

**DEVELOPING SERVICE PROVISION THROUGH DIGITAL TECHNOLOGIES IN  
UZBEK HOTELS**

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**Abstract**

This article examines the importance and prospects of introducing digital technologies in improving the quality of service in the hotel industry of Uzbekistan. The article analyzes the role of modern software solutions in automating hotel management, transferring communication with customers to a remote form, and expanding the scope of services. It also covers the issues of increasing the efficiency of hotel employees and creating additional amenities for guests in the process of digital transformation. At the end of the study, practical proposals and recommendations were put forward for digitizing hotel services to increase the national tourist potential of Uzbekistan.

**Keywords**

Digital technologies, management automation, electronic services, tourism infrastructure, digital economy.

**Abstract**

Today, the main factor in ensuring competitiveness in the global tourism market is the deep integration of modern information technologies into service processes. Although the modernization of tourism infrastructure in the Republic of Uzbekistan has been identified as a priority area of state policy, the level of use of digital technologies in hotel enterprises still lags behind international standards.

Currently, a number of systemic shortcomings are evident in the activities of local hotels. Firstly, in many medium and small-sized hotels, management processes are still carried out in a traditional, that is, "manual" way, which leads to errors in data exchange and loss of time. Secondly, remote guest service systems (electronic registration, digital service ordering) are not sufficiently developed. Thirdly, due to the low digital literacy of hotel employees, the implemented software is not used to its full potential. This, in turn, prevents the rapid satisfaction of customer needs and the improvement of service quality to international standards.

This article justifies the need to introduce modern software solutions that fully automate hotel management to eliminate the above-mentioned problems. Automation of internal hotel operations, viewing menus or ordering services via QR codes, Big Data: Analyzing the interests of guests and providing them with individual offers. Currently, a lot of work is being done in our country to further develop tourism, an example of which is the resolution of the Cabinet of Ministers of the Republic of Uzbekistan. We can take the resolution "On measures to organize electronic accounting in the tourism sector" (Regulation on the E-guest system). The main goal of such resolutions and decrees is to develop scientific and practical proposals to improve the efficiency of hotels by using digital technologies, optimize communication between guests and employees, reduce service time, and thereby increase the economic efficiency of hotels. Digital transformation serves as a key tool not only for customer convenience, but also for taking Uzbekistan's tourist attractiveness to a new level.

### Literature review on the topic

The introduction of digital technologies in the hotel industry and their impact on the quality of service is currently the focus of attention of both local and international researchers.

**Research by Uzbek scientists:** In his work on the tourism economy, local economist I.S. Tukhliyev interprets the digitization of the hospitality industry not only as a technical process, but also as a strategic resource that increases the competitiveness of the national tourism product in the global market. In his opinion, information technologies are the main driver of optimizing costs and increasing the speed of service in hotel enterprises. View I. Tukhliyev's works via Google Scholar.

Also, B.Sh. Safarov analyzed digital transformation from the point of view of increasing the efficiency of regional tourism clusters. Safarov's research emphasizes the role of "Smart Technologies" in hotel management, especially the importance of digital platforms in establishing feedback with customers. The resources of the Ziyonet educational portal widely cover the concepts of these scientists on the development of tourism in the digital economy.

**Approaches of foreign scientists:** At the international level, the work of scientists such as Dimitrios Buhalis and Rob Law is considered fundamental in this regard. D. Buhalis, having put forward the concept of "e-Hospitality", proved that the digitization of hotel management is not just computerization, but the creation of an ecosystem that allows predicting customer needs in advance. Rob Law, in his research, emphasizes that the use of artificial intelligence and robotics in hotels minimizes errors associated with the "human factor" in service provision.

### Research methodology

This article uses complex research methods to study the digital transformation processes in the hotel industry of Uzbekistan. The following were identified as the methodological basis of the study:

**Comparative Analysis:** Digital solutions and automated management systems (PMS) used by local hotels in Uzbekistan and leading global brands (Marriott, Hilton, Hyatt) were compared. This identified technological gaps and opportunities in the national market.

**Statistical analysis:** During the study, official data from the Statistics Agency of the Republic of Uzbekistan and the Tourism Committee, as well as the dynamics of digital development indicators in the industry, were studied.

