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# The Agentic Hotel: How Open Infrastructure Turns AI Into Operational Performance

Mid-Stay

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**Stephan Wiesener argues that the hospitality AI conversation has moved past experimentation into a harder question: what infrastructure actually allows AI agents to take reliable action across real hotel operations? Through concrete case studies from citizenM, THE FLAG Zürich, and Cocoon & Eckelmann Hotels, he makes the case that open, API-first architecture is the unglamorous foundation on which everything else depends.**

## THE INFRASTRUCTURE THAT WILL DECIDE WHETHER HOTEL AI WORKS

Agentic AI is entering its performance phase in hospitality. The question is no longer whether AI can assist guests or employees. Operators now want measurable ROI, and AI that can work with real operational context across hotel departments, even when those teams use separate tools and systems. This is what separates basic AI assistance from true agentic execution. The former still depends on humans to stitch the work together. The latter can take reliable action, coordinate across systems, and involve people only when judgment or oversight is needed. And infrastructure is the key differentiator.

Let's look at one real example. A guest adds a baby cot request to their booking. In many hotels, this seemingly simple task still depends on a person reading the note, interpreting it, messaging housekeeping, and finally checking to ensure the task was completed. It's something an AI agent can easily handle, but only if the agent can access information in real-time, trigger the appropriate workflow, and take action across different systems. Having an open infrastructure is the best way to optimize the agent's performance.

Over the last 18 months, AI has rapidly moved from experimentation into operational deployment across all aspects of hospitality. Marriott partnered with Google ([Starkov, 2025](#)) to include direct hotel bookings into Google's AI Mode, Expedia ([Expedia Group, 2026](#)) is investing heavily in conversational AI trip planning, and hotel groups are deploying guest-facing and back-office AI agents.

In these environments, the difference between AI experimentation and operational deployment becomes clear. Many AI solutions perform well in isolation, but far fewer are capable of operating reliably across the day-to-day complexity of a hotel environment. This is more pronounced when a workflow requires action across multiple systems, such as reservations, housekeeping, guest services, or room operations, with staff performing oversight.

Agents can only generate commercial and operational value when they can instantly access live operational data, interact across systems, and work within the operational context of a property, such as aligning with standard operating procedures (SOPs).

In conversations with hotel operators, this is increasingly where the focus lies: not on individual AI tools, but on how those tools can work together reliably across the business.

Rather than relying on a single proprietary agent, hotels increasingly need open environments where multiple agents, applications, and systems can interact through shared API-first infrastructure, allowing capabilities to evolve while remaining aligned with established workflows, permissions, and operational context.

This approach becomes increasingly important as agentic AI continues to evolve. Hotels are making technology decisions expected to support operations for years, while the AI landscape changes almost weekly. Open architectures give operators the flexibility to adopt new capabilities without repeatedly rebuilding their operational foundation as new technologies emerge.

## WHY AGENTIC AI MUST FIT THE WAY HOTELS ACTUALLY OPERATE

One of the biggest misconceptions in current hospitality AI discussions is the assumption that every hotel requires the same type of agentic environment. In reality, operating models vary enormously across the industry, and the architecture supporting AI needs to reflect those differences.

A lean select-service property operating with minimal staffing has very different priorities from a luxury resort managing restaurants, spa operations, meetings, concierge services, and high-touch guest experiences. The types of agents, permissions, and workflows required in each environment are fundamentally different.

This is why having a flexible infrastructure matters so much. The goal is not to force hotels into a standardized operating model for the sake of implementing AI, but to enable different property types, staffing structures, and service concepts to build agentic AI ecosystems around the way they already operate.

The next phase of hospitality AI will likely be defined by multi-agent environments where specialized agents coordinate across departments, workflows, and guest touchpoints simultaneously. A guest communication agent may trigger housekeeping activity, a revenue agent may influence room allocation logic, or a finance agent may interact directly with booking and operational data across the property.

This also changes how hotels should think about measuring ROI. The return from agentic AI is not simply labor reduction. It comes from reducing friction across the organization: faster response times, fewer manual handoffs, more consistent service delivery, reduced administrative overhead, improved conversion opportunities, and the ability to scale operations without adding equivalent layers of coordination work.

