

The Road to 2025

## Hospitality in the Digital Era

Across-the-board transformation is disrupting the hospitality industry. Here's how organizations can prepare for a future of chatbot services, expanded loyalty ecosystems, staff-less lobbies and tech-driven guest experiences, while facing new competition from nontraditional contenders.

# Executive Summary

The way we purchase and consume hospitality services is changing dramatically as the lodging industry transforms its offerings, products, services and infrastructure to meet the needs of the digital age.

By 2025, many technologies that are just emerging today will have moved into mainstream operation. Robotic process automation (RPA), for example, will disrupt hotels' booking and loyalty processes in positive ways. Chatbot services will integrate with booking and purchasing, forming a new notification channel for guests. Biometrics will keep us more secure, robots will bring us breakfast, and drones will deliver us hamburgers.

Loyalty and streamlined rewards redemption will be another key focus. Hotels will actively partner with other providers as they expand their role in the travel experience, leading to loyalty networks among hotels, airlines, restaurants and retailers.

As technology reinvents every stop on the travel journey, the on-site experience is no exception. Guests' growing comfort with technology is driving several disruptive trends. Staff-less hotels will appeal to independent-minded travelers – and slash human resource- and operating-related costs. Guest acceptance of tech-enabled hotel lobbies will green-light hospitality companies' big bet on the Internet of Things (IoT).

Look for experience-based guest services to become the hallmark of hotel offerings in 2025. The more memorable the hotel experience, the better. The brands we frequent will gain ever sharper insights and be able to anticipate customer needs. Consumer- and business- driven tech-enabled shifts are only part of the 2025 scenario for hotels. Other challenges include rapid transformation of the business, the complexity of large franchise ownership bases and the high-turnover labor environment.

This white paper identifies the changing dynamics of hospitality, including the expected boom in Chinese outbound travel. We also examine the advent of new segments, such as driverless cars and their expected impact on hospitality. We conclude with guidance for how hospitality providers can assess their readiness:

- Invest in getting to know their guests.
- Evaluate labor innovations.
- Leverage information as an asset.
- Determine IoT readiness.

While the most successful hotels know how to nurture travelers' dreams, the stakes in 2025 will have grown even higher as digital convenience and options continue to evolve along with mainstream consumer expectations.

## Inspiration: change starts at the beginning

The hospitality industry has always excelled at sparking travelers' imaginations. Today, however, digital intermediaries have encroached on hospitality providers' traditional territory, grabbing a significant percentage of the industry's revenues. Every time a customer is inspired to book through a provider's proprietary channel rather than an intermediary's, it results in savings of up to 20%.

In a world cluttered with options and intermediaries, inspiration has become an increasingly important tool for retaining market share and revenue. We can only imagine where Priceline will be in 2025. Will Amazon be selling hotel rooms?

While the most successful hotels know how to nurture travelers' dreams, the stakes in 2025 will have grown even higher as digital convenience and options continue to evolve along with mainstream consumer expectations. The inspiration that converts views into purchases will include a mix of experiences that appeal to travelers by blending technologies that enable hyper-personalization.

Dazzling, "you-are-there" imagery will fill content and programmatic advertising. For example, imagine inviting environmentally aware, tech-savvy millennial travelers to view content that includes a virtual tour of a hotel chain's "green" resort in Bali.

Even more persuasive will be experiences driven by virtual reality. For tech-savvy consumers, exploring a prospective hotel room through a virtual reality (VR) headset is a far more compelling sales pitch than browsing a static image. While VR is relatively new, leaders in the hotel space are already experimenting to understand best use cases.

Marriott Hotels launched VR Postcards, a series of immersive travel stories that guests view in 3-D on Samsung Gear VR headsets.<sup>1</sup> UK travel agency Thomas Cook created a video that lets UK and German customers experience New York City through VR. The "Try Before You Fly" campaign boosted excursions to New York by 190%, and generated a 40% ROI for the travel agency.<sup>2</sup>

Backed by VR and personalization, inspiration will be more fluid in 2025, finding its way to entertaining in-room experiences such as VR-assisted sports or other activities. Customized experiences will be the rule, not the exception. Powered by artificial intelligence (AI) and automated processes, personalized offers will be at the heart of inspiration.

Booking with a provider or an intermediary will be the moment of truth: In hotels' struggle for ownership of the customer relationship, the ability to inspire customers and prospects of all demographics to book with them, via the preferred channel, will be a core survival skill. To attract the lucrative Chinese travel market, for example, providers will need to be able to inspire them (see Quick Take, next page).

# Quick Take

## How hotels can attract Chinese outbound travelers

A seismic shift is under way in the demographics of international travel. The boom in China's economy and soaring disposable income has given rise to the Chinese luxury traveler. Here's a close-up look at how hotels will need to cater to this sought-after market.

By 2025, more than 220 million outbound travelers from the world's most populous country will be globetrotting. The young and affluent are predicted to spend \$35 billion in the U.S., according to research by Goldman Sachs.<sup>3</sup>

To serve this market segment, major hotel chains must do the following:

- Create personalized travel programs. Features that attract and retain outbound Chinese travelers include multi-lingual, customer-facing mobile apps and brand websites that support Chinese languages. Chinese-speaking concierge services will be a must. Young luxury travelers are a tech-savvy market segment. They favor services such as high-speed Wi-Fi, interactive digital concierge services and digital entertainment updated with the latest Chinese content. Organizations will need a digital infrastructure to support these demands.
- Gain the high ground with social media marketing. China's young luxury travelers rely on WeChat as their primary source of travel information, along with other popular travel sites such as Ctrip and Qunar.<sup>4</sup> With social media predicted to serve as the source for 90% of travel inspiration and information by 2025, connecting with Chinese social media sites is a key move for hotels. Marriott Rewards has teamed with DaoDao, TripAdvisor's official Chinese website, to provide search capabilities through the hotelier's WeChat platform.<sup>5</sup>
- Anticipate consolidation in China's domestic market. The sizable presence of major global hotel chains in the Chinese hospitality market will likely lead to market consolidation, with small regional players being taken over by the global giants.<sup>6</sup> Hotel chains are investing heavily to capture the market. InterContinental Hotels Group introduced HUALUXE Hotels and Resorts, an upscale brand. It also launched an employee-training program to enhance the outbound travel experience for Chinese guests.<sup>7</sup> Hilton Worldwide's Huanying program features a concierge app that allows Chinese-speaking guests to order room service in their own language – and then translates the order into English for the hotel staff.<sup>8</sup> Marriott, Starwood, Intercontinental and Accor have a combined pipeline of 400 new hotels in China and are still building.

