







### **Airline Distribution**

Istanbul Technical University Air Transportation Management, M.Sc. Program Aviation Economics and Financial Analysis Module 12 14, November, 2014





A. Introduction to airline distribution

**B.** Passenger distribution

**B.1 Traditional distribution channels** 

**B.2 New distribution channels** 

**B.3 Issues in airline distribution** 

**C. Cargo distribution** 





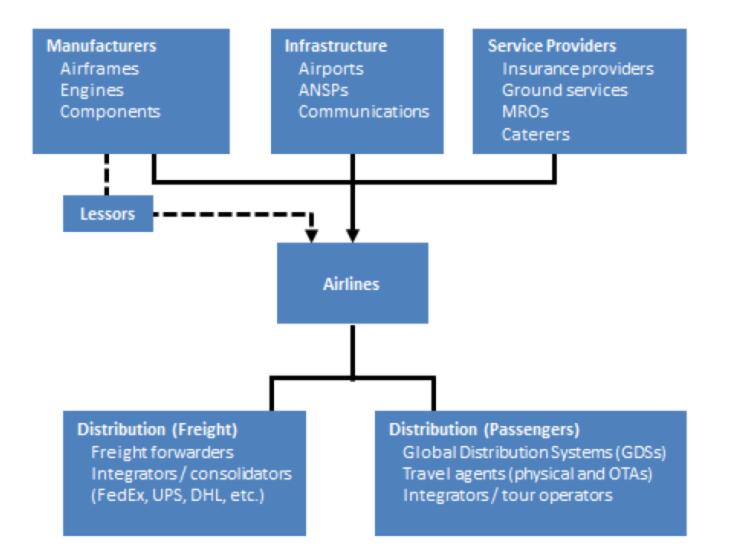


## A. Introduction to airline distribution (sales)

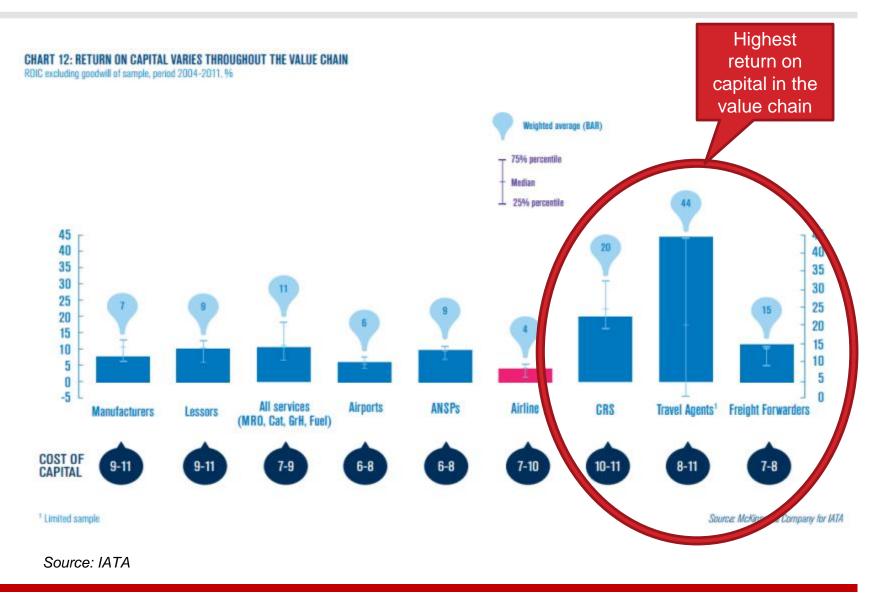


### The aviation value chain





## The distribution segment of the value chain









### **B.** Passenger distribution



### Main players in the distribution segment

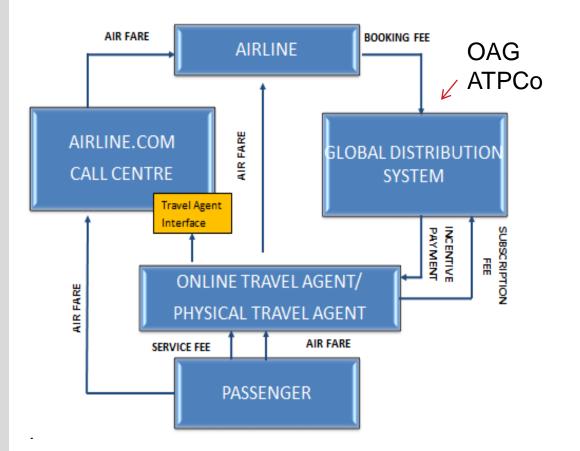
- Global Distribution Systems (GDSs)
  - Successors of Computer Reservation Systems (CRSs)
  - Store and distribute information on airline schedules, fares and seat availability
  - Source information from airlines, OAG and ATPCO
  - Facilitate transaction

#### Travel Agents

- Physical travel agents (Brick & Mortar)
- Online travel agents

#### Airlines

- Sell tickets directly to passenger via websites or partnerships with OTAs
- Or via GDS-powered channels
  - Airlines pay a booking fee on a flight segment sold via a GDSpowered channel



### The role of travel agents



- IATA agents have access to all IATA airlines
  - Airline access to 50,000 travel agents to sell product
  - Very efficient, financial protection, knowledgeable sales agents

