Innovation and Technologies in Chain Hotel Industry

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ABSTRACT

Innovation is important in the hospitality industry because it has the potential to change the industry in a positive way. Innovation in the hospitality industry has grown rapidly over the past few years. While most service providers and hospitality-related services are doing their best to adapt to these rapid changes, new technologies have helped the industry evolve.

KEYWORDS: Chain hotels, innovation, digitalization, robot, real-time translator, technology.

1. Introduction

During the development of modern information and communication technologies, humanity is facing global reforms. During this period, there is a transition to a new qualitative stage in all, namely, economy and management, science, security. Also, through digital technologies, social, political and economic changes are shaping the near future. It is worth noting that the state of digital economy transformation cannot be avoided, and any country that cannot adapt to it will be left behind. Demand for many professions is decreasing, and the demand for professionals with skills in ICT and related fields is increasing. Also, according to the latest data, there are 478 robots in South Korea, 323 in Japan, 282 in Germany, 152 in the USA, 36 in China, and 2 in Russia for every 10,000 workers in different countries. It is predicted that the People's Republic of China will provide 40% of the development of industrial robots to the world market in 2019.

High (macro) level technologies are entering all aspects of our life, and the development of no field can be imagined without modern information technologies and automated systems. Including macro-technologies in the market of intellectual products and services, artificial intelligence (artificial intelligence), automated information systems (ICT), electronic government (e-government), electronic commerce (e-commerce) and working with large data (big data), cloud the use of modern information technologies and systems such as cloud technologies, blockchain technologies, in the experience of the developed countries of the world, have unique models of digital economy formation and development. It should be noted that it is being widely implemented in our country and that the Digital Uzbekistan-2030 strategy and roadmap have been developed. In turn, the introduction of the necessary legal-normative and practical bases in our country is being implemented step by step. [1]

"In particular, uniform principles for the development of state information systems have not been developed, and activities in this field are carried out without mutual and integral connection with other information systems. The infrastructure of the "Electronic

Government" system is not developing properly, which has a positive effect on the widespread use of modern information and communication technologies in the provision of public services and interagency electronic cooperation. [2]

The concept of "business as usual" in the hospitality industry is rapidly evolving. A few years ago, so-called "customized" services were sufficient, but not anymore. Guests are now demanding more digital technologies and convenient options, so services can meet their specific requirements. In addition, the growth of the digital economy means that competition is widespread. Therefore, hotels must use their modern resources and systems if they hope to retain loyal customers. Modern technology plays an important role in hotels. and its presence is only expected to increase in the coming years. Especially prestigious and luxury hotels, it is time to use such modern technologies in "branded chain hotels". As all hospitality industry experts point out, the hotel industry has always been competitive. That's why Keeping up with the latest trends in technology is essential for hospitality management teams. Businesses that cannot quickly adapt to new technologies risk being left behind by their competitors. New technologies are helping hotels and travel companies add value to their guests' experiences, and this opportunity should not be missed. But the benefits of technology for the hotel industry are not limited to guest feedback. Technology can also improve operational efficiency and help hotel management reduce costs by replacing expensive human labor. Supplements improve customer service by facilitating seamless employee engagement and communication.

Because today's travelers want a "number one" approach, hotels can gain a competitive advantage by implementing the right modern technologies to exceed guest expectations. Today, the average hotel guest carries at least three mobile devices. They are used to getting information quickly, getting anything with one click, being the first to experience and share new experiences and innovations. During the pandemic, technology has become more important than ever, and it plays an important role in the recovery of the tourism industry. The hospitality industry can implement technology across all departments to improve guest feedback, streamline their business operations, learn about guest requirements, and improve overall communication between your staff and guests.

The hospitality and tourism industries have been hit the hardest by the recent pandemic – events like these have shown the need for digital transformation in every industry. Although technology is available in the hospitality sector (computerized reservation system etc.), it is still not properly utilized. Technology facilitates easy connectivity and communication across borders and continents. It has enabled fast transfer of information which helps in terms of more bookings, easy communication with customers etc. Hospitality businesses sell their services and products over the internet where people can communicate in real time from different locations. made it possible to sell their products and services at low prices and easily on a global scale. The end result was that businesses were able to adapt to the needs of the customer. Today, with the help of technology, consumers can find directions, accommodations, schedules, or money needed for travel. they can get the information they need.

2. Literature Review

Digital system one of the easiest adaptations hotels can make is going digital. Hundreds of our customers, including Hilton Worldwide, IHG, Kimpton and Holiday Inn, have replaced

legacy systems with Doc MX solutions to reduce costs and improve efficiency of their hotel operations. By automating traditionally labor-intensive tasks, business costs and efficiency can be significantly reduced. This digital transformation reduces stress and increases employee well-being – allowing teams to focus on valuable tasks instead. Furthermore, the transition to a paperless future is sustainable and helps hotels perform better in line with ESG criteria and customer expectations.