The key to successfully serving this fast-changing demographic is customer research, including guest behavior data from companies that specialize in the Chinese travel market.

Hotels would also do well to stay abreast of outbound travel from India, Latin America and Africa. Although current research data doesn't support a huge outbound travel spend from these geographies, macro-economic scenarios change rapidly.

Instead of the automated e-mails that hotels typically send guests to suggest amenities – such as spa treatments, airport transfers and dinner reservations – chatbots in 2025 might suggest these offers themselves, increasing offer relevance by asking guests questions.

### Booking and purchasing

Think of the routine booking questions fielded by the front-desk hotel staff on a daily basis.

- “Do you have any rooms free tonight?”
- “My dog is well-behaved. Can I bring her?”
- “Do you offer conference facilities?”

In 2025, conversational software bots could be answering these basic inquiries. Chatbots simulate intelligent conversation through text and voice, enabling humans to converse with computers through their native language.

Following the hospitality industry’s widespread adoption of in-house apps and instant messaging – and the prevalence of text messages in everyday life – chatbots are expected to flourish in hotels, winning out over phone and e-mail communications. Dealing with a chatbot feels familiar and convenient to customers. Guests can explore options at their own pace, and chatbots are on duty 24x7, ready to be quizzed whenever the need strikes. (To learn more, please read our white paper “[The Chatbot Imperative: Intelligence, Personalization and Utilitarian Design.](#)”)

Conversational AI is already hard at work in hospitality, taking fast food orders and helping travelers plan trips. While still in its infancy in the hotel sector, robotics holds enormous potential in several areas of booking and purchasing. For one thing, it lowers the cost of service via automation. Coupled with the industry’s growing operational costs, that potential will drive hotels to adopt bots aggressively during the next decade.

Equally important is chatbots’ potential to integrate with booking. By 2025, chatbots are likely to form a new reservation and notification channel for guests. Modeled on text conversations with call center agents and website navigation paths, booking bots may be able to not only fulfill reservations but also upsell rooms and promotions in line with customer preferences.

Instead of the automated e-mails that hotels typically send guests to suggest amenities – such as spa treatments, airport transfers and dinner reservations – chatbots in 2025 might suggest these offers themselves, increasing offer relevance by asking guests questions.

Providers of hotel reservation systems will need to integrate with chatbot software to ensure bots’ responses are accurate and the offers they make are relevant and welcome. It’s important to make sure guests can opt out easily and connect with contact center staff.

---

## Owning the guest experience, beyond the hotel stay

It goes without saying that retaining existing customers is far more cost-effective than acquiring new ones. So perhaps it's no wonder that 2025 will see the hospitality industry's participation in the guest experience go beyond booking rooms and additional services. To retain customers, it will be increasingly important for hoteliers to collaborate with other partners in the hospitality ecosystem, such as airlines, restaurants and retailers. (For more information, see our white paper "[Own the Travel Ribbon for Ultimate Customer Engagement](#).")

Loyalty programs will grow similarly collaborative. Currently, loyalty programs' lack of interoperability among industries is a limiting factor in their usefulness for consumers. But as the loyalty network expands among partnering hotels, airlines, restaurants and retailers, so will the programs' appeal to consumers.

A downside will be the increased complexity of tracking points and rewards. Monitoring the accrual and redemption of loyalty rewards is already difficult for program providers. Each year, organizations issue 16 trillion loyalty reward points, according to Loylogic, a provider of loyalty solutions. The estimated value is a staggering \$117 billion. Unused rewards represent large balance sheet liabilities for many companies.<sup>9</sup>

Even more challenging will be meeting travelers' expectations in 2025 for the easy, immediate transfer of points. Cumbersome redemption processes will be replaced by instant redemption. A loyalty member earning rewards for a hotel stay might trade points for, perhaps, a lift ticket at a nearby ski resort on the afternoon of check-in. Imagine travelers paying their hotel bill with airline points. Or coffee lovers sipping lattes paid for with car-rental rewards.

Hoteliers are already taking first steps. [La Quinta's recently revamped loyalty program lets members redeem points](#) for everyday purchases at restaurants, grocery stores and online bookstores.<sup>10</sup>

## Easier tracking of loyalty points

Blockchain technology holds great potential for helping hospitality organizations manage the accrual and frictionless redemption of loyalty points. The distributed ledger technology is secured by encryption, and it works without the need for a centralized authority such as a bank or government agency.

Because it eliminates the need for third parties, blockchain reduces transaction costs. It makes tracking points less expensive, more secure, instantaneous and visible to both the owners of the points and the companies issuing them. (For more information on blockchain, read our report "[Demystifying Blockchain](#).")

Analyzing redemption patterns will generate even more opportunities for personalization. With such convenient interoperability, the number of transactions could snowball – and reduce the cost per transaction.

Although blockchain adoption offers these and many other benefits, several hurdles remain. For one thing, there are few standards in place for the technology. For another, blockchain requires high computing efficiency, which is costly. It also demands shared infrastructure and an ecosystem of partners willing to experiment and engage using distributed ledgers, public key infrastructure (PKI) encryption and resources to process all the blocks.

## The on-site experience

### Personalization and security: the role of biometrics

Arrival continues to be a frustration point in the travel journey. While how we arrive at hotels is set to change dramatically, so is the means of our arrival (see Quick Take, page 9). Our research shows travelers overwhelmingly want easy, frictionless check-in.<sup>14</sup> We believe by 2025, the straight-to-your-room experience will be mainstream, and check-in lines will be a distant memory. Once guests are in their room, safety is a paramount concern. By 2025, biometrics will feature prominently in the on-site experience. Facial recognition will help identify guests, and fingerprint scans will offer secure access to rooms and amenities.

