Predictive Personalization

How machine learning & predictive analytics are revolutionizing direct bookings

Juanjo Rodriguez
Founder THN
Personalization is every CEO’s priority

**Arne Sorenson**  
CEO  
Marriott

“ensure every guest anywhere in the world can receive truly personalized service.”

**Herve Humler**  
Executive Chairman  
The Ritz-Carlton

“We want to make sure that guests have a deeply personalized experience.”

**James Liang**  
Executive Chairman  
Ctrip

“Bring our users the most advanced, personalized and seamless customer experience.”
Personalization starts long before check-in

- They have connecting bedrooms... perfect!
- What's more, 5% discount if I book now...
- Booked!
Personalization: OTAs and hotels have different goals and approaches

**Discovery**
Which hotel?

**Offer**
Room/Service/Price?
Machine learning to enable user-driven personalization
Going beyond revenue management...

Setting a price per room for each date

Adding the user into the equation
Beyond revenue management: Intent + Spend

Revenue Mgmt + User Intent + User Spend

Personalized Price: Identify the ideal price for each customer
Predictive Personalization

Predict behavior

Sweet spot

Personalize for each user
To a traditional hotel website, all users are the same

With predictive analytics, every user is different
How Predictive Personalization Works

Algorithm

Uses machine learning to segment users in real time by predicting who will book, and who won’t, before they do

Campaign Manager

Automatically shows campaigns based on purchase intent and user spend on the hotel website
How it works

Example: focus on low-intent users

Target low purchase intent users with a special offer (discount or benefit)

Get additional reservations from users who would otherwise have left the web without booking

Without cannibalizing the sales of users with high purchase intent
How it works
Example: focus on high-intent users

Target users with high purchase intent using incentives and relevant messages

"Push" them to upgrade to a suite or buy extra products (spa, golf, restaurant)

Increase the conversion rate and ADR of high value users
How it works
Combine Intent & Spend with any other Targeting Rule

User Intent

User Spend

+ Targeting Rules
Compare the expected conversion with the new conversion in the target group

And measure the increase in conversion and the evolution of ADR

How it works
Measure the results

+62% conversion in target group
+26 additional bookings
+$12,175 in revenue
Using machine learning and its proprietary dataset, THN has built a unique algorithm
The science behind Predictive Personalization

What are we tracking

Past Behavior
Before coming to the hotel website

Current Behavior
On the hotel website

THN Interactions
What they see, how they respond

External data
Market data on OTAs, competitors, etc.
Summary of Predictive Personalization

- Machine learning algorithms predict user behavior
- Combine intent and spend targeting to launch personalized campaigns
- A/B testing optimizes the right offer for each hotel
Artificial Intelligence meets Common Sense
3 Levels of ROI using website personalisation

Conversion Rate %

Without any personalisation tools
Adding Conversion Tools
Adding Personalisation Campaigns
Adding Predictive Personalisation

Level of Website Personalisation