

AI Application in Hospitality Industry: A Case of FlyZoo Hotel



Source: Unsplash (2023)

Background

Artificial Intelligence (AI) has been widely used in the hospitality industry to improve customer experience and operation efficiency. AI-powered chatbots and virtual assistants enable service providers to offer 24/7 customer service and instant support to their customers. In a physical setting, AI-driven robots can help carry out tasks such as self-check-in and room service. Furthermore, AI can analyze historical data and users' preferences to provide personalized travel recommendations. On managerial level, AI is also used in data analytics and forecasting in order to optimize pricing, marketing, and operational strategies.

As the first "Future hotel" of the Alibaba Group (阿里巴巴), FlyZoo Hotel (杭州菲住布渴酒店) was opened on December 18, 2018 (Ecommerce Strategy China, 2018). This "Future hotel" emphasizes introducing AI technology to every aspect of its service. For example, face recognition equipment is installed at the lobby entrance, reception desk, and room door lock (CNBC, 2019). Guests can check-in and enter their room simply by scanning their faces.

The hotel also has its AI voice assistant in each guest room called "TmallGenie" (天猫精灵). Guests can control the room's lighting, air conditioning, TV, curtains, and other equipment just by waking up the AI voice assistant. Moreover, the hotel has a total of 3 service robots, while there are two robots responsible for concierge and room services, there is one robot named "Xiao Fei" (小飞), who is stationed in the lobby and responsible for receiving and navigating the arriving guests. "Xiao Fei" also possesses the ability to sing, dance, and storytelling. Its entertaining feature appeals to families with young children.

Challenges

While AI-driven automated technology may offer convenient and efficient services to the guests,

- It compromises service quality as some guests may prefer face-to-face interaction with a human staff.
- A tech-intensive business like this demands a certain level of familiarization towards the machines and AI technology from its employees.
- It requires a huge amount of capital to cover the maintenance cost and training cost.
- Room for innovation and product development is limited for the hotel as developing new features or purchasing new models of robots will be very costly.

Discussion Questions

1. How can hotels balance automation with the need for human staff?
2. Do you think the long-term benefits of AI technology for hotels like FlyZoo are worth investing in? Why or why not?
3. How do you see the role of entertainment-focused robots, like "Xiao Fei," in enhancing the family experience at hotels? Is there any potential drawback?
4. What future trends do you foresee in AI technology within the hospitality industry?

References

- CNBC. (2019). Facial recognition is coming to hotels. I stayed at Alibaba's hotel of the future. CNBC Travel. Retrieved from <https://www.cnbc.com/2019/10/04/alibaba-china-flyzoo-hotel-uses-facial-recognition-tech-and-robots.html>
- Ecommerce Strategy China. (2018). Alibaba's Future Hotel was launched in Hangzhou. Retrieved from <https://www.ecommercestategychina.com/column/alibabas-future-hotel-was-launched-in-hangzhou>
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Keywords

- Hotel
- Artificial intelligence
- Service automation
- Robot
- Customer experience
- Technology

Acknowledgement

This case study is based on and adapted from the work of Master's student Yufan WEN from the School of Hotel and Tourism Management at The Hong Kong Polytechnic University.

人工智能在酒店行业的应用: FlyZoo 酒店案例



Source: Unsplash (2023)

背景

人工智能技术已在酒店业得到广泛应用，旨在提升客户体验与运营效率。由 AI 驱动的聊天机器人和虚拟助手，使服务提供商能够为客户提供全天候的即时支持与服务。在实际环境中，AI 驱动的机器人可协助完成自助入住、客房服务等任务。此外，AI 能够分析历史数据与用户偏好，从而提供个性化的出行推荐。在管理层面上，AI 也被应用于数据分析和预测，以优化定价、营销及运营策略。

作为阿里巴巴集团旗下的首家“未来酒店”，FlyZoo 酒店（杭州菲住布渴酒店）于 2018 年 12 月 18 日正式开业（Ecommerce Strategy China, 2018）。这家“未来酒店”的核心在于将 AI 技术融入服务的方方面面。例如，酒店在大堂入口、前台及客房门口均配备了面部识别设备（CNBC, 2019）。宾客仅需“刷脸”即可完成入住并进入房间。

酒店还在每间客房内配备了名为“天猫精灵”的 AI 语音助手。宾客仅需唤醒语音助手，便可控制房间内的灯光、空调、电视、窗帘等设备。此外，酒店共部署了 3 台服务机器人。其中两台负责礼宾与客房服务，另一台名为“小飞”的机器人则常驻大堂，负责接待并引导到店宾客。“小飞”还具备唱歌、跳舞和讲故事的能力。其娱乐功能尤其受到携带儿童家庭的喜爱。