Casinos were early adopters of biometrics-based solutions, using facial biometrics for surveillance and fraud detection, and user authentication systems for payment authorization and controlled access to player tables.<sup>15</sup> With the rise of easily installed and programmed biometrics readers, the technology will soon be within reach for large hotel properties that need to update access daily to restricted areas.<sup>16</sup> Other factors will drive **hotels' adoption of biometrics**. One is the growing number of biometrics-enabled mobile devices. By 2020, all smartphones will have embedded biometric features.<sup>17</sup> Another factor is hotel guests' growing acceptance of biometrics. Forty-one percent say they're likely to choose hotels with facial recognition technology, according to research by Austin-based Software Advice.<sup>18</sup>

A challenge for broad acceptance of biometrics is convincing the public that the highly sensitive information is secure. While fingerprint readers are widely accepted,<sup>19</sup> facial recognition is a tougher sell among privacy-conscious consumers.<sup>20</sup> When adopted for short-term uses such as fingerprint scans for room access, however, biometric data need not be stored in a central database as a permanent record. If possible, it should be stored locally on smart cards or security tokens to reduce the risk of data loss or inappropriate cross-linking of data across systems.<sup>21</sup>

The industry's implementation of biometrics to enhance existing card systems and reduce "card clutter" should always be customer-centric: Guests should feel comfortable using the technology. Promoting facial recognition as an experience enhancer during check-in should result in easier adoption of biometrics.



# Quick Take

## Driverless cars: getting to hotels will impact how and where we travel

The democratization of cars will have a profound impact on hotels.

Auto makers and transportation providers are collaborating to make driverless cars available when and where customers need them. Will the hospitality sector's focus on comfort as its primary service become redundant in era of autonomous vehicles? Autonomous vehicles let riders work, eat and sleep as they motor along. That stepped-up comfort in cars will likely mean fewer nightly stays at hotels.

Room nights are the most perishable and highest revenue contributor to hotel balance sheets. What products and services should hospitality organizations create to remain relevant to business and short-haul travelers?

- I Hourly room rentals.** Instead of overnight stays, travelers on road trips of six to eight hours in driverless cars may begin to view hotels as places to shower and change clothes, or to hold meetings and events. Options for hotels in 2025 might include subscription services in partnership with car manufacturers and rental or transportation providers.
- I Vehicle leasing programs.** Will car ownership become a thing of the past? One 2025 scenario predicts the rapid rise of car sharing, with drivers purchasing subscriptions to car manufacturers rather than owning vehicles outright.<sup>11</sup> By offering daily hotel credits to travelers in exchange for use of a vehicle, hotels will reduce operational costs for fleet maintenance and insurance.
- I Repurposed parking lots.** Autonomous vehicles could reduce the need for parking space in the U.S. by more than 5.7 billion square meters, according to a report by McKinsey.<sup>12</sup> Moreover, it's estimated that autonomous cars will require only four inches of parking space on either side, making parking garages 60% more efficient, reports Boston-based architectural firm Arrowstreet Inc.<sup>13</sup> With less demand for parking and fewer nightly stays, hotels will need to explore new revenue-generating uses for parking lots, such as restaurants and conference centers.
- I Rethinking of hotel rooms.** The room of the future will be smaller, and some may not even include beds. Properties with studio-size guest rooms that are within 500 miles of major locations will offer short-term services.

Hotels need to invest in smart partnerships and technologies to be ahead of the curve. New services and business models can enhance hotels' role in the travel journey.

## When less is more: going staff-less

Not every customer experience requires the human touch to be exceptional. For independent-minded travelers, staff-less hotels can offer a better on-site experience. It may seem contrary to the people-centric business of hospitality, but reducing hotel staff does not necessarily correlate with lower service quality. In the digital era, many travelers even prefer staff-less properties.<sup>22</sup> Why stand in line or wait for service when you can self-serve at your convenience?

With a mix of new technologies – including IoT, bots, biometrics and AI – hotels can begin to transition customers to self-serve digital check-ins and room-service orders.

In Munich's Stachus Square, Hotel Buddy is already doing just that. Guests at the 75-room property use mobile devices to book rooms, check in and pay for their stays.<sup>23</sup> Hotel Buddy has no staff, and its cloud-based environment requires no hardware. Kiosks and bots replace some hotel services, and others, such as housekeeping and pool service, are managed by crowdsourcing and on-demand services from contracted vendors.

The economics of staff-less service are favorable to both hotels and consumers. Fixed labor costs are the single largest expense item for hotel operators in the U.S., accounting for 44.8% of all operational dollars, according to *Lodging* magazine.<sup>24</sup> Rooms and food and beverage departments are the most expensive to manage – and the best candidates for self-service and outsourcing. Staff-less hotels also save costs in administration, recruitment and training.

While the balance-sheet savings are significant, customer-centric hotels' motivation should always be optimal guest experiences (see Quick Take, page 11).

### IoT: connect, then upsell

Tech-enabled lobbies are a growing attraction for travelers,<sup>26</sup> so it's no surprise that hospitality companies are betting big on IoT to connect with guests' smartphones and wearable devices. Gartner predicts 26 billion IoT-connected devices will be in use by 2020.<sup>27</sup> What is surprising, however, is IoT's broad application in hospitality – and its potential to drive revenues.

Guests will use mobile devices for check-in and checkout, as well as keyless entry. Although Disney Resorts pioneered its MagicBands in 2013,<sup>28</sup> IoT remains in limited use today in hospitality. By 2025, however, the technology will be mainstream. Numerous hoteliers that are investing in mobile engagement expect guests will use mobile devices not only for room selection and payment but also as access keys for amenities such as spas and pools.