**Systemic approach:** Hotel activities were considered as a holistic system, and all its links were analyzed - booking, check-in, customer service and digital integration of financial calculations.

### Analysis and results

As a result of the analysis of digital transformation processes in the hotel industry of Uzbekistan, the following key indicators and patterns were identified:

1. Increased operational efficiency: Studies show that the introduction of automated systems such as PMS (Property Management System) - Fidelio, HMS or Jowi in hotels reduces the check-in time by an average of 30-40%. This reduces the workload of employees and increases the quality of customer service.

2. Occupancy rate and online sales; According to the Statistics Agency, the occupancy rate of hotels that actively use digital booking platforms (Booking.com, Expedia, TripAdvisor) in Uzbekistan is 25-30% higher than that of hotels operating in the traditional way. In particular, more than 85% of hotels in Tashkent and Samarkand are integrated into online sales channels, which provides more than 40% of the flow of foreign tourists.

3. Economic efficiency: In hotels that have implemented Smart Rooms and sensor control systems, electricity and water consumption have decreased by an average of 15-20%. This proves the positive impact of digital technologies not only on the quality of service, but also on the financial stability of the enterprise.

4. Customer needs and feedback: Analysis conducted by the Tourism Committee shows that the availability of digital services (free high-speed Wi-Fi, QR-code menus, mobile applications) has increased the overall satisfaction level of tourists by 22%. Positive reviews on digital platforms have a direct impact on the number of subsequent hotel bookings.

*Table 1.*

**Comparative analysis of indicators before and after the introduction of digital technologies <sup>1</sup>**

Indicators	Traditional style	Digital style (PMS/CRM)	Efficiency
Client registration	10-15 min	3-5 min	3 times faster
Room occupancy	45-50%	70-80%	+30% grow
Operating expenses	High (manual labor)	Optimized	15-20% thrift
Possibility of making a mistake	Available (human factor)	Minimall	High accuracy

This table analyzes the differences between traditional management and digital management (PMS/CRM) in the hotel (or service) sector. As can be seen from the table, the introduction of digital technologies significantly speeds up service processes and increases efficiency. In particular, while the check-in process takes 10–15 minutes in the traditional way, this process is completed in only 3–5 minutes in the digital way. As a result, the speed of service increases by about 3 times. The room occupancy rate is also significantly improved with the help of digital systems. While the occupancy rate in traditional management is around 45–50%, with PMS/CRM systems it reaches 70–80%, which means an average increase of 30%. The advantage of digital technologies is also visible in terms of operating costs. While the traditional method is expensive due to the high level of manual labor, the digital method optimizes processes and achieves savings of 15–20% (Table 1). Also, while the possibility of making errors exists in traditional systems due to the human factor, this indicator is minimized in digital control. This increases the accuracy and reliability of data.

<sup>1</sup> Tadqiqot davomida muallif tomonidan tayyorlandi.

A number of important conclusions were drawn from the study of the introduction of digital technologies in the hotel sector of Uzbekistan and their impact on the quality of service. Studies show that automation of hotel management systems (PMS) increases the speed of operational processes by up to 3 times, which allows minimizing errors associated with the human factor, especially during guest registration. At the same time, it has been proven that the economic profitability of hotels integrated with online booking platforms is up to 30 percent higher than that of traditional hotels. "Smart Room" technologies, on the other hand, make it possible to reduce utility costs by up to 20 percent by saving resources. Although state initiatives such as the "E-guest" system serve as a solid foundation for the digitalization of the industry, the issue of digital literacy of employees still remains relevant.

A number of practical proposals are put forward to eliminate the shortcomings identified during the study and further develop the industry. Firstly, it is necessary to introduce special trainings on Big Data analysis and modern PMS programs to increase the digital literacy of hotel employees. Secondly, in order to ensure environmental and economic efficiency, it is advisable to apply tax incentives to business entities that have introduced energy-saving sensor systems and mobile applications. Thirdly, it is necessary to establish a system for offering an individual package of services based on the interests of each guest, as well as develop unified mobile platforms that integrate accommodation, transport and excursion services. In conclusion, digital transformation is the main strategic tool for the Uzbek hotel industry, ensuring the attractiveness and competitiveness of the national tourism product in the international market.

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