Optimizing hotel operations with smart hotels

Enhance staff workflows, improve guest experiences and streamline business operations with integrated digital solutions

Alcatel·Lucent

Enterprise

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Growing demand in hospitality demands effective differentiation

The hospitality industry has recently weathered significant challenges. Five years ago, many hotel chains cut costs by closing locations, consolidating operations or laying off staff. But the industry is rebounding. Recent reports show growth from 2022 to 2023 in key performance indicators (KPIs) such as revenue-per-room and average daily rates, in some cases as high as 73%.[1]

Demand's constant companion, however, is competition. Hotels will have to compete fiercely to capitalize on growing market demand. To stand out from the competition, hotels will need to effectively — and positively — differentiate their offerings.

The simplest way for hotels to capitalize on a growing market and improve KPIs is to increase occupancy rates. Doing so by upgrading facilities requires capital expenditures and risks revenue losses with no guarantee of return. But by better aligning hotel offerings to the changing demands and expectations of guests, hotels can more reliably bring in clientele while maximizing occupancy rates and customer loyalty.

Digital technology alone is not the answer

Addressing the expectations of travelers starts long before a guest arrives. That's why digital technologies underlie many hotels' strategy to meet changing traveler expectations and cope with broader industry challenges.

For example, most travelers today expect to be able to book their stay online.[2] They look more to online reviews than word-of-mouth when booking hotels. And the growing use of online comparison platforms puts downward pressure on prices, as has the explosion of online travel agencies (OTAs), which let travelers handle bookings entirely themselves.

Meanwhile, competition has increased with new entrants like Airbnb offering simple, low-cost alternatives, putting significant pressure on hotels to deliver better experiences and more services.

The hospitality industry itself faces increased pressure from acquisitions and consolidations. It continues to struggle with high levels of staff turnover that make it challenging to consistently deliver high-quality guest experiences.

Exacerbating all these challenges is the fact that customers expect both the quality and the quantity of services to improve. Features like contactless booking, high-performance Wi-Fi and a web presence listing amenities, reviews, available rooms and their respective features are table stakes. Guests expect to be able to personalize their experience and get answers to questions and requests quickly at all touch points.

Digital technology alone, however, isn't the answer. In many hotels, the personal touch has been lost: Guests are handed digital tools without guidance or support. This complicates workflows for staff, making

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1 Business travel, a key player in the hotel industry's good results, Voyages D'Affaires, Feb. 22, 2024.
2 The 2024 Trends Global Survey, Hilton.

operations even less efficient than before. To stand out, hotels must integrate digital technologies to facilitate faster and more efficient communications, both internally for staff and between staff and guests. And to be cost-efficient, this integration must be accomplished without adding overhead or complexity.

This integration of digital technology must consider more than just available technology, or the relative expense of different options. It represents the opportunity to transform the operation of mission- and business-critical processes in the hospitality industry. How hotels approach this process will be crucial.

A smart hotel addresses these requirements by taking the integration of digital technology to the next level. It uses end-to-end networking connectivity to synchronize every level of hotel operations. Staff can communicate internally more efficiently and connect with guests via the same network using email, SMS or telephony. Business operations are also managed on the same network, creating one seamless information interchange and streamlining operations both on the individual hotel level and between locations.

Most importantly, smart hotels balance digital technologies with the human touch, helping staff efficiently deliver better experiences to guests, empowering guests to personalize their experience to their expectations and simplifying operations management for all employees.

Empowering staff to enhance guest experiences

To enhance the guest experience, many hotels have adopted digital technologies such as artificial intelligence (AI) and internet of things (IoT)-powered customer service. This trend will only accelerate as the hospitality industry expands: Many hotel chains plan to add anywhere from five to 15% more rooms.

But in many cases the adoption of digital technologies that accompanies expansion has removed the human touch from staff-guest interactions. This does not translate into better guest experiences. A refocusing is needed.

A smart hotel integrates digital technologies at all levels — connecting internal staff interactions, external-facing communications and guest interactions, and integrating them with hotel operations. AI and automation are combined with advanced telecommunications technologies, cloud-based computing and network technologies to enable seamless and synchronized information sharing and coordination.

As a result, on-the-ground updates are available to decision-makers as needed, while top-level business direction can trickle down to hotel staff.

How this is achieved makes all the difference. If properly structured and implemented, the smart hotel can deliver benefits to every tier of hotel operations. But each individual piece of the puzzle comes with its own challenges that must be overcome.