Equally important is IoT's potential for growing revenue streams. Beacon technology in the lobbies of IHG hotels send individualized, real-time offers to arriving guests' smartphones.<sup>29</sup> The Fontainebleau Miami combines data from beacons and property management systems (PMS) to generate early check-in and late-stay offers.<sup>30</sup>

# Quick Take

## Digital operations in 2025

It's not just the guest experience that will transform over the next decade. Hotels' internal operations will also see major shifts:

- I Workforce management.** By 2025, biometrics-driven advances will enable hotels to improve shift monitoring, surveillance and fraud detection. The technology, as well as the convergence of devices for gathering biometrics data, will be key digital enablers for the success of shared inventory models in the hotels industry.
- I Staff support and development.** Conversational AI's ability to answer routine questions will free front-desk staff to provide the human touch for service issues and questions that require it. AI's rise will also fuel a shift toward digital specialization in the skill set of hotel marketing and customer service personnel. While chatbots aid guest interaction, staffs need to be both tech savvy and able to personify the brand.
- I Process automation.** By 2025, robotics in the hotel sector will automate processes related to housekeeping (think butler robots) and self-service contact centers. Automation will also ripple through accounts receivable and payable, purchase to pay, and supply-chain management. The effect will be nothing short of a seismic shift in the labor-intensive hospitality sector.
- I** The financial industry is already experimenting with RPA to perform the repetitive, standardized and rules-based tasks of standard functions such as accounts payable and purchase to pay. RPA will be relevant in the next decade as the travel and hospitality sectors work to reduce their turnover rates, which rank among the highest in the industry, according to the Bureau of Labor Statistics.
- I Smart sensors to streamline operations.** By connecting IoT sensors with mobile and wearable devices for staffs, hotels will be able to optimize operations. For example, sensors will be able to notify housekeeping when rooms are ready for cleaning. RFID-connected room-service carts will signal they're ready for removal once guests wheel them into the hallway.<sup>46</sup> In addition, predictive analytics from the sensor data can recognize hazardous conditions such as egress-blocking carts and unlocked rooms. Sensors can also contribute to predictive maintenance on elevators and escalators.

Like all businesses, hotels are working to facilitate the free flow of information throughout the extended enterprise, and of AI along the data supply chain.

The impact to hotel operations is far ranging – and positive: Automating back-office and other functions frees hotels to focus on providing differentiating experiences.

In many ways, automation will allow hotels to return to their roots as a people-first industry. Instead of performing rote behind-the-scenes tasks, staff can work to maximize their impact on the customer experience, driving up quality and consistency.

By 2025, hotels will increasingly leverage IoT to connect to and upsell customers. Beacons in lobbies and facilities will enable relevant offers based on customers' physical location. Customers' smart wearables will remove friction from the guest experience. Smart machines are already looking at similar data and providing recommendations.

## Digital concierges and virtual assistants

As experience becomes currency, vacationers and business travelers alike expect to interact with their favorite brands across all channels in frictionless ways.

What has less friction than speaking what's on your mind? "Weak" AI platforms built on natural language processing techniques such as Apple's Siri, Amazon's Alexa and Microsoft's Cortana are rapidly becoming ubiquitous, but hotels have so far stayed away. Consumers today can't say, "Book me a room at the Hilton," and guests aren't able to say, "Get me dinner from room service." By 2025, however, that will change.

Similarly, real-world experiences won't be enough for consumers accustomed to augmenting their experiences with digital facts, social communities and other means of in-the-moment sharing. Augmented reality (AR) is VR's real-world sibling. It layers digital images and applications over physical surroundings. Like VR, AR has great potential for serving guests. By 2025, for example, English-speaking employees will be able to talk effortlessly with hotel guests from all over the world, with headsets providing real-time translation.

Hotels are already trying out AR applications. The Hub Hotel from Premier Inn, the UK's largest lodging chain, has outfitted each guest room with an interactive wall map of the surrounding neighborhood. Travelers point their smartphones at the map to view local points of interest.<sup>31</sup>

Hoteliers inspired by the global success of Pokémon Go hope to launch AR-based games that engage guests and offer hidden rewards for using their smartphones to explore hotel amenities.<sup>32</sup>

AI, too, will play a role in on-site guest services. Edwardian Hotels London is among the first to put AI to use as a virtual assistant. In May 2016, the UK developer of luxury hotel and hospitality brands introduced a smartphone-based AI service that lets guests order room service and request local recommendations via text.<sup>33</sup>

When integrated into a property management system, AI-driven chatbots can be used for real-time alerts, such as notifying guests of spa and restaurant availability and last-minute rates.

By 2025, the virtual concierge will become standard. Syncing guests' current and previous stay records will enable hotels to offer virtual assistants that, for example, deliver breakfast to the rooms of guests with early-morning departures.

- In addition, look for robots to begin automating guest services by 2025. This could include robot-driven poolside assistants that hand out towels to guests and sort wet towels for the laundry, mini-robots vacuuming guest rooms and room service delivered by robots. Dexterous factory robots can be programmed to move their arms and perform guided-motion tasks at an annual cost of approximately \$25,000 annually, or \$4 per hour through the lifetime of work.<sup>34</sup>

By 2025, the virtual concierge will become standard. Syncing guests' current and previous stay records will enable hotels to offer virtual assistants that, for example, deliver breakfast to the rooms of guests with early-morning departures.

One major hotelier that leveraged predictive analytics and customer profiles to personalize promotions boosted consumer acceptance rates 300% in one year.

### Stepped-up personalization

In-room personalization will reach new heights by 2025. Matching experiences to individual customers' preferences is the ultimate challenge for any customer-centric industry, and in hospitality, it's a powerful tool to retain customers and acquire new ones. It will be especially key for hotels looking to command a share of global demographics.

Personalization is also profitable: McKinsey estimates companies that implement personalization can boost revenue growth 10% to 15% and reduce cost-to-serve by 15% to 20%.<sup>35</sup> One major hotelier that leveraged predictive analytics and customer profiles to personalize promotions boosted consumer acceptance rates 300% in one year.

Creating "smart rooms" is a way to begin. Users of Starwood's SPG app will soon be able to set room temperature and lighting to their personal preferences.<sup>36</sup> Scandic, the Nordic region's largest hotel chain, advances its sustainability mission by offering its equally green-minded guests bicycles and Segways for sightseeing.<sup>37</sup> (For more on sustainability in the hospitality industry, see Quick Take, page 15.)

By 2025, however, guests' will expect hyper-personalization. They'll look forward to customized amenities such as real-time notifications on dining specials in restaurants, or openings with their favorite spa providers. Families traveling with young children might receive offers of babysitting services.

Hotels will need systems that leverage social network data and also interact with each other in a frictionless manner. Hoteliers and other hospitality providers are learning that digital platforms – enablers of vibrant customer experiences, personalized interactions and community – are key differentiators and will only increase in importance.

### Experience as an offering

In 2025, hyper-personalization will morph into the ability to tailor experiences conditionally. Call it hyper-orchestration. Is there a long line at the French restaurant? Then book me at the bistro across the street. Heat maps on AR-equipped smartphones indicate the pool is crowded? Show me wait times for spa services.

