# H3824

# Technology Edition Entering The Everything-Data Decade



The Hotel Yearbook
Foresight and innovation in the global hotel industry



#### Data & Al

# Leading with generative AI: From enablement to empowerment



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How you integrate generative Al into your hotel operations will be the most important technology decision for the next 10 to 15 years. Just like the internet redefined our world, Al is set to do the same, and possibly even more.

Identifying your north star is crucial when considering where AI can most benefit your business. CitizenM, a rapidly growing global hotel chain, is guided by a dual focus on AI-driven automation and personalisation at scale. This approach drives significant outcomes for staff and guests, hinging on their property management platform, Apaleo, to unlock AI's full potential.

The future of property
management must evolve to enable
Al innovation, making it quick
and easy for hoteliers to integrate
constantly evolving generative Al
into daily operations. Instead of
merely tackling current challenges,
a property management system
should maximise Al's benefits, offering

scalability and flexibility for new innovations to come.

The big question is how to achieve this while keeping costs down and avoiding the need for a large tech team.

# Your backbone, fully accessible via APIs

Your first crucial step is ensuring your technical ecosystem is flexible enough to embrace new innovations. Al needs seamless access to your property data and business logic to make informed decisions. This is why a PMS fully accessible via APIs is at the heart of your AI journey. It ensures all your property data and capabilities are available and easy to integrate with your entire ecosystem, spanning multiple third-party hotel apps and touchpoints, including AI.

An API-driven platform with MACH architecture (Microservices-

based, API-first, Cloud-native, and Headless) places APIs at the core. Unlike pre-built solutions that only address specific problems for a narrow range of users, this approach unlocks endless possibilities for your AI-driven innovation. In the next few years, this could even eliminate the need for a traditional PMS user interface, allowing property data to be accessed and managed directly through APIs via voice assistants, text messaging or future AI-driven channels, which we don't even think of today.

# Trying out ready-made Al-driven apps

You don't have to be tech-savvy to notice how quickly businesses and newly funded start-ups are launching their Al-driven apps. According to research by Gartner, by 2026, 30% of new applications will use Al, up from less than 5% today. Similarly, the market of hotel apps is evolving at an incredibly fast pace.

One of the benefits of an open MACH ecosystem is that you can plug in the best third-party tools available whenever you want. These tools often come with free trials and 1-click connections, making it easy to integrate, test, and find the best fit for your needs.

With such open ecosystems, the onboarding or offboarding of AI tools can be completed in just a few hours. This flexibility allows you to integrate top third-party tools for various AI applications, including voice-assisted reservation management, upselling, inventory optimization, and in-room energy usage controls.

A MACH ecosystem can provide a stable, long-term foundation to cope with the highly dynamic development of Al and Al-driven applications. From a technology perspective, using a MACH platform allows hospitality businesses to try out and roll out the latest Al tech without replacing their core systems; they only need to plug in new apps.

## Create your own custom Al extensions

One of the most exciting and competitive aspects of AI integration is the ability to connect your MACH platform directly to large language models (LLMs) like OpenAl's Custom GPTs, enabling AI to execute automated workflows tailored exactly to your business ideas and needs. Think of AI extensions as your intelligent assistants behind the scenes, engaging guests and streamlining your operations across all aspects of your business, whether it's managing reservations, front office communication, marketing, or maintenance. This positions AI as the first line of defence, handling repetitive tasks and significantly reducing the burden on your staff.

Al extensions excel when integrated with your property data. Unlike generic chatbots, these Al extensions offer flexibility to act seamlessly on your business processes, using your hotel's data in real-time. Since the triggers come from APIs and the actions are executed via APIs again, an API-driven MACH platform is crucial in this process.

# Create your own custom Al extensions

When connecting an LLM to your MACH architecture you can write requests and give instructions in plain language, and it will handle them.