According to a recent survey by the World Economic Forum, more than 80% of global consumers say they prefer sustainable businesses, and this influences where they spend their money. The ability to collect, interpret, share and respond to data is essential for all hotels to optimize their performance. And this is especially important for large properties and hotel chains that serve thousands of guests each week. Through a combination of internal data sharing and what's available online, hotels can use digital data to develop better strategies to manage revenue, rapidly improve operations, and understand customers through sales and marketing. We know from our own business that digital innovation has a positive impact on all hotel departments, including finance, HR, kitchen and housekeeping. Indeed, digital transformation can help any team manage labor-intensive inventory and record keeping. [3]

Development of robotic technologies while developing robotic technology in hospitality is still considered expensive, it is an area that is likely to see significant growth in the next few years. One of the main reasons for this is that robotics technology can help solve one of the biggest challenges facing hotel operations today. This is a permanent shortage of personnel in the hotel industry. According to the Financial Times, the global hospitality sector is warning of further staffing shortages in the run-up to Christmas as they look for temporary workers to prepare for one of the busiest times of the year. Trade body UK Hospitality estimates that more than 250,000 additional seasonal workers are needed in the hospitality industry in the UK alone. Artificial intelligence-based robots are emerging as a popular technology trend with automation and self-service, playing an increasingly important role in improving hotel customer experience. Robots can help with speed, economy and accuracy. In the robot customer experience, Hilton Hotel in America is famous, and in the past years, it has launched robot service in its hotels.

Described as whimsical and futuristic, the entire experience from check-in to check-out is controlled by the customer through various automated services and voice and touch detection points. Even before the Hilton Hotel, Hilton launched a robotic concierge called Connie, paving the way for improved AI-based services. Most importantly, the system learns and adapts to each interaction, constantly improving the responses it provides. From customer service to cleaning robots, Canon Solutions America and Soft Bank Robotics America have launched their robot Whiz. This new device is a commercial robotic vacuum cleaner that works to improve health and safety in a variety of work environments, including hotels. Cleaning robots are quickly spreading across the hotel chain, and their adoption has reportedly accelerated during the pandemic for obvious reasons. Whether it's housekeeping, room service, or wait staff, we expect the use of hotel robotic technology to increase significantly, especially as hotels need a replacement workforce as staff shortages continue to disrupt operations. The use of robots is one of the great trends in hotel technology, as it is a rapidly evolving technology. Hotels that use robots for tasks such as greeting guests on arrival or providing 24/7 tourist information have already had a significant impact on their experiences and opinions. However, the usage now extends far beyond that. Hospitality

robots have the potential to help with housekeeping tasks like vacuuming floors and killing germs, which could be especially important in keeping your property COVID-safe. However, some hotels are also using robots for baggage handling, security, room service and restaurant waiting. It is a technology that is likely to continue to expand in the coming years as robots become more reliable and better equipped to improve their performance through artificial intelligence and machine learning over time. [4]

Virtual simultaneous interpreter Communication with guests is very important and sometimes you cannot always have someone who can speak the right language at the right time. There are situations when it is necessary to call a special interpreter to communicate with the guest, but this service is very expensive. Of course, this type of service will not be very useful for the guest. Finding a comprehensive specialist interpreter takes a lot of time, and even after the interpreter arrives, the guest may feel uncomfortable. Therefore, a simultaneous interpreter is very convenient for large and small hotels. A simultaneous interpreter is very convenient for a person of any gender and any age. In the first place, it saves time, and in the second place, it does not cause inconvenience to the guest. Real-time voice translation tools are available to assist visitors on-site with a little help from Google [5], but it's not perfect. A special device of the hotel specially prepared for guests can be a solution in this case. After this device is handed over to the guest, the guest enters the language he speaks and the language of communication for the hotel staff, after which the device becomes a virtual simultaneous interpreter for the guest.

A simultaneous interpreter is a new innovation that is as necessary as water and air for the hotel trend and the development of tourism potential. During the COVID pandemic, the process of limiting communication between people was introduced, and the obvious need for this technology was felt. This innovative technology creates an unhindered communication process between two inhabitants of any part of the world, regardless of era, time and nationality, and it makes a great contribution not only to the hotel industry, but also to the development of the tourism industry and encourages many tourists who cannot travel because they do not know foreign languages to travel.

3. *Methodology*

All the measurement items used in the study have been adopted from previous studies. Then, this items were adapted to fix the content of this research. The organizational structure of the "Hilton" hotel was also measured using data from previous validated studies. During research 6 articles related to this theme were read to find authentic and last information about communication in modern organizations. All articles can be find in references.

4. *Discussion and results*

Every year, billions of people travel to countries where their native language is not spoken for work and pleasure. At the same time, hotels employ millions of employees around the world whose native language may differ from the hotel's language. The world of hospitality is international, and communication barriers affect the quality of hotel guests' stays, as well as cultural and operational challenges faced by a diverse hotel community.