As services increasingly become commoditized, experience itself has a dollar value. Economists now classify experiences as distinct economic offerings.<sup>43</sup>

What are "experience-orchestrated" services today in the hospitality industry? Think local attractions, art and culture or live events such as theater and conferences – almost anything that makes guests feel valued.

Luxury hospitality brands have led the way in experience. Four Seasons Hotels & Resorts hosts dozens of experiences around the world, such as a behind-the-scenes tour and tequila tasting at the Jose Cuervo distillery. Guests at Peninsula Hotels can learn to make dim sum from a master chef or pose for a red-carpet photo shoot with an award-winning photographer.<sup>44</sup>

# Quick Take

## Sustainability: win-win for planet and profits



Environmental responsibility is emerging as a guest preference and working its way into the on-site experience. Guests are increasingly eager to do their part for sustainability, embracing campaigns to reuse bathroom towels and request less frequent bed linen changes. They'll even pay a premium: Scandic Hotels charges guests 10% more for a 95% biodegradable room, yet demand is higher than for standard rooms.<sup>41</sup>

Look for sustainability initiatives to become mainstream. By 2025, loyalty programs might offer guests green points, with stays at sustainability-focused hotels generating greater numbers of points.

Green campaigns have generated savings for hotel chains. To combat the drought in California, IHG distributed water-conservation kits to its branded hotels there, reducing total water consumption by 5% between 2014 and 2015.<sup>42</sup>

Marriott has generated even better results. With a global sustainability council that reports directly to its CEO, the chain reports its energy consumption has decreased 13.2% and its water consumption is down 10.4% in the last nine years.<sup>43</sup>

The popular green building certification program Leadership in Energy and Environmental Design (LEED) issued a new scorecard for the hospitality industry that offers incentives for new buildings that meets sustainability criteria. A recent study of 93 LEED-certified hotels found certified hotels performed better financially than their non-certified competitors.<sup>44</sup>

So-called smart buildings will digitize hotel facilities, converging data on occupancy, energy usage and physical plant information into a single platform. The result will be real-time data and lower energy costs.

For now, sustainability remains an afterthought for many hotels. Fewer than 50% have a budget for sustainability initiatives, according to a survey by The Green Lodging. More than 75% have sustainability policies, but fewer than half post them on their websites.<sup>45</sup>

To begin managing more sustainable operations and promote a positive image, hospitality providers should reassess their organization's environmental priorities. To leverage digital to record and report green efforts, they could offer green incentives for loyalty members, opt-in green programs for guests and modern heating, cooling and water systems.

As hotels modernize their engineering systems, new room systems' digital APIs will enable climate control as part of the customer experience. (To read more on sustainability benefits, read our report "Beyond Green: The Triple Play of Sustainability.")

Now experience is moving beyond the luxury niche. Wyndham Hotel Group, which operates economy and select-service brands, offers loyalty members curated local experiences that take guests off-property, including street food tours in Mexico City and desert safaris in Dubai.<sup>45</sup>

Enriched on-site experiences are also in development. Spotting the need for comfortable gathering areas in addition to its property restaurants and bars, Marriott Hotels partnered with appliance maker LG Electronics to create proof of concept residential kitchens for guests at its Charlotte, N.C., location.<sup>46</sup>

In 2025, we see the hospitality industry evolving experience-orchestrated services even further, moving from catalogs of offerings for loyalty customers to personalized suggestions for each guest based on hundreds of variables and data points. Would you like to request a babysitting service along with your show tickets? How about if we cancel your tee time if it's raining and book you in the spa instead?

We believe enabling customers to interact with the details of their recreation and travel will be table stakes in 2025. The clamor for personalized experiences will drive loyalty revenues. What's more, the downside of missing the experience trend is significant: Without curated experiences, individual segments and brands will be forced to compete on price. Online travel agencies gain the most from price wars, and the services become commoditized.

In 2025, we see the hospitality industry evolving experience-orchestrated services even further, moving from catalogs of offerings for loyalty customers to personalized suggestions for each guest based on hundreds of variables and data points.



## Looking ahead: prepping for 2025

Whether your organization has defined its five- and 10-year plans or is just beginning to consider how it will adapt to the changes underway, the following steps can help you assess your readiness:

- I **Invest in getting to know your guests.** What are their needs and desires? Include data from online and offline interactions, such as reservations, mobility and on-site. Although the industry has long relied on loyalty programs to understand guest preferences, now is the time for deeper dives into customer journey mapping and art-of-the-experience exercises. As a long-term task, consider creating a detailed strategy and roadmap for phased implementation of unique experiences across customer journey touchpoints where you can differentiate and provide vibrancy.
- I **Evaluate labor innovations.** Fixed labor costs are the most expensive item on any hotel's financial statement. Examine how robotics and self-service options can enhance your organization's efficiency and productivity without detracting from the customer-centric experience. For long-term positive impact to the bottom line, explore one-time investments in infrastructure, such as beacons. Research new capabilities for wearables such as enabling housekeepers to optimize their workday. Which room should they go to next?
- I **Examine how data flows across your properties.** Personalization and experience delivery rely on data from guests' prior stays and social networking to be readily available at all touchpoints. That means data must be available and actionable across the ecosystems, including customer service. Questions that need to be addressed include:
  - > What is the organization's strategy to harvest and leverage data from the various operations systems?
  - > Is the business harnessing available insights that best serve customers and support a customer-centric experience throughout the customer journey? The idea is to leverage insights differently to support various phases of the customer lifecycle.
  - > How is the hospitality provider differentiating the communication content for its global distribution system, channels, call center, website and third-party websites?
  - > How is the organization leveraging data to drive content and relevancy across all of its channels? Are the systems smart enough to display online images of, say, nightclubs or bars to young people, and lush photos of people lounging under a shady tree to others?
- I **Determine your IoT readiness.** Hotels make natural applications for IoT's ability to connect people and things. Take the pulse of your organization's preparedness for the changes such connectivity brings:
  - > **Big data and analytics.** Capitalizing on the vast amounts of customer data that IoT-enabled devices generate means harnessing it into actionable intelligence. Organizations should assess which assets are instrumented with sensors and how to leverage what's already there.
  - > **Actionable experiences and frictionless commerce.** When guests wear wristbands, they won't need their wallets.
  - > **Customer privacy and security concerns.** Lack of software security safeguards could expose sensitive customer data to hacking. Businesses should be prepared to address guests' privacy concerns regarding IoT-generated data by developing policies and procedures, as well as a method for communicating safeguards to the public.

