Radical Customization

Google / ITA Software
Radical Customization

Pricing ancillaries to maximize profit requires finely tuned pricing.

Tailored pricing can be complicated.

Tailored pricing can require custom criteria.
Unbundling
Fine-grained, tailored pricing
A/B testing Analytics
Brands shopping
Fast response Promotions

11th Ancillary Merchandising Conference
Tailored pricing
### Pricelines

- Thousands of lines
- Hard to create
- Hard to maintain
- Redundant
- Consistency issues
- Hard to understand

<table>
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Decision tree

- Compact
- Easy to create
- Easy to understand
Decision tree

- Compact … at first
- Easy to create … when small
- Easy to understand … when small
- Hard to maintain
- Redundant
- Hard to extend
- Consistency issues
Multi-factor pricing

- Compact
- Feasible to create
- Easy to understand
- Easy to maintain
- Not redundant
- Easy to extend
- Easy consistency

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Formulas

Price = (BasePrice \times CabinAdj \times \min(FFAdj, PTCAdj) \times \text{EquipmentAdj} \times \text{Promotions}) - \text{Coupons}
Customization and personalization
Whether to offer, and at what price?

- CRM information
  - Preferences
  - Privileges
  - History
  - Employee type

- Flight information
  - Countries touched
  - Flight times
  - Last flight of day?

- PNR information
  - Companions
  - Payment info
  - Reward type
  - Medical needs
  - Other services bought

- Availability of services
  - Early boarding slots
  - Flowers
  - Upper cabin seats
  - Reserved seats
  - Load factor
Former solution: Code

Custom code

- Slow to write
- Hard to update
- Hard to understand
- Obscure interactions with host system
Key–Value Pairs for Custom Criteria

**Keys defined in UI**
- UpperCabinSeats

**Criteria reference keys**
- UpperCabinSeats: =0, =1, <10, >3

**Formulas reference keys**
- if ( UpperCabinSeats > 3, ...)

**Queries pass in key values**
- QPX( UpperCabinSeats ⇒ 4 ...)

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Summary
Multi-factor pricing
- Explicit logic
- Easy to manage
- No reordering
- Explanations

User-defined criteria
- Customization
- Personalization
- Flexibility

… and much more
- Version management
- Formula functions
- Output functions
- Google infrastructure
- Fully integrated with QPX...

QPX + Merchandising
ITA Software by Google
Who we are
Customers

American Airlines

Iberia

Aeroplan

Southwest Airlines

Orbitz

Deem

Air Canada

Latam Airlines

Turkish Airlines

Virgin Atlantic

China Southern Airline

China Eastern

HIS

NuTravel Technology Solutions

Defense Travel System

Hemisphere Airlines

Accovia

Red Tag.ca

Delta

StudentUniverse

Google
QPX solutions for carriers

Pricing and shopping
- Deep, highly configurable search
- Optional service pricing and filtering
- Fast implementation

Changes and refunds (ReShop) (Cat 31/33)
- Waivers for predicted incidents, self-service
- Involuntary changes (IROP), self-service

Reward shopping

Meta-search engine and availability offload

Inspiration/affinity search (Explore)

Self-service shopping configuration

Flight tools (schedules, fares, pricing diagnostics, ...)

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