2<sup>nd</sup> Edition

# Tourism Information Technology

PIERRE J. BENCKENDORFF PAULINE J. SHELDON DANIEL R. FESENMAIER



COMPLIMENTARY TEACHING MATERIALS

# **Chapter 1**

Introduction to Tourism and Information Technology

# **Chapter 1 Learning Objectives**

After studying this chapter you should be able to:

- define key terms and concepts in information technology;
- 2. describe the evolution of information technology;
- 3. recognize the **types** of information technologies relevant to tourism;
- 4. explain the **synergies** between the travel industry and information technology; and
- 5. evaluate the **strategic applications** of information technology in tourism organizations and destinations.

## **Key Concepts**

- Characteristics of tourism services
- Evolution of computing technologies
- Information systems
- Information technology
- Moore's Law
- Space-time collapse
- Typologies of information
- Web 1.0 / Web 2.0

## **Definitions**

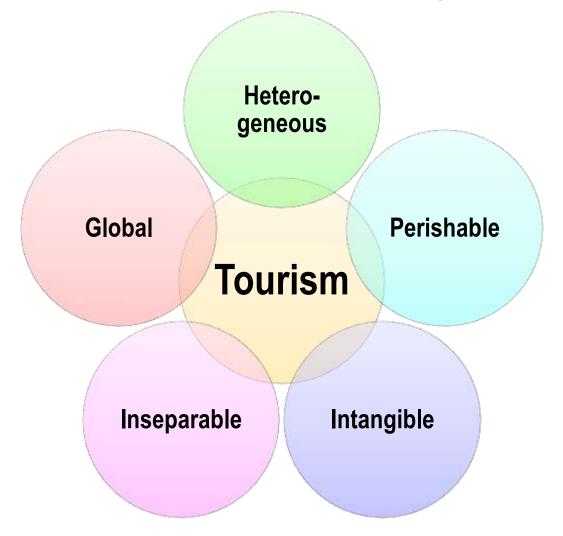
## Information technology (IT)

 The application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data." (Daintith, 2012)

## Information systems

• "Information systems are combinations of hardware, software and telecommunications networks that people build and use to collect, create, and distribute useful data, typically in organizational settings." (Valacich & Schneider, 2014)

## **Characteristics of Tourism Services**



## **Applications of IT in Tourism**

- aviation
- travel intermediaries
- hospitality
- attractions, events and entertainment
- destinations
- travelers



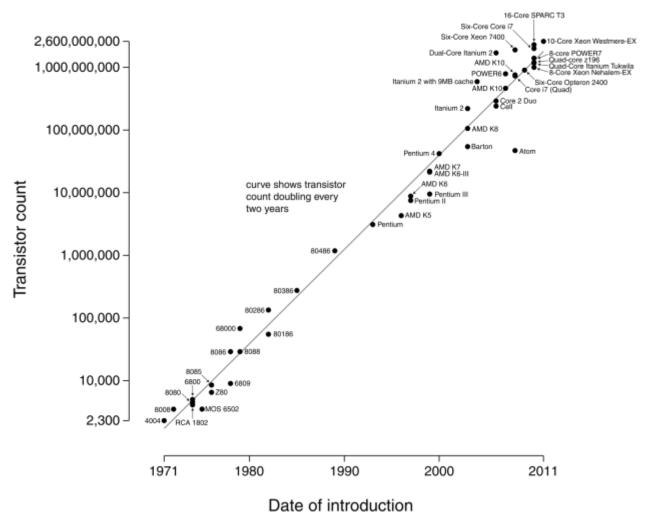
# **Typologies of Information**

<b>Trip Stage</b>	Static	Dynamic
Pre-trip	Brochures, guidebooks, fax, photos, videos, some information on websites	Phone, email, websites, social media, Internet booking engines, Global Distribution Systems
In-trip		Phone, fax, email, websites, social media, mobile apps
Post-trip	Brochures, guidebooks, photos, video	Blogs, social networks, media sharing, reviews