## WHAT CONNECTED AGENTIC AI LOOKS LIKE IN HOTEL OPERATIONS

Another Star, the founding company and operator of the citizenM brand, shows how agentic AI can evolve from a targeted automation initiative into a broader operational model. Two years ago, the company began pioneering the use of AI in non-guest-facing processes such as finance and invoice processing.

Since then, this use case has expanded into a connected ecosystem including guest-facing processes such as voice AI for customer service calls and written communication via email, WhatsApp and OTA channels. It is being used for providing property information, upsell opportunities, service recovery, as well as meetings and group sales. Today, the company operates five live agents in various parts of the business.

The significance is not the number of agents, but how they are working across departments and guest touchpoints with greater consistency. Information and workflows can move between systems without requiring the same level of repetitive manual coordination from staff.

The impact has been improved response times, shorter lead times, fewer manual errors, increased conversion opportunities and more capacity for teams to focus on guest interactions.

Another Star is now moving towards a unified orchestration layer that can coordinate multiple agents across the business. This marks a shift from standalone AI tools to an operating model where agents play a direct role in how the company functions, but more importantly, in the way employees and guests are supported, prepared for, and able to experience their stay.

THE FLAG Zürich demonstrates the same principle but in a different operating environment. At the 101-room property, which operates hotel rooms and serviced apartments, guest requests were often hidden inside reservation comments. A note about a baby cot, extra bed, or special occasion still had to be spotted by reception, interpreted correctly, and passed on to housekeeping. It was simple work, but it created delay, inconsistency, and unnecessary administrative burden.

By introducing a connected AI Trace Agent, those comments can now be read automatically and converted into structured housekeeping tasks. The agent interprets the reservation note, triggers the relevant task in a third-party app, and routes the request to the right operational team in real time. Around 30 tasks are now generated automatically each day, saving approximately 3.5 hours of manual coordination per week while improving execution consistency across departments. It shows how the value of agentic AI is not always found in dramatic transformation. It's often in removing the small, repetitive handoffs that slow operations down every day.

Cocoon & Eckelmann Hotels demonstrates how agentic AI can support consistency at scale in a select-service environment. Across more than 700 rooms, front office teams were spending significant time manually reviewing reservation notes and assigning rooms based on guest preferences, OTA booking comments, and accessibility requirements.

Supported by an API-first architecture, a Room Allocation AI Agent now interprets reservation data automatically and applies customizable allocation logic tailored for each property. This can include floor preference, accessibility, VIP handling, and group bookings.

The result is not just faster room assignment, but more standardized execution across high-volume operations. At one location alone, the agent saves approximately 45 minutes of manual work per day.

Together, these agentic AI deployments demonstrate one of the most important realities of the agentic era: hospitality is unlikely to converge around a single operating model or standardized AI stack. A select-service property, a serviced apartment concept, and a more complex multi-department operation all require different workflows, staffing structures, and service priorities.

What these environments have in common is the flexible architecture enabling the agents. Strategic value increasingly comes from infrastructure capable of supporting different operating models while allowing agent ecosystems to evolve continuously.

## THE BEST AI STRATEGIES IN HOSPITALITY START WITH OPENNESS

One of the defining characteristics of the current AI landscape is the speed at which it is evolving. New models, frameworks, and capabilities are emerging continuously, while hotels are making infrastructure decisions expected to support operations for years.

This is where open architecture and interoperability create long-term strategic value. Hotels need the ability to introduce new capabilities and data, change workflows, and replace technologies without rebuilding their operational foundation each time the market shifts. In practice, this means having "swappability": the ability to continuously evolve the agent ecosystem while maintaining operational continuity underneath it.

Hospitality is moving toward a future where hotel operations function through coordinated networks of highly specialized agents operating across guest communication, revenue management, room allocation, housekeeping coordination, finance, and service delivery.

Agentic hospitality depends on open infrastructure, and that's what will move AI from an isolated promise into operational and commercial performance at scale.

## REFERENCES

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