

Artificial Intelligence in Hotel Management Experiences of Switzerland and China

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Abstract:

Artificial Intelligence nowadays prevails in many fields; medicine, education, military, and banking. The current paper aims at shedding light on the role of artificial intelligence in hotels management by using smart applications and robots to improve guests' service, maintaining their loyalty, along with marketing the hotel service and enhancing safety, and eventually increasing incomes. It is noteworthy that this paper included experiences of China and Switzerland using robots and Chatbots hotels, and found that the new experience as much as it has positive sides, it also had negative reviews as any new experience takes time and effort to be improved.

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1. INTRODUCTION

The first thing that most of people think about when hearing the term Artificial Intelligence is generally, robots. May be because movies and novels have illustrated it that way, but in fact, in the AI concept- machines and computers can easily imitate, simulate human intelligence and execute tasks of different difficulty degrees. Goals of AI include learning, reasoning, and perception. Which means, replacing us humans to solve some complex tasks; not just repeated mechanical activity but instead tasks that require human wisdom to participate in.

In terms of software engineering, AI is a set of complex algorithms composed of programming codes based on data used to train the computer and enable it to deal with new data that it has never dealt with before. It is like humans taking decisions currently, based on previously lived experiences.

For business, AI became more reliable and more attractive, because it is considered as an economical solution reducing many working hours and it can work all the time. In this sense, industrial, tourism, and hotel companies tended to apply AI to facilitate travelers' lives around the world while changing the way they plan their travels, starting from scheduling, services provided in airports to discovering restaurants, museums, entertainment places, and hotel services.

Companies today has the ability to gather, store and analyze big data- this helps them enable AI and using it in the missions which may make them gain a good reputation that attracts clients, in addition to improving the allocation of services and recommendations provided to the clients, along with quick response, for travelers no longer need visiting travel agencies to book their flights or look for places to stay. Yet assistants of AI and chat bots are now trendier, especially when synchronized with social media i.e. easier to be used and more accessible for clients.

It is expected that travel, booking flights and touristic activities will be more designed for individual needs thanks to AI potentials, for smart systems can complete each other, for instance: wearable fitness devices and smart watches, so, smartphones applications can control health conditions of the travelers and passengers, it can also suggest for them activities that

are safer and tracks with less traffic jam during their movements and more suitable for them.

Upon what has been previously said, the following problem is expressed: What is the role of AI in hotels management?

Some sub-questions come under this problem

- What is the AI?
- What is the importance of AI?
- How can AI applications support hotels in the management field?

2. Definition of Artificial Intelligence

AI is a field of computer science, a pillar that technology industry is based on, in the current century. Generally Artificial Intelligence is abbreviated as AI, and defined as the ability of machines and computers to execute certain tasks which simulates intelligent creatures, for instance thinking, or learning from the previous experiences, and other operations that require a mental process. AI aims at creating intelligent systems acting like humans i.e. learns and understands, in a way that it provides to the users different services; education, guiding, interaction...etc. In other words, AI will replace humans in many activities which require lots of efforts or in some accurate cases where many working hours and concentration are needed, for human being if he/she works for long hours, they need a rest and cannot work all day long, unlike machine, able to continue working day and night without feeling board with the same energy, success, speed and precision (Mehdi, 2020, p. 41).

The term Artificial Intelligence is composed of Artificial, which refers to everything made by humans rather than things existing naturally, and Intelligence which refers to the ability to understand and learn new conditions. This makes AI one of the modern sciences linked to computers always searching for developed and creative methods to execute tasks and conclusions- even within narrow limits- the goal after AI is the reconstruction by using the artificial tools. It is also defined as the science, which enables machines to do things requiring intelligence and which have been already done by human (Souidi, DJahni, 2023, p.26)

It is also possible to define AI as a scientific system including ways of manufacturing and engineering devices and intelligent programs; however the objective behind AI is producing independent machines that may perform the complex missions using reflexive processes similar to those of humans. Programs and applications of AI are designed by studying the way humans' brain thinks, and how they learn, decide, and work while solving a problem, and eventually use the results of the study as a basis to develop software and intelligent systems (Moussa & Bilal, 2019, p.20).