## Endnotes

- <sup>1</sup> "Brandspeak: Virtual Reality Is the New Reality for Brands," BrandChannel, April 12, 2016, <http://www.brandchannel.com/2016/04/12/brandspeak-virtual-reality-brands-041116/>.
- <sup>2</sup> Angela Rumsey, "Is Virtual Reality Viable for Marketers in 2016," CMO, Jan. 25, 2016, <http://www.cmo.com/opinion/articles/2016/1/22/is-virtual-reality-viable-for-marketers-in-2016-.html#gs.7rHqaTg>.
- <sup>3</sup> Dan Kowalewski and Gregory Simon, "Will Blockchain Technology Rewrite Loyalty?" Hotel News Now, June 8, 2016, <http://www.hotelnewsnow.com/Articles/49347/Will-blockchain-technology-rewrite-loyalty>.
- <sup>4</sup> "La Quinta Launches Enhanced Returns Loyalty Program with Industry-First Benefits Innovations and Rewards," PR Newswire, March 2, 2017, <http://www.prnewswire.com/news-releases/la-quinta-launches-enhanced-returns-loyalty-program-with-industry-first-benefits-innovations-and-rewards-300416575.html>.
- <sup>5</sup> "Hotels Catering to Chinese Travelers," Global Traveler, November 2015, <http://www.globaltravelerusa.com/hotels-catering-to-chinese-travelers/>.
- <sup>6</sup> "Biometric Identification in Hotels and Casinos," Bayometric, <https://www.bayometric.com/biometric-identification-hotels-casinos/>.
- <sup>7</sup> "Biometric Security Overview," Technovelgy, <http://www.technovelgy.com/ct/Technology-Article.asp?ArtNum=10>.
- <sup>8</sup> Sarah Le, "Biometrics on Smartphones to Change Our Life for the Better," Engadget, Aug. 23, 2016, <https://www.engadget.com/2016/08/23/biometrics-on-smartphones-to-change-our-life-for-the-better/>.
- <sup>9</sup> "Guest Preferences for Technology Use in Hotels," Software Advice, 2015, <http://www.softwareadvice.com/hotel-management/industryview/technology-use-report-2015/>.
- <sup>10</sup> Mike Lynch, "Fingerprints: The Most Popular Biometric," InAuth, Jan. 9, 2017, <https://www.inauth.com/blog/fingerprints-popular-biometric/>.
- <sup>11</sup> "Guest Preferences for Technology Use in Hotels," Software Advice, 2015, <http://www.softwareadvice.com/hotel-management/industryview/technology-use-report-2015/>.
- <sup>12</sup> "Four Key Rules for Collecting Biometric Data in a Privacy-Compliant Way," B:Inform, Dec. 11, 2015, <http://www.bakerinform.com/home/2015/12/11/four-key-rules-for-collecting-biometric-data-in-a-privacy-compliant-way>.
- <sup>13</sup> Steven Van Belleghem, "The Self Service Economy," Slideshare, June 18, 2013, <https://www.slideshare.net/stevenvanbelleghem/the-self-serving-economy/19>.
- <sup>14</sup> Buddy Hotel website: <http://www.hotel-buddy.de/?lang=en>.
- <sup>15</sup> Robert Mandelbaum, "Examining Hotel Labor Costs," Lodging Magazine, Oct. 23, 2014, <http://lodgingmagazine.com/examining-hotel-labor-costs/>.
- <sup>16</sup> "Guest Preferences for Technology Use in Hotels," Software Advice, 2015, <http://www.softwareadvice.com/hotel-management/industryview/technology-use-report-2015/>.
- <sup>17</sup> "Gartner Says 6.4 Billion 'Things' Will Be in Use in 2016, Up 30% from 2015," Gartner, Nov. 10, 2015, <http://www.gartner.com/newsroom/id/3165317>.
- <sup>18</sup> Cliff Kuang, "Disney's \$1 Billion Bet on a Magical Wristband," Wired, March 10, 2015, <https://www.wired.com/2015/03/disney-magicband/>.
- <sup>19</sup> "IHG Launches Series of Mobile and In-Hotel Digital Technology Pilots," IHG, June 18, 2015, <https://www.ihgplc.com/news-and-media/news-releases/2015/ihg-launches-series-of-mobile-and-in-hotel-digital-technology-pilots>.

