





#### Pricing and Revenue Management

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#### Lecture Overview

- Pricing and the Marketing Mix
- Revenue Management
- Booking Classes
- Network Revenue Management
- Overbooking
- Fare conditions
- Issues
- LCCs
- Last-minute Deals



### Pricing and the Marketing Mix

- Pricing decisions cannot be made in isolation
- Depend on other aspects of the marketing mix
  - Product policy
    - Better onboard service → higher utility for consumers → prepared to pay higher price
    - Better onboard service → higher costs → need for charging more (ROI)

# Definition of Revenue Management



- Revenue Management
  - "... is a **revenue maximisation** technique with aims to increase the net yield (or revenue) through the predicted allocation of available (...) capacity to pre-determined market segments at optimum price." (Cooper et al., 2005, p. 398)
  - "Selling (...) to the **right people** at the **right price** and at the right time." (Cooper et al., 2005, p. 398)
  - "... aim was to ensure a good mix of high-yield and low-yield passengers on any route by preventing slippage of high-fare passengers into lower-fare categories." (Doganis, 2002, p. 282)

# Objectives of Revenue Management



- Revenue maximisation/optimisation
  - Revenue per ASK rather than by RPK
- LF maximisation

Supported by sophisticated software

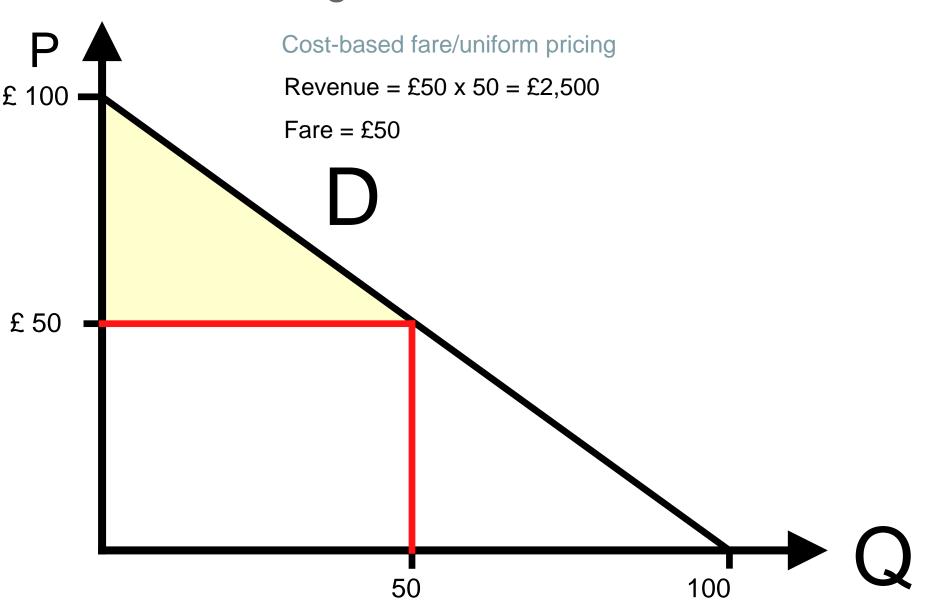
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# Revenue Management and Price Discrimination

- Price discrimination (vs uniform pricing)
  - Charging different prices to different customers (for the same/a similar product)
    - Difference in price is not primarily based on difference in costs
  - Based on utility for customer (willingness to pay)
    - Different customer segments have different price elasticities
  - Based on different time preferences (willingness to pay to be on a certain flight rather than another)

