



The New Hospitality Balancing Act: Leveraging Artificial Intelligence While Showing Care for Your Guests

Insights

11.09.23

Hospitality is all about people: making them feel welcome, comfortable, and appreciated. Excellent guest experiences often center around attentive service and a personal touch. So what would happen if some of that human element were augmented by artificial intelligence – or replaced by it? Would it improve service, or make it feel robotic? In this Insight, we take a look at how hotels, resorts, restaurants, cocktail bars, spas, cruise lines, and others in the industry are leveraging (or experimenting with) AI, and challenges hospitality employers should consider before deploying an AI solution.

Software as a Service: How Hospitality Uses AI

All industries have their early adopters, and hospitality is no exception. AI is being used to guide customer experiences, improve efficiency and profitability, and predict what guests are going to want next. Examples include:

Chatbots, Virtual Concierges, and Augmented Reality

Six months ago, one of this Insight's authors used an AI chatbot to plan an overseas trip, desperately wishing it could also book everything. It did not take long for enterprising companies in the travel industry to answer that call. AI-driven virtual assistants can now help travelers make reservations conversationally, assisting with personal requests beyond the standard reservation web form, like booking adjoining rooms, addressing accessibility concerns, and other arrangements that often require human intervention during business hours. After an automated and possibly no-contact check in, virtual concierges can answer questions and field requests. And real-time translation capabilities reduce language barriers, making services more accessible. Finally, immersive experiences brought about through AI-produced augmented (virtual) reality can enhance the customer experience, helping customers understand an event or experience before booking it. This is especially helpful in event planning, from weddings to large conventions.

Personalizing Customer Experience

Data analytics have long allowed companies to track guest activity and behavior patterns – like room preferences as well as dining, entertainment, and retail choices – so customers can be better

engaged, building loyalty and repeat business. AI can help send personalized offers to customers based on predicted preferences, or even the weather and traffic patterns.

Revenue Management

Analyzing pricing data is nothing new, but revenue management systems have become more sophisticated, taking into account real-time demand, availability, seasonality, and other events to create dynamic pricing models to maximize revenue.

Smart Rooms and Internet of Things (IoT) Technology

You may already be using voice commands or mobile apps to customize your home environment – setting lighting, temperature, and the like. This technology can also scale: hotel property management systems can be programmed to automate temperature and lighting settings based on occupancy, improving the customer experience, supporting sustainability efforts, and saving money.

Enhanced Security

AI can now automatically analyze security footage and alert employees to unusual behavior, thereby providing the opportunity for businesses to get ahead of security threats in their operations. Facial recognition technology can provide data about repeat “bad actors” on the premises so that employees can respond quickly to mitigate risk.

Predictive Maintenance

These incredibly smart systems use historic data to predict when equipment will need maintenance or replacement before a failure that could cause a negative customer experience, longer operational downtime and carry a high financial cost.

Inventory Management

Like predictive maintenance, AI systems can keep track of inventory, provide alerts, and even order supplies automatically. AI can rotate food and beverage products to ensure that the appropriate products are consumed, automate promotions designed to move specific inventory, and provide alerts of spoilage. The result is less waste and better products which mean both a better customer experience and higher profitability. Talk about a win-win!

Challenges To Consider

Potential use cases for AI in hospitality are seemingly limitless. But as with other tech advances in the past, not all ideas will stand the test of time, and some will have unintended consequences. If your company is considering AI as part of its strategy, keep these considerations in mind:

Discrimination and Bias in Interactive AI Systems

Discrimination and Bias in Interactive AI Systems

The potential for bias in AI systems is a common topic, but what might that look like in the hospitality setting? Perhaps an AI-driven customer engagement system makes predictions (for food, events, hotels, etc.) and sends promotions to an app. Are these predictions based on past known purchases by that customer? Or does the AI make assumptions based on, say, social media content, names, and zip codes? Can the vendor or your software engineer explain what information is and is not being considered by the model? Excluding data about protected classes – race, gender, age, etc. – is obvious, but there is still discrimination by proxy: that is, reliance on features that are statistically correlated with protected characteristics. Before deploying predictive solutions, you should understand how they work, whether and how they've been tested for bias, and how their performance can be monitored on an ongoing basis to ensure they're effective and fair.

Managing Liability for Harm

With progress and invention inevitably comes liability. In addition to claims of bias and discrimination, an AI system failure could be a key element in litigation over workplace injuries, data breaches, contract disputes, and consumer protections. Vendor agreements and insurance coverage should be reviewed to ensure the organization is protected if an AI system causes harm because it failed to perform as expected. We've seen everything from unconditional promises not to violate the law to elaborate ways of saying “*caveat emptor*,” so be prepared to really dig into those Terms of Service.

Ethical and Social Issues

Ethics associated with AI are interwoven with data privacy and the risk of bias. Another critical social issue is the impact of job displacement. Everyone likes to give their business to a company that has a “heart” and cares for its employees and the community. Employees who are displaced by AI will likely damage the brand and reputation of the company by sharing stories of how they were “replaced by robots” and the “depersonalization” of the hospitality industry.

For this reason, hospitality employers, being in the “people” business, are urged to upskill their workforce so that employees have the necessary skills and abilities to adapt to an environment where AI is a critical component of business success. Businesses should be intentional about where AI is employed – when is the human interaction important? Having an AI strategy that drives your business processes and includes human interaction where it will provide benefit is critical. Companies should also ensure that AI is used responsibly and sustainably – not only socially but also for the environment.

Balancing Customer Concerns About both Convenience and Privacy

Guests must feel confident that their personal data is being protected. This concern is likely heightened when interactions are through AI tools. To be successful in this area, hospitality providers should be transparent about data privacy policies and provide information to customers about how they can access and correct or delete their personal data.

about how they can access and correct or delete their personal data.

Some states have legal regulations, such as the California Consumer Protection Act (CCPA), with which hospitality providers are urged to become familiar. By now everyone is familiar with the risk – financial and otherwise – associated with a data breach. However, failure to manage data privacy as central to any AI strategy can also result in damage to company brand and reputation, loss of competitive advantage, as well as legal liability.

Training Employees and Customers to Interact with Your AI Systems

Communication and training are critical to the change management component of implementing AI in hospitality or in any industry. Employees need to develop new skills such as data literacy, writing effective prompts and queries, and understanding how AI uses algorithms to create outputs. Companies should be deliberate about their training plans and implement training to meet the individual needs and pace of individual employees to the extent possible.

Transition for customers should also be gradual. Customers should be given options to interact in traditional ways, with human interactions, during a transition period. This transitional model will allow customers to adopt AI processes at a comfortable pace. Before you know it, all your customers will be engaging with AI!

Final Note

Hospitality, like the rest of the business world, is entering a new era – an era where AI becomes central to business success...or failure. It is especially important in a business that is about people and human experience, hospitality, that careful thought goes into creating a strategy that balances the advantages of AI for all the stakeholders – customers, employees, shareholders, and business owners – with the challenges that can be derailing for the unaware.

Conclusion

If you have questions, contact your Fisher Phillips attorney, the authors of this Insight, or any attorney in our [Artificial Intelligence Practice Group](#) or [Hospitality Industry Team](#). Make sure you subscribe to [Fisher Phillips' Insight System](#) to gather the most up-to-date information on AI and the workplace.

Related People





Anne Hanson

Associate

702.862.3803

Email



Erica G. Wilson

Partner

412.822.6624

Email

Service Focus

AI, Data, and Analytics

Industry Focus

Hospitality