



Shiji

AI in Hospitality:

# The Guide to Successful Implementation

2023 SHIJI GROUP

# Contents

01. Welcome to the new era of AI-driven hospitality	P.3
02. AI & revenue management	P.4
03. Generative AI: all you need to know	P.7
04. Personalise guest experiences using AI	P.9
05. How will AI work with search engines	P.11
06. Will AI impact hotel jobs?	P.13
07. Managing the risks of AI	P.14
08. What next?	P.15



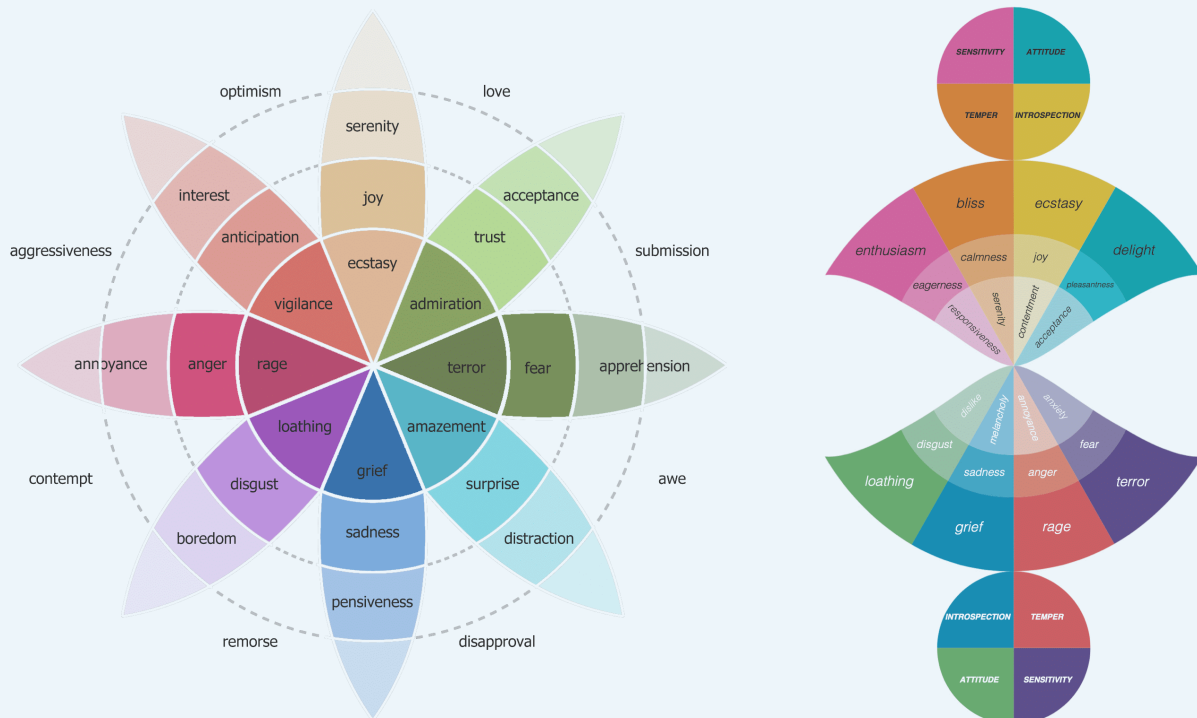
# Welcome to the New Era of AI-Driven Hospitality

Whether you love it or hate it, AI has firmly landed in our professional and working lives, and the hospitality sector is no exception. When applied correctly and responsibly, it has the potential to revolutionize the hospitality industry and usher in a new era of innovation and transformation.

The panelists shed light on the significance of AI and its applications in the context of hotels, highlighting both opportunities and challenges that hospitality professionals are set to face when embracing this technology-driven future.

In this guide, we explore the profound impact of AI on the hospitality sector and provide insights from our recent webinar featuring a panel of industry (and AI!) experts.