### Price comparison

• common and unbiased (??) sales agent for airline tickets

### Ticket processing

- complex international itineraries
- interline tickets

### Information and expertise for consumers

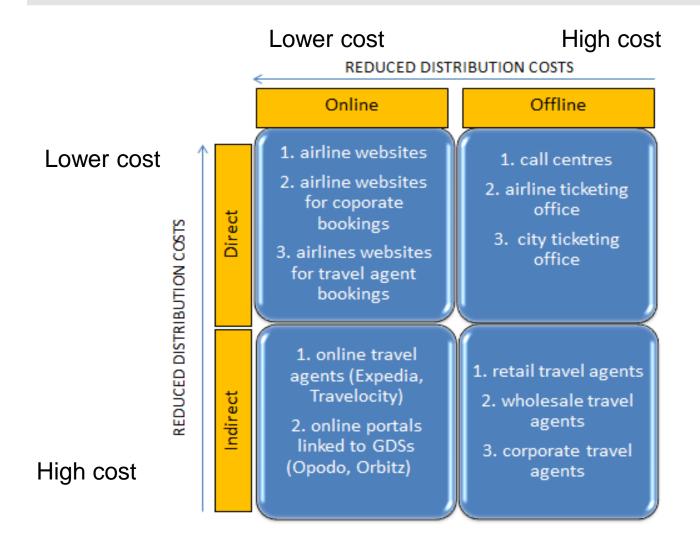
- consumers who do not have access to the Internet
- specific consumer groups (corporate business travel, government agencies, etc.)
- Corporate travel departments
  must work through an accredited travel agent Source: U.S. GAO (2003) Report 03-749



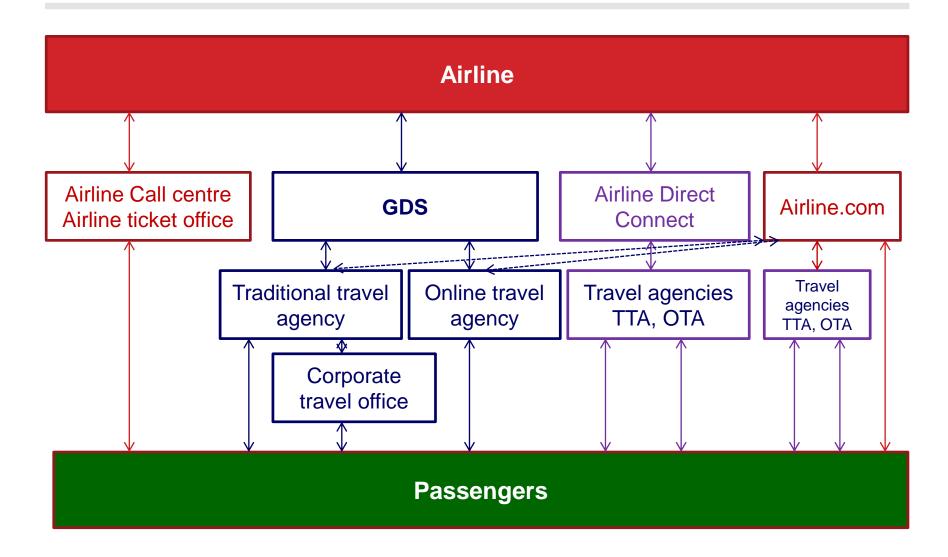
### **Trends in airline distribution**

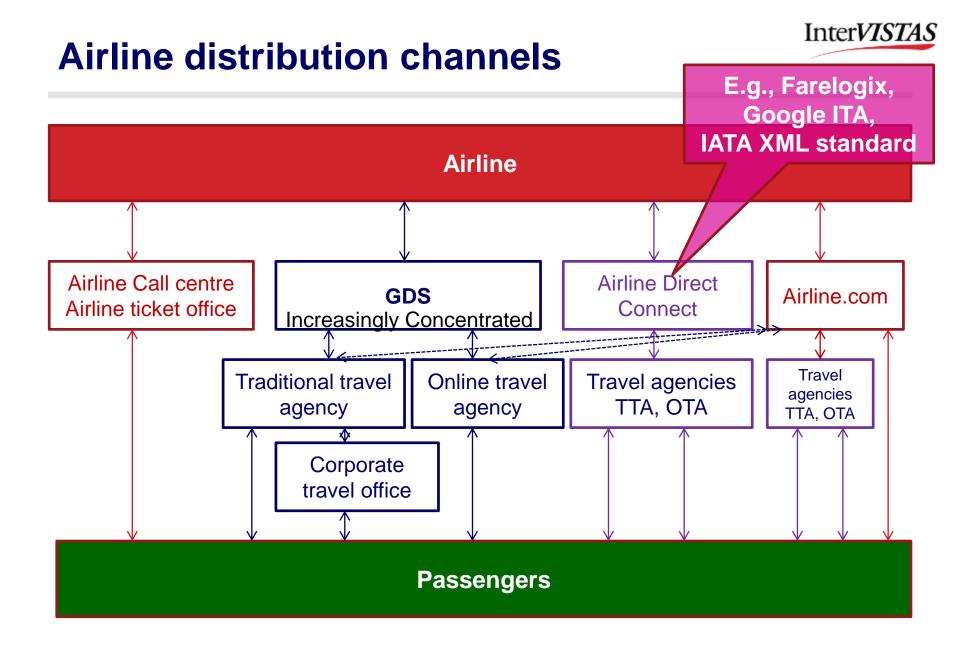
- In the mid-1990s two fundamental changes profoundly impacted airline distribution
  - Internet communication technologies enabled direct marketing by airlines to consumers
    - Personalized airline websites
    - In the US, the share of online reservations increased from 7% to 30% between 1999 and 2002 alone (now 36%)
  - Airlines reduced commissions paid to travel agents
    - Pressure on airlines to reduce costs
    - E.g. Irish carrier Aer Lingus cut commissions sharply and made the lowest fares available through its website only (45% of tickets are sold online)

