

Preemptive management of customer cancellations on online booking platforms

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Abstract

The emergence of online booking platforms has changed the way how customers search and book hotels. Hotel operators use booking platforms to attract and manage their customers. In comparison to the traditional sales channel, however, cancellation rates are significantly higher on booking platforms. This has severe effects on the profitability in the hospitality industry. Systematic overbooking is a conventional approach to reduce the negative impact of cancellations on profits. In contrast, we develop a framework to preemptively manage the increasing amount of customer cancellations. First, we apply machine learning methods to predict customer cancellation risk scores. Second, we present how to tailor key marketing mix variables to our cancellation risk scores during the hotel search. Thus, our managerial implications explicitly address the unique features of booking platforms and can be implemented into their design.

Keywords: Customer cancellations, Machine Learning, Marketing Analytics, Digital Platforms

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