*Emotion detection algorithms for news and social media coverage help to investigate trends and differing perceptions of various stakeholder groups.*



Source: [www.webyzard.com/emotion-detection/](http://www.webyzard.com/emotion-detection/)

# AI & Revenue Management

AI has revolutionized revenue management systems, empowering hotels to make data-driven decisions with speed and precision. These systems leverage AI algorithms and machine learning techniques to analyze vast amounts of data and generate valuable insights that drive revenue optimization.

By automating pricing and forecasting processes, AI enables revenue managers to make informed decisions based on real-time market dynamics, competitor analysis, demand patterns, and other relevant factors.



*“96% of all the pricing decisions that are being made (by AI) get accepted without anyone adjusting or overriding them. Millions of decisions are being made every year and we find that AI does the job better over a period of time than a human can.”*

**Klaus Kohlmayr, Chief Evangelist & Development Officer, IDEaS.**

## 5 Benefits of AI in Optimizing Pricing And Forecasting Decisions:

1

**Enhanced Accuracy:** AI algorithms process vast amounts of data and identify patterns and trends that may not be immediately apparent to humans. This leads to more accurate demand forecasting and pricing decisions, minimizing the risk of underpricing or overpricing hotel rooms.

2

**Real-time Market Insights:** AI-powered revenue management systems continually analyze market dynamics, competitor pricing, and other relevant factors in real-time. This enables revenue managers to make timely adjustments to room rates and optimize revenue based on the latest market conditions.

3

**Improved Efficiency:** AI automates time-consuming tasks, such as data analysis and report generation, enabling revenue managers to focus on strategic decision-making. This improves efficiency and allows revenue managers to handle larger portfolios of hotels while maintaining high-quality decision-making.

4

**Consistent Performance:** AI-powered systems deliver consistent performance and eliminate biases or inconsistencies that may arise from human decision-making. By relying on data-driven insights, hotels can achieve more reliable and predictable revenue outcomes.

5

**Scalability:** AI enables revenue management systems to handle large volumes of data and make decisions at scale. This scalability is especially valuable for hotel chains and organizations managing multiple properties, as AI can analyze vast amounts of data across various locations and deliver insights and recommendations tailored to each property's unique characteristics.

*This is a list of the most important hospitality technology providers on the planet.*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. **Shiji**
5. \_\_\_\_\_

*Can you guess who the others are?*

We've come a long way, and that is something we are proud of. Since entering the global market of hotel tech providers five years ago, we have worked hard to earn our place as one of the best. It is an honour to be on the shortlist, and it is something we don't take for granted.

What keeps us going? Knowing that our entire team is working towards creating better product and better services for our clients, every day. Who knows, in five more years we may even be at the #1 spot.

