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## **Executive Summary**

This whitepaper is designed for hotel owners, investors, and asset managers seeking to understand how technology directly drives asset performance. While day-to-day adoption often sits with operational teams, the measurable outcomes—higher revenues, optimized margins, and more resilient capital planning—belong firmly in the ownership conversation.

We reframe hospitality technology as "asset tech": platforms and systems that go beyond departmental efficiency to enhance RevPAR, NOI, and long-term asset value.

By connecting insights from leading solution providers, this paper highlights how owners can align tech strategy with the asset lifecycle, de-risk decision-making, and position their portfolios for stronger performance in an increasingly competitive market. From Al-powered revenue intelligence and advanced guest data, to unified payments, PMS-driven operational efficiencies, and smart access automation, the examples presented demonstrate how technology is evolving into an investment-grade lever for growth.

#### **Key Takeaways**

- Technology is an asset strategy, not just an operational tool: The right systems directly influence asset value, margins, and exit multiples.
- Investment lens matters: Owners and asset managers should evaluate tech by its impact on EBITDA, scalability, and risk reduction across the asset lifecycle.
- Data-driven decisions unlock resilience: Predictive analytics, unified platforms, and transparent dashboards move hospitality from reactive to proactive asset management.
- Efficiency and scalability are the new ROI drivers: Automation and integration cut costs, improve staff productivity, and support multiproperty growth without inflating overhead.
- Responsible innovation builds
   trust: Al, automation, and emerging
   technologies will only sustain long term gains if adopted with clear
   governance, transparency, and ESG
   alignment.





## Introduction

Technology is no longer just a backof-house tool—it is a driver of
profitability, brand relevance, and
asset growth. Yet for many hospitality
stakeholders at the ownership level,
tech strategy remains abstract or
relegated to operational teams. This
whitepaper aims to close that gap.
Created by ExploreTECH in
collaboration with leading solution
providers, it positions technology as a
core strategic pillar that enhances
RevPAR, NOI, and asset valuation
across all lifecycle stages.

it invites owners and asset managers to see today's decisions not just as operational upgrades, but as building blocks of tomorrow's property value.

The insights presented here draw from technology partners actively shaping the commercial and operational future of hotels—including innovations in revenue intelligence, guest data, payments, PMS-driven efficiencies, and smart access automation—and from ExploreTECH's position as the Middle East and Africa's leading B2B marketplace for hospitality technology.

With the **Future Hospitality Summit**'s 2025 theme of "Where Vision Leads, Investment Follows," this report explores how technology and AI are reshaping hospitality at every level—from guest engagement and commercial optimization to operational efficiency and long-term asset planning. By situating technology within the investment lens,



# Chapter 1: Strategic tech decisions for asset performance

For decades, hotel technology decisions have been operational in nature—focused on managing front desks, optimizing room inventories, and tracking guest preferences. But the role of technology is rapidly evolving. It is now a central lever in how hospitality assets generate value.

From the owner and asset manager's perspective, technology must be evaluated not just for its functionality, but for its **contribution** to long-term value creation. This chapter introduces the idea of asset tech—platforms and systems that directly impact RevPAR, NOI, margin control, and valuation multiples. By shifting the lens from operational support to enterprise-wide impact, we align technology with investment-grade priorities.

Critically, we recommend evaluating technology based on **its contribution to strategic asset goals**, not just its departmental efficiencies or short-term payback period.

"Automation built into modern PMS platforms allows teams to reclaim 30 to 40 hours per week, shifting staff from manual workflows to value-enhancing activities."

#### -RMS Cloud

For example, a guest data platform might seem like a marketing tool, but in reality, it enhances lifetime value (LTV), conversion rates, and upsell success across the portfolio—all of which feed into top-line growth.





