FUTURE-PROOFING HOTEL IT INFRASTRUCTURE IN 2025

A Guide For Technology Leaders

January 2025

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UNLOCKING IT RESILIENCE AND EFFICIENCY

Technology plays a pivotal role in shaping the modern hospitality experience, making future-proofing hotel IT infrastructure an essential focus. With trends such as increased digital guest engagement, IoT integration, and a growing cybersecurity threat landscape, partnering with an MSP is critical to developing resilient, agile, and scalable IT ecosystems.

This white paper outlines the strategic benefits of MSP collaboration and provides six key practices hotels can implement to prepare for 2025 and beyond.
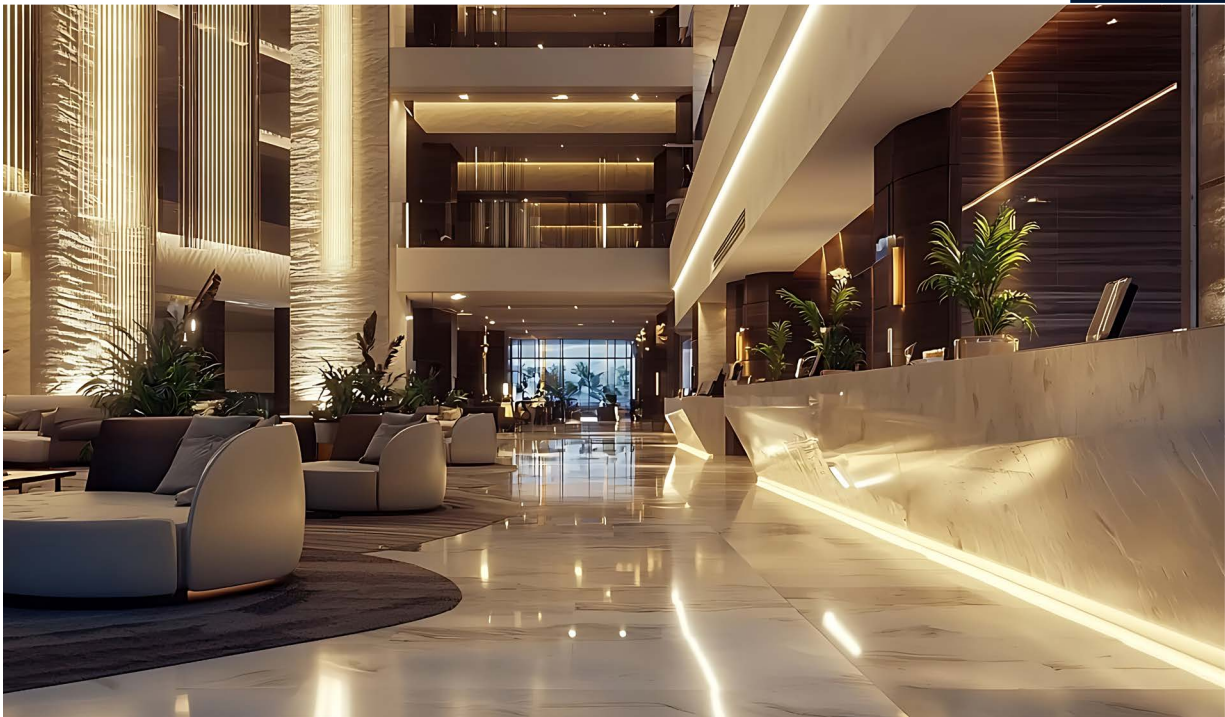
ASSET DISCOVERY

Knowing precisely what assets exist across each property is the starting point for any robust IT strategy. Asset discovery involves cataloging all deployed IT equipment within properties and portfolios - which can be a daunting task for management companies and owners to perform without help.. MSPs utilize specialized tools that assist with asset discovery by quickly scanning networks, identifying devices, and categorizing them. By mapping out each asset's location and function,

IT teams gain a clear understanding of their technology landscape, enabling more efficient management and troubleshooting. Detailed asset inventories are crucial during outages, where quick identification can mean the difference between prolonged downtime and seamless recovery.

Key Steps:

- **Automated Asset Discovery Tools:**
  Understand all the equipment that exists at any given property.

- **Location and Status Tracking:**
  Ensure each asset is appropriately mapped within the IT ecosystem.

- **Assessment:**
  Evaluate asset age, end-of-life status, criticality, and vendor support status.

