

PRINCIPAL REAL ESTATE

European Hotel Sector: Leveraging AI and other technologies to create value

AUTHORS



Graeme McCormack
Head of Hotel Fund
Management



Hugo Steen
Head of Hotel
Investments

The first step in a value-added investment strategy is finding undervalued or illiquid hotels with good micro locations in attractive markets. The second is creating value through some sort of transformation—brand repositioning, a targeted capex initiative such as expansion or refurbishment or an operational change such as implementation of technology.

The impact of that transformation (here we focus on the implementation of artificial intelligence and other technologies) depends on the extent to which the property has been undercapitalised. Essentially, the more antiquated a property's technology systems are, the more value opportunity there is.

KEY TAKEAWAYS

Technology can be leveraged to improve:

- Hotel management, by boosting productivity and sustainability;
- The guest experience, through personalisation and automation of routine interactions; and
- Marketing, by deepening prospect insights and boosting efficiency.

For technology to yield positive results, it must fit the brand and guests' expectations.

Leveraging technology to improve hotel management

Boosting productivity

Attracting and retaining talent and cutting costs are top priorities for many hotel operators. The effective implementation and utilisation of technology can help accomplish both. While we're not seeing widespread adoption of robot housekeepers (yet), technologies that make work more efficient can dramatically improve employee satisfaction—and positively impact the bottom line.

- **Real time data collection and communication improves efficiency.** For example, with a mobile property management system (PMS) app, housekeeping staff can know in real time when a room is ready to be cleaned, mark it as available when complete, and automatically relay that information to the front desk. No more back-and-forth radio communications with front desk staff, elevator trips to collect more supplies, or awkward interactions with still-sleeping guests.
- **Technology frees up time for higher value work.** Leveraging technology like AI chatbots to quickly respond to routine guest questions and automate interactions like check-in and check-out frees up employees' time to deliver high-value service in the types of interactions that bring joy to employees and guests alike.
- **For some hotel staff, such as concierges, technology provides an opportunity to work off-site.** This kind of flexibility is a significant talent attractor, and for hotels with multiple locations, it can be an opportunity to cut costs by leveraging one person to support multiple properties.

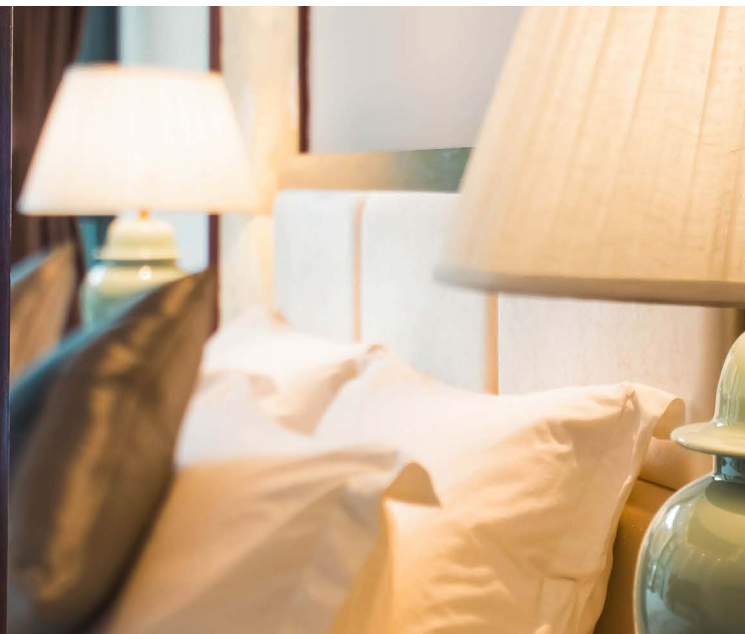
Boosting sustainability

Operating more sustainably by reducing resource consumption is a powerful way for hotel operators to cut costs and meet environment, sustainability, and governance (ESG) goals. It can also be a significant selling point for guests—76 percent of global travellers want to travel sustainably, up 16 percent since 2021.¹

