



Hotel Technology and Hospitality IT Systems: PMS, Guest Wi-Fi and Integration



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Introduction:

Hotel technology decisions are often made one system at a time, leaving properties with a property management system that does not talk cleanly to point of sale, channel manager or revenue tools, guest Wi-Fi that fails at peak occupancy and card data spread across too many devices. The cost shows up as manual re-keying, rate errors across channels, guest complaints and audit findings. This Core Concept course gives hotel IT, front office and operations leaders a working method to map, integrate, secure and select hospitality IT systems, ending with a Hotel Technology Roadmap and System Selection Scorecard for a case hotel.

Course Objectives:

- Map a hotel's technology stack and record each system's owner, age, interfaces and support arrangements
- Configure property management system modules, rate codes and room types and document the interfaces to distribution, POS, revenue and CRM systems
- Specify guest Wi-Fi coverage, bandwidth tiers and captive portal authentication for rooms, public areas and events
- Integrate mobile check-in, digital keys, guest apps and in-room systems with the property management system
- Reduce card data exposure and guest data privacy risk using PCI DSS control objectives and tokenised payment flows
- Select vendors and plan implementation, cutover and support in a phased Hotel Technology Roadmap

Target Audience:

- Managers responsible for hotel IT infrastructure, system administration and vendor support contracts
 - Managers who lead front office, reservations and night audit teams and own the property management system configuration
 - Managers accountable for food and beverage outlets, point of sale devices and room charge posting
 - Analysts who maintain interfaces, reports and data flows between hotel systems
 - Managers in hotel ownership or management companies who approve technology budgets and system projects
 - Managers who oversee guest experience, digital channels and guest-facing applications
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Course Outline:

Day 1: Hotel Technology Stack, Systems Landscape and Current-State Assessment

- Hotel Technology Stack Map: Guest-Facing, Operational and Back-Office Layers
- Core System Inventory: PMS, CRS, POS, RMS, CRM and Door Locking
- Technology Drivers: Guest Self-Service, Labour Efficiency and Direct Booking Share
- Hotel IT Operating Model: In-House Team, Management Company and Vendor Roles
- Current-State Technology Audit Checklist and System Age Register

Day 2: Property Management System Architecture, Distribution and Interfaces

- PMS Module Configuration: Reservations, Front Desk, Housekeeping and Night Audit
- Rate Codes, Room Types, Packages and Guest Profile Records in the PMS Database
- Distribution Architecture: Central Reservation System, Booking Engine and Channel Manager
- GDS Connectivity Through Switch Providers and Two-Way Availability Messaging
- Interface Map: Two-Way PMS Links to POS, RMS, CRM and Accounting

Day 3: Guest Wi-Fi Network Design and Guest-Facing Technology

- Guest Wi-Fi Coverage Survey, Access Point Density and Segmented VLAN Design
- Bandwidth Tiers, Per-Device Limits and Conference Event Capacity Planning
- Captive Portal Authentication: Room Number, Access Codes and MAC Registration
- Mobile Check-In, Digital Keys and Guest App Integration with the PMS
- IPTV, Casting and Guest Room Management System Controls at Overview

Day 4: F&B Point of Sale, Payment Security, Data Privacy and Deployment Risk

- F&B POS Setup: Outlet Menus, Room Charge Posting and End-of-Day Reconciliation
- PCI DSS at Overview: Twelve Requirements, Six Control Objectives and Merchant Levels
- Payment Tokenisation, Point-to-Point Encryption and Card Data Scope Reduction
- Guest Data Privacy Controls: Consent Capture, Retention Rules and Profile Deletion Requests
- Cloud PMS Versus On-Premise Servers: Uptime, Offline Fallback and Total Cost of Ownership

Day 5: Case Work: Vendor Selection, Implementation and the Hotel Technology Roadmap

- Vendor Request for Proposal and Weighted Scoring Matrix for a Case Hotel
 - Implementation Case: Data Migration, Interface Testing and Go-Live Cutover Plan
 - Support Model Design: Service Level Agreements, Escalation Paths and Out-of-Hours Cover
 - Hotel Technology Roadmap Build: Priorities, Phasing and Business Case
 - Roadmap and System Selection Scorecard Presentation and Peer Challenge
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Skills You Will Gain:

- Hotel Systems Architecture Mapping
- PMS Configuration
- Interface and Data Flow Design
- Guest Network Planning
- Captive Portal Setup
- Card Data Scope Reduction
- Vendor Evaluation Scoring
- System Cutover Planning

Why Attend This Course:

- Return with a Hotel Technology Roadmap and System Selection Scorecard you can adapt to your own property
- Cut manual re-keying and rate errors by fixing the gaps in your property's interface map
- Brief owners and general managers on cloud, on-premise and vendor choices with clear cost and risk arguments
- Compare system set-ups with peers from city, resort, serviced apartment and branded hotel properties

Conclusion:

Hotel systems deliver value when they are chosen, connected and secured as one stack rather than as separate purchases. The course moves from the technology stack and a current-state audit, through property management system configuration, distribution and interfaces, to guest Wi-Fi design, mobile and in-room technology, then point of sale, payment security, guest data privacy and cloud deployment choices. The final day applies case work to vendor selection, implementation and support, producing a Hotel Technology Roadmap and System Selection Scorecard.