3. The Importance of AI

It is noteworthy to mention some aspects showing the importance of AI

- It is expected that AI will contribute in maintaining the accumulated human experiences by transferring them to smart machines.
- Thanks to AI, humans will be able to use the human language when dealing with machines instead of code languages, which will make them accessible by all categories of the society even by people with special needs, hence, dealing with machines was merely for specialists and experienced people.
- AI plays a crucial role in many sensitive fields such as helping in the diagnosis and prescribing medicaments, legal and professional consultation, interactional education, and safety and military field
- Intelligent systems contribute in fields where decisions are made, for these systems have independence, accuracy, and subjectivity, therefore their decisions are from making mistakes, being biased and they are not racist or put any prejudgments, in addition to external and in-person interventions.
- Smart machines reduces many risks and psychological pressure for the sake of human being, it also allows him/her concentrate on things that are more humanistic, by using those machines in heavy dangerous labour, discovering unknown places, participate in rescuing operations during natural catastrophes, not to mention that these machines will have a crucial role in fields with a lot of details and complexity, requiring tiring mental concentration, a continuous thinking and

delicate decisions bearing no mistake or delay at all (Dhafri, 2022, p.09).

- AI may lead to a mechanism that is able to observe students' achievements and tests, and this will give educational staff more time for successful work, AI may also assess students and adapt with their needs, help them learn according to their particular rhythm, in addition to presenting Intelligent Tutoring systems *ITS* as an additional support for students.
- Personal financing applications are a dimension of AI, for they help in cases of financial transactions, with the task office, customs, the salary...etc.
- Banks are now using Chabots Software successfully in order to make their clients aware of the services they provide along with trading with financial transactions that don't require a direct human intervention, they also use AI to improve decision making relative to loans, putting limits to credit, and making the possible investment opportunities known to people. In addition to the role of AI in enabling autonomous vehicles, we can mention that AI technologies are used in managing the traffic, predicting flights delay, and making inland freight and shipping safer and more efficient (Elhadi, 2021).

4. The role of AI in Hospitality

Reeves one of the great pioneers and designers of AI for service of hotels management explains: "AI offers hotels the opportunity to really predict and respond to guest intent in real time. To know what they're thinking, what they're likely to do next. Even before they do". He also claims: "At allora.ai we've analyzed over 400 million online journeys – and counting - to ensure we really know what the guest wants – and what the hotel needs to do to encourage them to book. And once they've booked to ensure they don't cancel their stay" (Hospitalitytech, 2023). In fact, counting makes it easier for the hotel staff predicts, allocate, and plan better services for their costumers which will eventually improve the benchmarking.

a. Hotel Marketing:

Artificial Intelligence is expected to transform hotel marketing by enabling more targeted and personalized marketing campaigns based on individual guest preferences, past behavior and demographics.

AI will automate repetitive and time-consuming tasks such as data analysis, customer segmentation and campaign management allowing hotel marketers to focus on more strategic activities. In addition, artificial intelligence will enable hotel marketers to analyze large amounts of data and use predictive analytics to predict customer behavior and market trends, leading to more effective marketing strategies and data-driven decisions.

Chat bots and virtual assistants will become more prevalent in hotel marketing, allowing hotels to interact with guests in real-time and provide personalized recommendations and offers. AI will play a role in identifying and targeting the most effective influencers for hotel campaigns and helping hotels monitor social media platforms and identify customer feedback, sentiment and brand signals to respond instantly and improve the guest experience. AI will allow hotels to automate and optimize their digital advertising campaigns by identifying the most effective channels, audiences and times to advertise resulting in more efficient use of advertising budget.

b. Hotel Sales & MICE:

Hotel group sales managers can use artificial intelligence (AI) to attract more business travelers by leveraging predictive analytics to forecast future demand for group sales allowing them to proactively target potential business travelers and anticipate changes in demand.

AI-powered personalization and recommendation engines can help create personalized sales pitches and packages tailored to the specific needs of business travelers. AI can automate repetitive tasks such as data entry, follow-up, and lead generation, allowing sales managers to focus on building relationships with key customers and closing deals.