RISE IN HOTEL TRANSACTIONS DRIVING NEW NEED FOR ASSET DISCOVERY

The hospitality industry is expecting a surge in transactions in 2025, driven by reductions in interest rates, loan maturity and decreased availability of new properties. As hotel openings, closings, and transitions increase, ownership groups and management companies must thoroughly assess each property's existing infrastructure and networking capabilities to accurately determine their technology investment requirements.

MDF (MAIN DISTRIBUTION FRAME) CLEANUP

The MDF acts as the central hub of a property's network, but years of upgrades, replacements, and reconfigurations often result in tangled wiring, unidentified devices, and undocumented connections.

Regular MDF maintenance is essential for troubleshooting outages, optimizing bandwidth, and avoiding accidental disconnects during upkeep.

MSPs Can Help Hotel Technology Teams:

- **Document Every Connection:**
  Documentation is one of the IT "to-dos" that most often falls through the cracks. An MSP can help hotels create clear documentation of each connected device by labeling each network paths in the MDF.

- **Eliminate Redundant or Outdated Equipment:**
  Over time, as hotels add new equipment and cabling, their MDF closets often become cluttered with outdated and unused components. An MSP can assist in evaluating and removing unnecessary cabling and obsolete devices to streamline the network. They can also offer secure destruction and recycling services for outdated equipment, aligning with brand sustainability initiatives and ensuring compliance with data privacy standards.

- **Preventative Maintenance:**
  Cleaning an MDF closet is not a one-and-done effort. An MSP can work with onsite IT personnel to schedule periodic MDF cleanups to help maintain a clean and functional layout.

Cloud5 Hospitality ECO Program

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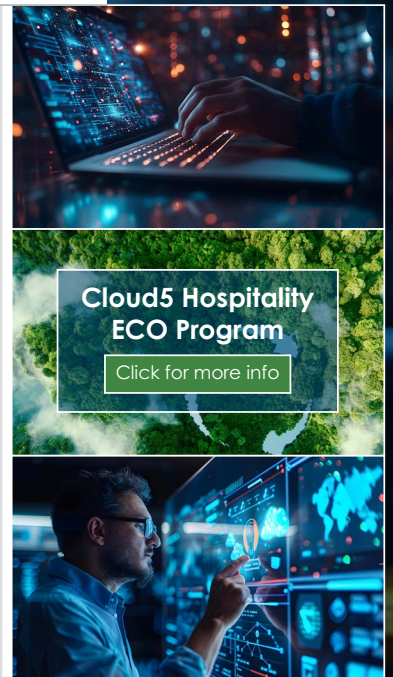
SYSTEM AND DATA BACKUPS

Hotels rely heavily on vast amounts of data to deliver seamless guest experiences, from reservations and billing to personalized services and loyalty programs. Without consistent and secure data and system backups, a hotel risks losing critical information in the event of a system failure, cyberattack, or even accidental deletion. Regular backups not only protect this data but also allow hotels to recover quickly, ensuring minimal disruption to services and continuity in guest satisfaction.

Furthermore, hotels are increasingly integrating advanced digital solutions, such as IoT devices and cloud-based platforms, which can increase system vulnerabilities. Backups are essential for these inteconnected systems to maintain operability.

Ultimately, a robust backup strategy is a critical component of a hotel's IT infrastructure, supporting growth in a digital-first hospitality environment. MSPs offer a strategic advantage by setting up and managing system and data backups tailored to hotel environments.

Recommended Backup Strategies:

- **Hybrid Backup Approach:**
  Combine on-site backups for quick recovery with cloud-based backups to prevent against physical failures.

- **Regular Testing of Backup Integrity:**
  Ensure backups are operational by regularly testing restore functions.

- **Disaster Recovery Planning:**
  Develop a comprehensive disaster recovery strategy that defines recovery time objectives (RTO) and recovery point objectives (RPO).

CYBERSECURITY: THE NEW BASICS

Hotels handle massive amounts of sensitive guest data, from personal identification to payment information, making them prime targets for cybercriminals. In 2024, hospitality ranked among the top five industries affected by data breaches, with the average breach costing approximately $4.4 million. In this environment, an MSP or MSSP can be a valuable partner - helping hotels implement cybersecurity protocols and maintain compliance with global data protection standards.

MSP Contributions to Cybersecurity:

- **PCI Compliance:**
  The Payment Card Industry Data Security Standard (PCI DSS) remains central to safeguarding guest data. MSPs help hotels meet GDPR, CCPA PCI DSS, and other regulatory standards. They implement advanced data protection, ensuring that guest information remains secure and compliant with regional regulations, a critical factor given that 67% of guests prioritize data security when choosing accommodations.