Facilitating staff communication for greater responsiveness and collaboration

The first consideration is facilitating staff-level communication, collaboration and responsiveness. Staff must be able to share information with each other and guests quickly and easily to provide a level of service that aligns with client expectations. Digital technologies must make it easier to:

- **Engage with the diverse needs of the connected traveler,** who expects communication and updates before, during and after a hotel stay
- **Deliver a personalized experience** to each guest based on their unique needs to help the hotel stand out in a competitive market
- **Offer effective contactless service** without compromising a guest's real or perceived safety and security
- **Reduce the need for staff interactions** by implementing superior automation within rooms without compromising the quality of personalized service
- **Provide guests with greater control** over their stay without infringing on efficient operations or services offered to other guests
- **Meet the personalization needs of guests for specific hotels** within extended chains or market niches by introducing apps on a hotel-specific level
- **Integrate advanced and customizable room phones** with other technologies, as telephony remains a staple of the hospitality experience and an expectation of guests
- **Operate highly critical digital applications**, including in-room IPTV and video-on-demand, as well as enhanced and interactive digital signage

An important component of this guest- and experience-oriented infrastructure is dependable, high-speed Wi-Fi 6 or Wi-Fi 7. But it must be leveraged strategically: Simply offering a Wi-Fi connection for guests to browse the web isn't sufficient. A powerful and customizable framework that supports and connects all internal and external communication enables smart hotels to take guest personalization to the next level.

Improving daily operations

Beyond the needs of staff, hotels must also ensure daily business operations are enhanced by technology integrations. This can be best achieved with reactive, configurable and high-performance networks that support:

- Integrated security, including both cybersecurity and video surveillance, as well as real-time notifications for both cyber and physical security to create a seamless security framework
- Simplified tracking and management of connected assets with IoT and location-based services
- Seamless maintenance of business continuity between locations with cloud-based networking solutions
- Alignment of network integration methods with financial needs and considerations, particularly capital expenditure (CAPEX) and operational expenditure (OPEX) funding models that better suit each hotel's financial situations

With seamless network integration and a carefully considered suite of technological capabilities, smart hotels can improve all operations. They can empower creative and multi-skilled staff with the efficient training and powerful tools they need to establish and maintain effective customer relationships. As a result, staff can deliver the personalized experiences guests expect without adding significant costs or complexity to hotel operations.

At the same time, hotels can deliver the enhanced connected experience travelers expect, while reducing reliance on staff and without compromising digital or physical security. Most importantly, hotels can future-proof hotel operations amid high staff turnover by simplifying handovers to new staff, reducing reliance on tribal knowledge and improving operational autonomy.

Enabling next-level interactions for improved guest experiences and business processes

Transforming to a smart hotel requires considering not just the technical capabilities themselves but how they relate to and integrate with the hotel's operational reality. An effective transformation enables efficient staff communication and collaboration, an improved guest experience and simplified business operations.

Empowering staff to collaborate efficiently

Staff require powerful and customizable communication tools because it's crucial that they can access the information they need, while filtering out information they don't for any specific task. These tools should facilitate efficient coordination with management, simplify workflows and reduce confusion. And they should also be simple to learn.

For example, automated incident reporting frees up staff to focus on higher priority items such as guest requests. This also translates into greater autonomy and flexibility for local teams, improving their responsiveness while reducing the need for managerial oversight.

A cloud-based Communications Platform-as-a-Service (CPaaS) can provide the technical backbone for improved staff-level communication and collaboration. Cloud-based solutions offer flexible and lightweight deployment with minimal oversight required. Combined with a full suite of communication tools available as needed, a cloud-based CPaaS puts seamlessly synchronized communications into the hands of staff while minimizing costs and complexity.

Facilitating greater guest control and staff responsiveness

A holistic digital engagement solution can be leveraged to ensure this improved collaboration and communication capacity translates into an improved guest experience. A holistic solution that connects staff, guests and management via one communications platform can help staff provide better service by putting them closer to guest demands, while also giving guests themselves greater control over their own experience.

Connecting guests and staff to one homogenous network can be achieved with high-speed, on-demand Wi-Fi. By integrating staff and guest communications on one network, staff can help guests more easily personalize their own experience from before they arrive to after they've left.

Automation is also instrumental to this process. Automatically confirming guest venues and pushing notifications advising interested guests of available rooms are simple but powerful tactics that can improve the guest experience and differentiate offerings. Sending automatic notifications to staff using the same platform they use to communicate with guests and each other makes it easier for staff to coordinate and respond to guest requests.

Aligning digital integrations with hotel operations

For a smart hotel to truly serve the entire business, next-level digital technology integrations must also be aligned with business operations. Managers and technical staff must be able to easily set up and manage the entire system. This requires a single network that can support multiple types of traffic with the ability to segment, demarcate and allocate bandwidth, allowing for the hotel to prioritize guest-, business- and safety-critical traffic as needed.