#### Chapter 1: Strategic tech decisions for asset performance

"For hotel owners and operators, the business case is clear: realtime, interest-based personalization reduces acquisition costs, drives direct revenue, and maximizes guest lifetime value."

dailypoint

### Strategic focus for owners

- Align tech with asset lifecycle stages: pre-opening, ramp-up, stabilization, maturity
- Track impact across revenue uplift, margin optimization, and scalability
- Prioritize tools that increase EBITDA, reduce OpEx, and elevate long-term asset value

Similarly, unified payment systems can reduce friction, increase authorization rates, and unlock new efficiencies across multi-property estates. This chapter also outlines a simple ROI framework for asset-level tech evaluation, focusing on three key pillars:

#### **Emerging technologies to watch**

- Al platforms that replace static systems and enable real-time decision-making
- Modular, API-driven systems enabling smoother upgrades across property cycles
- Cross-functional analytics dashboards showing asset-level tech ROI





### Chapter 1: Strategic tech decisions for asset performance

As investor expectations rise and operating margins shrink, the ability to scale value through tech will increasingly separate high-performing assets from under-optimized assets. In this environment, tech ROI is not just measured in staff hours saved, but in EBITDA expansion, exit multiples, and investment-grade operational resilience.

The focus needs to be on metrics relevant to asset managers, such as cost savings across departments, enhanced revenue potential, and system scalability in multi-property environments.—a simple framework that evaluates platforms based on their contribution to revenue uplift, margin control, and long-term adaptability.





# Chapter 2: What's next for owner-grade technology

Hospitality is entering a new era where platform consolidation, predictive decision-making, and data visibility are redefining how owners engage with tech. There are emerging trends that matter most to asset managers—ones that shift hotel tech from a black box to a transparent, measurable performance engine. Owner-grade technology is not about feature lists—it's about interoperability, forward-looking insight, and the ability to de-risk decision-making.

#### Strategic focus for owners

- Invest in systems that reduce silos and increase multi-property visibility
- Prioritize predictive and Al-native tools for smarter long-term planning
- Push for unified platforms that span departments and data layers

# Near-Term Trends (Next 1-3 Years)

- Unified portfolio dashboards & data visibility
- Predictive analytics for forecasting & maintenance
- Integrated systems and open apis (breaking data silos)
- Digital capex planning & asset management tools
- Sustainability & ESG tech solutions

# Longer-Term Trends (3-5+ Years)

- Al-driven decision support & autonomous analytics
- Robotics and automation in operations
- IoT-enabled "smart" hotels and digital twins
- Blockchain and fractional ownership models
- Immersive tech for asset marketing and planning

"With a 24-month forecasting horizon, owners and operators gain the intelligence to manage long-term investments and portfolio-level decisions, not just daily pricing."

-FLYR

Further deep dive into emerging technologies by clicking here.



#### **Chapter 2: What's next for owner-grade technology**

The future of tech in hospitality ownership lies in enabling proactive decisions. This is about knowing not just what's happening—but what will happen next.

Owners and asset managers equipped with predictive tools can better time renovations, assess risk, and make capital allocations with confidence. Just as business intelligence revolutionized revenue management, owner-grade tools will redefine strategic asset planning. This includes platform unification, automated forecasting, and integrations that break down departmental silos and increase control.







# Ethical AI in hospitality: Balancing innovation with responsibility By Dr. Grace Al Tayar, Board Member, ExploreTECH

As artificial intelligence rapidly reshapes the hospitality sector, its promise is undeniable: automation that reduces costs, predictive insights that enhance decision-making, and personalization that elevates the guest experience. Yet for hotel owners and asset managers, the next three to five years will not only be about adopting Al—it will be about adopting it responsibly.

The ethical dimension of AI cannot be an afterthought. Hotel groups must ensure transparency in how algorithms influence decisions, whether in pricing, staff scheduling, or guest interactions. Bias in data can easily translate into bias in service, and without governance frameworks, operators risk reputational damage as well as regulatory scrutiny. Implementation should begin with clear internal guidelines: define which decisions can be delegated to AI, and which must remain under human oversight.

Establishing "explainability" standards—where management can understand why an AI system made a recommendation—is critical for accountability. Equally important is data stewardship. Owners and boards should demand rigorous controls around how guest data is collected, stored, and used, aligning with global privacy standards while maintaining guest trust.

The long-term opportunity is significant. Al can help asset managers forecast demand with unprecedented accuracy, identify inefficiencies across portfolios, and even reduce environmental impact through smarter energy use. But these gains will be sustainable only if ethics guide adoption from the outset. In hospitality, trust is currency—and in an Al-driven future, trust will depend on governance as much as innovation.





