Rethinking Revenue Management Post-Pandemic in the Travel and Transportation Industries

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Revenue management is selling “the right product to the right customer at the right time to the right price” (Cross, 1997)
What’s Coming Next?

- Purchase History
- Forecasting Optimization
- Optimal Prices

My history

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History of all my competitors

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What’s Coming Next?

Forecasting and Optimization

Personalized offers for different Customer Segments

- One-day business
- Toddlers and baggage
- Couple
- Military

Optimal Prices

using clustering algorithms
What’s Coming Next?

Model customer behavior for propensity to book and choice

- Offer A
- Offer B
- Offer C

Forecasting Optimization

Customer Segments

Purchase History

Choice Model

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What’s Coming Next?

Multiple factors impact demand for travel:

- Economy
- Politics
- Health
- Climate
- Demographics
What’s Coming Next?

Airlines and hotels are becoming retailers

**Optimal Ancillary Price**
- $$$
- $$
- $$$
- $

**Discount Optimization**
- $20
- $10
- n/a
What’s Coming Next?

- Market Conditions
- Competitive Actions
- Ancillaries & Bundles
- Choice Model
- Purchase History
- Customer Segments

Forecasting Optimization

Optimal Prices

Adjust prices to react to competition

- 07:30: $173
- 11:30: $219
- 8:15: $238
- 15:00: $219
- 14:30: $219
- 11:30: $238
What’s Coming Next?

- Market Conditions
- Competitive Actions
- Customer Segments
- Purchase History
- Choice Model
- Ancillaries & Bundles
- Experimentation

Learn best actions through analysis of feedback

Optimal Prices

Forecasting Optimization

Test Design Chart Detail
What’s Coming Next? – Data!

- Market Conditions
- Competitive Actions
- Customer Segments
- Ancillaries & Bundles
- Choice Model
- Purchase History
- Experimentation

Optimal Prices
Sabre Travel AI powers innovation across travel

Industry insights and data
Expertise in operations research
End-to-end solution portfolio
Experience in the travel industry

SABRE TRAVEL AIG
Building the industry's leading travel technology through joint services development and rapid product innovation

Google Cloud
Scalable, extensible cloud platform
Proven Machine Learning / Artificial Intelligence
Commitment to travel space
Northwestern University Project

Seattle

Chicago

Boston

Houston

Atlanta