

ABSTRACT

Dynamic pricing strategy is a pricing strategy that is often applied by hotels to maximize their income. The purpose of this study is to provide a pricing policy proposal in accordance with dynamic pricing models. This study provides a dynamic pricing model that has been adapted to the problems that exist in hotels with various types of rooms.

This research consists of three stages, the first phase is predicting future demand. The second stage applying revenue management tools, namely dynamic pricing, to model the effect of prices on demand. Prices change dynamically based on the number of requests available. The third stage is using a nonlinear programming approach to maximize revenue. Forecast parameters and dynamic pricing models are estimated using historical sales data for one of the hotels in Bandung, West Java, Indonesia.

The results suggest a pricing policy for superior and deluxe room types that can increase revenue by 27% more than the existing pricing policy. The proposed pricing policy is able to complete the method void in determining prices. In addition, the results of this study provide optimal room rates every day along the planning horizon.

Keywords : dynamic pricing, revenue management, hotel room pricing policy