## Chapter 3: Tech that moves the top line

Technology is no longer a backend function—it's a direct lever for revenue generation. In today's competitive environment, guest data, real-time pricing, personalized engagement, and seamless payments all contribute to stronger topline outcomes. Owners and asset managers increasingly recognize that commercial tech investmentsonce viewed as operational-now have measurable financial impact. With tighter booking windows, more diverse traveler profiles, and pressure to maximize RevPAR and contribution margin, asset-aligned tech enables hotel businesses to unlock new sources of demand and optimize monetization.

#### Strategic focus for asset managers

- Maximize guest lifetime value (LTV) through data enrichment and personalized offers
- Increase direct booking share via conversion-optimized content and CRM-led engagement
- Drive RevPAR uplift through Albased forecasting, dynamic segmentation, and pricing agility
- Improve conversion and reduce payment friction across touchpoints



In an analysis of nearly 2,000 email campaigns with an average of 11,927 recipients per newsletter, campaigns achieved a 48.6% open rate – more than double the industry benchmark." "Initiatives powered by Al-driven content personalization delivered an additional 10% uplift in opens and a 50% increase in CTRs."

-dailypoint



#### **Emerging technologies to watch**

- CRM-driven personalization in real time across web, mobile, and in-stay experiences
- Al-native revenue intelligence replacing traditional RMS logic
- Unified payment platforms improving authorization rates and guest conversion
- CDPs that connect marketing, operations, loyalty, and guest service for 360° visibility
- Robotic process automation for repetitive tasks in back-of-house operations

#### **Ownership lens:**

#### Monetization beyond marketing

From the owner perspective, these technologies are not about "doing better marketing." They're about improving the commercial output of every guest touchpoint, from booking to checkout. By consolidating guest data, shifting away from rules-based pricing, and unifying payments into one revenue stream, operators can lift RevPAR, increase contribution margins, and reduce OTA dependency—while improving the overall quality of demand.

"Take Belmond for example. By unifying payments with Adyen, they reached a 90% conversion rate and saw a 4.2-point lift in NPS."

- Daumantas Grigaraviciu

Head of Middle East, Adyen







### From "Basic" Personalization to "One-to-One" Communication: The Revenue Power of Guest Data

The right guest communication has a direct and measurable impact on revenue. In an analysis of nearly **2,000 email campaigns** with an average of **11,927 recipients** per newsletter, campaigns achieved a **48.6% open rate** – more than double the industry benchmark. Initiatives powered by Aldriven content personalization delivered an additional **10% uplift** in opens and a **50% increase** in CTRs. These results translate directly into higher conversion rates, stronger upsell performance, and increased guest spend.

The reason behind these numbers lies in the intelligent use of data. Personalized communication is only possible when hotels consolidate information from different sources into actionable insights.

A centralized guest profile enables a single, consistent view of each guest by integrating data from PMS, IBE, POS, Wi-Fi, surveys, web tracking, and third-party systems.

Building on this foundation, communication should go far **beyond basic personalization**. Instead of sending the same content to a certain segment of your audience – such as DINKs (double income, no kids) – and calling it personalization, hotels can leverage dynamic content blocks that are automatically assembled based on individual preferences and behavior.

The weighting of each block adapts to the guest's unique interests, enabling communication that feels tailored on a one-to-one level – even when delivered at scale. This approach transforms personalization from simply using a guest's name in an email or creating separate campaigns for different segments into true interest-driven engagement, where the right message reaches the right guest at the right time.

Beyond improved performance, this unified foundation enables hotels to better understand guest motivations and preferences, driving smarter strategies across the entire guest journey. For hotel owners and operators, the business case is clear: real-time, interest-based personalization reduces acquisition costs, drives direct revenue, and maximizes guest lifetime value. In today's competitive hospitality landscape, activating guest data effectively has evolved from a marketing tactic into a proven revenue engine.

-Dr. Michael Toedt

## FLYR :::

#### Al-powered revenue intelligence: Automating decisions to boost RevPAR, NOI, and asset value

Revenue intelligence has shifted from hindsight-driven decisions to forward-looking on-the-books leveraging Al-powered decision-making and reinforcement learning. FLYR's platform applies advanced machine learning to continuously forecast demand, recommend optimal pricing, and automate commercial actions.

This approach delivers measurable impact across revenue, cost efficiency, and asset performance.

