2nd Edition Tourism Information Technology

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COMPLIMENTARY TEACHING MATERIALS

Chapter 3

Travel Intermediaries and Information Technology

Chapter 3 Learning Objectives

After studying this chapter you should be able to:

- 1. Explain the **evolution**, **role and features** of Global Distribution Systems (GDSs) as travel intermediaries;
- 2. Analyze the **challenges** faced by GDSs as a result of technological change and innovation;
- 3. Explain how traditional travel retailers use IT;
- 4. Explain how IT has led to **disintermediation** and evaluate how this has impacted travel intermediaries;
- 5. Describe and critically evaluate the different types of **online travel intermediaries** that have developed as a result of IT; and
- 6. Explain how **tour operators** can use IT to improve productivity and competitiveness.

Key Concepts

- Computer reservation systems(CRSs)
- Global Distribution Systems (GDSs)
- GDS New Entrants (GNEs)
- New Distribution Capability (NDC)
- Tour operators
- Tour wholesalers
- Travel retailers
- Travel management company (TMC)
- Online travel agents (OTAs)
 - Channel Managers





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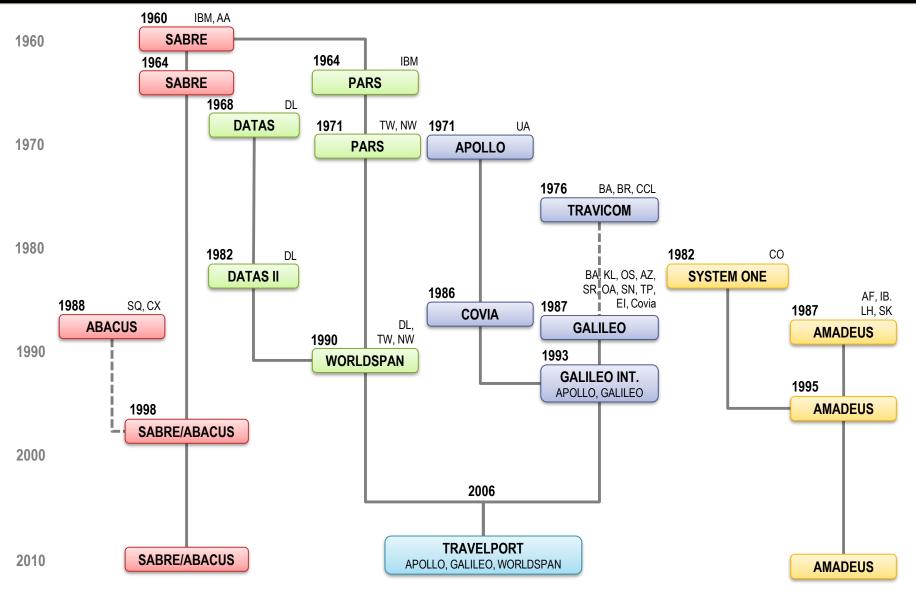
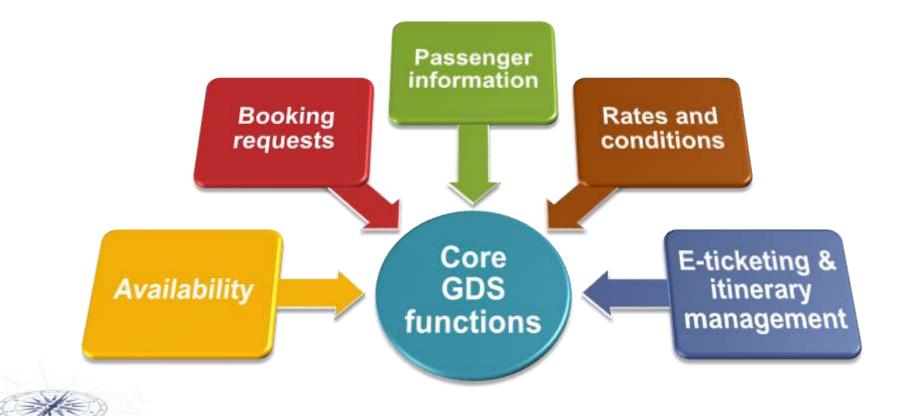


FIGURE 3.2 The evolution of major global distribution systems.

