

## **CHAPTER FIVE OUTLINE**

### **CAPTURING TECHNOLOGY'S COMPETITIVE ADVANTAGE**

- i. Quote: Shoshana Zuboff
- ii. Chapter Opener: Staying on the Cutting Edge
- I. Introduction
  - A. Technology: use of new knowledge and tools to improve productivity and systems
  - B. Creates both challenges and opportunities for tourism service providers
  - C. Inexpensive data storage and processing speeds given rise to POS and ERPS
  - D. Outcomes from investments in technology
    - 1. Enhanced productivity
    - 2. Improved communications
    - 3. Enhanced customer service
    - 4. Improved profitability
    - 5. Competitive advantage
- II. Improving Operating Efficiency and Effectiveness
  - A. Rising wages, increasing input costs, and intensifying competition necessitated changing of old ways
  - B. Examples of technology improvements
    - 1. Staffing programs match staff levels to demand levels
    - 2. Communication technology (such as remote devices) make internal ordering and inventory stocking more efficient
  - C. Management Information Systems
    - 1. Computer-based systems for collecting, storing and retrieving information for planning, decision-making and problem-solving
    - 2. Airlines pioneered the development of centralized MIS
    - 3. Many other MIS for other tourism service suppliers were initially implemented at the local level
    - 4. Point-of-sale systems are frequently major input to MIS at property or store levels
    - 5. Aggregation of data can improve financial, management and marketing decisions
    - 6. Enterprise Resource Planning System is total integration of all information sources
  - D. POS Systems
    - 1. POS systems for restaurants, with intuitive touch screens, reduce training time for servers and cashiers, reduce input errors and waste, and improve customer service
    - 2. Touch screen and wireless systems are quickly becoming the standard
    - 3. Consolidated data accumulated by a chain or a POS provider are available via an Internet site

4. Databases create powerful tools for making improved marketing, management, and financial decisions as reports can be generated by the day, hour, and minute
- E. Property Management Systems
  1. PMSs combine computer hardware and software into an integrated information system
  2. Enterprise systems present a new model of corporate computing
  3. Enterprise systems are delivering dramatic gains in operational efficiency and profitability
- III. Providing Customer Convenience and Enhancing Service
  1. Do-it-yourself approach via kiosks
  2. Technology has reduced labor costs for operators, but ultimately customer service has improved
  3. Consumers are more informed of the tourism products and more engaged in travel-related activities so as to enhance their consumption experience
  4. Data base marketing/data mining aids in targeting micro-segments with customized marketing mixes
- IV. Changing Communication and Distribution Channels
  1. Advent of the Internet fundamentally changed all distribution channels
  2. Internet access has become ubiquitous
  3. Smart phones are overtaking personal computers as the dominant platform to access the Internet- A. Internet and Travel Product Distribution
  1. Online booking engines allow travelers to compare schedules and prices without the need for an intermediary
  2. The introduction of the Internet expanded travelers' choice for points of purchase, thereby creating price competition
  3. The early airline reservation systems have later been further developed and evolved into what we know today as the Global Distribution System (GDS)
- B. Internet distribution for hotels
  1. Hotels, especially chain hotels, have been using central reservation systems (CRSs) to make room bookings
  2. CRS is integrated into the overall enterprise systems and provides customer profile, preferences, and behavior information for data mining

3. Due to the advancement of technology, there is a new breed of intermediaries specialized in online lodging product distribution
- C. The Internet as a Travel Tool
  1. Internet and travel product distribution
  2. Travelers use Internet for ideas, inspiration and information
  2. Web uses
    - a. Source of customized maps
    - b. Up-to-the-minute weather
    - c. Status of flights, etc.
    - d. Replacement for guidebooks as source of destination info
    - e. E-mail contact throughout trip
- D. The Power of User-Generated Content
  1. Social networking and blogging - one traveler speaking to another
  2. Social media is not only allowing consumers to research tourism sites and book services, but they can also create content and engage with companies
  3. Both positive and negative comments communicated
  4. Organizations must now monitor what is being said and distributed about them
  5. Many tourism suppliers and online travel agencies are actively managing their brand presence on social networking sites by connecting with consumers
  6. When information is acquired and analyzed from every customer touch point, meaningful relationships can be formed with customers from the information collected
- V. Improving Profitability
  - A. Revenue management (which is also called yield management), a foundational component of almost every MIS for tourism service suppliers
  - B. Revenue management: Method of allocating service capacity, originated by airlines
  - C. Now applied in many industries that can improve revenues through its use
  - D. Certain operating conditions must exist for revenue management to be effective
    1. Service capacity is relatively fixed, cannot be easily and cheaply expanded (or reduced) to meet increase (decrease) in demand
    2. Demand can be separated into market segments with differing price sensitivities and needs
    3. Service capacity, i.e., “inventory” is perishable
    4. Services can be sold in advance through reservation system
    5. Demand fluctuates substantially
    6. Marginal sales costs are low and marginal capacity costs are high (selling an additional service unit costs little but adding service supply is very costly)
    7. Internet is allowing even greater use and fine-tuning of revenue management
  - E. Although revenue management has been widely applied in many different industries, each of these industries has their own specific characteristics and differences