AI-powered chat bots and virtual assistants can provide 24/7 support for business travelers, helping book reservations, answering questions, and making recommendations. AI can also help manage and analyze customer data, identify the most valuable business traveler segments and provide insights into how best to target and engage with them. AI can help with

real-time analytics to track a group's sales performance, identify areas for improvement, and improve by making real-time decisions based on market conditions, guest behavior to meet the MICE concept, i.e. Meetings, Incentives, Experiences and Exhibitions, it is a very expanded form of business tourism based on organizing business events, however it does not exclude the revenues in other words “hotel meetings and corporate events are great way to boost revenue and secure those extra bookings .Developing MICE services is the perfect opportunity to enhance a hotel’s reputation and profile, besides its profitability” (EHL, 2024).

c. Guest Experience:

Artificial Intelligence is set to revolutionize the hotel guest experience in the next 10 years by providing more personalized and efficient service through the use of personalization and recommendation engines, automation of repetitive tasks, virtual assistants, smart room technology and concierge services.

AI will also enhance safety and security by monitoring potential threats and proactively providing guests with the services and amenities they desire. In addition, artificial intelligence will be combined with virtual reality and augmented reality to provide guests with immersive experiences such as virtual tours, virtual room selection and virtual events. Furthermore, AI will enable automated check-out allowing guests to check out of their rooms using their mobile devices or voice commands and receive their bill via email or text message.

d. Human Resources and Labor:

Artificial Intelligence is expected to change recruitment, labor and human resources in the hotel industry in several ways. One way is to automate repetitive tasks such as screening resumes, scheduling interviews, and conducting background checks. This will free up time and resources for HR professionals allowing them to focus on more strategic activities such as building relationships with key clients and providing personalized service to guests. AI can also be used to analyze data and use predictive analytics to predict employee behavior and market trends allowing hotels to

make data-driven decisions and develop more effective recruitment strategies (Hoteltechreport, 2024).

Chatbots and AI-powered virtual assistants can also be used to interact with job applicants and provide personalized assistance and information about open jobs and the application process. AI can also be used to improve scheduling and workforce management by forecasting demand and adjusting staffing levels accordingly resulting in more efficient use of hotel resources. AI can also be used to analyze employee performance, provide feedback, identify training needs, and track employee engagement. By providing insights from data analysis, hotels can implement programs to improve employee retention and satisfaction. AI can be used to enhance employee safety and security by monitoring potential threats and alerting hotel management in the event of an emergency. The integration of AI into recruitment, labor and HR in the hotel industry will bring greater efficiency and effectiveness and provide better service to guests while also supporting and developing employees.

In a world where technology is constantly accelerating, hardly a day goes by without us witnessing new developments in the field of artificial intelligence. One of the sectors that witnessed a significant impact from these developments is the hospitality and hotel sector, where smart machines and software have become an integral part of its operations.

5. Hotel Management with AI

AI in management field can help make operations more efficient and smooth for guests and employees. AI-powered automated systems in hotels can improve inventory management, track and manage energy usage, and optimize housekeeping schedules.

By incorporating AI into operations, managers can explore how to increase efficiency, lower expenses, and create more sustainable environments within hotels and resorts. Below are also some applications of artificial intelligence in hotel management that have been able to achieve remarkable success and improve the guest experience:

a. Chatbots :

The use of smart chat is one of the most common applications in the hospitality industry as it enables hotels to provide fast and efficient

customer service. Guests can communicate with the hotel via smart chat applications to inquire about available services, book rooms, and even order food and drinks (MA Hotels, 2023) . Thanks to machine learning, these robots can improve their performance over time and provide better service to guests. Example: Chatfuel is a smart chat app development platform that helps hotels create and improve smart chat assistants to meet customer needs.

b. Human Resource Management:

Artificial intelligence also helps improve human resource management within hotels. Through data analysis and predictive models, management can anticipate demand for services and determine the appropriate number of employees required to meet this demand. Thus, labor costs can be reduced and the quality of service provided can be improved.