- **Every electron saved makes a difference on the bottom line.** Internet of Things (IoT) technologies, combined with a capable building management system (BMS) for monitoring and management, can optimise energy utilisation over time. For example, IoT controllers can automatically turn off lights and air conditioners when guests leave a room.
- **Food waste is profit thrown in the trash.** Even the most conscientious hotels tend to waste a lot of food. Digital food waste tracking solutions, such as streamlining supply chains using real-time monitoring and tracking, forecasting and cost cutting through data-driven inventory management, and driving proactive waste management strategies through metering technology can each make a significant impact. One major hotel brand saw a 64 percent reduction in annualised food waste generation over four months after implementing these strategies.²

¹ GSTC, Cost vs Conscience: Booking.com Delves into the Dilemma Dividing Sustainable Travel in 2023, 19 April 2023.

² Serve 360, 2020 Serve 360 Report: Sustainability and Social Impact at Marriott International, 31 December 2020.



Leveraging technology to improve the guest experience

Personalising guests' experience

Technology can help hotel operators efficiently deliver on guest expectations, and when done right, it pays off: 73 percent of guests surveyed by Hotel Technology favour returning to a hotel that satisfied their technological needs.³

- **Armed with guests' personal data, hotel operators can deliver highly personalised experiences.** With data from search engines, pre-travel questionnaires, booking records, social media, chatbots, loyalty programs—even personal information like health passports, dietary restrictions, accessibility needs—hotel operators can deliver a tailored experience to guests before, during, and after their stay. For example, a pre-travel questionnaire might ask the guest about their favorite drink; when the guest arrives for check-in, a greeter is waiting with that drink in hand.
- **Hotels can utilise technology to provide information and services to guests as they travel through the property.** For example, used in tandem with a hotel app, strategically placed beacons allow a guest's movements to be tracked (if the guest opts in and enables location tracking and Bluetooth). The hotel can track the guest and push tailored notifications about perks and amenities—luxury property guests who spend most of their time at the spa, for example, might find a monogrammed towel on their bed that evening.
- **Even when guests leave to explore the local area, they rely on the hotel to provide valuable information and services.** They want to know where the best restaurants, bars, and coffee shops are, where to shop, what shows are playing nearby, and so on. A virtual concierge system, tied to the hotel's app, can significantly improve the guest experience, making guests more likely to stay at the hotel again, recommend it to others, and leave positive feedback online.



The proper use—and safeguarding—of guests' personal information

When asked “How interested are you in hotels using artificial intelligence to analyse your travel information?” a large majority of travellers surveyed by Oracle and Skift responded “very interested—whatever it takes to make my trip better!” or “somewhat interested—if I willingly provided the data for this purpose.”⁴ Travellers' responses did not differ much whether their information was being used for “more targeted and relevant advertising and offers” or “better customer service during your trip.”

Nevertheless, guests' data privacy must be protected in accordance with the General Data Protection Regulation (GDPR) and prevailing best practices.