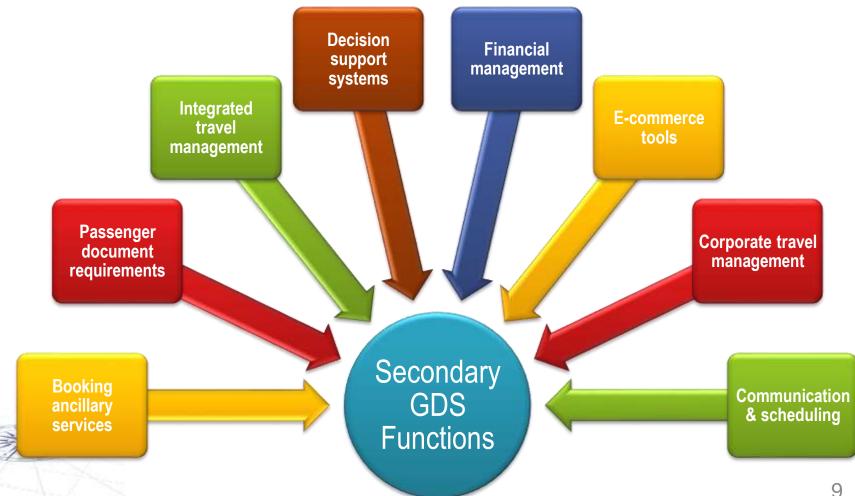
Characteristics of Major GDSs

GDS	Founded	Founders	Market Share	Locations
Sabre	1960	American Airlines	30%	56,000 travel agency locations. Global presence, strong in US & Asia Pacific
Amadeus	1987	Air France, Lufthansa, Iberia & SAS	39%	104,000 travel agency locations. Mainly Western Europe, Middle East & Asia Pacific
Abacus	1988	Singapore Airlines & Cathay Pacific	5%	20,000 travel agency locations. Mainly Asia- Pacific
Travelport	2006	Merger of Galileo & Worldspan	26%	67,000 travel agency locations. Global presence,
Worldspan Galileo	1990 1987 1971	United Airlines Nine major European airlines Delta, TWA & NW Airlines		strong in US & Western Europe
Apollo				7

Core GDS Functions



Secondary GDS Functions



Industry Insights: Amadeus Data Centre

No single point of failure

'Follow The Sun' operational concept: global support and local knowledge

> Central Data Centre in Erding, Germany

> > Security drives everything we do

Aim: 100% service availability

Miami

Sydney

ding

Source: Amadeus, 2014

+ billion

transactions processed per day 850 🤹

billable transactions processed in 2010 system response time

0.3 Ô

95% of the world's scheduled network airline seats 5000 + servers

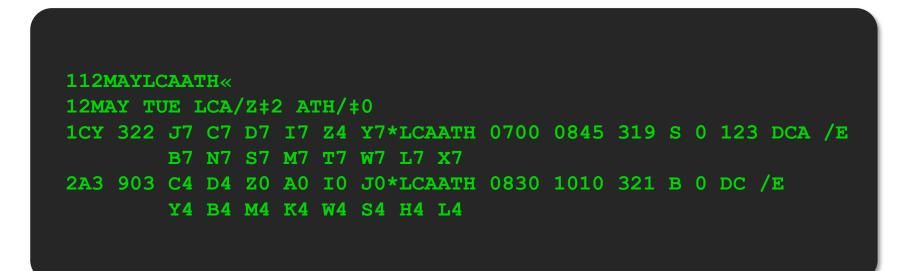


FIGURE 3.4 Traditional GDS "Green Screen" command line display.