### **Trends in airline distribution**

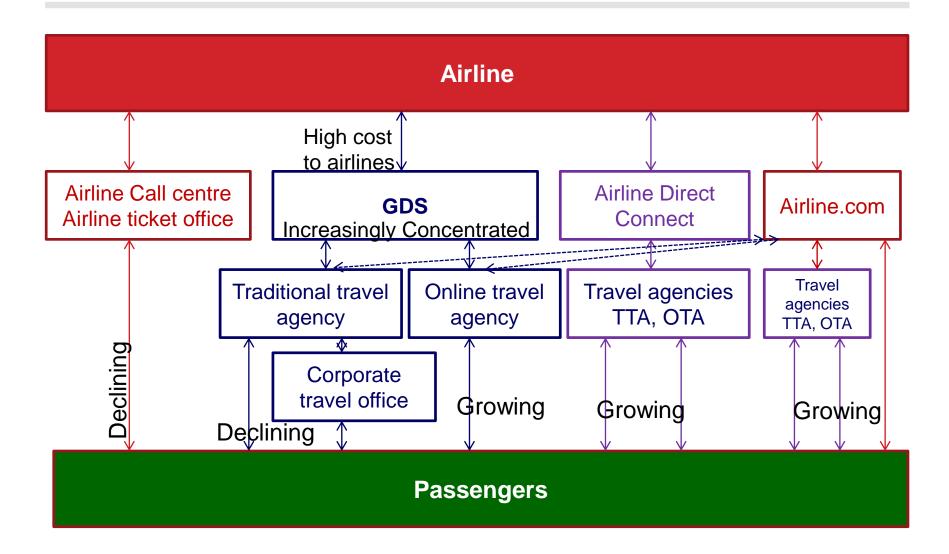


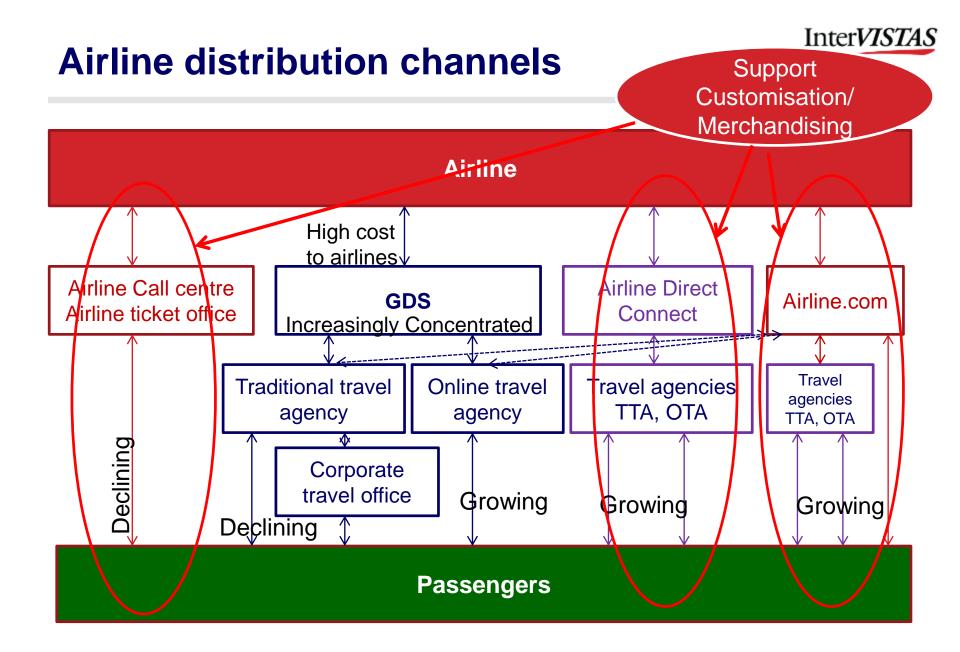
### **Airline distribution channels**





### **Airline distribution channels**

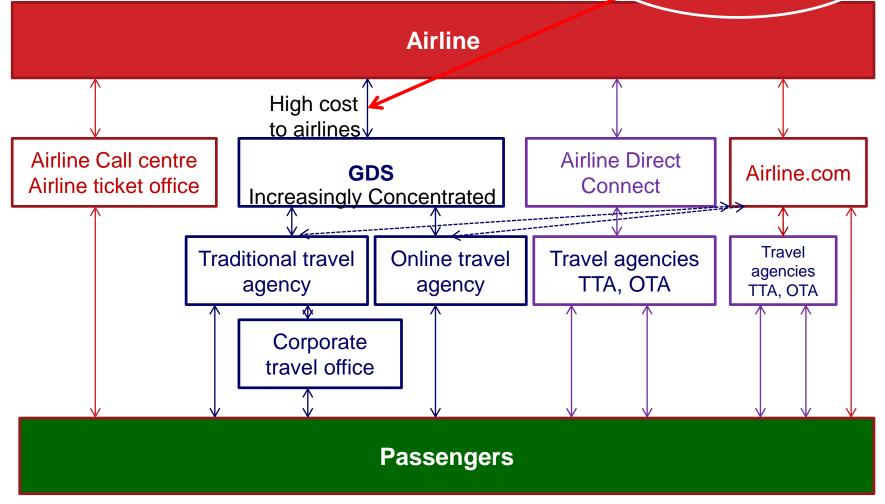


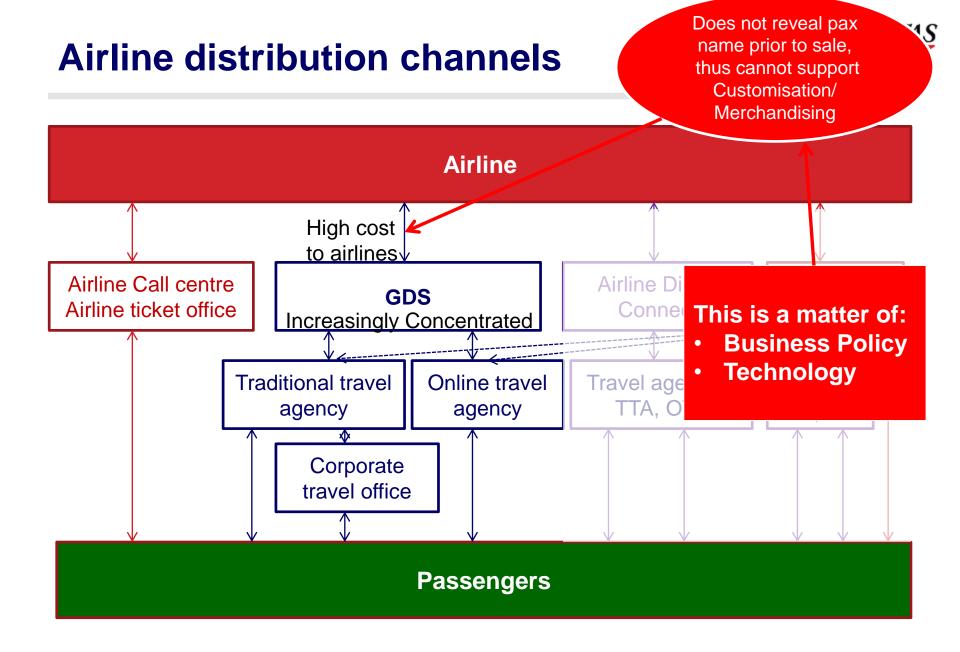


### **Airline distribution channels**

Does not reveal pax name prior to sale, thus cannot support Customisation/ Merchandising

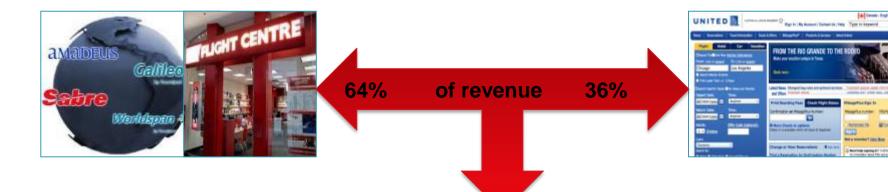
1.5



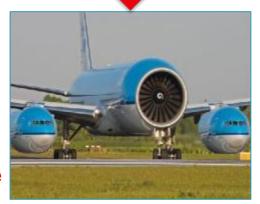




### **GDS versus online sales**



- In the US, sales through GDSs generated 64% of airline passenger revenue in 2008. 50% of tickets GDS tickets higher fare
- In Canada, 75% of international, 40% of transborder and 25% of domestic travel is booked through GDSs.



- Airlines increasingly use their websites for domestic sales (GDSs for international itineraries).
- Low cost airlines (e.g. Southwest and JetBlue) sell over 90% of tickets online.

