

## Automation for Hotels and Tourism

### Hotel Automation

Automation refers to anything (a technology, process, or procedure) that exists to reduce or eliminate inputs (human or otherwise) while maintaining (or improving) outputs; the technology, process or procedure operates independently and requires little additional intervention. As artificial intelligence technology advances, automation also refers to autonomous decision-making to do things that humans were never able to, such as analyzing massive data sets and continuously improving forecasts, recommendations, and actions.

Many other industries have already adopted automation into their processes, like self-service kiosks at supermarkets or online check-ins at airports. More people are expecting the same facilities at hotels.

The pandemic has left many hotels running on leaner teams and budgets, having to do more with less. It has encouraged many businesses to consider new types of technology, which can increase efficiency at their organizations.

It is important to consider what should be automated and what shouldn't and then analyze the utility, probability, and time it takes to automate those tasks. Sometimes it's more costly and inefficient to automate than to simply do the task manually. Other times, the amount of time it takes to automate a tedious task makes automation a poor return on investment.

### Potential Benefits of Hotel Automation

- Reducing labor costs
- Supporting short-staffed teams
- Streamlining operational services
- Improving the guest experience
- Enticing tech-savvy travelers
- Driving additional hotel revenue
- Increasing occupancy percentages
- Enhancing hotel communications
- Cutting hotel expenses
- Machine-level reliability
- Relieving manual or repetitive processes
- Handling large data sets

### Which processes can hotels automate?

- **Automated Revenue Management Systems**
  - Integrates data on hotel's website, third-party sites, and the hotel's internal management platform to ensure that real-time changes are accurately shown in the revenue, inventory, and sales systems.
    - **Doesn't really seem to save on labor costs or reduce hotel expenses. What position is being replaced? This is more streamlined in that hotels will have**

slightly more accurate data and could slightly reduce the occurrence of double bookings. It could also reduce the amount of redundant information that needs to be entered into different systems. This may reduce labor cost for very large hotels but probably won't have any impact on small or medium sized hotels.

- **Optimized Pricing and Rate Utilization**
  - Independent hotels can leverage the data-driven decision-making of revenue management software, such as Infor EzRMS, that automates many of the laborious and administrative pieces of revenue management while also working 24/7 to translate the latest property and market data into optimal rates and availability.
  - An automated revenue management system can detect periods of high and low demand and automatically adjusts rates and offer promotions to maximize profit.
    - **Could increase profits but likely won't reduce labor costs.**
- **Automated Guest Messaging**
  - Automate service requests, preference notes, and guest messages. External guest communications including staying in touch with guests, promoting repeat travel, reducing no-show rates, booking confirmations, reservation reminders, deposit details, receipt summaries etc.
  - Automate communications via business texting. These texts not only put important information in the hands of guests (and boost satisfaction), but also provide upselling and other revenue-generating opportunities. Guests messaging platforms can be customized to respond to specific triggers, such as personalizing a check-out survey or sending a mid-stay message.
    - **Good for larger hotels. Smaller hotels could use down time of desk staff to create personal communication messages and emails.**
- **Automated Billing Tools**
  - Automatically authorize credit cards upon arrival for room rates, taxes, additional fees and hold for potential incidental charges. Streamline guest billing by automating the billing procedure for amenities, room services, automated mini bars, etc.
    - **Possible for medium sized and large sized hotels and guest houses. Could potentially reduce the number of required staff.**
- **Mobile and Automated Booking and Check-in Services**
  - Guest access automation for contactless check-ins/check-outs, which means operating without front desk staff.
  - Adopting mobile-friendly guest services, hotels are able to use automated check-in tools to lighten the workload on short-staffed front desk teams, save on labor costs, and improve the guest experience. KPMG and Facebook forecast that 9 in 10 hotel bookings will be completed on mobile devices in 2022.
    - **Good for any hotel, guest house, B&B, or other form of room rental.**
- **Housekeeping Management Software**
  - Housekeeping software adjusts work assignments according to real-time changes in guest flows. It's seamless and requires no intervention, which allows the business to optimize itself as each shift unfolds. With the average hotel room clean costing between \$10 and \$16 this can dramatically improve efficiency and thus profitability.

- Possible automation system for medium and large hotels.
- **Automated Upselling**
  - Automated upselling eliminates the failure point of forgetting to send a campaign or neglecting to manually upload the latest guest data from the PMS into the email marketing software.
  - Upselling software uses data to dynamically create segments and match them with the most relevant offers.
    - Probably not cost-effective for smaller or medium sized operators.

## Hotel automation tools for guests

- **Digital Room Keys**
  - Optimize guest check-in services by allowing travelers to bypass the front desk altogether. Through digital check-in services and contactless hotel apps, guests are able to use their cell phone as a digital key.
    - Reduces the need for front desk staff while maintaining security and an image of professionalism.
- **Check-in Kiosks**
  - A digital kiosk that performs check-in services. Installing a digital check-in kiosk in the lobby can also help prevent crowded lines at the front desk by speeding up the arrival process for hotel guests.
    - Can reduce the need for extra staff at locations that would normally employ more than one desk clerk for a shift. Most likely would still require one, so this solution would only work for larger hotels.
- **Interactive/Informational Kiosk**
  - An interactive kiosk to act as a digital concierge for guests. Can be programmed with weather, activities, road conditions, nearby events, etc.
    - Most likely expensive and would require a trained staff member or external service provider to maintain and update the device.
- **Digital Menu Boards**
  - Touchscreen restaurant menus allow hotel guests to quickly order to-go meals. The digital menu sends guest orders directly to the kitchen staff, allowing the restaurant staff to focus more of their attention on seated diners. In-room digital menus send room service orders and automatically track charges on the guest's bill, minimizing the hotel's risk of failing to recoup charges for services provided.
    - Only practical for large hotels and resorts.
- **Automated Request Messaging**
  - Through the use of in-room digital hotel technology, guests can request housekeeping services, select "do not disturb" preferences, or even order a spa package, and their request will automatically be routed to the correct department.
    - Only practical for large hotels and resorts.

## Considerations When Automating

Find the right balance between human intervention and automated processes. You do not need to automate everything at once. Going at it step by step, and making sure everything is well-implemented and functional, allows your team to get familiar with new processes and procedures.

Offer your guests choice between automation and live agents. Kiosks and chatbots can complete common tasks but give your guests the option of speaking to a live agent in cases where the request is too complex for the automation, or they are uncomfortable interacting with an automated system.

Look for technology that is flexible and scalable. Any technology that is implemented today needs to be adaptable to the needs of your organization both now, and in the future. Look for technologies that can easily integrate to ensure that they all stay connected as new systems and automation technologies are added. This will reduce the risk of information silos and also ensure a seamless experience for staff, and guests.

Ensure that your staff is engaged with the automation project. Give as many people as possible access to the platform. However, don't overwhelm them. Make sure that they only have access to the information they need, by sending out relevant reports and alerts only to the relevant people. Reduce staff resistance and fear of automation technology. Try to make it clear to them how automation will help them and what the objectives are.

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