# **Evolution of Computing Technologies**

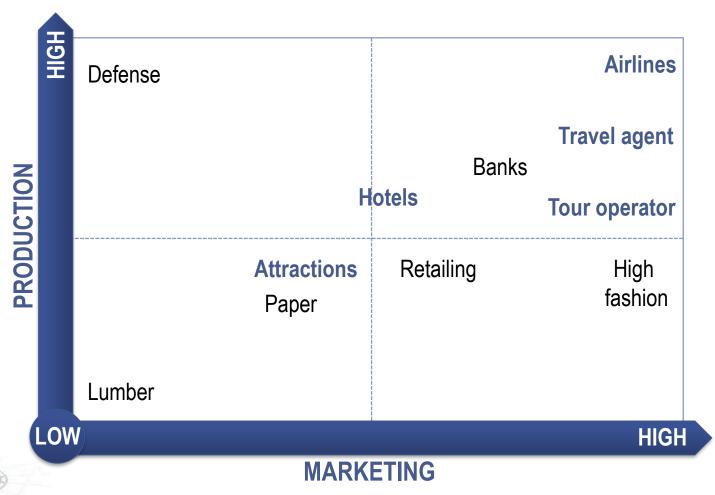
30,000 BC 1800 1950 1900 2000 2025 1950 1975 **Manual Counting Aids & Mechanical Computers Electronic Computers Ubiquitous Technologies Calculators** Punched Cards Vacuum Tubes Mobile Phones IBM5100 / Osborne 1 **Arithometers ENIAC** Tally Bones Difference/Analytical Engines **Transistors** Newton Abacus UNIVAC I / IBM650 **Typewriters Smartphones** Antikythera Mechanism **Tabulators Integrated Circuits** Wifi Astrolabe Mouse iPod, iPhone, iPad **Gutenberg Press** Spectra 70 / IBM360 Android Slide Rules App stores Microprocessors Pascaline Microcomputers 1G, 2G, 3G, 4G Networks **GUI OS & Software** Mobile Social Networks Wearable Devices **Networking & Internet** ARPAnet Email Ethernet Internet WWW Web Browsers Search Engines Social Networks Broadband YouTube VoIP

#### Microprocessor Transistor Counts 1971-2011 & Moore's Law



Moore's Law (Wikipedia 2014)

# **Strategic Thinking & IT**



**FIGURE 1.1** Impact of IT on the production and marketing of different industries.

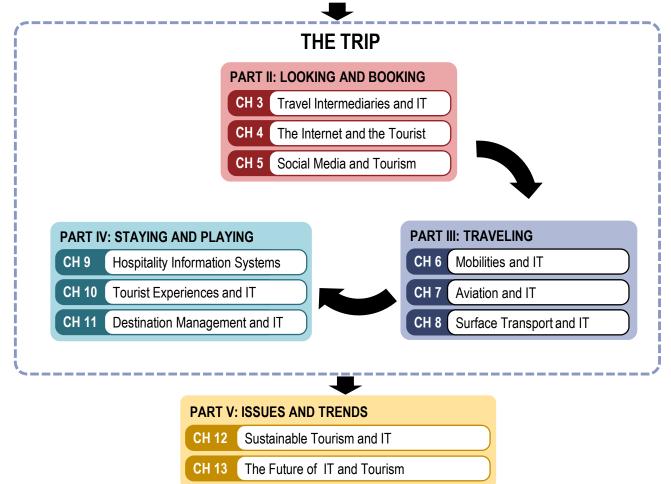
# **Strategic Thinking & IT**

- Managing Value Chains
- Managing Knowledge and Information
- Marketing and Competitive Advantage
- Service Delivery and Customer Relationship Management (CRM)
- Strategic Listening



# FIGURE 1.2 Outline of Chapters





## **Discussion Questions**

- In your opinion, what are the three most important inventions that have led to the information technologies we have available today? Provide examples to justify your answer.
- 2. Why is tourism such an information-intensive industry? Explain and give some examples.
- 3. What is the difference between static and dynamic tourism information? Give examples of each.
- 4. A hotel manager asks you why she should incorporate more technology into her hotel. How would you respond to this question so that they are inspired to invest?
- 5. Identify one travel organization in your area that you think has used technology in a particularly creative way. Which of the strategic applications discussed at the end of the chapter would it fit into?
- 6. Which part of the textbook (based on the diagram of the chapters) are you most looking forward to studying? Why?

## **Useful Websites**



## **Eye for Travel**

http://www.eyefortravel.com/



## **International Federation for Tourism and Technology**

http://www.ifitt.org/



**International Hospitality Information Technology Association** 

http://hita.camp7.org/



Tnooz.com

http://www.tnooz.com/



**Travel Technology Initiative** 

http://www.tti.org/

## Case Study Intercontinental Hotels Group

- Crowne Plaza, Holiday Inn, InterContinental Hotels.
- 4503 hotels and 656,661 rooms.
- Spends about \$200 million annually on IT innovations (about 1.2% of revenue).
- The Atlanta Crowne Plaza Hotel's customer database holds 200 million guest profiles which can be mined for customer activity, trends and preferences.
- BOSS search technology:
  - Google Integration
  - GPS support and voice search
- iPhone and Google apps.
- Touchscreen kiosks in lobbies and concierge iPads.
- Camelot cloud computing environment.