Source: PhoCusWright (2009)

"The role and value of the global distribution systems in travel distribution"



### **Summary**

- There has been a clear shift from GDS-based to new and emerging distribution channels.
- Nevertheless, GDSs still play an important role in airline distribution:
  - Corporate travel
  - Government travel
  - International travel
  - Regions with limited or no internet access









### **B.1 Traditional distribution channels**







- an airline (call centre or ticketing office)
- a travel agent (access to a CRS)

- Physical travel agents powered by CRSs accounted for a lion's of all ticket sales
  - In 1999, 71% of all airline tickets in the US were sold via CRS-powered travel agents

Source: U.S. GAO (2003) Report 03-749

### **Computer reservation systems (CRSs)**

#### Computer reservation systems (CRSs)

- Developed by airlines in the 1960s...
  - Sabre was developed by American Airlines & IBM
- Originally used to track flight and schedule information and sell airline seats
- In the mid-1970s airlines provided access to CRSs for travel agents
- Over time CRSs evolved and added new functionality
- Most airlines sold off CRSs by the early 2000s
- Today they are referred to as Global Distribution Systems

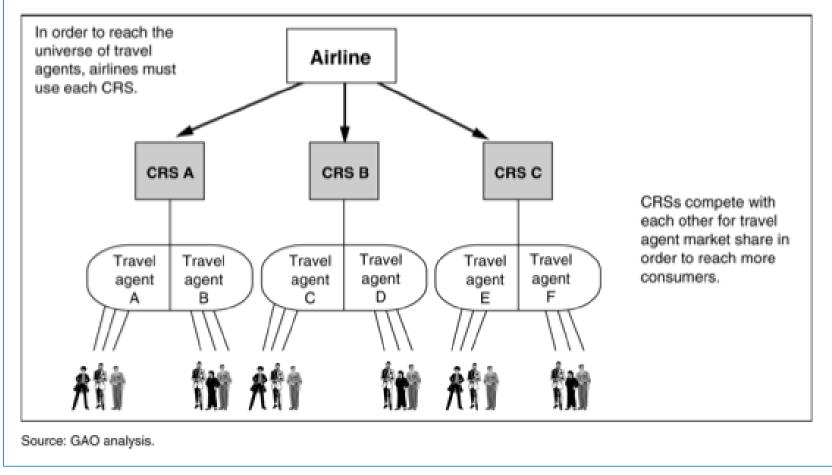
### ReserVec, Toronto, 1963



Source: Air Canada's website

### **Airline-CRS-Travel agent relationship**

#### Figure 2: CRS Relationships with Travel Agencies and Airlines



Source: GAO (2003)

# CRSs were used to disadvantage competitors

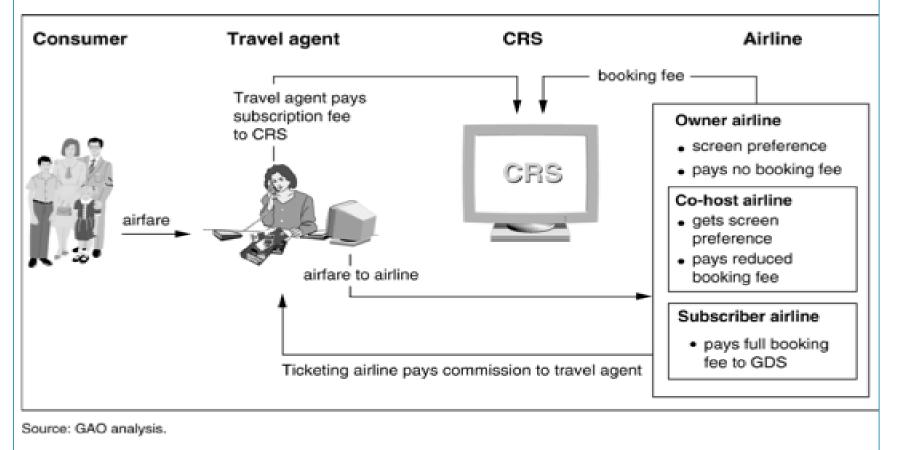


- Different regions have different regulations
- There has been a strong incentive to bias CRS displays by moving the host airline's flights to top of screen.
  - For example, funnel flights
    - (treat connecting flight as through flight and therefore would place service higher on screen)
- Some countries adopted regulations to prohibit display bias
  - Now considered anti-competitive
  - Fees to non-owner airlines increased dramatically

### **Display bias**



#### Figure 1: Summary of Historic Airline Ticket Distribution Relationships Prior to the CRS Rules

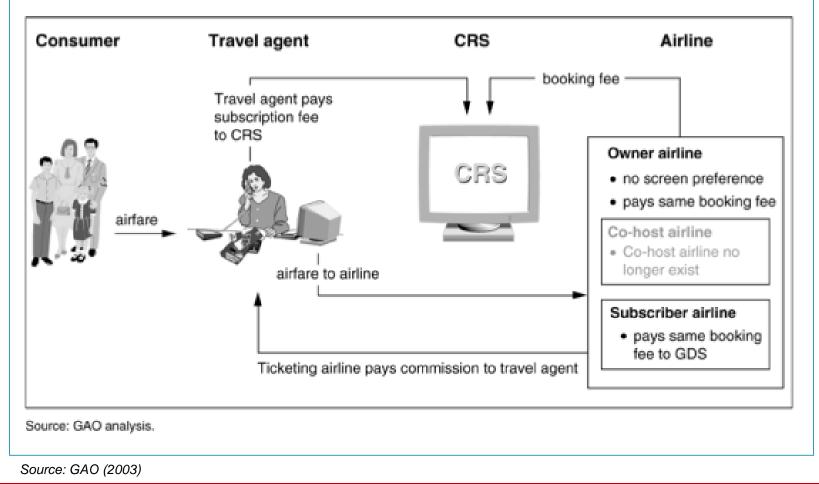


Source: US General Accounting Office (2003)