Traditional revenue management often relies on manual assumptions, limited historical data, static updates of competitor price shops and false positives of call center and website turndowns. FLYR replaces this with dynamic forecasts that refresh hourly and factor in dozens of demand signals, including booking pace, competitive pricing, market events, and room availability.





By eliminating outdated batch processes, hotels achieve a step-change in forecast accuracy. For example, properties using FLYR regularly reach **forecast accuracy levels above 95%**, enabling teams to plan budgets and staffing with greater confidence.

On the revenue side, FLYR's automated price optimization has shown **RevPAR uplift of 5–10**% compared to baseline performance. Because the platform manages by exception, revenue managers can focus on strategy instead of repetitive tasks. This accelerates decision-making over a wider date horizon. One group deployment demonstrated over **90**% **automation** acceptance, proving that Aldriven decisions align with operator goals.

FORECAST
ACCURACY
>95%

AI-DRIVEN
AUTOMATION

90%
ACCEPTANCE

Beyond revenue, the platform improves Net Operating Income (NOI) by optimizing distribution mix based on costs per channel and reducing dependency on costly manual interventions. Asset owners benefit from stronger cash flow and higher asset valuation due to more consistent and resilient performance. With a 24-month forecasting horizon, owners and operators gain the intelligence to manage long-term investments and portfolio-level decisions, not just daily pricing.

In short, FLYR transforms revenue management into revenue intelligence. By combining automation, accuracy, and forward-looking insight, the platform empowers commercial leaders to increase RevPAR, protect NOI, and make faster, data-driven decisions that directly enhance asset value.





#### The friction. The solution.

For many hotel groups, payments are a hidden source of friction. Guests arrive with different expectations, staff juggle outdated systems, and finance teams battle with endless reconciliation. Every extra step, delay, or error means lost revenue and frustrated customers. In an industry where margins matter, payments can either be a hidden drain or a powerful lever.

#### The friction:

- Guests abandoning bookings when their preferred payment method isn't available.
- Front-desk staff tied up with manual checks instead of welcoming guests.
- Finance teams reconcile data across multiple systems, often days behind real performance.
- Multi-property owners unable to see a clear picture of revenue across their portfolio.

# The solution: a unified payments platform.

With Adyen, all payments whether for rooms, restaurants, spas, or events flow through one system. Guests enjoy a smooth experience, paying with cards, wallets, or contactless taps anywhere in the hotel. That ease reduces friction and lifts conversion, both online and in person.

For staff, integration with Property Management Systems (PMS) removes repetitive admin. Reconciliation is automatic, chargebacks are easier to manage, and finance gains real-time visibility across all locations.







#### **Chapter 3: Tech that moves the top line**

Owners and investors benefit too: one platform scales easily across properties, providing consistent reporting and insights for smarter decisions.

The impact is measurable. Hotels using Adyen have seen faster reconciliation, higher direct bookings, and improved margins across their portfolios. What once was friction becomes clarity.

Take Belmond for example. By unifying payments with Adyen, they reached a 90% conversion rate and saw a 4.2-point lift in NPS. It's a simple shift that eased payment friction and elevated the guest experience.

Read how Belmond increased conversion





# Chapter 4: Efficiency Engines – tech that cuts cost and increases scalability

Labor costs, energy consumption, and repetitive workflows continue to put pressure on hotel margins. But asset-light growth and lean operations don't mean sacrificing service quality—especially when automation, smart design, and workflow digitization can do the heavy lifting.

Here we spotlight technologies that reduce operational drag, improve staff productivity, and enable multiproperty models without growing overhead. These tools directly improve GOP and reduce time-to-break-even for new builds or renovations.

"A well-implemented PMS cuts labor intensity dramatically, streamlines multi-property operations through single-pane visibility, and tightens cost control—delivering measurable uplift in revenue and efficiency."

**RMS Cloud** 

#### Strategic focus for owners:

- Reduce fixed labor costs through automation of routine guest and back-office tasks
- Improve operating leverage by centralizing or digitizing key workflows
- Enable higher revenue-per-staff
   FTE through smart tools and integrations

"A typical 300-unit development saves approximately 15 hours weekly in administrative overhead, translating to \$45,000 annually in labor cost optimisation."
"Properties implementing connected access systems report measurable improvements: reception productivity increases by 35% when keycard programming is eliminated, while lock-related maintenance requests decrease by 78%."

