

Consumers Visit **38** Sites Before Booking



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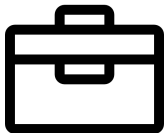
Strategy

Generate unique features and conduct k-means clustering analysis to capture the characteristics of different clusters in hotel booking's customer



Features

- Distance (user's location and search hotel)
- Mobile or not?
- Package or not?
- Number of children
- Book or not?
- Advance booking days
- Length stay



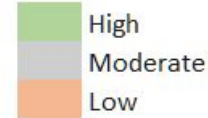
Goal

Segment customers based on different clusters and conduct direct marketing strategy to target the right customers with the right deals to increase booking rate

Customer Segments for Hotel Booking - K-Means Clustering Analysis

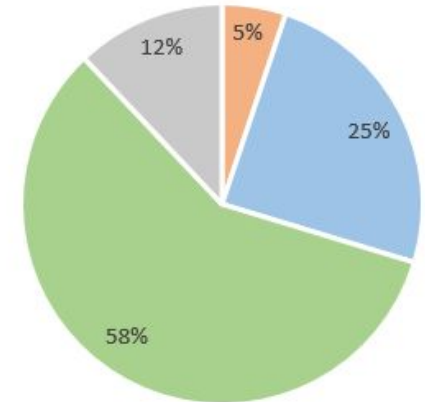
Cluster	Distance	Mobile	Package	Children	Booking	Advance Book Days	Length Stay
1	3.34	0.16	0.41	0.40	0.05	246	4.52
2	3.07	0.18	0.28	0.36	0.07	60	3.87
3	2.59	0.25	0.11	0.28	0.11	12	2.33
4	3.26	0.18	0.37	0.38	0.05	134	4.39

Cluster	Description
1	Long Dist + Low Mobile + High Package & Children + Low Booking + Long Advance & Stay
2	Average (Book in advance around 8 weeks - price sensitive)
3	Short Dist + High Mobile + Low Package & Children + High Booking + Short Advance & Stay
4	Low Booking + Long Stay



Cluster Segments

1 2 3 4



Insights & Recommendations

- Found significant segments in hotel booking's customer generated from 7 unique features
- 58% is busy traveller with high booking rate & short stay
- 5% is big family booking hotel long in advance with package deals
- Offer package deals ads for cluster 1 (big family) in low travel season
- Offer coupons & promotions for price sensitive cluster 2 (research from [trivago.co.uk](https://www.trivago.co.uk) suggests the best time to book hotel is 1-2 months in advance)
- Offer convenient, non-package deals for cluster 3 (busy traveller)