#### Figure 3: Summary of Historic Airline Ticket Distribution Relationships under the CRS Rules



22 November 2013

Realizing the vision together



### **Global distribution systems (GDSs)**

#### Global distribution aystems (GDSs)

- Communication platforms that connect travel suppliers and buyers
- In addition to information on airline tickets, GDSs distribute other travel services (car rentals, hotel accommodation, sightseeing tours, etc.)
- Largest GDSs today are Travelport, Sabre and Amadeus
- Sabre and Travelport account for 90% of tickets sold via GDSs in North America
- Amadeus dominates
  GDS sales in Europe

#### Travelport / Galileo User Interface, 2007

			455	8		-	•			3	-	2	1	<b>6</b> i	ŧ۵	2	₹	Ş	L.
	A15	MARA	THLON	×															
THU	15	MARØ	7 ATHI	ENS		/LON	DON									*	0A		
1	ATH	LGW	0700	0855	0A	271	C4 87	¥7	M7 L	7 N7	K7	X7	07	17	V7	734	C*		
2	ATH	LHR	1330	1530	0A	269	C4 87	¥7	M7 L	7 N7	K7	X7	<u>و</u> ړ	TØ	V7	340	C*		
3	ATH	LHR	1915	2115	ÛA	265	64 87	¥7	M7 L	7 N7	K7	X7	07	TØ	V7	734	C*		
4	ATH	LHR	0900	1100	BA	631	49 VC	<b>C</b> 9	D9 I	C Y9	89	H9	К9	M9	RC	767	C*E		
5	ATH	LGW	1250	1440	U2	5086										319	*		
6	ATH	LHR	1455	1655	BA	641	J9 VC	C9	D9 I	C 49	89	H9	К9	M9	RC	32\$	C*E		
7	ATH	LHR	1925	2125	BA	633		C9	D9 I	C 49	89	H9	К9	M9	RC	767	C#E		
<< M	ore	Flight	ts »																
< 1	4MAF												16	3MAF	₹ »	1;	pax 💌		
<u>«1</u>			ONATH	×									16	imaf	₹ »	1;	pax 💌		
_	A18	MARL	ONATH 7 LON			/ATH	ENS						16	MAF	₹.»	,	0A		
SUN	A18	MARL		DON				¥7	M7 L	7 N7	К7	x2	_			*	ÛÂ		
SUN 1	A18 18 LHR	MARL MARO ATH	7 LON	DON 1755	ÛA		64 87		M7 L M7 L			x2 x7	Q7		Ų7	*	0A C*		
SUN 1 2	A18 18 LHR LHR	MARL MARO ATH ATH	7 LON 1220	DON 1755 2210	OA OA	260	C4 87 C4 87 C4	¥7		7 N7	K7	<b>X7</b>	Q7 Q7	T0 T0	V7 V7	* 734 340	0A C* C*		
SUN 1 2 3	A18 18 LHR LHR LHR	MARL MAROT ATH ATH ATH	7 LON 1220 1635 2215	DON 1755 2210 #0350	0A 0A 0A	260 270 266	C4 87 C4 87 C4 87 C4 87	¥7	M7 L	7 N7	K7	<b>X7</b>	Q7 Q7	T0 T0	V7 V7	* 734 340	0A C* C* C*		
SUN 1 2 3 4	A18 LHR LHR LHR	MARL MARO ATH ATH ATH ATH	7 LON 1220 1635	DON 1755 2210 #0350 1220	0A 0A 0A 02	260 270 266 5085	C4 87 C4 87 C4 87 C4 87 Y	47 47	M7 L	7 N7 7 N7	K7 K7	x7 x7	Q7 Q7 Q7	T0 T0 T0	V7 V7 V7	* 734 340 340	0A C* C* C*		
SUN 1 2 3 4 5	A18 1 18 1 HR 1 HR 1 HR 1 HR 1 GW	MARL MARGI ATH ATH ATH ATH ATH	7 LONI 1220 1635 2215 8640	DON 1755 2210 #0350 1220 1335	0A 0A 0A 0A U2 BA	260 270 266 5085	C4 B7 C4 B7 C4 B7 C4 B7 Y J9 VC J9	ч7 ч7 с9	M7 L M7 L	7 N7 7 N7 C Y9	К7 К7 В9	x7 x7	Q7 Q7 Q7 Q7 K9	T0 T0 T0	V7 V7 V7 RC	* 734 340 340 319	0A C* C* C* C* C*		
SUN 1 2 3 4 5 6	A18 18 LHR LHR LHR LHR LHR	MARL ATH ATH ATH ATH ATH ATH ATH	7 LONI 1220 1635 2215 8640 8755	DON 1755 2210 #0350 1220 1335 1805	0A 0A 0A 0A 0A 8A 8A	260 270 266 5085 640	C4 B7 C4 B7 C4 B7 C4 B7 Y J9 VC J9 VC	ч7 ч7 с9	M7 L M7 L D9 I	7 N7 7 N7 C Y9	К7 К7 В9	х7 х7 Н9	Q7 Q7 Q7 Q7 K9	тө тө тө м9	V7 V7 V7 RC	* 734 340 340 319 325	0A C# C# C# C# C#E C#E		
SUN 1 2 3 4 5 6 7	A18 118 LHR LHR LHR LHR LHR LHR	MARL ATH ATH ATH ATH ATH ATH ATH	7 LON 1220 1635 2215 8640 8755 1225	DON 1755 2210 #0350 1220 1335 1805 2125	0A 0A 0A 0A 0A 0A 0A 8A 8A 8A	260 270 266 5085 640 632	C4 B7 C4 B7 C4 B7 C4 B7 Y J9 VC J9 VC Y	ч7 ч7 с9 с9	M7 L M7 L D9 I	7 N7 7 N7 C Y9 C Y9	K7 K7 B9 B9	X7 X7 H9 H9	Q7 Q7 Q7 Q7 K9	та та та м9 м9	V7 V7 V7 RC RC	* 734 340 340 319 325 767	0A C# C# C# C# C#E C#E X		