Goki



Contribution by

#### **Emerging technologies to watch:**

- Mobile access, messaging, and check-in tools that reduce front desk load
- API-enabled PMS that integrates seamlessly with external systems
- Smart task management platforms to streamline housekeeping and maintenance

The business case is clear: every point of automation adds to profitability. From check-in to payment to issue resolution, hotel groups are finding ways to serve more guests with less manual effort—without compromising experience.

In regions with high labor volatility or high acquisition cost, automation is no longer a luxury but a necessity. The best solutions reduce onboarding complexity, allow for remote oversight, and are proven in real-world multiproperty environments.



## portal\*/GOKI

One platform to make space smart:
Driving operational excellence and
automation in MENA's built
environment
Operational Transformation Through
Smart Access

Modern building management faces significant labor inefficiencies rooted in manual access control systems. Traditional keycard management consumes 25- 30% of front desk staff time, while maintenance teams dedicate substantial resources to lock-related service calls. Smart access technology eliminates repetitive tasks for staff. Properties implementing connected access systems report measurable improvements: reception productivity increases by 35% when keycard programming is eliminated, while lock-related maintenance requests decrease by 78%. A typical 300-unit development saves approximately 15 hours weekly in administrative overhead, translating to \$45,000 annually in labor cost optimisation.



#### **PMS-Driven Operational Efficiency**

Property management systems are reshaping hospitality operations by driving substantial labor savings, enabling multi-property oversight, and tightening cost control, all reinforcing asset performance. Automation built into modern PMS platforms allows teams to reclaim 30 to 40 hours per week that would otherwise be consumed by routine manual tasks. That alone transforms staffing needs, letting teams focus on value-enhancing activities like guest engagement or strategic planning rather than repetitive workflows.

For operators managing multiple locations, centralization is crucial. A unified PMS allows front desk, housekeeping, reservations, payments and analytics to be handled from one interface. This consolidation boosts transparency, supports consistent execution across sites, and provides real-time visibility into performance and cost drivers, helping control expenditures across payroll, utilities, and operations.

Contribution by



Revenue impact is equally significant. With a PMS-integrated booking engine, operators typically see a twofold increase in direct bookings. That accelerates revenue capture and reduces dependency on commissions paid to third-party channels. Taken together, these benefits elevate both margins and long-term asset value.



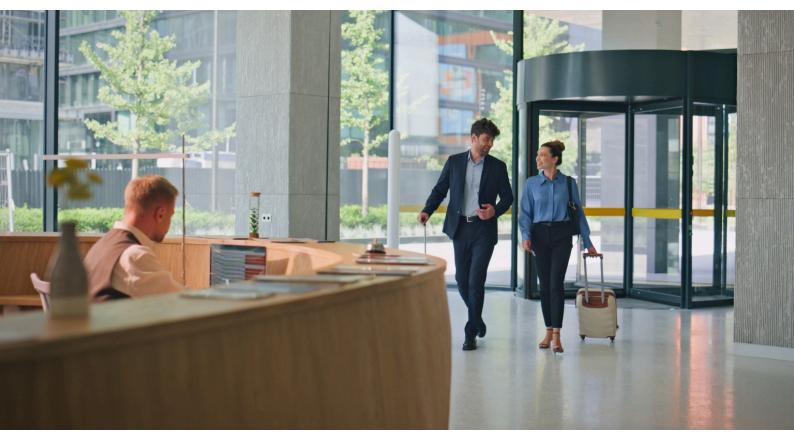


#### Chapter 4: Efficiency Engines – tech that cuts cost and increases scalability

A practical example of these gains is Staycae, a luxury serviced-apartment operator in Dubai. Deploying the RMS PMS across more than 100 properties, Staycae achieved efficient, centralized management of workflows and guest communications.

The platform delivered seamless real-time access to data across locations and supported a branded booking engine to increase direct bookings. In doing so, Staycae maintained service quality amid rapid scale up and enriched guest experience for over 50,000 stays.

In sum, a well-implemented PMS cuts labor intensity dramatically, streamlines multi-property operations through single-pane visibility, and tightens cost control. When paired with stronger direct-booking performance, the result is measurable uplift in revenue, efficiency, and ultimately, asset value.