Example: UltiPro is an AI-based HR and payroll management system that helps hotels improve employee management and forecast demand for services

c. Improve guest experience using a smart recommendation system:

Artificial intelligence recommendations play a major role in improving the guest experience, as these recommendations can provide suggestions based on guests' preferences and previous data of their experiences (t2.space, 2023). This includes recommendations for local activities, restaurants and tours; an example is *Triptunern* an AI-based recommendation platform that provides personalized recommendations to guests based on their preferences and interests.

d. Energy Management and Sustainability:

AI can help hotels improve energy and natural resource efficiency, enhancing sustainability efforts. Machine learning technology can be used to analyze energy, water and waste consumption and apply smart solutions to reduce environmental impact. For instance; *Grid4C* is a technology company that uses artificial intelligence to analyze consumption data and provide smart solutions to improve energy efficiency in hotels.

e. Improve Maintenance and Security:

Artificial intelligence can contribute to improving maintenance and security operations in hotels. Through the use of data analysis techniques and cameras equipped with artificial intelligence hotels can identify potential problems and malfunctions before they occur and implement appropriate repairs early. One of the famous companies in security maintaining field is *NETATMO*; a company that provides smart security and maintenance solutions like AI-powered security cameras and smoke sensors that help hotels keep guests and properties safe.

Artificial intelligence represents a great opportunity to improve the quality of services and guest experience in the hotel industry. By strategically exploiting these smart technologies, hotels can enhance service quality and improve efficiency in their operations.

f. Improve Guest Loyalty and Retention:

Artificial Intelligence has become an integral part of various industries, revolutionizing the way businesses operate and interact with customers. Artificial Intelligence has emerged in the hospitality industry as a powerful tool to enhance guest loyalty and retention. By employing AI technology, hotels and other hospitality organizations can deliver personalized experiences, streamline operations, and ultimately foster long-term relationships with their guests.

One of the key benefits of AI in improving tourist loyalty and retention is its ability to deliver personalized experiences. Thanks to artificial intelligence algorithms, hotels can analyze huge amounts of data including tourists' preferences, past behavior and feedback to provide personalized recommendations and offers. By understanding individual preferences, hotels can provide personalized services such as room preferences, dining options, and entertainment activities that meet the unique needs of each guest. This level of personalization not only enhances the guest experience but also increases the likelihood of repeat visits and positive word-of-mouth recommendations.

Moreover, AI can help hotels streamline their operations, leading to improved guest satisfaction and loyalty. For example, AI-powered chatbots can handle routine inquiries and requests, allowing employees to focus on

more complex tasks and provide a faster response. This automation not only enhances efficiency but also ensures consistent and accurate information is provided to guests. Additionally, AI can help manage inventory and forecast demand, allowing hotels to optimize their resources and provide a seamless guest experience. By managing operations efficiently, hotels can enhance guest satisfaction, leading to increased guest loyalty and retention.

AI also plays a critical role in enhancing guest loyalty and retention through its ability to analyze guest feedback and sentiment sent through analysis of online reviews, social media posts and customer surveys. AI algorithms can recognize patterns and trends in guests' emotions. This valuable data allows hotels to act proactively to address any issues or concerns expressed by guests, ensuring a positive experience and preventing potential negative reviews. Furthermore, AI can identify loyal guests and their preferences, allowing hotels to reward them with personalized offers and incentives by recognizing and rewarding loyalty. Hotels can strengthen bonds with their guests, increasing the likelihood of repeat visits and long-term loyalty.

In addition to personalized experiences, streamlined processes, and sentiment analysis, AI can also boost guest loyalty and retention through its predictive power. AI algorithms can analyze historical data, market trends, and guest behavior patterns to predict future preferences and needs. This predictive analysis allows hotels to anticipate guests' needs and proactively provide relevant services and offers. For example, if a guest books spa treatments – treatments that allow for a break from work stress and relaxation with a massage – frequently during their stay, AI can predict this preference and offer a discounted spa package before the guest arrives. By anticipating guest needs, hotels can exceed expectations and create memorable experiences that increase guest loyalty and retention.

6. Experiences

The current study was based on a mixed analysis, allowing a holistic approach combining between qualitative and quantitative research all with analyzing some models and having a glimpse on reviews of guests

a. Artificial Intelligence in Hotels in Switzerland:

Swiss hotels have used artificial intelligence robots to compensate for the growing shortage of workers as travel returns to normal. In the "Avatarion Technologies" booth, the president of the company that specifically provides robots for transporting dishes will provide an explanation of two human-shaped robots, each one meter and twenty centimeters tall, designated to receive customers in the entrance hall. One of them uses the "Chat GPT" program.

When one of them - originally programmed to give guests information about train and plane timetables - was asked, "Where can I order coffee?" In his response, he merely stated that he is "just a robot" and therefore cannot "make coffee" (Asharq, 2023)

However, the second one, who used GPT chat, quickly found the solution after a short search. He also answered that he was not good at making coffee, yet he immediately followed up his response with another phrase: "But I can tell you where to buy a cup of coffee."