But no two hotels are identical: each will take its own path towards smart hotel transformation on its own timelines, and needs may change along the way. Therefore, the ideal solution should also support on premises, hybrid or fully cloud-based network options, with the ability to switch between them as circumstances change without needing expensive rip-and-replace modifications down the road.

A smart hotel is also a safe building that ensures the physical safety of guests and staff using video surveillance, alert systems, sensors and other connected devices. A network that protects these systems with cybersecurity-by-design is also paramount. Solutions with built-in security are considerably more cost-efficient, helping hotels maintain their crucial safety and security KPIs.

Notably, most hotels don't have their own dedicated IT teams, limiting their ability to add additional cybersecurity when needed. This also makes it more difficult for smart hotels to maintain technology infrastructure, manage integrations and troubleshoot issues. Any solution should accommodate this reality with integrated maintenance and management capabilities built into switches and access points. This way, hotels can avoid situations where multiple other appliances are needed to form a functional network. Built-in integration with video surveillance, for example, makes life easier for security agents, while controllerless and mesh Wi-Fi allows changes to be made during operations with no hardware restrictions.

Smart hotel integration should also consider existing networked tools and technologies. For example, many hotels have already adopted customer relationship management (CRM) and property management systems (PMS) that staff and guests are familiar with, and processes are built around. Seamless integration with these existing systems is a crucial requirement for any smart hotel solution.

Easing adoption and integration with standards-based solutions

Seamless integration can best be achieved with standards-based solutions. They offer the proven reliability and flexibility needed to integrate with existing infrastructure, eliminate the need for costly rip-and-replace installations and avoid locking hotels to one vendor.

Standards-based options also simplify future replacements or upgrades by providing the greatest possible range of choices when it's time to upgrade, allowing hotel operators to choose the best options for every element of their smart hotel, deploy them quickly and easily, scale up at their own pace and adjust individual elements as needed.

Choose the right partner to guide your smart hotel journey

Navigating the complex ecosystem of technologies that support smart hotel infrastructure is a huge challenge. Once a decision is made, hotels are still faced with the daunting task of effectively deploying, integrating, maintaining and keeping their solution up to date.

This is why the final element of any smart hotel transformation is finding a technology partner with a deep understanding of both the hospitality industry and the ecosystem of software and hardware devices, how they fit together and how they align with the specific needs and use cases of the hospitality industry.

Alcatel-Lucent Enterprise is that partner. With deep experience in both networking technology and the hospitality industry going back 80-plus years, our experts understand not just the suite of modern tools available but what hotels need from them. A partnership with Alcatel-Lucent Enterprise combines the know-how and experience to build the right solution for your hotel, with the tools you need to cultivate multi-skilled and efficient staff fully empowered to deliver better guest experiences.

Our hardware, software and support offerings address every element of a hotel's networking and collaboration infrastructure requirements, and are as simple as possible to deploy, integrate, manage and use. This includes:

- **The Rainbow communications platform**, which creates one point of access for all staff, allows them to filter information and create groups, supports real-time text, voice, video chat and an alert and resolution-tracking system, while seamlessly connecting to AI and CRM systems
- **Advanced Wi-Fi 7 access points** for high-quality, real-time connectivity at any location, with built-in cybersecurity and control over bandwidth allocation, including in-room devices, to ensure access is everywhere it needs to be
- **Asset tracking chatbots** enabling staff to maximize efficient use of hotel resources and quickly respond to guest requests
- **Seamless integration with major video management systems** for efficient deployment of safety and loss prevention video surveillance
- **Advanced telephony** with the OmniPCX Enterprise Communication Server and Smart DeskPhones for both staff and guests that integrate with communications platforms, AI assistants and existing hotel networks
- **Contained networks** within one networking infrastructure that enhance cybersecurity by segmenting systems, ensuring one device being compromised does not compromise the entire network
- **Visual automated attendants** that give guests high-quality and timely responses to inquiries without needing to engage staff
- **Support for video content and digital media** powered by enterprise-grade networking designed to operate digital applications including IPTV, video-on-demand, digital signage and special CCTV APIs for simpler deployment

Our solutions provide maximum flexibility and can be deployed as needed, whether on-premises, in the cloud or hybrid. We structure these solutions to support the transition to a smart hotel by leveraging either CAPEX or OPEX funding models that make it easier to make the transformation. And our accredited partners are ready and able to help your hotel find, implement and manage the right solution.

Choosing a network or communication solution is not just a question of technology or pricing. It's a mission- and business-critical choice that will play a large role in the functioning of your business and the ability to deliver customer satisfaction, improve operations and manage future integrations of other advanced technologies.

Contact us to learn more about how Alcatel-Lucent Enterprise can help you make the transformation to a smart hotel operation and improve your bottom line.

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