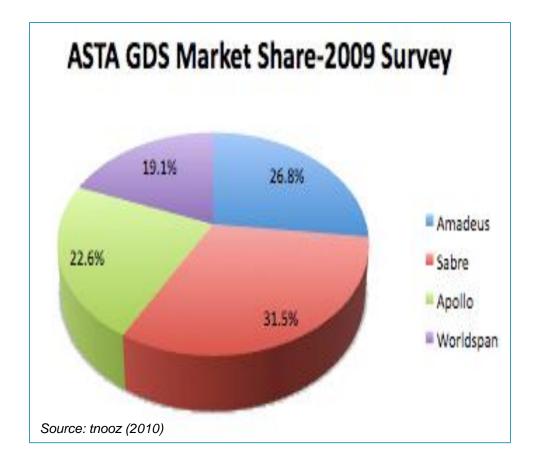
### **GDS** market is highly concentrated

#### Sabre

- Owned by private equity firms
  - Silver Lake Partners
  - Texas Pacific Group
- Travelport (Apollo, Galileo, Worldspan)
  - Owned by a private investment firm
    - Blackstone Group

#### Amadeus

- Airlines are shareholders in the owning company
  - WAM Acquisitions (Air France, Iberia and Lufthansa are shareholders)







- GDSs remain a major distribution tool
  - Over 60% of airline industry revenue comes from sales via GDS-enabled distribution channels
  - Used by scheduled carriers
  - Limited use by charter carriers and discount carriers such as Southwest
  - It is a global business
    - Global consolidation; interline linkages partly driven by carrier alliances

What was the impact of CRSs/GDSs?

- Situation in the United States
  - In 2008, 64% of airline revenue (50% of tickets) came from sales via GDS-powered channels
  - In 2002, 63% of airline tickets were sold through GDS-powered travel agents
    - 54% of all sales come from the first line on screen
    - 92% of all sales come from the first screen
    - 20% increase in sales to vendor of a "biased" system

Source: U.S. GAO (2003) ; PhoCusWright (2009)

Inter*VIST* 



### What was the impact of CRSs/GDSs?

- Situation in Canada
  - In 2000, 74% of tickets were sold by GDS-powered travel agencies
  - Agencies traditionally earned 10-12% commission
    - In recent years "caps" have been placed
    - Larger chains greater opportunity for incentives & overrides
    - Travel agencies starting to place a service charge with its customers to partially offset the "cap" impact.







AVIATION TRANSPORTATION TOURISM

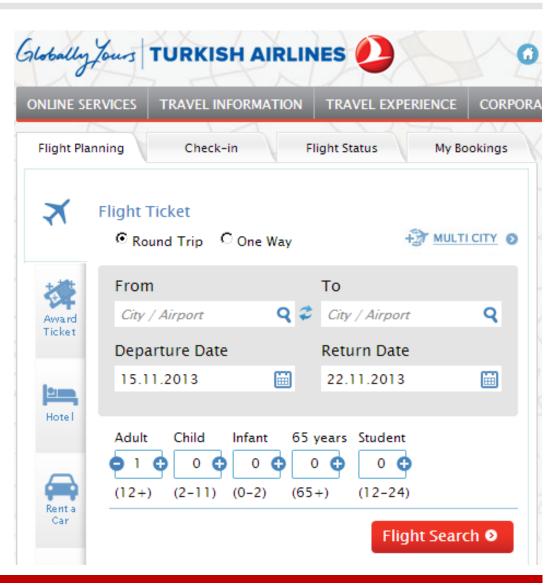
### **B.2** New and emerging distribution channels





### **Airlines' websites**

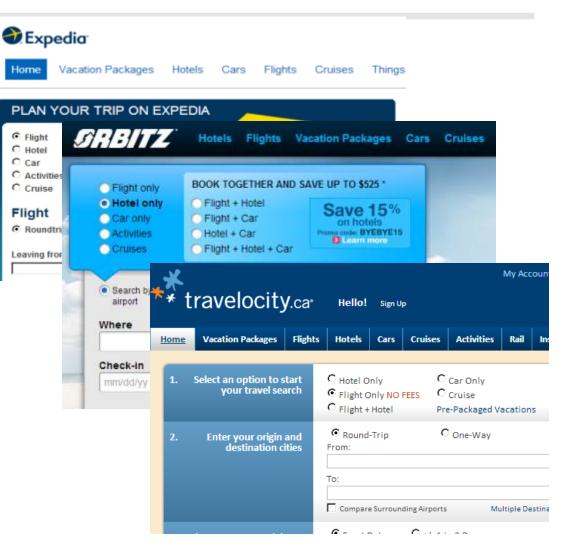
- Airlines made substantial investments to develop personalized websites
- Travellers can buy personalized product offerings
- Ticket at the base price
- Ancillary services for an additional price
- Airlines save costs when bypassing expensive intermediaries (GDSs and travel agents)
- LCCs use direct sales as a way to keep costs under control
- over 90% of tickets by Southwest and JetBlue are sold via their websites