**Shiji**



shijigroup.com



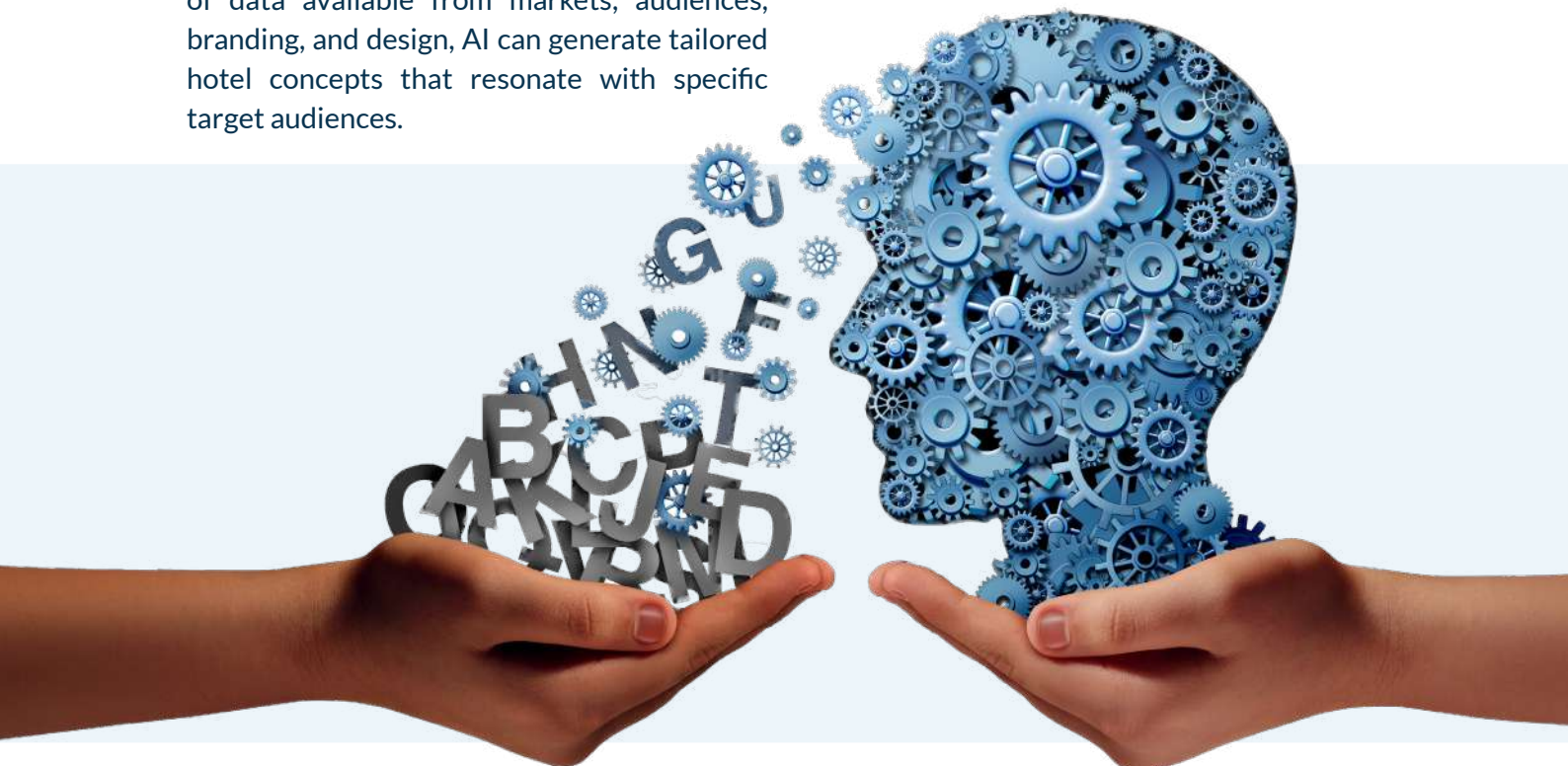
# Generative AI: All You Need to Know

## But What is Generative AI?

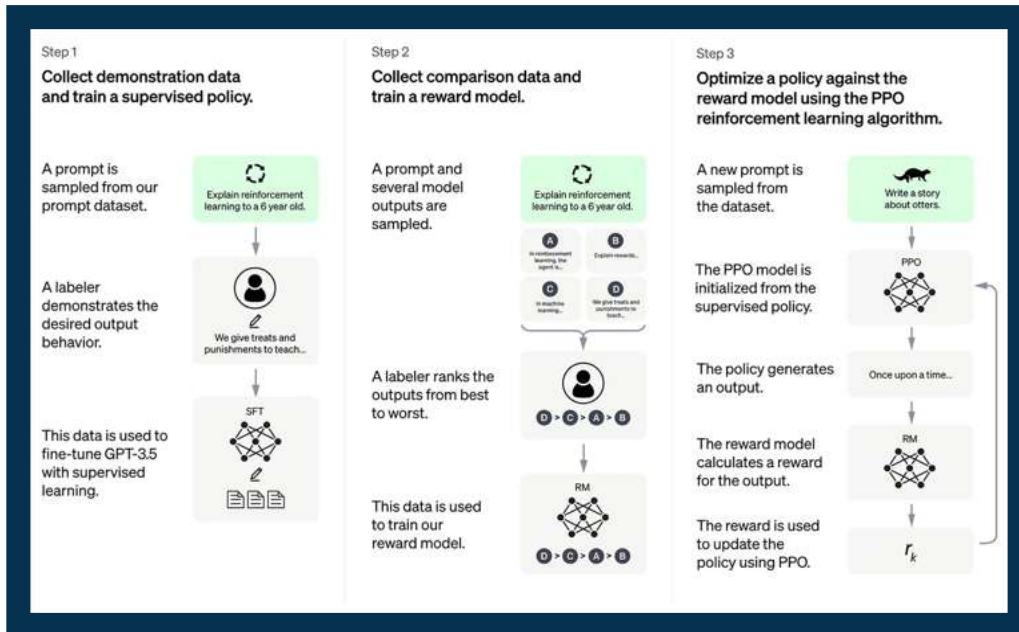
The term refers to a branch of artificial intelligence that focuses on creating new content, ideas, or solutions. It involves training models to generate original and creative outputs based on patterns and data. In the context of the hospitality industry, generative AI can be used to develop new hotel concepts, optimize processes, and enhance guest experiences.

