# Global Reservations Technologies

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## Objectives of Chapter 5

- Global Distribution System(G.D.S).
  - The role that airline reservation systems played.
- Seamless Connectivity
  - Last room availability
  - Electronic switch technology
- Reservation Channels
  - Travel agents
  - Central Reservations Services (CRS)
  - Internet and web-based reservations
- Changing electronic reservations environment.
  - Growth of on-line reservations
  - Voice recognition technology
- Automated revenue/yield management systems
  - Assumptions and components of revenue/yield systems



- Airlines Global Distribution Systems (GDS)
  - Exhibit 5-2
  - Exhibit 5-3
- Hotels Central Reservation Systems (CRS)
  - Started in 1960s
    - Linked airlines with Travel Agents (TAs)
      - Put terminals in TAs offices, enabling them to book
      - · Hotel chains linked up their CRSs into this GDS
        - System of blocking rooms manually
          - » Problems of overbooking and sales refusal
- Seamless Connectivity
  - Move from half-duplex (one-way) to full-duplex (2-way)
  - Last room availability
    - Everyone sees same availability, updated in real-time
      - Faster, more accurate, sells more rooms at higher rates



- Seamless Connectivity
  - Electronic switch technology.
    - Earlier, airlines and hotels had incompatible systems
      - Complicates training, causes errors, increases costs
    - Now, incompatible systems "speak the same language"
      - Now one terminal is used for booking air, lodging, car rentalis
      - All bookings done in real-time
        - » Inventory updated in real-time
        - » Customer confirmation provided instantly

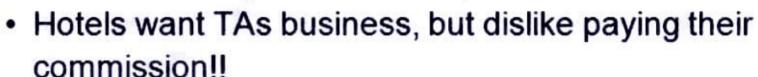


- Application Service Providers (ASPs)
  - Software companies that offer a suite of software applications via Internet-based access
    - Through an Internet Web site, each hotel runs off the same suite of software by simply using any Internet-ready computer
  - Four primary functions in their arsenal of applications (Exhibit) 5-5)
    - A CRS
    - GDS connectivity
    - Connections to "alternate" distribution systems
    - Internet reservations

- Application Service Providers (ASPs) Continued
  - Benefits associated with ASP applications
    - No need to make large capital investments in hardware and software
- **←**
- No need to employ many specialized software engineers to maintain the system and program new applications
- Avoid multiple versions of poorly integrated applications
- New software enhancements are implemented immediately at the ASP site and available to all users instantaneously
- Single-Image Inventory allows all users to feed from the same database and results in a lower error rate in reservations bookings and an improvement in overall customer service (Exhibit 5-9)

- Taking the Reservation
  - The Travel Agent An intermediary between the hotel and the guest who:
    - · Books the room for the guest
    - Bills the guest and pays the hotel
    - Collects a 10% or more commission from the hotel

The hotel/travel agent relationship





- Marketing problem TAs send business only in peak periods
- Bookkeeping problems Too much paperwork/hassle/costs to deal with individual TAs not providing regular business
- TAs complain about late/non-payment of commission
  - Will steer guests towards high/prompt commission payers!
- Hotels developing Info/booking Web Sites to bypass TAs.
  - Saves commission and gains direct guest relationship



- Central Reservations System (CRS) or Office (CRO) or Res Centers
  - A central call-center to handle incoming reservations
  - May handle millions of phone calls a month
  - Average call time is 2 to 3 minutes
  - Automated systems route callers to the right operator
    Press "1" for USA, "2" for Europe etc
- $\rightarrow$

- Hold time is used for sales messages
  - System is expensive to set up and maintain
    - Hotels are billed for each reservation made + annual fees
    - Call centers being moved to India and Philippines
      - » Availability of cheap, skilled English-speaking workers
      - » International telecom costs are dropping, supporting this trend

- Taking the Reservation
  - Direct or In-house reservations center
    - Many guests call hotel directly
      - Hotel better informed CRS deals with 1000's of hotels
      - May have rooms available, despite CRS refusal
    - Group reservations, meetings often booked directly.
    - Maybe a large source in independent properties
    - Maybe a whole department or just FO Clerk



- Internet and Web-Based Reservations
  - Travel related bookings are the largest category of internet transactions
    - Exhibits 5-1 & 5-6
  - Search Engine Optimization
- Need to be in the top .0005% of he search to be listed in the top few
  - Paid search results Pay for placement and per-click through to search engines
  - Organic search results Develop sophisticated website, optimized to rise to the top of the search



- · 40% of annual marketing budget may be spent on online products
- Booking through own website nets more revenue than 3<sup>rd</sup> party sites
  - Exhibit 5-10; Exhibits 5-11 a & b
- Chain Sites Encourage bookings through chain site by:
  - · Enhancing quality of website
  - Offering lowest price guarantee
  - Letting users search for multiple brands at multiple price points on one-click
  - Exhibit 5-13