- <sup>20</sup> Lisa Terry, "Six Mega Trends in Hospitality Technology," HT, April 11, 2016, <http://hospitalitytechnology.edg.com/news/6-Mega-Trends-in-Hotel-Technology105033>.
- <sup>21</sup> "How Hotels Are Using Beacons and Augmented Reality," HT, Dec. 14, 2015, <http://hospitalitytechnology.edg.com/news/How-Hotels-Are-Using-Beacons-and-Augmented-Reality103717>.
- <sup>22</sup> "Deciphering Pokemon Go's Lessons for Marketers," Cognizant Technology Solutions, Aug. 16, 2016, <https://www.cognizant.com/perspectives/deciphering-pokemon-gos-lessons-for-marketers>.
- <sup>23</sup> Janet Burns, "Radisson Blu Edwardian Guests Can Now Text Edward the Chatbot for Service," Forbes, May 10, 2016, <https://www.forbes.com/sites/janetwburns/2016/05/10/radisson-blu-hotel-guests-can-now-text-edward-the-chatbot-for-service/#ed59d2cle23c>.
- <sup>24</sup> Duhamel et al, "Rethinking Robotics: Finding a Market," Stanford University School of Engineering, June 3, 2013, <http://web.stanford.edu/class/ee204/Publications/Rethink%20Robotics%202013-204-1.pdf>.
- <sup>25</sup> Driek Desmet, Ewan Duncan, Jay Scanlan and Marc Singer, "Six Building Blocks for Creating a High-Performing Digital Enterprise," McKinsey & Co., September 2015, <http://www.mckinsey.com/business-functions/organization/our-insights/six-building-blocks-for-creating-a-high-performing-digital-enterprise>.
- <sup>26</sup> Nikki Ekstein, "11 Amazing Things Found in the Hotel Room of the Future," Travel & Leisure, <http://www.travelandleisure.com/slideshows/hotel-technology-starwood-robot-butlers/5>.
- <sup>27</sup> "Scandic Hotels Awarded Gold in Berlin and Hamburg," Green Globe, <https://greenglobe.com/latest-news/scandic-hotels-awarded-gold-in-berlin-and-hamburg/>.
- <sup>28</sup> B. Joseph Pine and James H. Gilmore, "Welcome to the Experience Economy," Harvard Business Review, July-August 1998, <https://hbr.org/1998/07/welcome-to-the-experience-economy>.
- <sup>29</sup> Deanna Ting, "Branded Experiences Are Everything for Today's Hospitality Brands," Skift, May 31, 2016, <https://skift.com/2016/05/31/branded-experiences-are-everything-for-todays-hospitality-brands/>.
- <sup>30</sup> Ibid.
- <sup>31</sup> Michael Williams, "Marriott Hotels and LG Electronics Revolutionize Hotel Experience with Innovative Technology, Intuitive Design," Rave Publications, Jan. 16, 2017, <http://www.ravepubs.com/marriott-hotels-lg-electronics-revolutionize-hotel-experience-innovative-technology-intuitive-design/>.
- <sup>32</sup> "The Chinese Tourist Boom," Goldman Sachs, Nov. 20, 2015, <http://www.goldmansachs.com/our-thinking/pages/macroeconomic-insights-folder/chinese-tourist-boom/report.pdf>.
- <sup>33</sup> "Marriott International Partners with Hurun Research to Bring Insight on China's Luxury Travelers," Marriott, June 1, 2016, <http://news.marriott.com/2016/06/marriott-international-partners-hurun-research-bring-insight-chinas-luxury-travelers/>.
- <sup>34</sup> "Members Get More with DaoDao," Travel Weekly, Dec. 10, 2014, <http://www.travelweekly.com.au/article/Members-get-more-with-DaoDao/>.
- <sup>35</sup> "China's Hospitality Industry: Rooms for Growth," A.T. Kearney, 2013, [https://www.atkearney.com/documents/10192/982632/Chinas\\_Hospitality\\_Industry.pdf/72ed00fb-1cad-4798-a1a1-1552604bc72e](https://www.atkearney.com/documents/10192/982632/Chinas_Hospitality_Industry.pdf/72ed00fb-1cad-4798-a1a1-1552604bc72e).
- <sup>36</sup> "Hotels Catering to Chinese Travelers," Global Traveler, November 2015, <http://www.globaltravelerusa.com/hotels-catering-to-chinese-travelers/>.
- <sup>37</sup> Hilton Huanying website: <http://hilton.com.cn/huanying/>.

- <sup>38</sup> "How Autonomous Cars Could Help the Hotel Business Regain Market Share from Airbnb," 2025 AD, <https://www.2025ad.com/in-the-news/news/autonomous-driving-and-hotels/>.
- <sup>39</sup> Michele Bertoncetto and Dominik Wee, "Ten Ways Autonomous Driving Could Redefine the Automotive World," McKinsey & Co., June 2015, <http://www.mckinsey.com/industries/automotive-and-assembly/our-insights/ten-ways-autonomous-driving-could-redefine-the-automotive-world>.
- <sup>40</sup> Sanjay Salomon, "How the Self-Driving Car Could Eliminate the Parking Garage in Boston," Boston.com, Feb. 23, 2016, <https://www.boston.com/cars/news-and-reviews/2016/02/23/how-the-self-driving-car-could-eliminate-the-parking-garage-in-boston>.
- <sup>41</sup> Alexandra Bruns-Smith, Vanessa Choy, Howard Chong, Rohit Verma, "Environmental Sustainability in the Hospitality Industry: Best Practices, Guest Participation and Customer Satisfaction," Cornell University School of Hotel Administration, March 1, 2015, <http://scholarship.sha.cornell.edu/cgi/viewcontent.cgi?article=1199&context=chrpubs>.
- <sup>42</sup> "IHG Reconfirms Water Stewardship Commitment for World Water Week," Green Hotelier, Aug. 31, 2016, <http://www.greenhotelier.org/our-themes/water/ihg-reconfirms-water-stewardship-commitment-for-world-water-week/>.
- <sup>43</sup> Craig Ballard, "Marriott International: No Reservations About Climate Change," Harvard Business School, Nov. 4, 2016, <https://rctom.hbs.org/submission/marriott-international-no-reservations-about-climate-change/#>.
- <sup>44</sup> "The Business Case for Green Building," USGBC, Feb. 10, 2015, <http://www.usgbc.org/articles/business-case-green-building>.
- <sup>45</sup> "Global Hoteliers Like Being Green But Not Talking About It," Green Hotelier, Dec. 1, 2016, <http://www.greenhotelier.org/our-news/industry-news/global-hoteliers-like-being-green-but-not-talking-about-it/>.
- <sup>46</sup> Nikki Ekstein, "11 Amazing Things Found in the Hotel Room of the Future," Travel & Leisure, <http://www.travelandleisure.com/slideshows/hotel-technology-starwood-robot-butlers/7>.

## About the authors



### Micah Friedman

#### Senior Director and Practice Head, Cognizant Business Consulting's Travel & Hospitality

Micah Friedman is Senior Director and Practice Head in Cognizant Business Consulting's Travel & Hospitality Practice. His specialties include corporate strategy, guest strategy and experiences, hospitality IT advisory, methodology, product and project management, and mergers and acquisitions. Micah has led numerous transformations, held leadership roles and provided strategy to globally leading hospitality companies. He leads a team of seasoned domain experts covering hotels, food services and dining, car rental, casino gaming, cruise lines and real estate. Micah also services as co-chair of the HTNG Vendor Advisory Council, the highest elected position in the Hotel

Technology Standards Organization, and has led numerous standards workgroups. He is a graduate of Ithaca College with a bachelor's of science in finance. Micah can be reached at [Micah.Friedman@cognizant.com](mailto:Micah.Friedman@cognizant.com) and [linkedin.com/in/micahfriedman](https://www.linkedin.com/in/micahfriedman).