Generative AI holds tremendous potential for the hospitality industry, opening up exciting opportunities for innovation and growth. For example, generative AI has the ability to transform the process of developing new hotel concepts. By leveraging the vast amounts of data available from markets, audiences, branding, and design, AI can generate tailored hotel concepts that resonate with specific target audiences.

Sustainability is a pressing concern for the hospitality industry, with regulations and consumer demand driving the need for eco-friendly practices. Generative AI can play a significant role in advancing sustainability efforts in hotels. By analyzing data and optimizing building designs, AI can contribute to reducing the environmental footprint of hotels. The integration of generative AI can lead to the emergence of new hotel brands with innovative concepts that are more energy-efficient, eco-friendly, and aligned with sustainable practices.



# How ChatGPT Works



<https://www.wired.co.uk/article/how-chatgpt-works-large-language-model>

For instance, by leveraging data from point-of-sale systems, AI can generate tailored menus that minimize food waste and perfectly match guests' preferences. This concrete application demonstrates how generative AI can enhance sustainability efforts while delivering personalized experiences.

Another area where generative AI is poised to make an impact is in content management

systems (CMS) and website management. The integration of generative AI into CMS platforms can revolutionize the way hotels build and manage their websites. By leveraging AI capabilities, marketing teams can automate the creation of new pages, connect with email data for personalized content, and dynamically adapt website content based on user preferences.



*"I see many opportunities for generative AI in the hospitality industry, such as creating tailored hotel concepts for specific target audiences and contributing to sustainability efforts."*

**Sebastian Felix, Founder, Influence Society.**

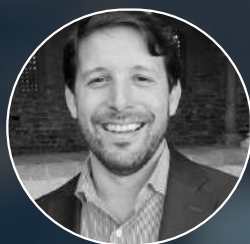


# Personalise Guest Experiences Using AI

## Gone Are The Days of Generic Interactions And One-Size-Fits-All Service.

AI unlocks endless possibilities for guest services, enabling hotels to provide proactive and anticipatory experiences.

From AI-powered chatbots that swiftly respond to guest inquiries to virtual concierges offering personalized recommendations, technology seamlessly integrates with human touchpoints, elevating the guest experience to new heights.



*«AI can predict guest needs and plan personalized touchpoints, enhancing their overall stay experience.»*

Rafael Patiño, Chief Product Officer,  
Shiji Guest Solutions

# Personalise Guest Experiences Using AI

1

**Arrival:** Imagine arriving at your hotel, and the AI-powered system knows your preferences. It seamlessly orchestrates a warm welcome, assigning you a room with your favorite view, temperature, and amenities. Throughout your stay, AI continues to personalize your experience, intuitively recommending activities, dining options, and local attractions based on your interests and previous interactions.