- Internet and Web-Based Reservations (Continued)
  - Third Party Travel Sites
    - · Sites that are not controlled either by the hotel or the chain
      - Exhibit 5-10
      - Examples: Travelocity, Cheap Tickets
    - Opaque sites hotels sell distressed inventory at low prices. Hotel name is revealed only after transaction is completed.
      - Used by hotels to protect brand integrity
      - Used by guests more interested in prices rather than brands
         » Examples: Priceline, Hotwire
  - Meta Search Technology
    - Sites that search all available websites to present side-byside comparisons and booking options
      - Example: Sidestep, Kayak or TravelZoo



#### Other Trends in Electronic Reservations

- Voice Recognition
  - Possible with limited choices
    - Days of week, Dates, Credit Card types etc
  - Capabilities are improving dramatically
  - Supplemented by touch-tone or operators



#### **Mapping Capabilities**

 Links reservation queries with maps, using internet technolog Maps etc) to give directions



- Guest History Databases
  - Electronic systems capture huge amounts of data and permit sophisticated analysis
    - Excellent tool for cross-selling, promotions etc
- Mobile Apps
  - Enabling potential guests to locate and book hotel rooms through their smartphones and tablets.

- The Hotel Representative
  - Sales/Reservation offices maintained by individual hotels or small chains
  - May represent and sell several non-competing hotels/chains
    - Promotes them in Trade Shows etc.
    - Example Utell International
    - International reps provide language operators/liaisor with local TAs etc.

- Hotel Reps maintain their own CRS systems
  - Cost-effective for smaller chains, independent hotels
- Independent Reservation Services
  - CRS for hire, used by smaller chains, independent hotels



- The Yield Management Revolution
  - The act of controlling rates and restricting occupancies to maximize gross room revenues.
  - Price–Occupancy Mix
    - Revenue is a function of rooms sold <u>and</u> revenue per room
    - High ADR can balance low occupancy and vice-versa
      - A \$2 increase in ADR in a 400 room hotel = \$200.000
        - » True, only if there is no corresponding decrease in occupancy%
      - Exhibit 5-16, Exhibit 5-17



- A brief history of yield management
  - The airlines' role Invented yield management
    - After airline de-regulation they competed on price, but found it difficult to track, so developed computerized systems
    - Airlines have high fixed costs, low variable costs, and highly perishable products
      - Need to sell "today"
      - Any income that exceeds fixed costs is welcome
    - Hotels have similar characteristics

- The Yield Management Revolution
  - Market demand assumptions for yield management
    - Demand is price sensitive, different segments have varying levels
    - Price sensitivity of demand can be measured and manipulated



 Corporate guests – Less price sensitive, seeks flexibility, weekday travel, books at the last minute, cannot wait for deals



- Leisure guests Very price sensitive, weekend travel, will trade price for restrictions, is motivated by deals
- Group guests Place and date more important than rate
  - Hotel needs to balance total value of group against room rates
  - Books well in advance, reducing risk for hotel

- The Yield Management Revolution (Continued)
  - Tools for Measuring Results
    - PHASER Complete Access Reports
      - Breaks the hotel rates into two categories, GDS and CRAS, and looks for the lowest available rate in each of these areas
      - Features include
        - » Highlighted rates that have risen or dropped by a user defined ar nount
        - » Total hotel availability status by day in both the GDS and CRS
        - » Details for every rate offered in the CRS by room type across each competitive hotel during the selected time period

#### Smith Travel Research's STAR Reports

- Based entirely on historical data
- Answer questions: How well did I do in terms of average daily rate, occupancy, and RevPar against my competitors last week? Last month? Lat year?
- Does not share specific performance data for each competing property
  - » Hotel can't see how well each competing hotel performed individually



- Tools for Measuring Results (Continued)
  - Travel Information Management Services (TIMS)
    - Rated are gathered through the CRS seamless connection
    - Displays discounts and lowest available rates for all hotels in the competitive market set



- Hotelligence Report (Exhibit 5 -19)
  - Compares a manager's rooms available with those available in the competitive market set and room-nights sold for the manager's hotel against room-nights sold across the competitive set
  - Compares actual history with theoretical market share
  - Shows growth trends for current periods against similar periods the previous year

- Tools for Measuring Results (Continued)
  - Expedia Competitive Price Grid Report
    - The hotel wants to see the rates it is listing in Expedia as well as the rates listed by competitors in order to manage its own hotel-direct Web site



#### Other Reports

- Sabre. Net Reports
- Hotel Information Service (HIS) Reports
- TrendFx

## Automated Yield Management Systems

- Role of Yield Management Systems
  - Establishes and monitors rate structure
  - Continually monitors reservations activity and sets inventory controls as needed
  - Aids rates negotiations with bulk buyers
    - Monitors and restricts the number of reservations that can be taken for any particular room rate/room type
    - Enables reservationists to sell, rather than be order take
  - Matches the right room product and rate with the customers needs and price/other sensitivities
  - Provides reports to management for basis of accepting and rejecting bookings and can give suggestions for improving yield