AI is here: Can hotels take advantage?

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Hoteliers should invest in artificial intelligence to help create flexibility, improve customer service and focus on profitability.

By Sam Trotter

Articles about artificial intelligence seem to be published daily, yet little to nothing seems to have changed for hotels. What exactly is AI and what are examples of tools that we can use today to better achieve our industry’s goals?

What is AI?

AI was discussed as early as 1952, which is much earlier than headlines would have you think. With the invention of basic computers, scientists were interested in mimicking human behavior with machines. This general field is known as artificial intelligence. When the term is brought up, you might think of a robot that thinks exactly like a human. Instead, it means anything, even small, that mimics a human. An example of a simple form of AI is your computer’s chess game. It makes decisions without your input to achieve its programmed goal.

Since the invention of those basic systems, AI continues to evolve. In the past two decades, machine learning became the next steppingstone. Computers were given algorithms and could take unstructured data and make sense of it. Think of Google’s early search query autocomplete where you would begin typing “how do,” and the system would show suggestions that were popular. To make this happen, engineers created an algorithm that helped it understand all these queries and make sense of it for humans. Having humans analyze and create these suggestions now seem silly, but their creation was a revolution.

The current new phase of AI is called deep learning. Instead of human provided algorithms, the computer has layers and layers of algorithms, and while it peers into data it automatically gives context. To help show the difference, in machine learning, you would teach the computer what a dog looked like and it would look for photos of a dog based on that photo. Deep learning will look at photos and associate attributes to a dog (tail, fur, color, size) to go even further. With this, the machine’s ability to identify a photo of a dog will become better than a human’s ability as it improves to learn like a human but on a scale that is unachievable by humans.

This unassisted learning combined with cheaper and easier access has created an influx of new tools that are now available for hoteliers.

Data platforms

Let’s back up. Microsoft, Amazon and Google have all created cloud platforms with an array of services that are offered. Instead of storing data on your hotel’s physical site, these companies want data hosted on their platforms. If the data is then stored there, they can build up systems and services for your business based on your own data and business problems. Ideally all your systems (like PMS, CRM, RMS, payroll, etc.), with their open APIs, allow data to flow in and out of their cloud. Data is then brought together and passed from one system to the next with ease.

This allows for systems that don’t naturally communicate to finally work together. You could select a PMS system and a POS system based on their own individual merits and have them work together. The data is all stored and readily accessible by your systems. Marketers can pull out data to understand average spend on site or operation teams can look at utilization of the property on average during a day to learn how to optimize staffing.

With all the data, it is just a matter of asking the right questions, testing and optimizing. In a recent business issue, the goal was to create a loyalty program with businesses that aren’t generally compatible (hotel and co-working space). To do this, all customer and financial data had to flow together to accurately market and track guests across businesses. This is now possible with cloud services from these platforms.

Cloud services

Microsoft cloud lists 200 services which vary from creating applications to remote 3D rendering. If anything is built from the cloud, it has access to all of your company’s data and the possibilities are no longer limited on what business problems you and your company can solve or quickly flex to be able to meet changing business needs. Common services for a hotel would include a customer service center, social media management, 360-degree CRM, mobile applications in the hotel and out, all of which are capable of total personalization and individualized journeys.

Finally AI

The platforms of the major cloud companies are allowing access to their machine and deep-learning technology they have been perfecting over the last few decades. The computer can look at massive data sets and help humans make decisions, like whether it is worth taking a wedding block on an October weekend in New York City or which leads are worth pursuing for a busy salesperson.

What if AI was everywhere in your hotel helping managers make decisions and save time by making inconsequential decisions for them? That’s what
businesses are busy working on in the next digital gold rush.

**Products available today**

AI sales is layered on top of a sales team’s customer relationship management tool. There can be several great features, like automatically entering in client data from integrations with email clients and smart speakers. But what is truly an innovation is the system can learn from the data that’s entered over time. Once enough data is entered—business lost and won, business types, or any other data points that are relevant—AI will assign a score to a lead. The higher the score, the more likely the lead is to convert. This helps salespeople spend most of their time on the most likely clients to convert.

AI revenue management helps managers make difficult decisions based on historical data, not gut reactions. A simple yet daily difficult example on how this tool can maximize a manager’s time is on the decision to overbook and by how many. Too often that decision is a gut one that isn’t grounded on what is statistically most likely to happen. It is based on the trouble it will cause any inconvenienced guests. These tools also help accurately forecast, price, find the right business mix and most importantly, help managers focus on the most important data without going into granular data reviews.

Chatbots offer human-like interactions that aim to solve common customer issues without involving human assistance. The chatbot can react within hundredths of a second giving customers the answers they need quickly and access to humans if needed. Chatbots are popping up everywhere from savvy job application chatbots that qualify applicants and customer service chatbots that can handle common questions and issues.

Voice assistants are common in households but are becoming more popular in hotel rooms.

With assistants for hospitality, guests can order room service, schedule alarms, play music and much more. Another innovation is contact center AI which provides businesses smart voice assistance that assist customers conversationally. This revolutionary product can provide self-service, give more data on sentiment of customers speaking with humans or listen in on human to human conversations to help agents quickly progress to the next step of a customer issue.

**Conclusion**

Machine learning and deep learning are finally accessible to hotels. Your business problems can likely be assisted with AI today but will require investing in only one small niche or converting your business to a cloud business. If your brand takes the leap, anything is possible and your company will be positioned for flexibility and the greatest technologies that are available today to apply to your business. Grow your brand, improve customer service, focus on profitability. These are all possible with the help of AI working for you in the background.

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