2

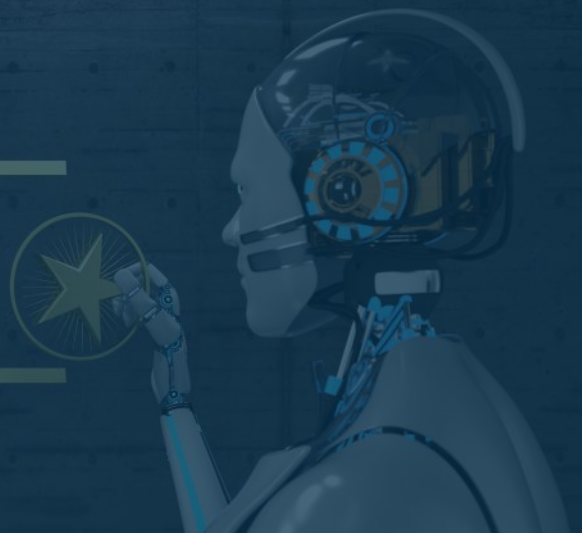
**F&B:** Imagine stepping into a restaurant where the AI system, armed with data from your previous visits, suggests a perfectly tailored menu, taking into account your dietary restrictions, preferences, and past dining experiences. It's a culinary journey crafted specifically for you, ensuring every bite is a delight.

3

**Operational efficiency:** AI empowers hotels to make data-driven decisions that enhance operational efficiency. It optimizes processes such as inventory management, resource allocation, and service delivery, ensuring seamless operations behind the scenes. As hotels harness the power of AI, they can allocate their resources effectively, minimizing waste, and maximizing guest satisfaction.

4

**Working with staff:** The future of guest experiences lies in the harmony between AI and human expertise. While AI enhances efficiency and personalization, the human touch remains paramount, providing warmth, empathy, and genuine connections. It's a symphony of technology and hospitality, where AI acts as an invaluable partner, amplifying the hotel's ability to create truly remarkable memories for every guest.



# How Will AI Work With Search Engines?

“The future of search engines in the AI space is uncertain. Biases, decision-making algorithms, and data availability will play significant roles in shaping the landscape of AI-powered search.” Rafael Patino, Chief Product Officer, Shiji Guest Solutions

This uncertainty stems from the evolving nature of AI and its potential to disrupt traditional search engine dominance. It is crucial to acknowledge that biases, decision-making processes, and data availability play significant roles in shaping AI-powered search experiences and the future of search engines in the AI era hinges on the industry’s ability to address these biases, promote fairness, and deliver accurate and relevant information.

The screenshot shows a Bing AI search interface. At the top, there is a search bar with the text: "I am going on a business trip to Barcelona next week Tuesday. Please search for 10 good hotel options, within 30min walk to Plaza Catalunya and a budget between 125 eur to 200 eur per night. trip is for 2 nights. make a comparison table of the options available." Below this, there are two green checkmarks indicating the search progress: "Searching for: 10 good hotel options within 30min walk to Plaza Catalunya Barcelona 125 eur to 200 eur per night" and "Generating answers for you...". The main content is a table of hotel options:

Hotel Name	Distance from Plaza Catalunya	Price per night
Catalonia Plaza Catalunya	1 min walk	€125 - €200
H10 Universitat Hotel	7 min walk	€150 - €200
H10 Metropolitan Hotel	8 min walk	€125 - €200
HCC Regente Hotel	9 min walk	€125 - €200
HCC Montblanc Hotel	10 min walk	€125 - €200
Olivia Balmes Hotel	12 min walk	€150 - €200
HCC St. Moritz Hotel	13 min walk	€125 - €200
HCC Taber Hotel	14 min walk	€125 - €200
HCC Lugano Hotel	15 min walk	€125 - €200
H10 Casanova Hotel	16 min walk	€150 - €200

Below the table, there is a prompt: "I hope this helps! Let me know if you have any other questions." and a "Learn more" section with links to "1. bing.com", "2. cataloniahotels.com", "3. cataloniahotels.com", and "+3 more". At the bottom, there is a map of Barcelona and a search bar with the text "Ask me anything...".

