

CABI TOURISM TEXTS

2nd Edition

Tourism Information Technology

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



COMPLIMENTARY TEACHING
MATERIALS

Chapter 10

Tourist Experiences and Information Technology



Chapter 10 Learning Objectives

After studying this chapter you should be able to:

1. explain the role that IT plays in attracting visitors to attractions and events;
2. analyze the different roles of IT in the staging of memorable attraction and event experiences;
3. understand how It can disrupt or destroy some visitor experiences; and
4. apply various IT solutions to the management of visitors in attraction and event settings.

Key Concepts

- ⊙ Android, animatronics, mechatronics
- ⊙ Augmented and virtual reality
- ⊙ Electronic ticketing systems
- ⊙ Experience economy
- ⊙ Gamification
- ⊙ Interpretation and orientation
- ⊙ Virtual guide
- ⊙ Virtual queuing systems



Understanding Attractions

	Natural	Cultural
Permanent	<ul style="list-style-type: none"> ▪ flora and fauna ▪ terrestrial/marine parks & reserves ▪ landscapes ▪ geological features 	<ul style="list-style-type: none"> ▪ theme parks ▪ art galleries & museums ▪ historic sites ▪ architectural wonders ▪ zoos & aquaria ▪ sports & entertainment sites ▪ shopping & tourist precincts
Temporary	<ul style="list-style-type: none"> ▪ volcanic eruptions ▪ astronomical events ▪ wildlife migrations ▪ coral spawning 	<ul style="list-style-type: none"> ▪ sports events ▪ festivals ▪ concerts & performances ▪ conferences & meetings

Attracting Visitors

- ⦿ Visitor Information Centers (VICs)
 - Mobile apps
 - Mediawalls
 - Twitter feeds
 - Information kiosks
 - Tablets
- ⦿ Sales and distribution
 - Electronic ticketing



Staging Experiences

Role	Description
Enabler	Technological innovations stimulate travel demand by providing the inspiration, time and economic means for people to travel
Creator	Technology is used in the creation of tourism experiences and settings
Attractor	Technology can be the focal point for travel experiences
Enhancer	Technology can enhance the experience by supporting comfort, orientation, interpretation and translation
Protector	Technology can be used to protect travelers and the resources that attract them
Educator	Technology can reveal meanings and understandings of objects, artifacts, landscapes and sites through interpretation
Substitute	Technology can provide visitors with substitute experiences in instances where the resource is threatened, congested or not accessible
Facilitator	Technology is a tool for the tourism industry
Reminder	Technology can be used to support the recording, reflection and sharing of experiences
Destroyer	Technology can also destroy the experience by impacting the social, environmental and economic well-being of travelers or employees

Technology as an enabler

Technology...

- ⦿ stimulates the broader socio-economic conditions for travel;
- ⦿ increases productivity and relieves workers from mundane tasks;
- ⦿ enables the movement of travelers;
- ⦿ is used extensively in the production and delivery of goods and services; and
- ⦿ has provided easy access to travel information.



Technology as a creator

- ⊙ Engineers, architects and other professionals use CAD software to design tourism facilities.
- ⊙ Technological infrastructures and machines create new opportunities for tourist experiences.
- ⊙ Examples:
 - jet boating
 - jet skiing
 - Segway tours
 - simulators
 - roller coasters
 - ski runs



Technology as an attractor

- ⦿ Technology may be the focus of the experience that attracts visitors.
- ⦿ Examples:
 - science and technology museums (e.g. EPCOT)
 - industrial sites (e.g. Guinness Brewery)
 - working farms (e.g. Dole Pineapple Plantation)
 - technology expos and motor shows
 - theme park rides
 - audio-visual effects
 - augmented and virtual reality



Technology as an enhancer

- ⦿ visitor orientation
- ⦿ translation
- ⦿ communication and translation
- ⦿ planning and scheduling



Technology as a protector

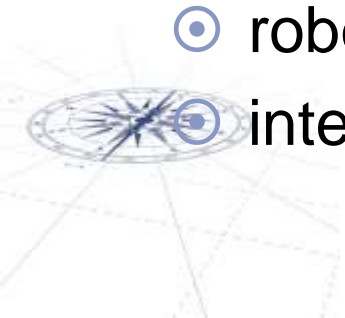
- ⊙ Protection of travelers:
 - electronic locking systems
 - surveillance systems
 - security scanning
 - warnings sent to mobile devices
 - water treatment and food safety
- ⊙ Protection of resources:
 - climate control systems
 - documenting historical and natural artifacts
 - monitoring and managing wildlife
 - energy and waste management