**F.. Operational Considerations**

1. Must consider factors such as market position, customer satisfaction, and demand for related services when using yield management
2. Additional benefits can be obtained from revenue management when it is combined with dynamic packaging and suggestive selling

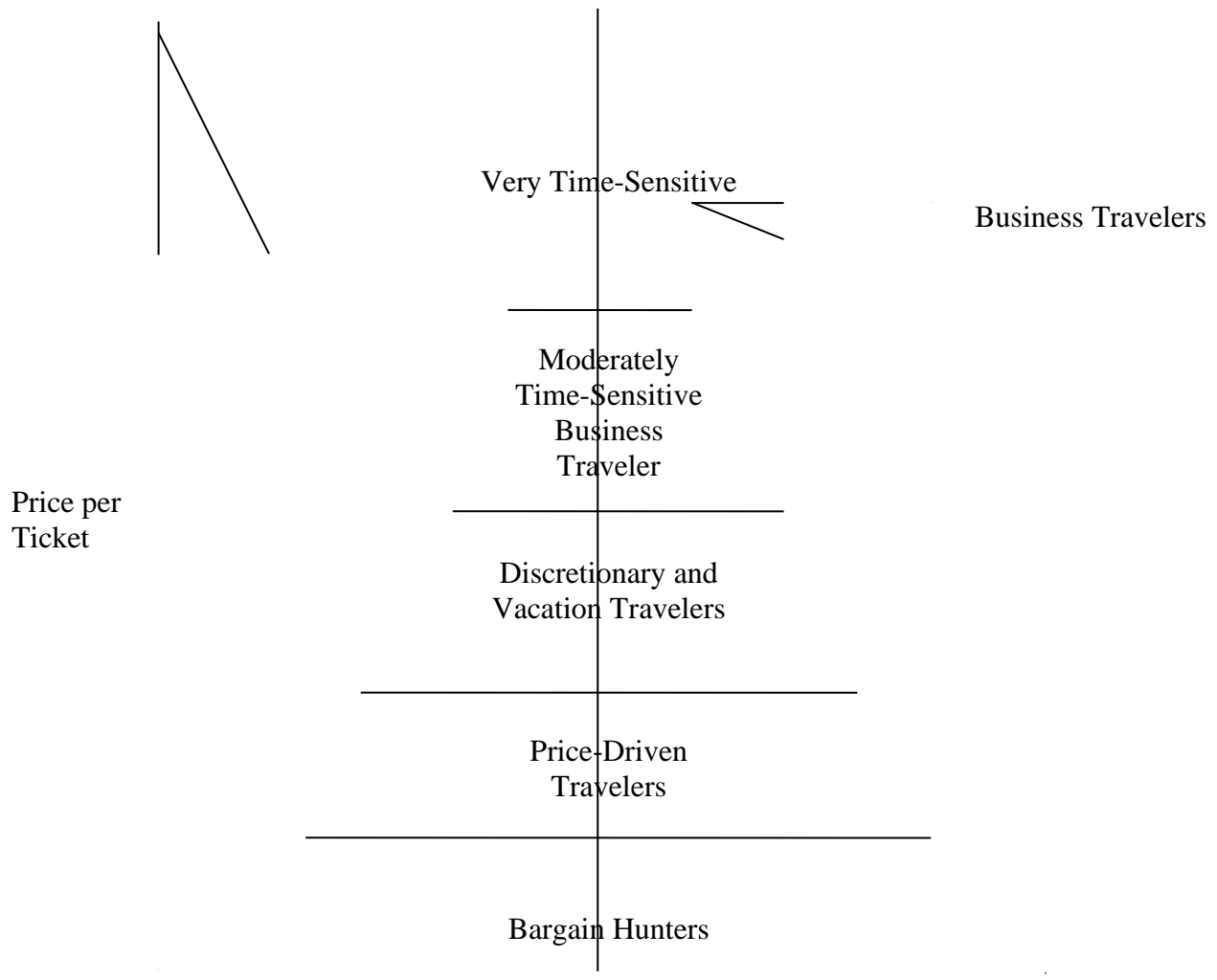
**G. Revenue Management in Practice**

1. A practical example will highlight the importance of revenue management techniques as they are used to enhance revenues and potential profitability in an airline setting
2. Revenue management allows service providers to reserve capacity for the highest revenue customers
3. As more tourism suppliers fully adopt the revenue management concept and as software developers create more sophisticated programs, additional applications are being tapped
4. Care should be taken in the implementation of revenue management as, when looking strictly at the numbers, decisions may only focus on short-term revenues, thereby neglecting long-term customer relationships