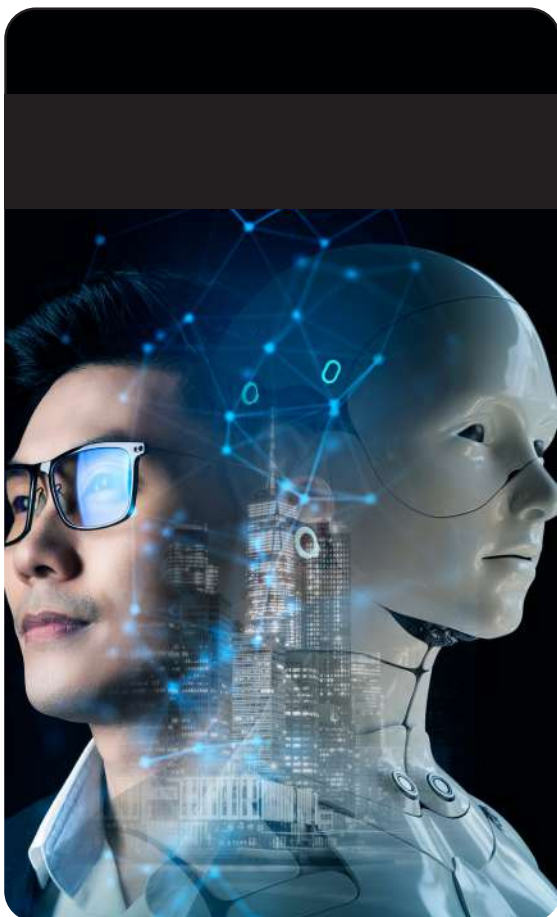
Annotations on the screenshot:

- A green callout box points to the search prompt: "Long unstructured search prompt of all conditions one can think of."
- A green callout box points to the table: "Comparison table generated based on search criteria, not an A/B tested average."
- A green callout box points to the search bar: "Follow up prompt to refine or restart."



# How Will AI Work With Search Engines?

Furthermore, the availability and quality of data play a significant role in shaping AI-powered search. Access to reliable, comprehensive, and diverse data sets enables AI models to deliver more accurate and relevant search results. As AI continues to evolve, there is a need for continued data refinement, ensuring that search engines have access to high-quality data that reflects the diversity of user needs and preferences.



**Tim Brooks** • 3rd+

1mo (edited) ...

Strategy | Growth | AI Solutions

Yes [Martin Soler](#), yes! Sooner than most consumers expect, we'll be able to communicate in native speech patterns to prompt our AI companions to compare and contrast options as you've illustrated. Some AI-powered tools will be inclined to use the ad-supported model to monetize its services, populating consumer-facing apps with the equivalent of Google promoted results.

However, I expect that many enterprises will adopt subscription services as intelligent assistants that help to reduce friction from the travel purchasing experience; they can afford it and an AI travel assistant could help facilitate compliance.

Like · 🗨️ 1 | Reply



**Frederic Gonzalo** • 3rd+

1mo ...

Travel & Hospitality expert. Digital Marketing Speaker & Consultant. ...

Generative AI is today's party trick, just like TikTok was in 2018-2019, or Instagram circa 2015 and Facebook circa 2010-2012. But with much, much more disruption potential as you mention here. Social media were impacting mostly on the front end, with customer-facing interactions, while AI will impact operations, design, marketing, advertising, research, legal and more!

Indeed, it will be interesting to see how hotel search (and search for travel in general, including airlines, but also restaurants, attractions and so on) will evolve in coming months and years. This stuff is evolving so fast, it's mind-boggling!

Like · 🗨️ 2 | Reply · 1 Reply



# Will AI Impact Hotel Jobs?

As AI continues to advance in the hospitality industry, there are understandable concerns about the potential displacement of hotel jobs. AI technology allows for the automation of repetitive and manual tasks, freeing up employees to focus on more strategic and value-added responsibilities.

By automating routine operations through AI, hotels can achieve greater efficiencies and optimize resources, leading to cost savings and improved productivity. This, in turn, enables employees to take on more strategic roles that require human creativity, critical thinking, and personalized interactions with guests.

