.

Importantly, proprietary apps allow hotels to create a more extensive and richer data connection with each individual guest. When a guest uses a hotel's native app, it becomes that much easier for it to know exactly who that guest is, and to collect and integrate a record of those guest's messages as part of their profile information. By being able to tie messaging back to their guest profile, a hotel can know, for example, that a guest has used the spa on each prior visit. It can message the guest to inform him where the spa is located and its opening hours and even send a special promotional offer.

“Guests interacting with a hotel via a messaging app on their smartphones has proven to be the most effective way for hotels to stay connected with guests through all phases of the journey.”

While different approaches to messaging with guests have different advantages and disadvantages, all of them have the same goals: to build guest loyalty, increase guest engagement, and enhance the overall guest experience. Many hotels send guests an invitation to their messaging app after they book their stay. On an opt-in basis, guests can receive pre-stay notifications and view key reservation details. They can explore neighborhood guides, set their preferences, and communicate with the social care team.

When it comes to the evolution of hotel messaging, the big question has been: to what extent will messaging apps incorporate artificial intelligence? Also: will the conversation between hotels and guests shift from a request-based one to more of a two-way dialogue? As times goes on, it seems clear that the latter will be the case, and, also, that the conversation will be largely enabled by artificial intelligence.

“When it comes to the evolution of hotel messaging, the big question has been: to what extent will messaging apps incorporate artificial intelligence?”

Working Hand in Hand with Hotel Staff

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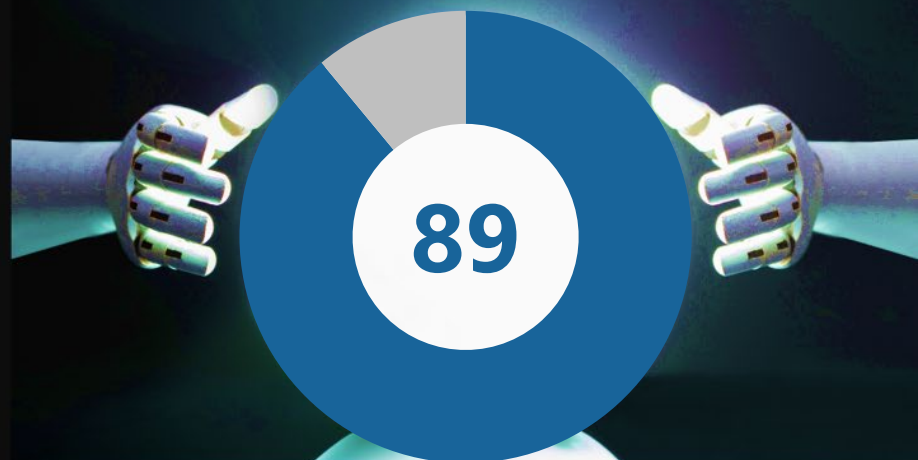
Artificial intelligence has been disrupting and transforming various industry sectors for years. While the hospitality industry as a whole may not have been at the forefront of AI-enabled technology adoption, hotel operators are now paying close attention to the potential benefits as well as the potential threats that artificial intelligence may present to them.

In many cases, as discussed, they are investing significant resources in AI-related technologies, particularly ones that allow them to take advantage of the evolution in guest experience management. At the same time, they are seeking to understand the potential impact of artificial intelligence on front desk personnel, customer service reps, concierge and other guest-facing hotel staff positions and support resources.

For most hoteliers, regardless of the size or type of property they operate, it seems clear that, sooner or later, they will need to embrace the fusion of AI-enabled speaker systems and personal assistants, IoT advanced in-room controls, consolidated service devices and even robots that might appear to be straight out of Star Wars to transform their properties and redefine their guest service standards.

“While the hospitality industry as a whole may not have been at the forefront of AI-enabled technology adoption, hotel operators are now paying close attention.”

Percentage of hoteliers who agree that AI significantly reduces hotel operating costs; 86% agree that AI improves employee satisfaction (by freeing employees to focus on higher-value tasks and by enhancing their knowledge and performance)



The financial benefits are obvious. In fact, 89 percentage of hoteliers agree that AI significantly reduces operating costs in the customer support function. By integrating artificial intelligence to redefine the meaning of an exceptional customer experience, hotels also have the opportunity to increase positive brand awareness and increase customer loyalty, which should translate into tangible revenue gains.

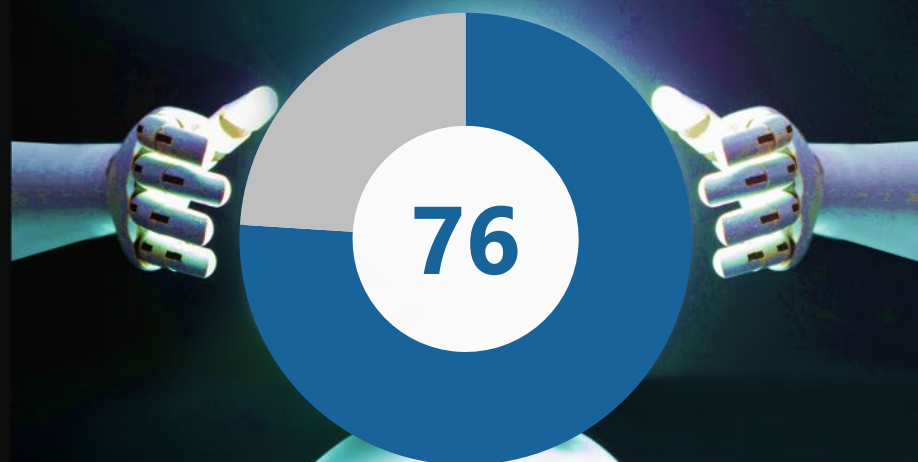
An important question for hoteliers to ask as they embark on this journey is: To what extent will the migration from humans to machines redefine, or even possibly eliminate, existing jobs? Can humans and machines work together in a way that is complementary and benefits both hotel staff and hotel guests?

