

Applied Information Technology

BLEH 3

Week 1

Learning Objectives

- ▶ Define Information Technology in the hospitality context
- ▶ Identify key components of IT systems in hospitality
- ▶ Explain the role of IT in enhancing guest experiences
- ▶ Discuss how IT improves operational efficiency

What is Information Technology?

- ▶ Broad definition: Use of computers, software, networks, and data to store, process, and communicate information
- ▶ In hospitality: Any digital tools or systems used to deliver services, manage operations, and enhance experiences
- ▶ Covers hardware, software, networks, databases, and mobile technologies

The hospitality IT ecosystem

- ▶ Guest-facing systems
 - ▶ Online booking engines
 - ▶ Mobile check-in/check-out apps
 - ▶ In-room technologies (smart TVs, keyless entry)
- ▶ Operational systems
 - ▶ PMS
 - ▶ Point of Sale (POS) systems
 - ▶ Inventory management
- ▶ Analytical & support systems
 - ▶ CRM
 - ▶ Revenue management systems
 - ▶ Data analytics tools

Why IT matters in hospitality

- ▶ Enhances guest experience
- ▶ Improves efficiency and reduces errors
- ▶ Enables personalization of services
- ▶ Facilitates data-driven decision making
- ▶ Supports competitiveness in a digital marketplace

Case study - Apps - Class exercise

- ▶ Identify a number of apps
- ▶ What do they do
- ▶ What do you think they should do

Challenges of IT in hospitality

- ▶ High implementation costs
- ▶ Staff training requirements
- ▶ Cybersecurity risks
- ▶ System integration issues
- ▶ Technology obsolescence

Summary

- ▶ IT is central to modern hospitality operations
- ▶ Involves both guest-facing and operational systems
- ▶ Drives efficiency, personalization, and competitiveness
- ▶ Challenges exist and must be managed strategically



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Lecture 2

Learning Objectives

- ▶ Trace the historical development of hospitality IT
- ▶ Understand the shift from manual to digital systems
- ▶ Explore emerging technologies shaping the sector
- ▶ Discuss the impact of digital transformation

A brief history of hospitality IT

- ▶ **Pre-digital era:** Manual bookings, paper ledgers, telephone reservations
- ▶ **Early computerization (1970s-1990s):** First PMS and POS systems
- ▶ **Internet age (2000s):** Online travel agencies (OTAs), global distribution systems (GDS)
- ▶ **Mobile & cloud era (2010s-present):** Mobile apps, cloud PMS, AI chatbots

Digital transformation in hospitality

- ▶ Integration of systems across departments
- ▶ Real-time data access and analytics
- ▶ Shift to mobile-first services
- ▶ Personalization through AI and machine learning

Current trends

- ▶ Contactless check-in/check-out
- ▶ Smart rooms with IoT devices
- ▶ AI-powered chatbots for guest service
- ▶ Data-driven revenue management
- ▶ Virtual reality (VR) for marketing and previews

Emerging trends

- ▶ Blockchain for secure transactions
- ▶ Robotics in concierge and housekeeping roles
- ▶ Voice-activated room controls
- ▶ Sustainability-focused tech (energy management systems)

Opportunities & risks

- ▶ Opportunities: efficiency, revenue growth, improved guest loyalty
- ▶ Risks: over-reliance on technology, privacy concerns, cyberattacks
- ▶ Class discussion:
 - ▶ Discuss balancing innovation with human service.
 - ▶ What trends excite you most? Which do you think will fail?