While AI may streamline certain processes, it doesn't replace the importance of human touch and expertise in the hospitality industry. Hotel jobs are evolving rather than disappearing, and the key lies in adapting to new technologies and embracing the opportunities they bring.

AI enables revenue managers to focus on rate setting, demand forecasting, and strategic decision-making. It allows marketing teams to develop targeted campaigns and personalized guest experiences. AI also assists employees in providing exceptional service by equipping them with insights and recommendations based on guest preferences and historical data.

The future of hotel jobs with AI lies in a harmonious collaboration between technology and human expertise. Hoteliers must embrace the shift in tasks and proactively upskill their workforce to align with the changing landscape. By doing so, employees can thrive in roles that require creativity, empathy, and the ability to build genuine connections with guests.



*“It’s a shift of tasks, not a job that will go away. AI allows employees to focus on more strategic responsibilities and make decisions at scale.”*

**Klaus Kohlmayr, Chief Evangelist & Development Officer, IDEaS.**

# 07 Managing the Risks of AI

“We have to be very critical about how we’re approaching AI. While it offers exciting opportunities, there are inherent risks, such as machines surpassing human intelligence and the proliferation of misinformation. It’s important to implement responsible AI practices and fact-check the information we receive.” Kohlmayr, Chief Evangelist & Development Office, IDeaS.

By embracing responsible AI practices and fostering a collaborative partnership between humans and machines, the hospitality industry can harness the benefits of AI while mitigating potential risks.

When wielded ethically and thoughtfully, AI becomes a powerful ally in elevating guest experiences, optimizing operations, and driving innovation.

## Seven Ways To Mitigate The Risks Of AI

1

**Be responsible with AI implementation:** Prioritize transparency, ethics, and accountability in your organization’s AI practices.

2

**Exercise caution and skepticism:** Fact-check AI-generated answers and be aware of potential biases and inaccuracies.

3

**Emphasize human judgment and critical thinking:** Remember that AI is a tool, and human decision-making is still essential.

4

**Establish robust guidelines:** Set clear guidelines for data collection, model training, and decision-making to ensure ethical AI practices.

5

**Stay informed and adapt:** Keep up with the latest developments in AI, including capabilities, limitations, and potential biases.

6

**Monitor and audit AI systems:** Regularly assess AI performance and conduct ethical assessments to identify and address unintended consequences or biases.

7

**Foster a culture of learning:** Encourage continuous learning and adaptability to stay ahead of AI advancements and ethical considerations.





# What Next?

In this rapidly evolving digital landscape, the potential of AI in the hospitality industry is immense. As we've explored in this guide, AI has already made significant strides in revenue management, guest experience, sustainability efforts, and more.

However, it's important for hospitality professionals to embrace this potential while also understanding the implications and challenges that come with it. While AI brings numerous benefits, such as enhanced

efficiency, personalization, and data-driven decision-making, it's crucial to manage its implementation responsibly.

AI is undoubtedly transforming the industry, and by responsibly embracing its potential hoteliers are enabled to strike the delicate balance between technology and human touch, ultimately redefining the future of hospitality.



## Additional resources for general education:

- 1) How ChatGPT Works Technically (ByteByteGo)
- 2) AI Canon (a16z.com)
- 3) Skift, the Chatbot (Skift)
- 4) Language Models Can Explain Neurones in Language Models (OpenAI)

## CONTACT US

**NORTH AMERICA**  
sales-us@shijigroup.com  
Tel: +1 (404) 948-4001

**EMEA**  
sales-eu@shijigroup.com  
sales-uk@shijigroup.com  
Tel: +49 89 716 718 510

**LATAM**  
sales-latam@shijigroup.com

**ASIA/PACIFIC**  
sales-ap@shijigroup.com  
Tel: +65 6240 7400

**GREATER CHINA**  
sales@shijigroup.com  
Tel: +86 10 5932 5388 - 2

**CANADA**  
sales-can.list@shijigroup.com

## CONNECT WITH US



facebook.com/ShijiGroup



twitter.com/shijigroup



linkedin.com/company/shijigroup