The answer, in most cases, would appear to be a resounding “yes.” In fact, 86% of hoteliers agree that AI actually *improves* employee satisfaction. It does this, in part, by handling mundane tasks, such as answering frequently asked questions, freeing employees to focus on higher-value, high-touch tasks and by enhancing their knowledge and performance.

To that point, one should keep in mind that a new technology often turns out to be complements, not substitutes, to the old technologies (and even manual processes) it is envisaged to replace. A new technology may simply be better suited to serving a different user need and in a different situation.

“Can humans and machines work together in a way that is complementary and benefits both hotel staff and hotel guests?”

Percentage of hoteliers who have already invested (or plan to do so within the next 12 months) in one or more AI technology-related initiatives (including chatbots and mobile messaging apps) focused on enhancing the guest experience



Guests who prefer to interact with real humans in some situations may be perfectly content to interact with AI-enabled technologies in other situations. With artificial intelligence, hotels are better able to handle guest inquiries and provide support in a far more efficient and effective manner, reducing strain on employees while improving guest satisfaction in the process, and in a way that complements and enhances existing processes.

At a growing number major hotel groups, artificial intelligence is already reducing the workload of human customer support reps by orders of magnitude. Until recently, the team at one major hotel group was struggling to keep up with the tens of thousands of support tickets it received each year. Its multiple support systems were running at full capacity. Responses to guest inquiries were often delayed or incomplete, putting the company's reputation at risk. To meet its capacity demands, the company implemented AI-enabled virtual assistants with natural language integration and self-learning capabilities that could provide guests with a conversational support experience.

Integrated with the hotel's case management tools, the technology has the ability to adapt over time. It can get up to speed on the customer support processes quickly while feeding back information that continues to help improve the guest experience with each interaction and support engagement.

To date, the technology has accelerated call resolution times in a large number of tasks, reportedly reducing contact time by more than four minutes per interaction and with upwards of 85 percent accuracy on received queries for many tasks. This has gone a long way toward taking the pressure off of the human support personnel, who are now free to focus on higher-value tasks, while improving the guest experience on a mass scale.

“At a growing number major hotel groups, artificial intelligence is already reducing the workload of human customer support reps by orders of magnitude.”

The complementary nature of AI is such that it can also enhance the knowledge, performance and speed of human customer service reps. Some hotel groups are experimenting with an AI-enabled voice-controlled speaker to listen in on sales reps conversations with prospective guests. If the rep fumbles on a response, the technology comes to the rescue.

Some companies are using AI bots to suggest responses to guest queries which a human agent can then approve or adapt before sending. In some cases, this approach has doubled the number of text-based inquiries a hotel can handle without increasing the number of reps on its payroll.

At one hotel group, the bots are now able to handle upwards of 2 million queries a day, a workload equivalent to around 7,000 human staff. By offering a virtual concierge that automatically answers guests' queries by text, it has reduced calls to the human concierge desk by 30 percent.

Technology adoption requires an internal culture change. Employees need to understand the benefits of artificial intelligence and how it can enhance not only the guest experience but also improve their own employee experience. They need to overcome any fears, particularly as they relate to job security, and see how AI allows their jobs to fit into higher-level roles.

AI-enabled technology needs to be made a part of the overall business strategy. Employees need to be included in the strategy and understand how they can work together with the technology to their own advantage as well as to the advantage of the organization as a whole.

“Employees need to understand the benefits of artificial intelligence and how it can enhance not only the guest experience but also improve their own employee experience.”

Conclusion

When it comes to utilizing AI, the hotel industry was lagging behind the times. However, as this research study shows, that is no longer the case, particularly with respect to the guest experience. Today the industry is moving fast and furiously toward not only mirroring AI-enabled home and office experiences in guest rooms, but surpassing those experiences with a range of innovative capabilities designed to further elevate the overall guest experience across the entire property — and beyond.

The following are just a few of the key takeaways of this study for hotel operators to keep in mind:

- AI dramatically reduces the need for human assistance when it comes to answering questions and resolving problems that commonly arise during a guest stay, resulting in substantial cost savings.
- AI is driving the evolution of hotel messaging; increasingly, the conversation between hotels and guests is shifting from a request-based one to a two-way dialogue, which is far more valuable.
- AI significantly enhances the in-room guest experience by seamlessly integrating technology-enabled amenities. This integration translates into increased guest satisfaction and loyalty.
- By automating “best next actions” based on guest data, AI gives hotels the opportunity to enable personalization in ways not previously possible — driving increased RevPAR in the process.
- AI can identify and resolve issues that could potentially erode guest satisfaction without the need for human intervention. It can also suggest new innovations to further improve guest satisfaction.

While it may be early in the game, AI is already changing the guest experience across the travel lifecycle, including the on-property experience. As the research makes clear, this transformation will only accelerate over the next few years, ushering in the future of the hotel guest experience.

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Oracle Hospitality offers a range of software, hardware and related services – including a leading portfolio of cloud solutions for hotel and food and beverage operations – designed for the hospitality industry. Oracle Hospitality brings 40 years of experience in best-in-class technology solutions that help our customers elevate the guest experience, streamline operations and enhance profitability – all while reducing the cost and complexity of IT.

Contact Oracle Hospitality

7031 Columbia Gateway Drive
Columbia, MD 21046

www.oracle.com/hospitality
oraclehosp_ww@oracle.com

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Contact Starfleet Research

6650 Northwest Highway, Suite 213
Chicago, IL 60631

www.starfleetresearch.com
research@starfleetmedia.com

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