Technology as an educator

Interpretation and edutainment:

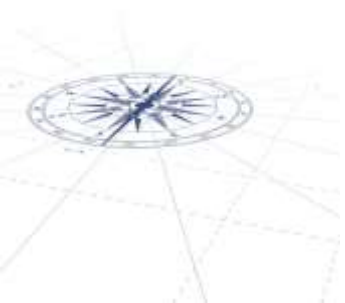
- ⊙ virtual guides, audio guides & podcasts
- ⊙ mobile technologies (QR codes, geofencing, wearable technologies)
- ⊙ special effects
- ⊙ virtual and augmented reality
- ⊙ holographic projection
- ⊙ 3D printing
- ⊙ robotics and mechatronics
- ⊙ interactive surfaces



Technology as a substitute

Technology can re-enact or recreate environments, activities or events to provide substitute experiences for:

- ⦿ fragile or dangerous places
- ⦿ experiences that are too costly
- ⦿ attractions and objects that no longer exist
- ⦿ visitors with disabilities or mobility constraints



Technology as a facilitator

Applications	Technology Examples
Marketing & distribution	Websites, online bookings, apps, on-site purchases
Visitor management	Managing access, managing queues and crowding
Business intelligence	Tracking visitor patterns and behavior
Facility management	Property management systems, safety and security
Back-office systems	Revenue management, accounting, payroll systems
Personnel	Employee access systems, laundry and costuming services
Automation	Cleaning, order taking, self-service kiosks, robotics

Technology as a reminder

- ⦿ Visitors use IT to document, capture and share experiences.
- ⦿ Examples:
 - image and video sharing
 - geotagged images
 - social media
 - product reviews
 - blogs



Technology as a destroyer

Technology can also bite back, resulting in negative experiences, inconvenience or more serious consequences:

- ⦿ technology failure
- ⦿ noise and visual pollution
- ⦿ resource depletion



Managing Visitors

Admission	Smart cards, wristbands, barcoded tickets, biometrics, seat allocation
Orientation	LCD maps and directories, mobile apps
Ancillary purchases	Cashless payment systems for parking, accommodation, food and beverages, photos and merchandize; geofencing and mobile notifications
Crowding & queue Management	Visitor tracking, controlled access, forecasting demand, virtual queuing systems, wait time displays, queue entertainment
Business intelligence & CRM	Strategic listening, monitoring visitor behavior
Safety & security	CCTV, secure access, electronic lockers, safety systems
Casinos & gaming	Slot machine maintenance and accounting, table games, player tracking and marketing, cage management, and staff systems



Discussion Questions

1. What technologies do you use when you are traveling? How can technology be used in the co-creation of visitor experiences?
2. Some commentators have predicted that virtual reality will eventually eliminate the need to travel. Do you think this is a valid prediction? Discuss your reasoning.
3. Think about places you have visited on your travels. Have you experienced any examples of technology in interpretive experiences? Were these technologies effective in supporting your learning or were they just a gimmick?

Discussion Questions

4. In this chapter we explored some of the challenges and opportunities of using IT for interpretation. What are some of the operational advantages and disadvantages of using technology in the creation of experiences?
5. Does the use of technology in attractions erode or enhance opportunities for high touch experiences? Discuss your reasoning and compare your points with other students.

Useful Websites



**International Association
of Amusement Parks and
Attractions**

www.iaapa.org



**International Council of
Museums**

icom.museum



PDC

www.pdc solutions.com



Accesso

accesso.com



iVenture Card

www.iventurecard.com



Walt Disney Company

thewaltdisneycompany.com

Case Study: Walt Disney Company

Any sufficiently advanced technology is indistinguishable from magic
(Arthur C. Clarke).

- ◉ Walt Disney Parks and Resorts include six destinations with 13 theme parks and 46 resorts in North America, Europe and Asia.
- ◉ Walt Disney was an early pioneer in the adoption of new technologies for animation, live action films, nature documentaries, special exhibits, theme park rides and city planning.

MyMagic+

- ◉ *My Disney Experience* website and mobile app.
- ◉ *MagicBand* RFID wristband.
- ◉ Provides theme park entry, hotel room access, purchases, dinner reservations, fastpass and photopass access, and various interactive experiences.