### Samrat Sen

#### Senior Director and Practice Head, Cognizant Business Consulting's Travel & Hospitality

Samrat Sen is Senior Director and Practice Head in Cognizant Business Consulting's Travel & Hospitality Practice. His specialties include digital transformation, business case preparation, fit gap analysis, roadmap development, package selection, data analysis, program and change management, and business process reengineering. His team has expertise in airlines, online and retail travel companies, GDSs, hotels, restaurants and car rental companies across multiple processes, including reservations, loyalty,

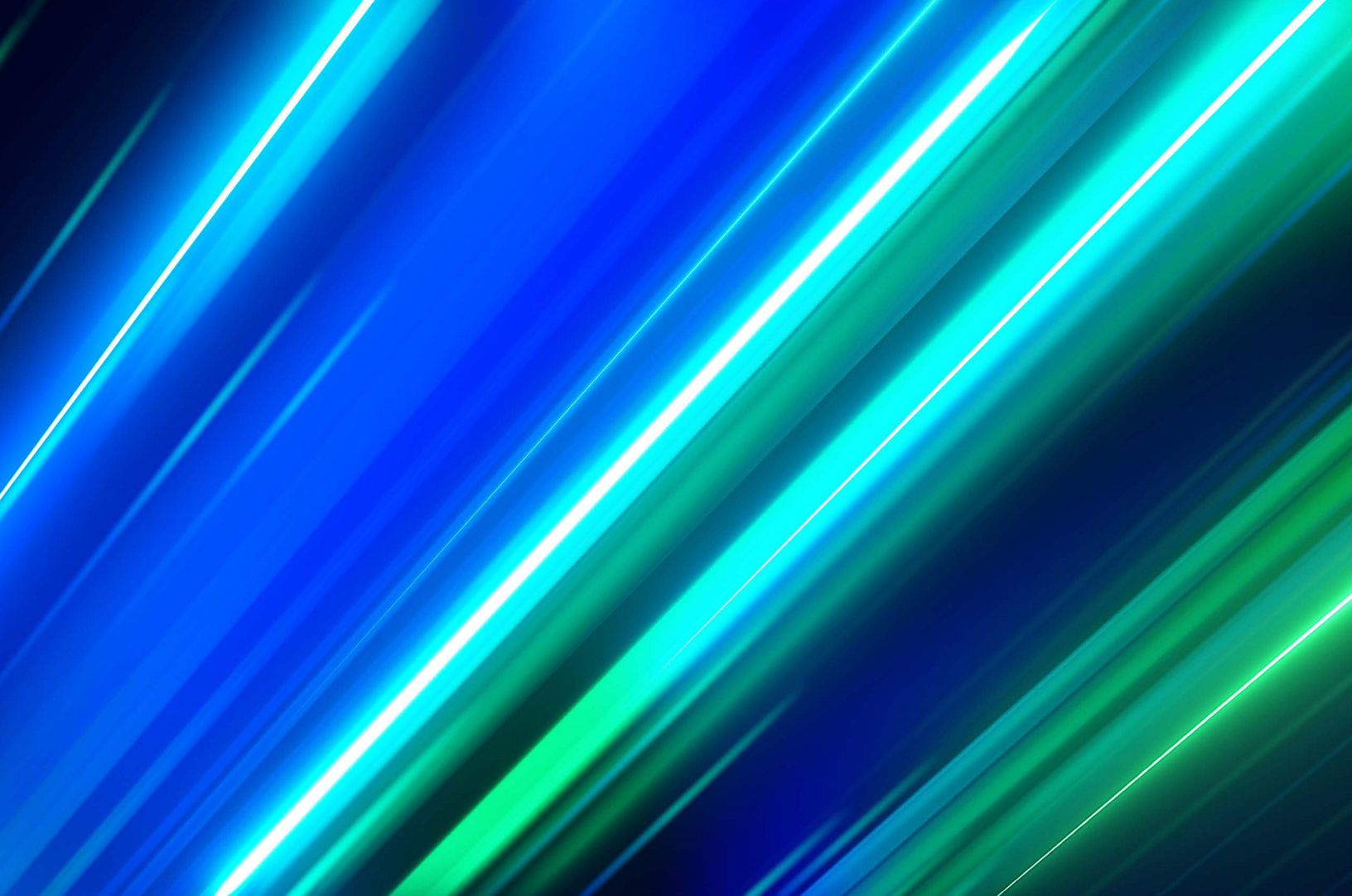
revenue management, point of sale and inventory management. Previous to Cognizant, Samrat worked at Deloitte and Dell Computers. He graduated from the Indian Institute of Management, Bangalore, and BITS, Pilani, and can be reached at [Samrat.Sen2@cognizant.com](mailto:Samrat.Sen2@cognizant.com) and [linkedin.com/in/samrats/](https://www.linkedin.com/in/samrats/).

## Acknowledgments

The author would like to thank Vipul Khanna, Executive Vice-President and Global Leader of Cognizant Digital Operations, for his invaluable inputs.







---

## About Cognizant Business Consulting

With over 5,500 consultants worldwide, Cognizant Business Consulting offers high-value digital business and IT consulting services that improve business performance and operational productivity while lowering operational costs. Clients leverage our deep industry experience, strategy and transformation capabilities, and analytical insights to help improve productivity, drive business transformation and increase shareholder value across the enterprise. To learn more, visit [www.cognizant.com/consulting](http://www.cognizant.com/consulting) or email us at [inquiry@cognizant.com](mailto:inquiry@cognizant.com).

---

## About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at [www.cognizant.com](http://www.cognizant.com) or follow us @Cognizant.

---

# Cognizant

### World Headquarters

500 Frank W. Burr Blvd.  
Teaneck, NJ 07666 USA  
Phone: +1 201 801 0233  
Fax: +1 201 801 0243  
Toll Free: +1 888 937 3277

### European Headquarters

1 Kingdom Street  
Paddington Central  
London W2 6BD England  
Phone: +44 (0) 20 7297 7600  
Fax: +44 (0) 20 7121 0102

### India Operations Headquarters

#5/535 Old Mahabalipuram Road  
Okkiyam Pettai, Thoraipakkam  
Chennai, 600 096 India  
Phone: +91 (0) 44 4209 6000  
Fax: +91 (0) 44 4209 6060

© Copyright 2019, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.