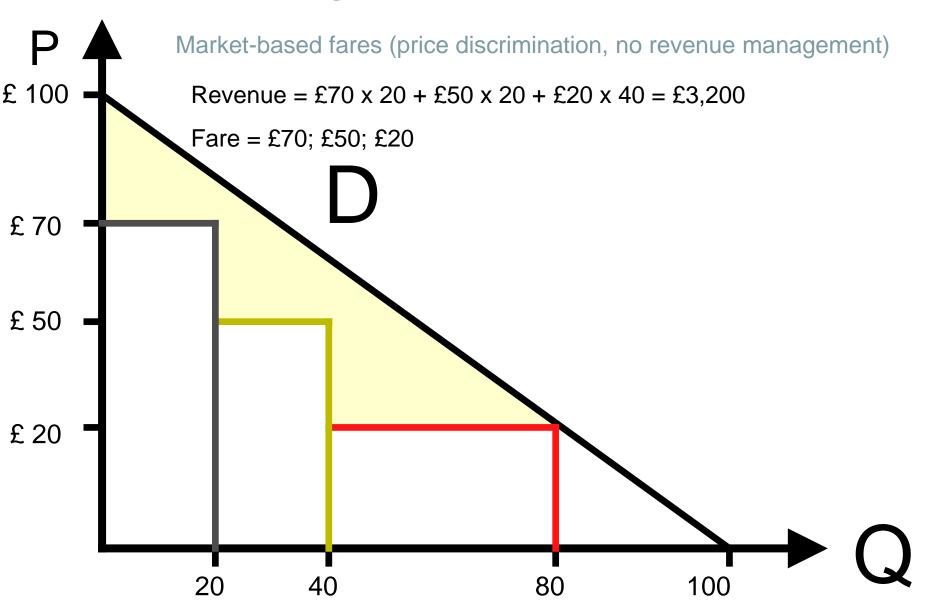


#### Revenue Management



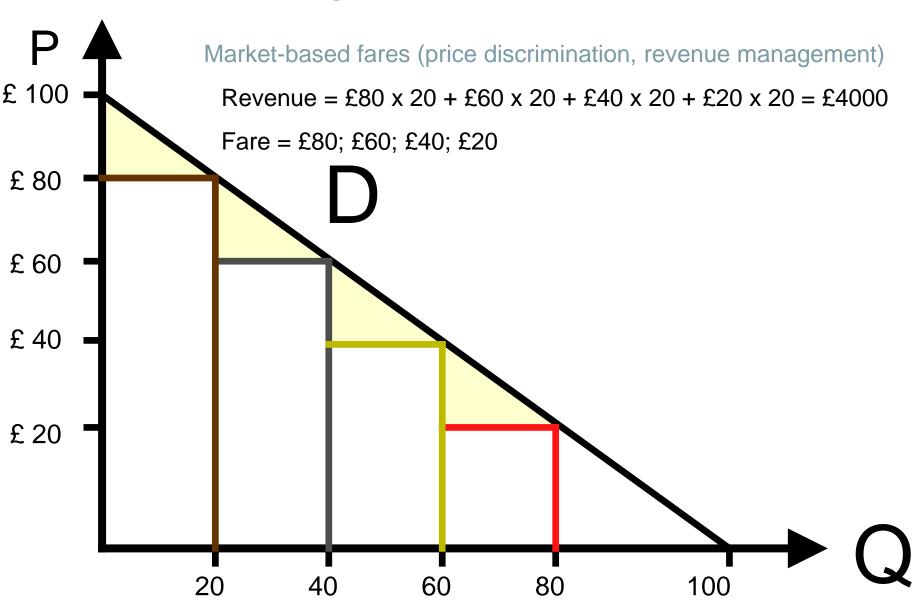


### Revenue Management





#### Revenue Management





### **Booking Classes & Fares**

- Fares in air transport are primarily differentiated by cabin class
  - eg First, Business, Economy
- Within these cabin classes they are further differentiated into booking classes
  - Each cabin class can have numerous booking classes
- Booking classes are made up by fares with different conditions for purchase (= fare conditions)
  - Related to the willingness to pay

# Allocation of Seats to Booking Classes



- Fare-mix optimisation
- Main question: How many seats should be sold at what price?
- Based on forecasts and market research
- Setting limits for booking classes
  - How many seats will be sold in each booking class?
  - Upper limit: physical capacity of aircraft + overbooking

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## Allocation of Seats to Booking Classes

- Problems related to the allocation of seats to booking classes
  - Too many seats allocated to discounted booking classes
    - → Spillage
    - Limited accessibility and availability for price inelastic segments that book last minute
    - A higher average fare could have been achieved
  - Not enough seats allocated to discounted booking classes
    - → Spoilage
    - More seats could have been sold on the flight

# Allocation of Seats to Booking Classes



- Seat accessibility
  - Availability of seats (at last minute) important for certain segments
  - Why?