- **Advanced Threat Detection and Response:**
  MSPs leverage AI-powered tools to monitor networks in real time, identifying anomalies that could indicate potential threats. Proactive detection has been shown to reduce the risk of successful breaches by 35%. In the event of an attack or malicious outage, MSPs can deploy additional resources to help hotels restore operations quickly and efficiently.

- **Patch Management and Security Updates:**
  According to a recent report, 60% of breaches could have been prevented by timely patch management. MSPs offer continuous patching and updates, ensuring that systems are protected against vulnerabilities as soon as they're discovered. Click here to learn more about the benefits of an MSPs patch management program.

- **Cybersecurity Awareness Training:**
  Hotels rely heavily on front-line employees to deliver excellent service, but given their focus on guest satisfaction, hospitality staff are often prime targets for cyberattacks like phishing, ransomware and social engineering. Research indicates that human error contributes to nearly 68% of data breaches, highlighting the critical need for comprehensive training. MSPs can assist hotels in developing and implementing regular training programs that empower employees to recognize and respond to potential threats, fostering a resilient cybersecurity culture and reducing the risk of breaches.
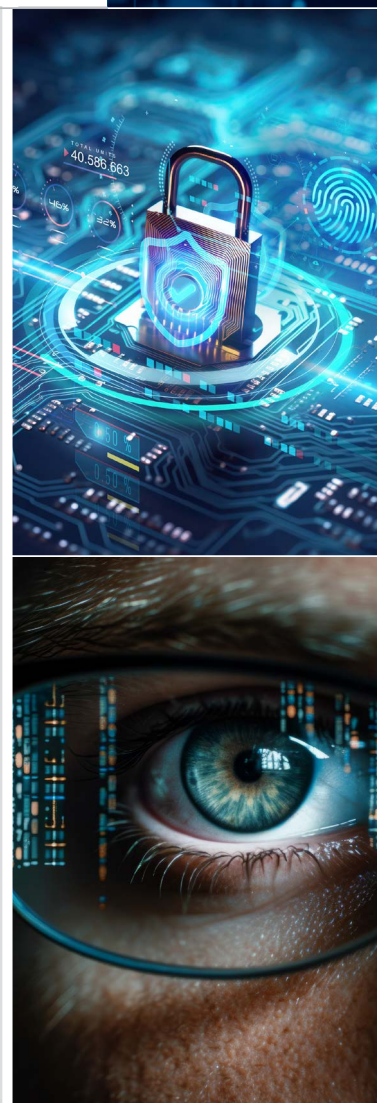
PC AND SERVER REFRESH CYCLES

Regular PC and server refresh cycles are vital in hospitality industry to ensure security, performance, and a seamless guest experience. Aging equipment can introduce security vulnerabilities, slow performance, and heighten the risk of unplanned outages. MSPs play an essential role in managing these refresh cycles, helping hotels avoid the costly disruptions associated with outdated hardware. According to a 2023 Ponemon Institute study, downtime from outdated equipment can cost organizations over $400,000 annually, driven by productivity losses and repair expenses.

MSPs can assist in maintaining up-to-date hardware and establishing EOL policies and procedures that enhance operational efficiency and minimize the risk of unexpected outages.

Best Practices for Refresh Cycles:

- **Determine Optimal Refresh Intervals:**
  Setting appropriate refresh intervals is essential for balancing performance and cost efficiency. Industry standards suggest replacing PCs every 3-5 years and servers every 5-7 years. A study by IDC found that companies adhering to these cycles experienced 30% fewer instances of equipment failure. MSPs evaluate usage intensity, hardware condition, and security requirements to refine these intervals, ensuring each device is upgraded when its productivity and security value diminish.

- **Proactive Budgeting:**
  Avoiding emergency replacements by planning refresh cycles in advance offers substantial financial benefits. MSPs help hotels develop long-term budgets by predicting replacement costs based on the EOL timeline. For example, Deloitte reports that proactive hardware management can reduce total IT costs by up to 15%, as hotels avoid unplanned expenditures and can reallocate resources to more strategic priorities.

- **Deployment Planning:**
  Replacing equipment can pose challenges, particularly during high-occupancy periods. MSPs develop deployment plans that prioritize minimizing disruptions, scheduling replacements during off-peak times, and utilizing phased rollouts. These structured approaches ensure smooth transitions, with backup resources available to mitigate any temporary downtime. By maintaining service continuity, hotels can upgrade critical infrastructure without compromising staff efficiency or guest satisfaction.

