NEW REVENUE MANAGEMENT TECHNIQUES, DYNAMIC PRICING AND DISTRIBUTION CHALLENGES

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CONTENT

1. Dynamic pricing through GDS channels
2. Major distribution challenges and drawbacks
3. Move to continuous prices
4. New ways to distribute
DYNAMIC PRICING THROUGH GDS CHANNELS (SCHEMATIONAL)

Information about customer delivered with seamless request reveals information about WTP

Customer

Agent

GDS

RTDP

ATPCO

Availability = Price

Availability

Fare Levels

Control Parameters
Fare Adjustment

Price points
(rules minimized)

Integrated Revenue Management

Price information about customer delivered with seamless request reveals information about WTP.
DYNAMIC PRICING THROUGH GDS CHANNELS (PRACTICAL)

Differential pricing effected via 3 basic categories

1. Itinerary and time of booking
   Advanced purchase, minimum stay, season, weekday etc.
2. Passenger segment
   Tour operator package, seamen, student etc.
3. Flexibility, additional services
   Rebooking, refund, bundling with ancillaries

Category 1 and 2 can be coded into availability (in principle)

\[
\text{Fare} \geq \text{Bid Price} \quad \Rightarrow \quad \text{Fare} - \text{Fare Modifier} \geq \text{Bid Price}
\]

Fare modifier depends on elasticity: „Quantitative fare rules“

Category 3 implemented with fare families: dynamic price for each flexibility category or product bundle
FARE ADJUSTMENTS AND DEMAND FORECAST

Fare adjustments can be calculated from a demand forecast considering choice behavior (e.g. hybrid forecast) via the efficient frontier construction.

Usually a too fine grained segmentation. Need to extract „important“ features: Customer segmentation.
SEGMENTATION BY FARE ADJUSTMENT

Fare adjustment: Conditioned on information in the request
Desired (optimal) margin above bid price for customer segment

Perfect segmentation: Forecasting independent bookings per class would be sufficient to calculate bid price. Never true in practice
REQUIREMENTS TO THE DISTRIBUTION WORLD

100% Polling and GDS products such as...

- Full PNR Itinerary information
  ✓ Supported by all major GDSs
- Seamless availability
  ✓ Supported by all major GDSs
- Interactive sell
  ✓ Supported by all major GDSs
- Journey / Trip data
  ✓ Supported by all major GDSs
- Interactive Married Segment Control
  ✓ Supported by all major GDSs

Does now all work perfectly fine? Unfortunately... NOT QUITE!
DISTRIBUTION CHALLENGES WITH O&D DYNAMIC PRICING

Point of Commencement vs. Point of Sale
- POC is industry standard for fare quotation since a long time
- SWISS applies POC control by evaluating the round-trip pattern
- O&D RMS usually use POS as proxy for POC
  - POS may not reflect true applicable fare i.e. ZRH agent may book LHR-ZRH-LHR
  - Discrimination per POS within EU may be deemed illegal
- POC better known with e-channels (structured process), but not exactly known with distribution system when booking is made

Problem
- Agent may book in wrong sequence or book fake segment to hide true POC
- Distribution system cache is not reflecting true availability in many cases

Possible solutions
- Distribution systems to provide and to guarantee correct POC information
- Distribution systems to send round-trip information and to support round-trip marriage
DISTRIBUTION CHALLENGES WITH O&D DYNAMIC PRICING

Interactive Married Segment Control (ITARES)
- Supposed to ensure ticketing according to the evaluation process of a booking
- Number of segment not consistent across all GDSs
  - Min. of 3 segments good for connections
- Round-trip marriage only supported by some GDSs

Problem
- Marriage break possible with creative procedures by GDS agents
- Dynamic Pricing creates higher incentives to break marriages

Possible Solution
- No conditions and own interpretation of marriage by the distribution systems
- Distribution systems to support a least 6 married Segments
- Distribution systems to send round-trip information and to support round-trip marriage
DYNAMIC PRICING THROUGH GDS CHANNELS

MAJOR DRAWBACK

The need for booking classes in GDS distribution is the most severe drawback for dynamic pricing.

– Only 26 price points to switch on and off

– Competitors with pure web distribution can have continuous (or arbitrarily fine grained) price points

– Fare levels have to be changed repeatedly

– Traditional way out is to publish more than one fare level per booking class, distinguished by „hard coded“ rules.
CLASSICAL FARE STRUCTURE LONG HAUL

More than 100 price points
Up to 30 points per booking class
DYNAMIC PRICING THROUGH GDS CHANNELS
MORE PRICE POINTS & COMPLEX RULES

Customer

Agent

GDS

Available

Fared

Price

RTDP

Control Parameters
Fare Adjustment
Fare Rules

ATPCO

Price points
complex rules

Integrated Revenue Management
ARE BOOKING CLASSES NECESSARY?

Why not respond with price directly to seamless requests, as would be possible with current RM technology (RTDP etc.)?

Booking classes needed for compartment only, or additionally for product flexibility conditions (fare families)

Availability control by fare code?
EVOLUTION TOWARDS ONLINE SEGMENTATION AND INDEPENDENCE FROM GDS

Online Dynamic Pricing

Customer ➔ Discriminating Information ➔ ALN

OD Dynamic Pricing Carrier

Customer ➔ GDS Tvl Agent ➔ Fare Levels ➔ ALN

OD Carrier

Customer ➔ GDS Tvl Agent ➔ Fare Levels & Rules ➔ ALN

Leg Carrier

Customer ➔ GDS Tvl Agent ➔ Fare Levels & Rules ➔ ALN

Online (Re)evolution

Customer ➔ ALN

OD Carrier

Customer ➔ GDS Tvl Agent ➔ Availability ➔ ALN

Leg Carrier

Customer ➔ GDS Tvl Agent ➔ Availability ➔ ALN
THE INTERNET REVOLUTION
UNPRECEDENTED POSSIBILITIES FOR PRICE DIFFERENTIATION

In practice, there are many who not only know you are a dog, but are familiar with your age, breed, illnesses, and tastes in dog food.


2010:
With the social networks on the web many also know who your friends are, what they do and like etc.

Peter Steiner in The New Yorker (1993)
HOW TO MOVE FORWARD WITH GDS CHANNELS?

Move to continuous prices may be disruptive for current agent processes.
  – It is unlikely that all GDS move simultaneously
  – GDS would need buy-in from agent community
  – Investments in times of downward pressure on booking fees?

Distribution via Internet only is not an option for many airlines.
Interline bookings involving several airlines are still a major USP for GDS channels.

Will Internet aggregators, pulling prices directly from airline.com, fill the gap?

What about “Full Content” contracts reducing GDS costs on one hand but tie airline.com and GDS prices together on the other hand. Are full content contracts independent of channel costs and capability clever?
POSSIBLE WAY FORWARD

Traditional fare distribution
Still needed?

Customer → ALN.COM → Internet Aggregator → Customer

ALN.COM → Single XML Interface → ALN RM

GDS

Traditional distribution

Customer → Tvl Agent GUI → Price

Equal content can be guaranteed
THANK YOU