#### Network Revenue Optimisation

- How many seats to allocate on a short-haul flight to point-to-point traffic and how much to connecting traffic
- Latter one will generate less revenue on that route, but will provide further revenue on the connecting leg
- When flying via a hub airport passengers usually have more choices on their O&D routing than on point-to-point routes → lower fares on connecting routings (as more competition)
- Lower willingness to pay for connecting services vs point-to-point → lower fares on connecting routings



#### Network Revenue Optimisation

- Example: VIE LHR LAX
  - O&D demand VIE LAX can be satisfied by numerous airlines (eg not only via LHR but also FRA, CDG, AMS, ORD...)
  - O&D demand VIE LHR and LHR LAX gives limited alternative routeings for travellers
  - → Revenue VIE LHR & LHR LAX > Revenue VIE LHR LAX



#### Network Revenue Optimisation

→ Outt	ound - Frid	ay 16 September 2016				Price
11:50 16 Sep	13:25 16 Sep	Vienna	Heathrow (London)	BA0697 British Airways	Euro Traveller	€964.14 1 passenger
16:10 16 Sep	19:20 16 Sep	Heathrow (London)	Los Angeles International (CA)	BA0269 British Airways	World Traveller	Email price quote  Baggage allowance  Currency calculator
<b>←</b> Inbo	und - Satur	day 24 September 2016				
21:35 24 Sep	16:00 25 Sep	Los Angeles International (CA)	Heathrow (London)	BA0268 British Airways	World Traveller	
19:40 25 Sep	22:50 25 Sep	Heathrow (London)	Vienna	BA0706 British Airways	Euro Traveller	

→ Vienna -	Heathrow (L	ondon) - Friday	16 September 2016		Price
Departs Arrives Flight Heathrov	11:50 13:25 BA0697 w (London) -		Carrier Cabin ny 25 September 201	British Airways Euro Traveller	€206.89 1 passenger  Email price quote  Baggage allowance
Departs Arrives Flight	19:40 22:50 BA0706	25 Sep 25 Sep	Carrier Cabin	British Airways Euro Traveller	Currency calculator
← Change fl	ights				
Passenger		Fare		Taxes, fees and carrier charges per person	Total price**
1 Adult		€120.00		€86.89 1	€206.89

Passenger	Fare	Taxes, fees and carrier charges per person	Total price**
1 Adult	€599.00	€365.14 1	€964.14

€599.00 + €365.14 = €964.14

€682.42 + €496.52 = €1,178.94

)eparts	16:10 16 Sep	Carrier	British Airways	
Arrives	19:20 16 Sep	Cabin	World Traveller	£777.75 1 passenger
Flight	BA0269			Email price quote
C Los Ang	eles International (CA) - H	eathrow (London) - S	saturday 24 September 2016	Baggage allowance
← Los Ang Departs	eles International (CA) - H	eathrow (London) - S Carrier	British Airways	Baggage allowance Currency calculator
`				

Passenger	Fare	Taxes, fees and carrier charges per person	Total price**
1 Adult	£450.00	£327.75 <b>1</b>	£777.75

Exchange rate: £1 = €1.25 (12 April 2016)



### Overbooking

- Why?
  - Misconnections
  - No-shows
  - Late cancellations
- Reduce spoilage
- Spoilage costs vs. DBC and customer loyalty
- Lower no-show rates on flights with more non-refundable/rebookable tickets



#### **Fare Conditions**

To avoid slippage of high-fare passengers to low-fare classes

#### and

- to avoid that too many low-fare seats are sold (revenue dilution)
  - Fare conditions
  - Day-to-day monitoring of seat availability
  - Sales data
  - CRS & GDS utilisation
  - → Complex and critical task

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#### **Fare Conditions**

- Restrictive conditions of discount fares, "fences"
- Aim: to make certain market segment book certain fares
- Examples
  - Maximum/minimum stay limit (incl. "Sunday"-Rule)
  - Departure time limits (day of week, etc.)
  - Purchase time restrictions (advanced purchase, eg APEX fare)
  - Routeing restrictions
  - Restrictions on name changes
- LCCs weakened the fare conditions of network airlines
  - Often one-way pricing which is now also adapted by some network airlines



#### **Fare Conditions**

+ Heathro	w (London) -	Johannesburg	- Friday 02 Septembe	er 2016	Price
Departs Arrives Flight	19:05 07:05 BA0055	02 Sep 03 Sep	Carrier Cabin	British Airways World Traveller	£956.75 1 passenger Email price quote
+ Johanne	esburg - Heat	throw (London)	Baggage allowance Currency calculator		
Departs Arrives Flight	21:10 07:20 BA0054	09 Sep 10 Sep	Carrier Cabin	British Airways World Traveller	