#### **Automation and Revenue Generation**

Smart access creates direct digital channels between properties and residents, with industry-leading platforms achieving 83% user adoption rates compared to the 6% average. These touchpoints enable automated services including visitor management, concierge booking, and predictive maintenance scheduling. The revenue implications are substantial. Properties leveraging app-based resident engagement generate \$25-40 additional revenue per unit monthly through premium services. Data insights from access patterns enable better space utilisation, predictive maintenance, and personalised resident experiences that legacy locks block. Installation automation further enhances operational efficiency. Modern retrofit solutions require just two minutes per lock with no specialised training, compared to traditional smart lock replacements requiring certified technicians and extended downtime.

# Strategic Alignment with Regional Development

MENA's \$27 billion development pipeline, including projects like NEOM and ROSHN, demands scalable operational models. Saudi Arabia's Vision 2030 and UAE keyless mandates create regulatory frameworks that align with operational efficiency objectives. Universal compatibility across major lock manufacturers (Assa Abloy, Onity, Dormakaba) enables seamless modernisation without infrastructure replacement costs, supporting the region's development velocity while meeting compliance requirements.

#### **Conclusion**

Smart access technology represents a fundamental shift toward operational excellence in building management. As MENA positions itself as a global leader in smart city development, automated building systems provide the operational foundation for sustainable growth and enhanced resident experiences.



## **Emerging technologies to watch for hospitality**

Owners and asset managers in hospitality are entering an era of unprecedented data transparency and predictive capability. Below are the key technology trends to watch, split between near-term innovations and longer-term developments:

# Near-Term Trends (Next 1-3 Years)

- Unified portfolio dashboards & data visibility:
   New owner-focused BI platforms consolidate previously siloed data (financials, operations, market metrics) into a single "source of truth" dashboard. This gives owners real-time, standardized performance data across all properties, eliminating delays and inconsistent reports from operators. With a single pane of glass view, owners can instantly spot underperforming assets and benchmark metrics like ADR or RevPAR across the portfolio, enabling quicker, data-driven decisions.
- Predictive analytics for forecasting & maintenance: Modern analytics tools increasingly leverage AI and machine learning to look beyond historical reports and into the future. By analyzing past trends and current inputs, predictive models can forecast demand, revenue, and even pinpoint when critical CapEx investments (like renovations or equipment replacements) should be made for optimal ROI.



#### **Appendix**

For example, asset management software now helps predict future expenses or maintenance needs – turning what used to be reactive fixes into proactive planning. This forward-looking insight lets owners time renovations or property upgrades strategically (de-risking big capital decisions by choosing the ideal market timing).

- Integrated systems and open apis
   (breaking data silos): A major focus is
   on interoperability ensuring all hotel
   systems (PMS, CRM, sales, labor
   management, etc.) can share data
   seamlessly. Rather than juggling
   fragmented platforms, owners are
   pushing for unified data integration
   across departments[i]. Emerging owner grade systems come with extensive
   third-party integrations and universal
   APIs that sync data in real time.
- This means revenue management,
  marketing, and operations data can live
  in one ecosystem, empowering owners
  with a holistic view of performance.
  Ultimately, open integrations turn hotel
  tech from a "black box" into a
  transparent network where information
  flows freely and every stakeholder –
  from asset manager to operator is
  aligned on the same numbers[ii].



- Digital capex planning & asset management tools: Handling capital expenditures and asset upkeep is becoming far more high-tech. Owners are adopting dedicated CapEx management platforms that centralize everything from budgeting and project tracking to approval workflows. By replacing clunky spreadsheets, these systems offer real-time visibility into project statuses and spending. Many come with analytics that can forecast the impact of capital investments and optimize timing[iii].
- In parallel, modern asset management software tracks the lifecycle of every major asset in a hotel (from HVAC systems to elevators), often integrating with IoT sensors for predictive maintenance alerts. This reduces unexpected outages and helps prolong asset life by scheduling maintenance or replacements at just the right time[iv]. The result is a de-risked approach to CapEx – fewer surprises and data-backed justification for each investment.

- Sustainability & ESG tech solutions:
   Especially in EMEA, sustainable operations have moved from "nice-to-have" to an essential part of asset strategy[v]. Owners are investing in green building tech and energy management systems that cut utility costs while meeting regulatory and investor ESG criteria.
- For instance, smart energy platforms can automatically adjust lighting and HVAC based on occupancy, or Albased systems optimize water usage directly lowering expenses and carbon footprint. Portfolio-wide sustainability dashboards now enable tracking of carbon metrics, waste reduction, and compliance with green certifications. Beyond the ethical benefits, properties with strong ESG performance are seeing tangible upside in asset value and guest loyalty[vi], making these tech investments financially prudent as well.