挑战

尽管 AI 驱动的自动化技术能为宾客提供便捷高效的服务，它也带来了一系列挑战：

- 可能对服务质量产生影响，因为部分宾客更倾向于与真人服务人员面对面互动。
- 此类技术密集型业务要求员工具备对机器与 AI 技术一定的熟悉度。
- 需要投入大量资金以覆盖维护成本与员工培训成本。
- 酒店的创新与产品开发空间受限，因为开发新功能或采购新型机器人通常成本高昂。

讨论问题

1. 酒店应如何平衡自动化技术与对真人服务人员的需求？
2. 您认为对于 FlyZoo 这类酒店而言，投资 AI 技术的长期效益是否值得？请说明理由。
3. 您如何看待诸如“小飞”这类以娱乐功能为主的机器人在提升酒店家庭宾客体验中的作用？是否存在潜在不足？
4. 您预见人工智能技术在酒店业中将有哪些未来发展趋势？

参考文献

CNBC. (2019). Facial recognition is coming to hotels. I stayed at Alibaba's hotel of the future. CNBC Travel. Retrieved from <https://www.cnbc.com/2019/10/04/alibaba-china-flyzoo-hotel-uses-facial-recognition-tech-and-robots.html>

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关键词

- 酒店
- 人工智能
- 服务自动化
- 机器人
- 客户体验
- 科技

致谢

本案例研究基于香港理工大学酒店及旅游管理学院硕士生 Yufan WEN 的工作并加以改编。

人工智慧在酒店行業的應用：FlyZoo 酒店案例



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背景

人工智慧技術已在酒店業得到廣泛應用，旨在提升客戶體驗與營運效率。由 AI 驅動的聊天機器人和虛擬助手，使服務提供商能夠為客戶提供全天候的即時支持與服務。在實際環境中，AI 驅動的機器人可協助完成自助入住、客房服務等任務。此外，AI 能夠分析歷史數據與用戶偏好，從而提供個人化的出行推薦。在管理層面上，AI 也被應用於數據分析和預測，以優化定價、行銷及營運策略。

作為阿里巴巴集團旗下的首家「未來酒店」，FlyZoo 酒店（杭州菲住布渴酒店）於 2018 年 12 月 18 日正式開業（Ecommerce Strategy China, 2018）。這家「未來酒店」的核心在於將 AI 技術融入服務的方方面面。例如，酒店在大堂入口、前台及客房門口均配備了面部識別設備（CNBC, 2019）。賓客僅需「刷臉」即可完成入住並進入房間。

酒店還在每間客房內配備了名為「天貓精靈」的 AI 語音助手。賓客僅需喚醒語音助手，便可控制房間內的燈光、空調、電視、窗簾等設備。此外，酒店共部署了 3 台服務機器人。其中兩台負責禮賓與客房服務，另一台名為「小飛」的機器人常駐大堂，負責接待與引導到店賓客。「小飛」還具備唱歌、跳舞和講故事的能力。其娛樂功能尤其受到攜帶兒童家庭的喜愛。

挑戰

儘管 AI 驅動的自動化技術能為賓客提供便捷高效的服務，它也帶來了一系列挑戰：

- 可能對服務品質產生影響，因為部分賓客更傾向於與真人服務人員面對面互動。
- 此類技術密集型業務要求員工具備對機器與 AI 技術一定的熟悉度。
- 需要投入大量資金以涵蓋維護成本與員工培訓成本。
- 酒店的創新與產品開發空間受限，因為開發新功能或採購新型機器人通常成本高昂。

討論問題

1. 酒店應如何平衡自動化技術與對真人服務人員的需求？
2. 您認為對於 FlyZoo 這類酒店而言，投資 AI 技術的長期效益是否值得？請說明理由。
3. 您如何看待諸如「小飛」這類以娛樂功能為主的機器人在提升酒店家庭賓客體驗中的作用？是否存在潛在不足？
4. 您預見人工智慧技術在酒店業中將有哪些未來發展趨勢？

參考文獻

- CNBC. (2019). Facial recognition is coming to hotels. I stayed at Alibaba's hotel of the future. CNBC Travel. Retrieved from <https://www.cnbc.com/2019/10/04/alibaba-china-flyzoo-hotel-uses-facial-recognition-tech-and-robots.html>
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致謝

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