Hotel Bookings Case Study

Part 1: Early bookings

by Anna Mándoki - November 2022

Business Objective

Identify trends in hotel bookings to help develop marketing campaign targeting guests who book early.

Question

What group of guests tend to book early?

Dataset used for the analysis

Source:	[Hotel booking demand - Kaggle](#)
Hotel type:	City Hotel, Resort Hotel
Total number of bookings:	87,392
Timeframe:	July 2015 - August 2017
Booking status:	effectively arrived, cancelled
Key data points:	lead time, hotel type, number of children, distribution channel

Understanding lead time

Lead time is number of days between the entering date of the booking and the arrival date.

80 days

average lead time

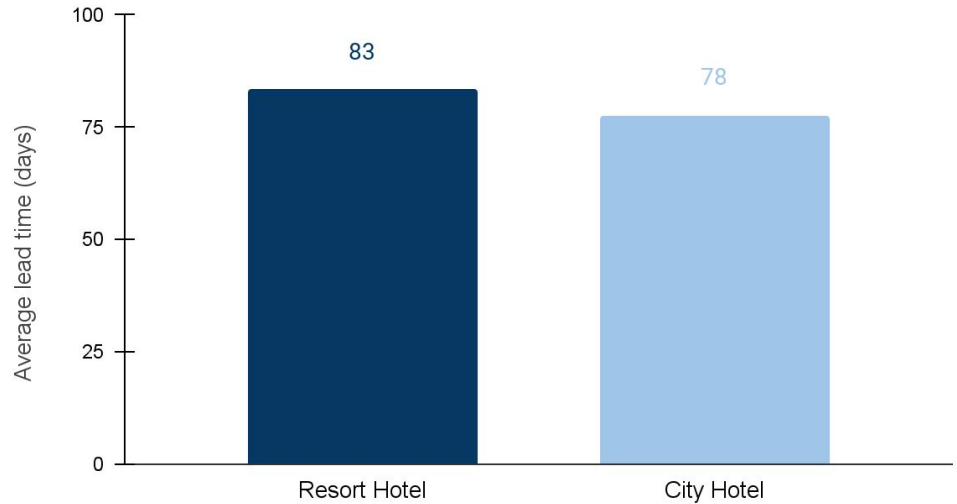# 0 days

minimum lead time

737 days

maximum lead time

What group of guests tend to book early?

Resort Hotel guests book earlier than City Hotel guests

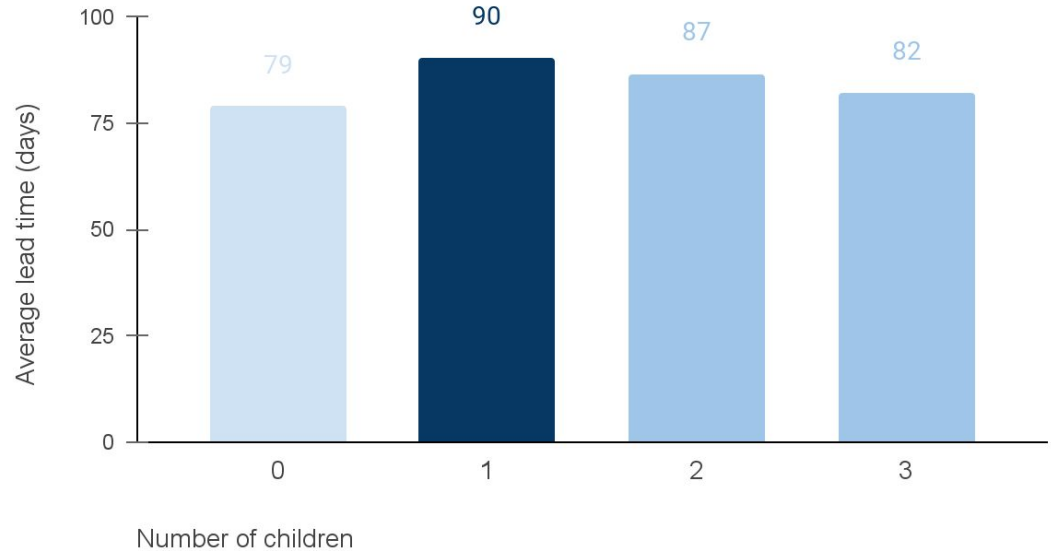Resort Hotel guests book on average 5 days earlier than City Hotel guests.

Average lead time by hotel type

Guests with children book early

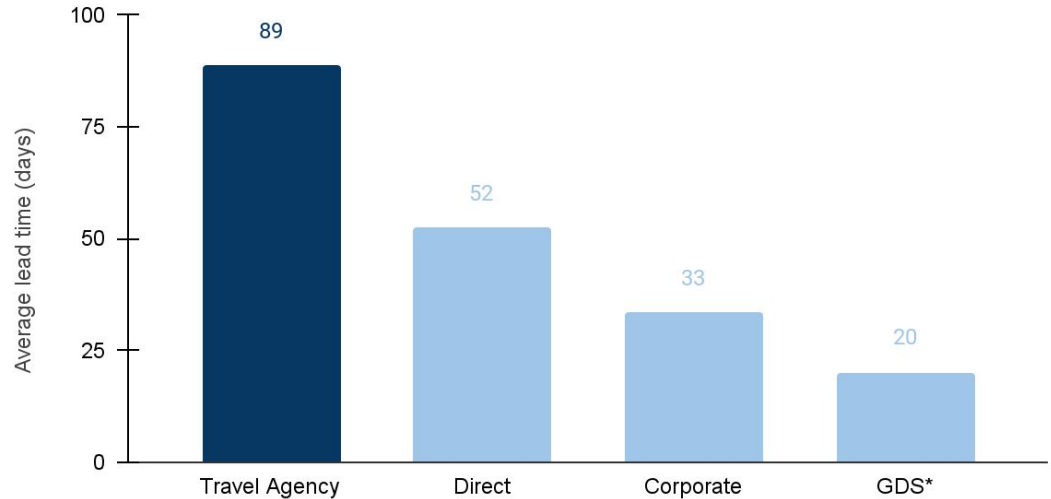Guests with one child book on average 90 days in advance.

Average lead time by number of children

Guests booking through Travel Agencies

Guests booking through Travel Agencies or Travel Offices book on average 36 days earlier than guests booking directly.

Average lead time by distribution channel

*GDS = Global Distribution System

Recommendations

- Offer "Early Bird" discounts for those who book 90+ days in advance through travel agencies or travel offices
- Target families with children
- Target Resort Hotel guests
- Special offers for guests with no children to encourage early booking

Further business objectives

- Increase weekend bookings, an important source of revenue for the hotels
- Develop promotions based on different distribution types
- Prevent cancellations

The complete analysis and R code is available on GitHub.