# Longer-Term Trends (3-5+ Years)

- Al-driven decision support & autonomous analytics: Looking further ahead, the role of Al in owner-grade tech will deepen from predictions to prescriptive guidance. We anticipate Al "copilots" for asset managers tools that not only forecast outcomes but also recommend optimal actions (e.g., suggesting the best time to refinance or flagging a property for acquisition/divestment based on simulated scenarios).
- These next-gen systems could ingest vast amounts of internal and market data and then, using advanced AI or even generative algorithms, provide scenario analyses and answers to complex strategic questions. In essence, the asset manager of the future might work side-by-side with an AI assistant that continuously crunches numbers, evaluates risks, and surfaces insights in plain language. This evolution will further de-risk decision-making by augmenting human expertise with unbiased, data-rich advice.

- Robotics and automation in operations: To address labor shortages and improve efficiency, automation in hotel operations will likely become mainstream in the coming years. Owners should watch the maturation of service robotics and Al-driven process automation as a means to protect operating margins. Already, some hotels are using robots for routine tasks from cleaning rooms to delivering room service and seeing labor costs reduced while maintaining service quality[vii].
- In the near future, these technologies could scale up: think autonomous housekeeping machines, robotic kitchen assistants, or Al-managed front desks handling check-ins and guest inquiries with minimal human oversight. For owners, greater automation promises more predictable labor expenses and the ability to maintain service levels even amid staffing challenges. While fully "staffless" hotels may be rare beyond limited-service models, targeted automation will increasingly support human staff, and owners must be ready to invest in such capabilities as they prove their ROI.
- IoT-Enabled "smart" hotels and digital twins: The proliferation of IoT (Internet of Things) devices and the rise of digital twins are set to transform how owners monitor and optimize their assets. In coming years, most building equipment and guest touchpoints (thermostats, lighting, elevators, etc.) will be sensor-equipped and networked, continuously feeding data into analytics platforms. This real-time data stream will allow for live dashboards showing energy consumption, foot traffic, air quality, and more across a property.



#### **Appendix**

- Furthermore, digital twin technology - virtual replicas of physical hotels could allow owners to test changes in a risk-free digital environment. For example, before investing in a major renovation or rebranding, a digital twin model of the hotel might simulate the impact on operating costs and guest satisfaction. While still emerging, these tools are already providing real-time insight into asset performance[viii], and their capabilities will expand. A fully "smart" hotel ecosystem can dynamically adjust to conditions (e.g. shutting off power in unoccupied areas) and give owners granular control and predictive insight into every aspect of operations.
  - Blockchain and fractional ownership models: Further out, innovations from the broader real estate world – like blockchain-enabled ownership – may influence hospitality asset management. Blockchain technology opens the door for fractional ownership and new financing mechanisms for hotels.

- In a tokenized future, an owner could raise capital by selling microshares of a property to investors worldwide, facilitated through secure digital tokens and smart contracts.
- This concept is already gaining traction in real estate: as of mid-2025 over \$7 billion in property value has been tokenized, with 1.2 million investors participating in fractional real-estate ownership via blockchain platforms[ix]. For hotels, this could mean new ways to fund renovations or acquisitions by tapping a global investor pool, or even allowing guests and fans to own a small stake in a beloved property.
- Blockchain's smart contracts might also streamline operations such as franchise fee payments, vendor contracts, or insurance claims by automatically executing agreements when predefined conditions are met. While widespread adoption in hospitality is likely a few years away, owners should keep an eye on how these decentralized models evolve, as they promise greater liquidity, transparency, and flexibility in real estate investment.