To facilitate foreign language communication between travelers and their service providers, ALICE, the on-demand mobile service platform for hospitality, today features real-time translation for every interaction between hotel guests and staff. announced the launch of the

first app in the industry. "No matter where you're from or what language you speak, ALICE now enables guests and staff from around the world to communicate in real-time through our mobile technology," said Alex Shashaw, Founder and President of ALICE. It allows you to build strong relationships with them by allowing them to do so. In addition, "nothing is lost in translation." The traditional approach to translation is a manual process that applies only to static content - individual words and phrases - but ALICE aims to seamlessly blend real-time and manual translation. "Since we are focused on providing a real-time, on-demand service infrastructure, our language solution cannot support static content like most solutions. We had to translate the details of each sent request and individual guest notes. Visitors and provide real-time chat messages between employees," said Dmitry Koltunov, the company's technical director. "This very ambitious project took the team almost a year. Our mission is to use technology to improve the way we deliver services. Reducing the language barrier is a huge step towards achieving this." Traditional approaches to translation in the hospitality industry only involve translators, making it expensive and ineffective for real-time interactions. Overcoming these inefficiencies for ALICE has developed a solution that elegantly combines manual translation and machine automation using state-of-the-art machine learning technology to ensure continuous improvement. The more the service is used, the "smarter" and more powerful it becomes. Available in 30 languages and available throughout the ALICE suite, including free-form text functionality.

This means that a guest can send a message in German to an Italian-speaking hotel owner, who will receive the message in Italian via the ALICE app. When he replies, the message is translated into German for the visitor. "It's not just about serving guests," added Shashou, "Our multicultural hotel staff can interact with each other in the same practical way, writing internal comments in any language, with real-time translation available. All this is done at the same time. The only thing each employee needs to do is to specify the language of their choice. ALICE integrates multiple departments into a single system and back-of-house interaction with integrated translation is tracking, accountability and transparency." ALICE currently works with hotels on three continents, from Shangri La's Jen Hotel in Australia to Setai in Miami. These hotels attracts travelers worldwide who rely on ALICE to facilitate superior service, better understand their guests, and make improvements based on aggregated guest data.[6]

A robot is any device or system designed to perform a specific set of tasks with unprecedented efficiency and accuracy. Examples may include robots designed to work on an assembly line and CNC machines designed to create highly complex parts in a fraction of the time required by a human. From the point of view of the hotel industry, the main purpose of robots is to improve and speed up the overall guest experience. As we can see, this can be done in different ways. There are several reasons why robots have become so popular. From a financial perspective, implementing hospitality technology is getting cheaper.

This means that even smaller properties such as boutique hotels can take advantage. However, we must also remember that the demands of the guests themselves are beginning to change. With wireless connectivity and the near-ubiquity of smartphones, customers have come to expect second-rate service during their stay. This includes the availability of technology to some extent. Hotel robots offer such a competitive advantage, so managers choose to take advantage of such opportunities. Some daily tasks include greeting new arrivals, carrying luggage, escorting guests to certain destinations within the hotel, and

offering room service. During the peak hotel season, the presence of these robots will be an invaluable asset.

Alibaba's Robot Hotel Alibaba's Fly Zoo hotel has been dubbed the "hotel of the future" thanks to the presence of robots. Built around a bespoke mobile app, common hassles such as registration and facial recognition access are greatly simplified. These methods are primarily implemented through the use of artificial intelligence. Voice-based room service bots are also complemented by the availability of autonomous smart machines that provide room service to guests as needed. One of the main advantages of robots in the hotel includes a secondary level of internal automation; Releasing staff for other guest-related duties. In addition, hotel robots can perform tasks around the clock that staff can't reach. Many requirements can be met with a higher degree of accuracy compared to their human counterparts. Finally, the presence of robots gives the hotel a truly cutting-edge appeal. But it is also worth noting a few possible disadvantages. Of course, some tasks (for example, solving a question not pre-programmed by the staff) will need to be solved by a human. Another problem is that many guests still want to enjoy the human experience during their stay. Some guests may not appreciate the somewhat "cold" nature of even the most advanced hotel robots. Simply put, most robots cannot provide a truly personal connection. [7]

5. Conclusion

Nowadays, the system of remote service around the world is increasing significantly in all aspects. In the food industry, across restaurants, tourism enterprises and hotels. We need to emphasize that working without a digital system in the hotel industry will have very bad consequences. The implementation of a complex digital system in chain hotels is very pleasant for customers and one of the main functions that attract guests to the hotel. A lot of disagreements between guests and employees are avoided. The introduction of a digital system always has the effect of increasing the flow of customers for the hotel and improving the quality of service. Robots are also a real innovative technology for hotels. Their main advantage is that they perfectly perform the service assigned to them day and night without stopping. In tourism, when the main seasonal tourism begins, it is natural to observe a shortage of seasonal labor in hotels, and the only solution to these situations is to use the services of digital systems and robots. Robots always perform the task assigned to them in a complex way, so in this case, customers are satisfied and the probability of repeat purchase increases. Another constant problem in the hotel industry is that hotel staff and guests speak different languages, and the reason for this problem is that every year different people from different countries of the world go on a trip, and the hotel staff does not know the native language of the guests. We recommend the Real virtual interpreter program or device for Hotels, as the conversation is always carried out through an interpreter. In our modern world, there are currently programs that provide real simultaneous translation in several languages, and if the most well-structured one is taken and adapted for the hotel, a single program or device can be a very good reason for increasing the sales volume for the hotel.

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