Automating routine interactions

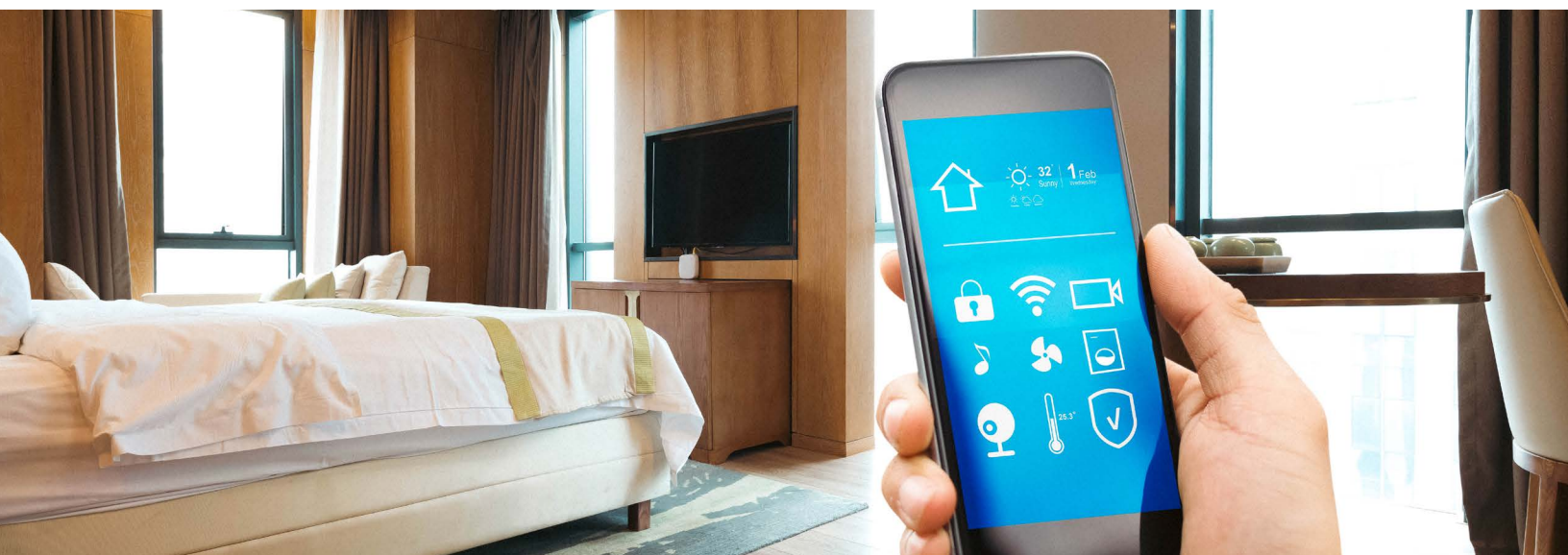
One of the most obvious use cases for technology—in any sector—is the automation of routine activities. That's true for hotels too, and the benefits extend to both the business and the guests.

- **Automating the check-in process boosts staff productivity and drives a better guest experience.** Using technology, guests can check in on their phones at any time without waiting in a queue or speaking with a customer service agent. They can input ID or passport information, pay for parking or valet, request an early check-in or late check-out, and make reservations at the hotel's restaurant and spa, all before setting foot on the property. Once the guest arrives, they automatically receive an electronic key when their room is ready.
- **Technology enables any time, any language questions and requests.** Sometimes guests want to have a conversation with a deeply knowledgeable concierge to craft a personalised local experience. Sometimes they just need fresh towels. For the latter, AI chatbots and virtual agents have dramatically improved the guest experience. They're available on-demand 24x7x365, can converse with guests in any language, and there's never a wait. In one case, a hotel's chatbot had more than 3,600 conversations in five months and resolved 80 percent of queries without human support.⁵

³ Hotel Technology News, How Hotel Operations Technology Improves Employee Productivity, Enhances the Guest Experience, and Increases Profits, 12 September 2023.

⁴ Skift and Oracle Hospitality, Hospitality in 2025: Automated, Intelligent... and More Personal.

⁵ Hospitality Technology, Trend Report: Hotel Workforce Automation Boosts Productivity, 28 April 2022.



Leveraging technology to improve marketing

Getting to know the prospective guest

Targeted marketing is one of the clearest use cases for artificial intelligence. Indeed, a majority of hotel executives surveyed by Oracle and Skift plan to use analytics and AI to learn about guests' behaviours and more effectively market to them.⁶

- **Data is the first step to personalised marketing.** Where technology is used to personalise guests' experience, a lot of very valuable data is generated. That data can be used to attract those guests back to the hotel, and to attract new guests like them. For instance, if many guests are leisure travellers in their mid-30s to 50s who enjoy the pool and spa, the hotel could focus its marketing efforts on promoting those amenities. If many guests are families with young children, the hotel could promote its kids' club.

Marketing more efficiently and effectively

Leveraging technologies like AI-powered chatbots, analytics, and virtual reality enables hotel operators to market more efficiently—and more effectively to drive bookings and revenue.