- Immersive tech for asset marketing and planning: In the longer term, expect technologies like virtual reality to play a bigger role in how hotel assets are designed, marketed, and even experienced remotely. Virtual and Augmented Reality (VR/AR) can allow potential investors or partners to "walk through" a hotel digitally, inspecting a property or a prototype of a new development from anywhere in the world. This could speed up due diligence and design processes by enabling virtual site visits and collaborative planning in immersive 3D space.
- On the marketing side, immersive digital tours are already becoming popular to entice guests[x], and a similar approach can elevate how owners pitch renovation projects or property sales. Over the next 5+ years, as the metaverse and 3D digital environments mature, hospitality real estate may see virtual replicas of hotels used for everything from testing guest experience concepts to training staff in a simulated environment. Owners who stay ahead of these trends could reduce time-to-market for new projects and enhance stakeholder engagement by visualizing changes before they're built.



## **References & resources**

This white paper is the result of a collaborative effort, blending expert contributions from leading solution providers; **Adyen, dailypoint, Flyr, Portal/Goki & RMS Cloud** with secondary research conducted by the **ExploreTECH & Insight Out team**. Together, these insights create a well-rounded perspective, supported by the resources listed below.

Emerging Technologies for Hospitality Owners and Asset Managers

Skift – Hotel Tech 2025 Predictions: <a href="https://skift.com/blog/hotel-tech-predictions-2025-asset-owners">https://skift.com/blog/hotel-tech-predictions-2025-asset-owners</a>

**CoStar – Al in Revenue Management**: <a href="https://www.costar.com/article/1790410413/ai-in-revenue-management">https://www.costar.com/article/1790410413/ai-in-revenue-management</a>

**Beacon Sky Hospitality** – Strategic Forecasting Whitepaper: <a href="https://www.beaconskyhospitality.com">https://www.beaconskyhospitality.com</a>

**Shiji Group – API Interoperability in Hospitality**: https://insights.shijigroup.com/an-introduction-to-hotel-apis-2023/

#### **CBRE – EMEA ESG Hotel Strategy Report:**

https://mediaassets.cbre.com/-/media/project/cbre/sharedsite/insights/reports/2023-report-media-folder/esg-adoption-in-the-hotel-industry-aglobal-status-update/global-hotels-esg.pdf?rev=8136fc37636d47ff97eacc3f8d2e121d

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**Oracle Hospitality** – Hospitality in 2025: automated, intelligent... and more personal: <a href="https://www.oracle.com/in/a/ocom/docs/industries/hospitality/hospitality-industry-trends-for-2025.pdf">https://www.oracle.com/in/a/ocom/docs/industries/hospitality/hospitality-industry-trends-for-2025.pdf</a>

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## **Contributors Profiles**

Adyen offers a unified payments platform for the entire hospitality journey—from booking to checkout. It consolidates all payment channels, simplifying operations and enhancing security. Hotels benefit from local payment options, reduced PCI scope, and seamless tech integrations. Ideal for single properties or global chains, Adyen delivers a smooth, personalized payment experience.

dailypoint™ is a CRM and Data Management platform that centralizes guest data into a single profile. Powered by AI, it supports personalized marketing and guest engagement. The platform includes 16 modules and connects with 200+ tech partners. It also ensures GDPR compliance through its built-in Privacy Dashboard.



FLYR leverages Al and decision intelligence to modernize revenue management. It helps hotels move beyond static forecasting with real-time, automated pricing strategies. As part of FLYR Inc., it supports global hospitality teams in improving forecast accuracy and maximizing revenue. Trusted by leading hotel groups worldwide.



Insight Out is the Middle East's leading hospitality specialist consultancy, trusted for its commercial expertise and regional market intelligence. Its team of experienced consultants delivers tailored support in revenue management, sales and marketing representation, and learning and development programs designed to boost performance and drive revenue growth. With a proven track record across independent hotels, global brands, and asset management companies, Insight Out provides strategic insights and bespoke solutions that create measurable value.





## **Contributors Profiles**

Portal is the companion app for Goki's smart access platform, designed to streamline and enhance the experience for both property staff and guests. With intuitive controls, staff can easily configure, manage, and monitor smart locks across the property in real time. For guests, Portal transforms their smartphone into a secure digital key, allowing seamless, contactless access to rooms and common areas—no need for physical cards or check-in queues. Whether you're running daily operations or arriving for your stay, Portal brings secure, convenient, and modern access to the palm of your hand.

portal\*/GOKI

RMS provides cloud-based property management technology for the hospitality industry. It supports operations across all departments, including reservations, housekeeping, and guest services. Designed for scalability, it suits everything from boutique hotels to large groups. RMS helps teams boost efficiency and deliver better guest experiences.