The founder of "Avatarion", Jean-Christophe Gostanian, explained to the Agence France-Presse that achieving this required going through "machine learning", that is, "teaching the robot the different variants of the question" and "the answers it can provide."

He notes that "GPT Chat" provides the robot with "a form of intelligence" that allows it, for example, to find an answer to what the "aloe vera massage" offered by the hotel is, as well as "a better understanding of language." "I can speak to him in French, English, German and Chinese and he will understand," he adds. Thus, the robot will be able to help the "concierge" communicate with guests of different nationalities.

In addition to pavilions for companies that supply hotels with soap, furniture, or fitness equipment, the exhibition includes a number of platforms dedicated to technological solutions that allow better management of hotels and bookings.

Gostanian also presents an application that allows communication with an avatar from a smartphone or tablet in order to navigate between the various services provided by the hotel, whether ordering a dish from the kitchen or booking a massage session at the spa.

For the hotel, the accumulation of data collected by this application over time is supposed to make it possible to better predict customers' aspirations and behaviors, such as "the time when the room will be available," "better organizing the cleaning process," and "automatically lowering the temperature" as soon as the customer leaves to reduce the energy bill. As Gostanian explains.

The unemployment rate in Switzerland reached 1.9 %, while the hotel sector was one of the sectors that had the most difficulty recruiting. Claude Meyer, director of the Hotelier Suisse Federation, points out that this shortage restricts hotel owners and pushes them to "not make outdoor hotel spaces available except in the evening" because there is "not enough employees to work in the afternoon."

Hotel owners call on thinking about "technological solutions available to them" for automated tasks so that employees have more time to focus on communicating with customers. "Technology will bring big changes in ten years and I am sure our sector can benefit from it," he says.

b. Artificial Intelligence in a Hotel in China:

It is noteworthy that China revolutionized hotel management with AI with the Covid19 spread, another reason is lowering costs as "One robot can do the work of two staff, according to Ma Huan, director of BTG Homeinns Hotels Group's intelligent hotel and innovation project. A drop in robot prices has also made hotel operators more open to using them.

The average price per robot fell to CNY20,000 (USD2,865) from CNY100,000 (USD14,325) a few years ago, Ma added, noting that with five-year maintenance charges of CNY10,000, two robots cost CNY60,000 every five years, versus CNY750,000 for three employees doing the same work » (Yicai, 2022)

Fly Zoo:

The "Future Hotel" is the latest project of Alibaba, the Chinese internet giant, which was recently opened in the city of Hangzhou, the capital of Zhejiang Province in eastern China. Its operation method is based on artificial intelligence and robotics technology.

Wang Chun, CEO of the hotel, which bears the name "Fly Zoo", said that customers can check in to the hotel by simply scanning their faces electronically, and the facial recognition system installed in the hotel enables customers to use their faces as room cards to open doors and access the other hotel services(Al-Ain, 2023).

He added that users can also control the lights, TV and curtains in the rooms via a digital assistant activated by leaving through just a few clicks on the mobile phone via a single application.

He pointed out that the goal of establishing this type of hotel is to help customers save time and reduce the burden of repetitive work on hotel employees.

Smart Lyz:

Another AI model of managing hotels and services is Smart Lyz-Shenzhen-based company focused on AI technology and smart hotel development, opened its first fully automated hotel in Chengdu, Sichuan province. The guest does not have to interact with a single member of human staff if he does not wish to do so. A traveler books a room through the Wechat website in Smart LYZ, checks in through a facial recognition device, unlocks the door through a specific passcode or mobile his app, and finally on the app guests can check out by pressing a button. (CNN, 2018)

Guests Reviews

Nowadays, and especially with Generation Z, it is possible to leave comments about one's experience of a certain restaurant, pool, institution and also hotels, resorts and inns, namely called reviews; this helps others gather information before attempting that place. People, specifically internet users can put their reviews on different platforms such as: Facebook, X, Youtube or even Travel and Hotels platforms like Trip Advisor, coming to guests reviews on hotels using robots and AI, they must be less than traditional hotels as the experience itself is by and large new

Below are some random reviews and comments found on Youtube (Walkboaut, 2021), the youtuber filmed a video to talk about his experience in the Alibabas Futur Hotel in Hangzhou, China-the above mentioned.