### **Integrated websites**

- Websites which act as an online travel agency
- Travellers can compare fares, schedules and other flight information
- May be independent or owned by travel suppliers
- Orbitz is part-owned by Travelport
- Expedia is independent
- Bookings via integrated websites may be channeled via GDSs or directly access airlines' inventories
- Opaque websites
- Blind auction principle
- Priceline.com





### **Direct airline-travel agent partnerships**

- Online travel agencies increasingly develop direct links with airlines
  - E.g. American Airlines and priceline.com
  - E.g. Air Canada and Kayak
  - Objective is to bypass costly GDS systems



- Airlines use different technological standards when selling through their websites and through GDSs
- XML used for website sales and supports customized product offerings
- EDIFACT/TELETYPE used for GDS/travel agent sales and does not support customized product offerings
- NDC is designed to bridge the gap between the different standards
- NDC is currently in the pilot stage



Source: IATA's New Distribution Capability (NDC) Program

# What is the impact of new and emerging distribution channels?



- Airlines seek to enhance competition between distribution channels
  - Goal is to reduce cost of distribution
  - Greatly increased quality of service to consumers
  - Support airline industry goal of a merchandising approach to defining and selling the airline product
  - Move away from mass standardisation of the airline product
  - To a customised service and price for consumers

### Gains to consumer from lower fares

 As a result of enhanced competition between new and traditional distribution channels









### **B.3** Issues in airline distribution





 "We are not keeping up with the rest of retail and consumer marketing when you look at [airline] distribution"

- Jim Davidson, President of Farelogix



### **Issues with GDSs**

- GDSs use outdated technologies that were developed in the 1960s
- GDSs do not have interoperability and are fragmented
  - an airline has to participate in multiple GDSs which do not communicate with each other
- GDSs do not display information on ancillary services
  - price of luggage check in, onboard meals, assigned seating, etc.



- Exercise of market power results in high fees to users (airlines)
- GDSs have high return on investment, especially compared to the airline industry
  - This suggests a certain degree of market power vis-à-vis airlines

•







## C. Cargo distribution





- Freight forwarders play a critical role in air cargo distribution
  - Handle over 70% of world's freight
- Some freight forwarders have evolved into global providers with worldwide networks
  - Expeditors, Panalpina, etc.
- A trend of increased consolidation in the freight forwarding sector can be observed
  - Leads to economies of scale and increased investor returns in the freight forwarding sector

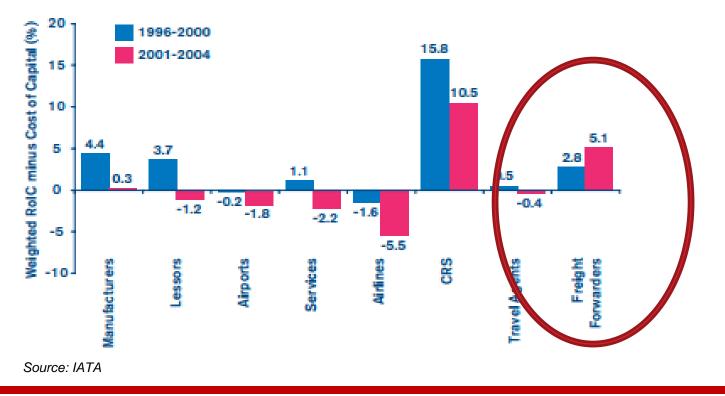
### **Freight forwarders**



### • Freight forwarders returns are counter-cyclical

Higher average returns during downturns

Figure 5.2: The Weighted Return on Invested Capital minus the Cost of Capital by Sector





### **Freight forwarders**

- The consolidation trend means that there are fewer and larger global players
  - High entry barriers due to economies of scale
  - Direct air cargo distribution channels (airlines and shipping companies) exert limited competition due to lack of skills or smaller networks, but
  - Emerging Chinese and Asian competitors provide some competition in this sector



### **Partnerships**

 Emergence of partnerships between airlines and freight forwarders

- e-freight is a project designed to reduce the amount of paper documentation in air cargo and replace it with electronic documentation and data exchange
- e-AWB is an initiative designed to remove paper air waybill
  - these partnerships involve airlines, freight forwarders, shippers, ground handling companies and customs authorities



### FedEx/UPS/DHL/Purolator

- FedEx was established in the early 1970s
  - Originally express parcels, documents
  - Expanded to larger items and trucking
- FedEx and UPS leading companies in the U.S.
- DHL in Europe and other markets















### Thank You!

www.intervistas.com