- **AI chatbots and virtual agents enable more efficient marketing.** A hotel could use generative AI chatbots

to engage with website visitors and offer personalised recommendations based on their preferences. Instead of devoting human resources to responding to comments made on travel search engines, booking sites, and review sites, for example, a chatbot could respond. Also, just as hotel guests could use virtual agents for any time, any language questions and requests, so can prospective guests. For example, the hotel chatbot that had more than 3,600 conversations in five months helped increase direct sales by 11 percent.⁷

- **VR technology enables more engaging—and effective—shopping experiences.** Almost half of the hotel operators surveyed by Skift and Oracle said they are developing virtual reality (VR) maps of their hotels or plan to do so within the next year.⁸ By embracing virtual reality technology, hotels cater to the growing demand for more interactive and engaging experiences and gain an edge over competitors.
- **Analytics technologies are dramatically new and improved.** Analytics have long been a stalwart in the marketer's toolbox—to identify, for example, which channels and messages are most effective for each specific customer segment. Machine learning and AI enable marketers to more deeply analyse larger volumes of data, predict behaviour patterns, and target individuals with personalised content while continuously learning and adapting.

^{6,8} Skift and Oracle Hospitality, Hospitality in 2025: Automated, Intelligent... and More Personal.

⁷ Hospitality Technology, Trend Report: Hotel Workforce Automation Boosts Productivity, 28 April 2022.

Effective technology fits the brand and guests' expectations

For technology to yield positive results, it must be implemented purposefully with the end goal in mind, and managed actively to ensure it is achieving that goal (The same as with human hotel staff: they need clear direction, proper training, and active management to drive high performance).

Effective technology fits the brand

Well-located but smaller properties are often hard to operate profitably as full-service hotels. (See [European Hotel Sector: Demand-driven transformation](#) for detail). These are ideal candidates for technology implementation and repositioning as digital brands with few employees and minimal amenities. Given the high reliance on technology in these cases, hotel performance depends significantly on its effective implementation and management. Guests must be able to meet their needs (i.e., room access, housekeeping requests) digitally, with the easy option of contacting a human staff member, if necessary. Likewise, the technology tools must equip employees to serve guests efficiently and effectively.

With a luxury or lifestyle brand, in contrast, technology augments rather than replaces human service. Its effectiveness is no less important, though. Discerning guests at these types of properties expect technology to function as advertised, weaved into the overall guest experience to add value. Perhaps even more important than guest-facing technologies, back-end systems must enable efficient and effective hotel management to ensure the profitability of this higher-touch model.

Effective technology fits guests' expectations

Guests have different expectations depending on the product they've chosen. If a guest visits a hotel that's very cost-efficient, well-located, and tech-focused, they won't expect to be greeted by a team of staff members with a glass of champagne and a warm towel. They likely will expect a seamless app-based check-in process, digital room key, and virtual agent for requests and questions.

On the other hand, guests at a luxury hotel likely do expect a glass of champagne and a warm towel. Again, technology is an enabler of human interaction, not a replacement for it; technology enables the hotel to deliver just the right type of champagne to suit the guests' known tastes.

Bottom line

Implementing AI and other technologies can be a very effective component of a value creation strategy in the European hotel sector. By enhancing hotel revenue and profitability significant additional real estate value can be unlocked for investors. There is a cost, of course, including the technology itself, its implementation, and training management and staff to utilise it. For historically undercapitalised properties in particular, the ROI can be quite significant.

Now is the time for investors to capitalise on the opportunity—as digital transformations become more widespread, the value creation opportunity diminishes.

Risk Considerations

Investing involves risk, including possible loss of principal. Past Performance does not guarantee future return. All financial investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed. Potential investors should be aware of the risks inherent to owning and investing in real estate, including value fluctuations, capital market pricing volatility, liquidity risks, leverage, credit risk, occupancy risk and legal risk. All these risks can lead to a decline in the value of the real estate, a decline in the income produced by the real estate and declines in the value or total loss in value of securities derived from investments in real estate.

International investing involves greater risks such as currency fluctuations, political/social instability, and differing accounting standards.

Important information

This material covers general information only and does not take account of any investor's investment objectives or financial situation and should not be construed as specific investment advice, a recommendation, or be relied on in any way as a guarantee, promise, forecast or prediction of future events regarding an investment or the markets in general. The opinions and predictions expressed are subject to change without prior notice. The information presented has been derived from sources believed to be accurate; however, we do not independently verify or guarantee its accuracy or validity. Any reference to a specific investment or security does not constitute a recommendation to buy, sell, or hold such investment or security, nor an indication that the investment manager or its affiliates has recommended a specific security for any client account.