,	(,		Friday 02 Septemb		Price
Departs Arrives	19:05 07:05	02 Sep 03 Sep	Carrier Cabin	British Airways World Traveller	£2,056.75 1 passenger
Flight	BA0055	оз Зер	Cabin	world Traveller	Email price quote
→ Johannesburg - Heathrow (London) - Friday 09 September 2016					
<b>←</b> Johann	esburg - Heat	throw (London) -	Friday 09 Septemb	per 2016	Baggage allowance
<b>←</b> Johanne	esburg - Heat	throw (London) -	- Friday 09 Septemb	per 2016	Baggage allowance  Currency calculator
`	esburg - Heat	throw (London) -	Friday 09 Septemb	British Airways	
→ Johanno Departs Arrives		<u> </u>			

Flight	Fare conditions	Additional features
Heathrow (London) to Johannesburg	Changes Time/date changes permitted at any time before each flight departure for a change fee of £100 or an upgrade fee of £100 plus any difference in fare. Changes subject to availability. Fees apply per ticket  If you want to cancel your flight There are no refunds except for any government & airport taxes	Operated by British Airways  31in seat pitch (78cm), lumbar support and adjustable headrest  Non-stop entertainment: blockbuster movies, TV and audio channels  Complimentary three course meal and drinks  Check in online or on your mobile
Johannesburg to Heathrow (London)	Changes Time/date changes permitted at any time before each flight departure for a change fee of £100 or an upgrade fee of £100 plus any difference in fare. Changes subject to availability. Fees apply per ticket  If you want to cancel your flight There are no refunds except for any government & airport taxes	Operated by British Airways  31in seat pitch (78cm), lumbar support and adjustable headrest  Non-stop entertainment: blockbuster movies, TV and audio channels  Complimentary three course meal and drinks  Check in online or on your mobile  View all features

Flight	Fare conditions	Additional features
Heathrow (London) to Johannesburg	Changes Time/date changes permitted at any time for the difference in fare. Changes subject to availability  If you want to cancel your flight  If you cancel a refund is permitted, subject to recalculation of the fare for any journey flown. There are no cancellation fees.	Operated by British Airways  3 Tin seat pitch (78cm), lumbar support and adjustable headrest  This fare entitles you to choose your seat at any time prior to check-in  Non-stop entertainment: blockbuster movies, TV and a
Johannesburg to Heathrow (London)	Changes Time/date changes permitted at any time for the difference in fare. Changes subject to availability  If you want to cancel your flight  If you cancel a refund is permitted, subject to recalculation of the fare for any journey flown.  There are no cancellation fees.	Operated by British Airways  3 Tin seat pitch (78cm), lumbar support and adjustable headrest This fare entitles you to choose your seat at any time prior to check-in Non-stop entertainment: blockbuster movies, TV and audio channels Complimentary three course meal and drinks View all features



#### Revenue Management: Issues

- Disadvantages of price discrimination
  - Complex fare structure
  - "Fences" need to be developed
  - Training costs
  - Negative consumer perception
- Extreme forms of price discrimination reduced as LCCs opted for simpler pricing structure



### Pricing of LCCs

- Use price differentiation
  - Different prices at different times of booking
  - Not always low-fare if booked close to departure

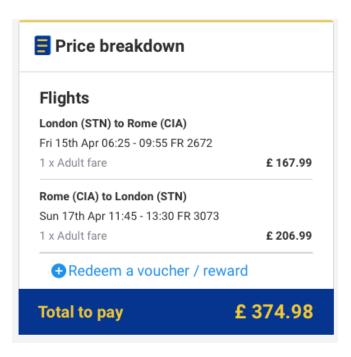
#### BUT

Only one price available at any time



### Pricing of LCCs

#### Ryanair



That's about 1,500 TRY!



#### Last-minute deals

- Low marginal costs
  - i.e. the costs of selling one more seat are minimal (meal, handling, duties...)
  - Incentive to sell seats before departure at very low costs
  - Problem: slippage, diversion of more price inelastic segments



#### Conclusion

- Many FSNCs have changed their marketing mix
- Many LCCs have changed their marketing mix
- → hybridisation of business models
- Defining business models by their marketing mix is more and more difficult