### Mini-Lecture

*We have used the following diagram to help students understand the concept of yield management. Students seem to appreciate the simplicity of this diagram when trying to comprehend this new concept.*

#### The Airline Passenger Pyramid



The above chart is a simple way to demonstrate the dynamics of yield management. Although limited in number, the very time-sensitive business travelers who must fly and, for the most part, are not particularly concerned about price are the most profitable for airlines.

Bargain hunters, who make up the bulk of airline passengers, are found at the bottom of the

pyramid. They will purchase tickets months in advance or snag last-minute discounts that are available through consolidators.

Price-driven travelers are calculators. They will consider the price of the ticket against other alternatives, such as driving or possibly taking the train.

Discretionary and vacation travelers are able to plan their trips in advance. This allows them the time to shop around, waiting for a price that fits within their spending budgets.

Moderately time-sensitive business travelers have some flexibility in planning their trips. Since most of their trips are not last-minute decisions, they are able to take advantage of advance purchase discounts. The airlines are particularly interested in attracting and retaining this group of flyers. Therefore, they have promoted memberships in frequent-flyer programs to gain loyalty and repeat business.

### Reference

Flint, Perry. (1997). "Will the Real United Please Stand Up?" [Air Transport World](#). August, 34(8): 26-34.

### Discussion Questions

1. What technological advances have had the most significant changes on the tourism industry?

Increasing data storage capacities and improved processing speeds which can be achieved at lower and lower costs are permitting all participants in the tourism industry to tap the benefits of information technology.

2. How can technology be used to enhance productivity?

Technological applications for productivity enhancement can be found in a variety of applications for tourism service suppliers. Staffing programs allow supervisors to schedule employees in key time slots to meet peak customer demands while limiting coverage during slack times. Advances in communication technologies make internal ordering and inventory stocking more efficient by allowing employees to communicate through remote devices. Wireless headsets, handheld order-entry equipment, and point-of-sale are improving productivity in retail operations. Management Information Systems provide the backbone for operational decisions as they collect and store data and then provide information for planning, decision-making, and problem solving.

3. How can technology be used to improve both internal and external communications?

Organizations are finding new ways to improve customer service and reduce costs through improved communication systems. Database marketing, also called data mining, is aiding tourism suppliers in targeting micro-segments of their markets and customizing marketing mixes to fulfill the needs of specific travelers. There is no question that social media is a growing and important source for online travel information searches. It is also an important tool for travel planning and may well continue to grow into the primary source for travel information as these sites seem to be available everywhere.

4. How has the Internet changed the delivery of tourism services?

The introduction of the Internet expanded travelers' choice for points of purchase. Travel marketers created online booking engines that allowed travelers to compare available inventories. The Internet has become a major source of information about travel products and destinations. As on-line users have become more comfortable, confident, and convinced of the security on the Internet, more and more travelers are relying on this medium for their travel needs.

5. How can technology be used to enhance customer service?

The Internet has become a major source of information about travel products and destinations. Kiosk applications have allowed customers to take control over service delivery options and hand-held devices and laptops are also aiding employees in the service delivery process, freeing up more time to focus on the customer service. When information is acquired and analyzed from every customer touch point, meaningful relationships can be formed with customers from the information collected. By offering them products and services that are tailored to meet their individual needs, sales volume can be increased and profitability can be enhanced.

6. How can revenue management be used to improve financial performance?

Revenue management requires allocating capacity to customers at the right price and at the right time, thereby maximizing revenue. Additional benefits can be obtained from revenue management when it is combined with dynamic packaging and suggestive selling. Additional benefits can be obtained from revenue management when it is combined with dynamic packaging and suggestive selling.

### **Additional Short Answer Questions**

1. How has technology impacted tourism service suppliers?
2. How can technology be used to improve operating efficiency and effectiveness?
3. How can tourism service suppliers use the power of management information systems?
4. Why have do-it-yourself applications been so widely accepted by travelers?
5. How can tourism service suppliers use data mining to improve their marketing efforts?
6. How has the Internet changed the distribution of travel services?
7. Explain pros and cons of user-generated content related to tourism service offerings.
8. How can revenue management be used to enhance customer service, improve operating efficiency, and increase profitability?