Subject to any contrary provisions of applicable law, the investment manager and its affiliates, and their officers, directors, employees, agents, disclaim any express or implied warranty of reliability or accuracy and any responsibility arising in any way (including by reason of negligence) for errors or omissions in the information or data provided. All figures shown in this document are in U.S. dollars unless otherwise noted.

This material may contain 'forward looking' information that is not purely historical in nature. Such information may include, among other things, projections and forecasts. There is no guarantee that any forecasts made will come to pass. Reliance upon information in this material is at the sole discretion of the reader.

This material is not intended for distribution to or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

This document is issued in:

- The United States by Principal Global Investors, LLC, which is regulated by the U.S. Securities and Exchange Commission.
- Europe by Principal Global Investors (Ireland) Limited, 70 Sir John Rogerson's Quay, Dublin 2, D02 R296, Ireland. Principal Global Investors (Ireland) Limited is regulated by the Central Bank of Ireland. Clients that do not directly contract with Principal Global Investors (Europe) Limited ("PGIE") or Principal Global Investors (Ireland) Limited ("PGII") will not benefit from the protections offered by the rules and regulations of the Financial Conduct Authority or the Central Bank of Ireland, including those enacted under MiFID II. Further, where clients do contract with PGIE or PGII, PGIE or PGII may delegate management authority to affiliates that are not authorised and regulated within Europe and in any such case, the client may not benefit from all protections offered by the rules and regulations of the Financial Conduct Authority, or the Central Bank of Ireland. In Europe, this document is directed exclusively at Professional Clients and Eligible Counterparties and should not be relied upon by Retail Clients (all as defined by the MiFID).
- United Kingdom by Principal Global Investors (Europe) Limited, Level 1, 1 Wood Street, London, EC2V 7 JB, registered in England, No. 03819986, which is authorized and regulated by the Financial Conduct Authority ("FCA").
- United Arab Emirates by Principal Global Investors LLC, a branch registered in the Dubai International Financial Centre and authorized by the Dubai Financial Services Authority as a representative office and is delivered on an individual basis to the recipient and should not be passed on or otherwise distributed by the recipient to any other person or organisation.
- Singapore by Principal Global Investors (Singapore) Limited (ACRA Reg. No. 199603735H), which is regulated by the Monetary Authority of Singapore and is directed exclusively at institutional investors as defined by the Securities and Futures Act 2001. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.
- Australia by Principal Global Investors (Australia) Limited (ABN 45 102 488 068, AFS Licence No. 225385), which is regulated by the Australian Securities and Investments Commission and is only directed at wholesale clients as defined under Corporations Act 2001.
- This document is marketing material and is issued in Switzerland by Principal Global Investors (Switzerland) GmbH.
- Hong Kong SAR (China) by Principal Asset Management Company (Asia) Limited, which is regulated by the Securities and Futures Commission. This document has not been reviewed by the Securities and Futures Commission.
- Other APAC Countries/Jurisdictions, this material is issued for institutional investors only (or professional/sophisticated/qualified investors, as such term may apply in local jurisdictions) and is delivered on an individual basis to the recipient and should not be passed on, used by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

Principal Global Investors, LLC (PGI) is registered with the U.S. Commodity Futures Trading Commission (CFTC) as a commodity trading advisor (CTA), a commodity pool operator (CPO) and is a member of the National Futures Association (NFA). PGI advises qualified eligible persons (QEPs) under CFTC Regulation 4.7.

Principal Funds are distributed by Principal Funds Distributor, Inc.

©2024 Principal Financial Services, Inc. Principal®, Principal Financial Group®, Principal Asset Management, and Principal and the logomark design are registered trademarks and service marks of Principal Financial Services, Inc., a Principal Financial Group company, in various countries around the world and may be used only with the permission of Principal Financial Services, Inc. Principal Asset ManagementSM is a trade name of Principal Global Investors, LLC. Principal Real Estate is a trade name of Principal Real Estate Investors, LLC, an affiliate of Principal Global Investors.