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			r	28JUN Thu	1535.60	1535.60	1535.60	1535.60	1582.40	1582.40	1633.40
				29JUN Fri	1580.60	1580.60	1580.60	1580.60	1818,40	1818.40	1869.40
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FIGURE 3.5 Sabre Red Graphical Workspace.

Source: Sabre Holdings, 2014

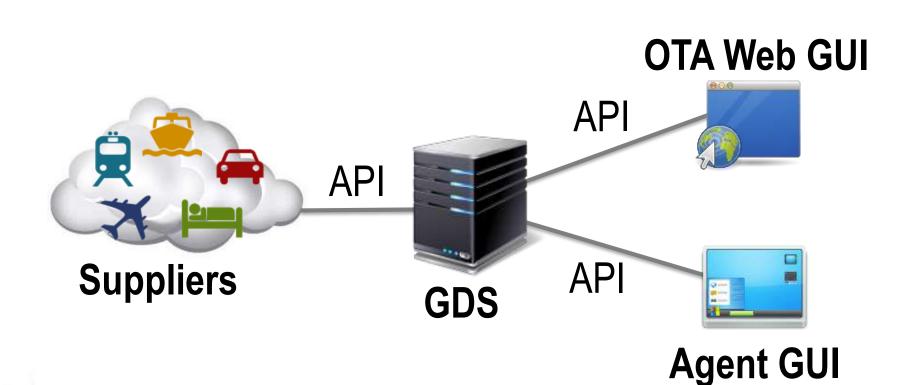


FIGURE 3.6 GDS interfaces.

SWOT Analysis of GDSs

	Positive	Negative			
Internal	 Strengths Market power Homogenized content Interline bookings Back-office integration Client loyalty 	 Weaknesses Legacy-based systems Connectivity Pricing innovation 			
External	 Opportunities New suppliers New clients Dynamic packaging Interoperability 	 Threats GDS New Entrants (GNEs) Open systems Direct bookings 			

GDS Trends

- Diversifying IT solutions
- Consolidation
- Connectivity and interoperability
- Transparency
- Personalization
- Social, Local and Mobile (SoLoMo)



Tour Operator Use of IT

- Package creation
- Tour package distribution
- Reservations and customer management



Traditional Travel Retailers

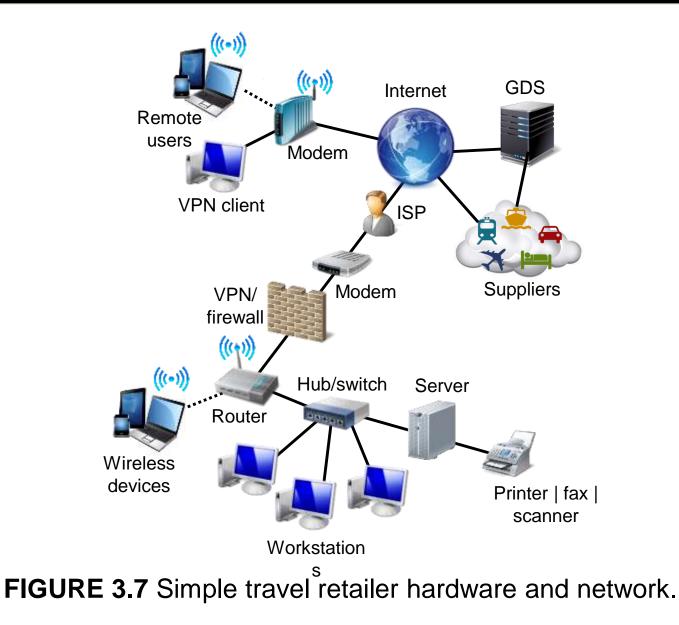
- Front-office systems
- Back-office systems
 - Accounting systems
 - Human resource systems
 - Customer relationship management (CRM)
 - Communication
 - Commission tracking
 - Transaction settlement



Enterprise Resource Planning (ERP) Systems

- Back office functions can be integrated into crossfunctional systems known as Enterprise Resource Planning (ERP) systems.
- Benefits:
 - O Productivity
 - Reporting
 - Customer satisfaction
 - Forecasting