Table 1. Opinions and Reviews on the Hotel Hangzhou

Review/comment	Username	Date
I was there, love it	@sepolopez6706	Two years ago
This is like Airasia hotel/tune hotel,everything you must pay,even soap and towel,the hotel price is cheap, but you know,everything you must pay	@stevenlee3422	Two years ago
This is definitely future of motels / budget hotels, I just hope it wont be extended to middle of the range hotels as standard I would hate it if human hospitality is only reserve for the wealthy, I've never been impress with mechanise service industries just keep those robots working at a factory floor.	@kuazexin	Two years ago
thats a scam, there's nothing of futuristic at all	@chou3595	Two years ago

Source: Created by the Researchers based on Comments from Youtube, Walkabout, seen on 06.04.2024

Feedback:

To sum up the reviews and comments; before delving into the opinions, it is noteworthy to differentiate between a comment and a review, as comment could be written by someone who actually tried the service or the product, and could be by someone who is simply giving their point of view about the idea itself. However, a review is definitely a client/costumer point of view about the provided service/product. As for the comments/reviews about the mentioned video; they range between good and bad, as some people did really visit the hotel and liked the revolutionized service provided by robots like **sepolopez6706**, but some think they will not like- they still haven't visited the hotel, **stevenlee3422** believe the cost is very high.

7. CONCLUSION

In summary, this study provided definitions, application of AI and real-life examples of how technology is used generally in hotels. To conclude AI's predictive power can enhance guest loyalty and retention by analyzing historical data and guest behavior patterns to anticipate and proactively provide relevant services and offers, ultimately exceeding guest expectations and creating memorable experiences. In addition, AI applications may also enhance security, help in promoting for the hotel institution and also manage it. But just as every new invention, it has many negative sides, that is why by-and large customers check reviews before attempting a new provided service implementing AI.

8. Bibliography List

- Dhafri, A(2022) *Artificial Intelligence*, Education Facutly, Education and Information Technology Departement, Yemen
- Mahdi, H (2020) *Artificial Intelligence & Imperial Conflict*, Alaan Publishing and Distribution
- Souidi, S, Eldjahni, M(2023) *AI Model ChatGPT*, El Asala for Publishing and Distribution, Turkey

Online References

- Al-Ain, A Chinese Hotel Working with AI Technology, seen on 26/09/2023, retrieved from: <https://al-ain.com/article/chinese-hotel-artificial-intelligence-technology>
- Asharq, *AI Replaces Lack of Employees in Hotels* seen on 15/09/2023, retrived from: asharq.com/technology/50997/-سويسرا-الذكاء-الاصطناعي-يعوّض-نقص
- EHL Insights, *What is MICE?*, seen on 09/04/2024, retrieved from: <https://hospitalityinsights.ehl.edu/what-is-mice>
- Hotel Tech Report, *AI Creates Happier Guests*, retrieved from: <https://hoteltechreport.com/news/> seen on 29/09/2023
- Hotel Tech Report, *AI in Hospitality*, seen on 20/09/2023, retrieved from: <https://hoteltechreport.com/ar/news/ai-in-hospitality>
- MA Hotels, *AI In Hotel Management*, seen on 21/09/2023, retrieved from: <https://mahotels.net/archives/7698>
- Thakaa, retrieved from: <https://p1.thakaa.sa> seen on 25/09/2023
- Wong, M, *High Tech Hotel Wars*, CNN Travel, seen on 06/04/2024, retrieved from: <https://edition.cnn.com/travel/article/china-high-tech-hotels/index.html>

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- Yuming et.al (2022) *Cost, Covid19 Drive China into Service Robots*, Yicai, seen on 06/04/2024, retrieved from: <https://www.yicaiglobal.com/news/use-of-service-robots-in-chinese-hotels-rises-amid-lower-costs-covid-19/>

List of Videos

- Walkabout, R [ojoreadsthenews6080](2021, August 11th) I Stayed at Alibaba's "Future" Robot Hotel (FlyZoo Hotel) in Hangzhou, China [Video]
Youtube: https://youtu.be/gIAC2qhDP1Q?si=NSj6Gd_lXlZh2frN