These commands are called "prompts." You don't need developers for this; it's like talking to your hotel software. In the past, you had to program software for this, but now it's more like having a conversation in everyday language with your team. This will lead to the democratisation of AI in hospitality. In a MACH ecosystem, Al prompts can be easily published and shared like code snippets. Imagine a community of hoteliers, consultants, and developers who are constantly evolving and sharing AI recipes that can be picked up and adapted to the specific business needs of individual hotels. Al transformation in hospitality is ultimately about collaboration, instant sharing, and continuous learning.

## Final thoughts on the future outlook

Anticipating future needs is challenging - we can only discover what AI will truly bring as time progresses. Many of the AI applications that will shape the future are ideas that haven't even crossed our minds yet. All technology implementations are dynamic and iterative processes, and with the business landscape constantly in flux, choosing a rock-solid, compliant, and secure AI-enabling foundation for this journey is essential.

Navigating AI doesn't have to be overwhelming. By partnering with forward-thinking organisations like citizenM, we're leading AI innovation by integrating your property management platform with LLMs, exploring endless possibilities to elevate your business.

Embark on your Al-driven journey with confidence, free from limitations. Together, we're shaping and acting on the future as it emerges in the present.

#### API Application Programming Interface:

The foundation of connectivity in your ecosystem, allowing seamless access to your property data and functionality. They allow different systems to communicate effectively. For example, external apps for guest communication, CRM, or staff collaboration can easily access reservation details, guest names, occupancy, rates, and more.

#### MACH Microservices, API-first, Cloud-native,

A software architecture that separates the user interface from the business logic, enabling the use of best-in-class technologies. This approach allows different components to communicate via APIs and can be replaced without affecting the overall system.

#### LLM Large Language Models:

LLMs are advanced AI models that handle textbased tasks. ChatGPT, for example, is powered by OpenAI's GPT models, which are a type of LLM. These models have gained significant attention worldwide for their impressive capabilities in understanding, generating and acting upon humanlike text.



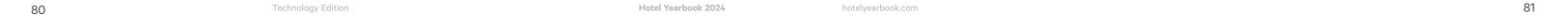
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#### HITEC® 2024 Charlotte

Jun 24 – 27, 2024 Charlotte Convention Center

#### **HSMAI** Americas - Commercial

Strategy Conference Nov 25 – 26, 2024 Charlotte Convention Center

#### **HITEC Technology Investment**

Conference Jun 27 – 28, 2024 Charlotte Convention Center

#### 2024 Hotel Data Conference

Aug 7 – 9, 2024 Grand Hyatt Nashville

#### Skift Global Forum 2024

Sep 17 – 19, 2024 The Glasshouse, New York

#### **HEDNA Asia Distribution Conference**

Sep 23 – 24, 2024 Siam Kempinski Hotel Bangkok

#### FHS World 2024

Sep 30 – Oct 2, 2024 Madinat Jumeirah Conference & Events Centre

#### **HSMAI** Asia - Digital Marketing

Conference Oct 10, 2024 Phuket

#### Hospitality Tech Expo

Oct 15 - Oct 16, 2024 Excel London

#### ITB Asia

Oct 23 – 25, 2024 Marina Bay Sands Singapore

#### The Hospitality Show 2024

Oct 28 – 30, 2024 San Antonio, TX, United States

#### Cvent CONNECT 2024 - Europe

Nov 5 – 7, 2024 Hilton London Metropole

#### International Hotel Technology Forum

Asia 2024 (AHTF) Nov 12 – 13, 2024 Pan Pacific Singapore

#### Hotel Technology Forum (HTF) 2024

Nov 18 – 20, 2024 Rancho Palos Verdes

#### The Phocuswright Conference

Nov 19 – 21, 2024 JW Marriott Phoenix Desert Ridge Resort & Spa

#### **HSMAI Middle East - Commercial**

Strategy Conference Nov 26 – 27, 2024 Conrad Dubai

#### **HSMAI** Europe Revenue Optimization

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Conference: North America Jan 27 – 29, 2025 Catamaran Resort Hotel and Spa

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while ensuring cloud-based accessibility and secure,

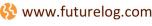
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- Denis Karalić, ACHAT Hotels

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### **Technology Edition**

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