Structured refresh cycles managed by MSPs provide hotels with a proactive approach to maintaining secure, reliable technology that meets guest expectations, optimizes IT budgets, and minimizes service disruptions.

FUTUREPROOFING WITH EMERGING TECHNOLOGIES

With the growing adoption of IoT, AI-driven guest services, and cloud-based applications, hotels need agile IT systems that can quickly adapt to evolving technological demands.

Futureproofing through emerging technologies not only enhances guest experiences but also boosts operational efficiency and flexibility. MSPs play a vital role in integrating these technologies by setting up scalable, resilient infrastructure and managing seamless cloud migrations.

Trends to Watch:

- **IoT Integration:**
  IoT technology is transforming hotel operations, from energy management systems to personalized in-room services. These devices generate valuable data on guest preferences and operational patterns, but they also introduce potential security risks and network challenges. MSPs help hotels secure IoT networks and ensure adequate bandwidth, ensuring devices are authenticated, encrypted, and seamlessly connected. A 2024 PwC survey found that IoT integration in hospitality reduced energy costs by up to 25% and significantly improved guest satisfaction through tailored experiences.

- **Cloud-Based Services:**
  Adopting cloud technology enables hotels to improve accessibility and lower IT costs. Cloud-based applications simplify essential operations such as property management, staff communication, and customer service, reducing dependency on on-site servers while allowing for faster and more flexible scalability. According to research by IDC, cloud migration can lower IT expenses by 30-50% over a five-year period. MSPs facilitate this transition, managing cloud security and scalability, which helps hotels adapt to fluctuating demands and future needs.

- **Data Analytics for Enhanced Decision-Making:**
  Big data analytics provide hotels new insights into guest preferences, operational efficiencies, and revenue drivers. MSPs enable hotels to leverage data analytics, transforming vast amounts of information into actionable insights that support strategic decisions, such as personalized marketing and resource allocation. A study by McKinsey found that hotels using datadriven strategies experienced a 10-15% improvement in customer retention and operational efficiency, highlighting the value of data as a competitive asset.

By partnering with MSPs to integrate emerging technologies, hotels can build flexible, secure, and efficient IT environments that enhance service quality, improve operational resilience, and drive sustained competitiveness.

CONCLUSION

As the hospitality industry adapts to a future that emphasizes personalized guest experiences, data security, and operational efficiency, the role of an MSP becomes essential. By leveraging asset discovery, structured equipment refresh cycles, robust cybersecurity measures, and proactive budget planning, hotels can build IT network infrastructures capable of adapting to technological advancements and market changes.

MSPs provide the expertise, resources, and agility needed for hospitality technologists to confidently futureproof their technology investments for 2025 and beyond.

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Cloud5 Communications is a leading IT services and solutions provider for the hospitality industry. With more than 20 years supporting some of hospitality's most discerning brands, our teams have the experience and technical know-how to support all the technology-related components of a successful hotel operation.

We act as an extension of a property's IT department – offloading common tasks, buttoning up devices, servers and workstations and managing IT infrastructure to ensure that systems aren't just operational but that they're also optimized for peak performance.

This, in turn, drives down overall IT costs, frees up hotel staff time and improves job satisfaction, and enhances the guest experience.

The Cloud5 Difference:

- We're the only technology solutions provider able to manage the full stack of hotel and IT communications: WIFI, Voice, TV, Contact Center and Managed Services.

- Our Project Management Office and NOC are both in-house.

- We have true 24/7 support and executive escalation as needed.

- We leverage a ServiceNow ticketing instance for seamless integrations.

- Ability to customize engagements to meet the specific needs of clients.
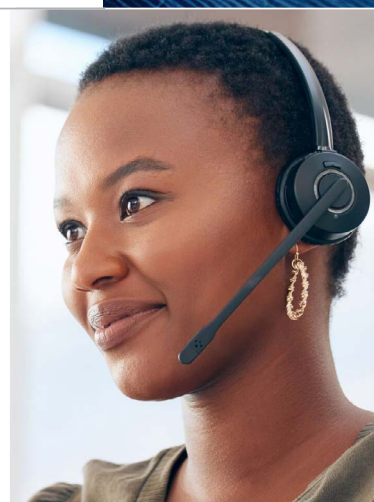
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