

The case for AI-powered revenue management

This [article](#) was originally published by Hospitality Technology magazine in the 2019 Lodging Technology Study.

The objective of revenue management to increase profitability for hotels has not changed much over the last two decades. In recent years, market evolution and the advanced complexity of business processes have made crucial the need for automated systems that can analyze and adjust without requiring heavy reconfiguration and manual processes. At the same time, technology development continues to advance and the latest generation of revenue management system (RMS) is becoming more and more intelligent every day. Systems are less dependent on abstract hypothesis and becoming more data-driven, taking advantage of the major progress in artificial intelligence (AI) and machine learning (ML).

Great opportunity exists with AI-infused algorithms in the forecasting and optimization engine. These new algorithms are making the systems learn over time to integrate all evolutions and changes, while concurrently integrating their own mistakes to avoid reproducing them. In addition, to guarantee the accuracy of models and results, the systems track data and user inputs. Having less reliance on manual entry will yield better results.

AI has great potential in its ability to register changes in behavior and business to create an algorithm. This control helps alert hotels of potential data issues and help them to evaluate procedure. AI empowers revenue managers to see any evolution in guest booking behaviors and patterns better and more quickly, which in turn makes it possible to enact strategies that are proactive and predictive rather than reactive.

Consider the fact that a major goal for hotels is driving direct bookings. In general, the industry sees online travel agencies (OTAs) as enemies. This may not be the case. OTAs are often painted as “bad guys” because they have high commissions. What hotels need is to have visibility into where demand is coming from.

AI-powered revenue management systems have learning capabilities that can help hoteliers better understand business drivers. If indeed there is enough demand from sources other than OTAs, then the system will capture, learn and apply the right strategy to make sure it is funneling business through the most profitable channels. It is not a question of OTA versus direct business. It is about the system optimizing decisions and considering the value of all business channels, and weighing how much each drives demand. It comes down to profitability, and as said, AI-infused engines will learn these trends much more quickly.

Businesses that embrace AI-powered revenue management technology as a support mechanism to help devise the best pricing, selling, and yielding strategies are the most successful, whereas those who see the system as the enemy or want to prove the system wrong are not successful. When hotels buy or license revenue management software, the solution and staff need to work together.

There is a suspicion that AI technology will replace humans. When used correctly this type of technology can be used to emphasize the human potential, especially in an industry like hospitality, where the human connection is so important. This is not about replacing humans; they provide strategic direction while the system is taking care of tactical optimization.

In revenue management, a great deal of time and energy is spent collecting data, but a strategy is often not developed. Eventually, AI-powered systems will perform all mundane tasks and propose strategy. Then the human can work with, fine-tune and deploy that strategy. When used in a smart way, AI enhances hospitality.



AUTHOR

Stan Van Roij
VP of Hospitality Solutions



AUTHOR

Marwen Nouri
PhD, Lead Scientist, Infor

This [article](#) was originally published by Hospitality Technology magazine in the 2019 Lodging Technology Study.



Infor builds business software for specific industries in the cloud. With 17,000 employees and over 68,000 customers in more than 170 countries, Infor software is designed for progress. To learn more, please visit www.infor.com.

Follow us: [in](#) [f](#) [t](#)