Travel Retail Hardware and Networks

Key Terms

- Local area network (LAN)
- Intranet
- Extranet
- Virtual private network (VPN)

• Firewall



SWOT Analysis of Traditional Retailers

	Positive	Negative				
Internal	 Strengths Time and cost Expertise Security Value adding Personalization Special needs 	 Weaknesses Cost Bias and errors Less choice and transparency Less control High fixed costs Limited opening hours 				
External	 Opportunities Emerging markets Hybrid models Consolidation 	 Threats Decommissioning Digital competitors Public perceptions Failure to attract talent Lack of investment 				

Travel Management Companies (TMCs)

- Unique characteristics
- Contracts and preferred suppliers
- Travel policy compliance
- Employee productivity
- Risk management
- Travel expense management



Types of Online Travel Intermediaries



Online Travel Intermediaries

IT Innovations

- The Matrix Display
- Search filters
- Opaque pricing
- Oynamic packaging
- I Flexible date search
- Alternative airport search
- Low-fare notifications
- Mapping
 - Semantic search

SWOT analysis of online travel intermediaries

Positive

Strengths

- Low entry costs and investment
- Pricing and convenience
- Customization
- Choice and control
- Instantaneous
- Comparison
- Flexibility

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- Multimedia
- **Opportunities**
- Social
- Mobile
- Integration
- Innovation

Negative

Weaknesses

- Lack of transparency
- Cancellation and changes
- Security
- Time consuming
- Limited advice
- Support (general and special needs)
- Lack of expertise

Threats

- Competition
- Direct bookings

Discussion Questions

- 1. What is the difference between a GDS and a GNE? Visit the GDS and GNE websites to help you answer this question. Do you think GNEs are a threat to the GDSs? Justify your answer.
- 2. You have started your own small travel retail business. Which GDS would you choose and why?
- 3. What is the role of traditional intermediaries in the travel distribution system and are they still needed? How might traditional intermediaries use IT to compete against the innovative features offered by OTAs?
- 4. Watch the following video about IATAs New Distribution Capability: http://youtu.be/IW-fIRooeVc. What impact is this IT development likely to have in travel intermediaries?
- 5. What is disintermediation and how has it impacted the different types of travel intermediaries described in this chapter? Do you think some of the intermediaries discussed in this chapter are likely to disappear in the next 10 years? Which and why? What role has IT played in this process

Discussion Questions

7.

- 5. This chapter provides SWOT Analyses for the GDSs, traditional travel retailers and OTAs. Use the information in this chapter along with your own research to conduct a similar SWOT analysis of TMCs. What do you think the future looks like for TMCs?
- 6. Visit two metasearch engines (e.g. Hipmunk, Room77, Skyscanner, Trivago, Kayak) and search for a return flight and hotel to a destination of your choice. Compare and contrast the two sites by identifying the strengths and weaknesses of each. Do they offer different features? Which features do you like the most? What ITs are used to improve the search experience?
 - Group buying sites and opaque pricing sites have attracted some media controversy. Find some press stories about these types of OTAs and use them to identify the key consumer issues that have generated negative publicity. How can these OTAs overcome these challenges?

Useful Websites



Expedia

http://www.expedia.com/



Sabre Holdings http://www.sabre.com/



Kayak

Priceline

http://www.kayak.com/

http://www.priceline.com/



Travelocity

http://www.travelocity.com/



lastminute.com

http://www.lastminute.com/



TUI

http://www.tui-group.com/en/

Case Study Sabre Holdings

- Founded by partnership between American Airlines and IBM in 1953.
- SABRE was the first private real-time online transaction system.
- 9000 employees in 59 countries.
- Diversified beyond GDS to become a travel technology company offering a range of IT solutions for airlines, airports, travel intermediaries, hotels, car rental providers, rail providers and tour operators.
- Four business units:
 - 1. Sabre Travel Network
 - 2. Sabre Airline Solutions
 - 3. Sabre Hospitality Solutions
 - 4. Travelocity

