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**INNOVATIONAL
ASPECTS OF THE
HOTEL INDUSTRY
DEVELOPMENT**

The modern hospitality industry is a global social-economic phenomenon that operates in a highly competitive environment. The innovation is a specific factor of competition that plays a special role for the hotel industry enterprises, as a basis of their development that provides with the growth of clients, the efficiency increases of the management and the hotel awareness. The innovations are considered to be the tool, used by the business to survive in conditions of high competition, cope with slowing growth and lower profitability. Innovations, in their essence, are the appliances that enhance the effectiveness of existing systems (the particular company, business or the economy in general, education and human development) [1, 2].

The effective functioning of the hospitality sector is an indicator of positive changes in the country's economy, an important prerequisite for intensification of international relations and the country's integration into the world community. In today's business environment, one of the competitive advantages for the hotel industry may be the achievement of a 100% "customer satisfaction index". The perspective direction of the index achievement is the creation of innovative technologies and their practical use. Thus, data from numerous studies confirm that one dissatisfied customer leads to the loss of 300 potential consumers [2, 3].

As already known, the hospitality industry consists of several elements of operation, which include: the hotel industry, which has a significant number of businesses (hotels, motels, campgrounds, etc.); restaurant facilities (restaurant chains, general-purpose and special

cafes, fast food establishments, etc.); tourism business (travel companies); transport enterprises providing services of various kinds of transportation; fitness and health facilities (swimming pools, gyms, sports complexes, saunas, etc.); cultural and leisure facilities (exhibition centers, museums, concert halls, libraries, etc.) that provide for the spiritual needs of man [4].

The hotel industry is developing rapidly and numbering about 350 hotels, with an annual increase of 3-4 % [5]. That's why innovative activity in the hotel business is relevant, as the innovational approach in this sector can be reduced not only to the use of progressive technologies and the production of new services but the whole complex of innovations, that touch upon all the spheres of its management.

The innovations in the hospitality industry contain 4 main categories [6]:

1. Product innovations (creation of new services and introduction of the latest service technologies);
2. Marketing innovations (the use of new tools to promote the enterprise to the market);
3. Resource innovations (use of energy-saving systems and ensuring the environmental performance of the enterprise);
4. Organizational innovations (improvement of the enterprise management system).

Most of the foreign enterprises direct their main investments to the improvement of mechanisms of making management's decisions: informatization, constant forecasting of the consumers' market, marketing and logistic development of the promotion of the product (services), schemes of management, aimed at reducing costs associated with the activity of the enterprise [2].

One of the key tendencies of hotel business development is the creation of eco-hotels (the "green" hotels). On the one hand, making the hotel product ecological is related to the need for saving the natural environment, and on the other hand, the reason for that is the increasing tourists' demand for environmentally friendly services and products. The concept of activity of eco-hotels includes environmental management at the enterprise, monitoring of water and energy consumption, waste utilization, raising environmental awareness among both guests and staff, cooperation with the local community. Green Key's environmental certification has been passed through more than 124 facilities in the global hotel industry. The largest number of such hotels is in France (226), Denmark (86) and Germany (27). The introduction of ecological

certification systems of hotel establishments is especially promising in the case of their placement in recreational, tourist attractive and environmentally friendly territories in order to avoid damage to nature as a result of infrastructure development [7, 8].

The priority of today is the introduction of energy-saving technologies, which is associated with a shortage of basic energy resources, increasing the cost of their production, as well as with global environmental problems. To ensure the energy efficiency of the hotel enterprise can be used such innovative solutions as the installation of solar panels on the roof of the building for heating water, the use of heat pumps for the purpose of energy recovery and maximum use of heat, use of air generators to generate electricity, window blinds and panels with built-in photoelectric elements.

The introduction of an automated energy-saving and climate control system is also an interesting innovative solution that allows the hotel visitors to control the lighting, climate, mechanization devices and many other functions of the living suite. The use of this system in the rooms allows the hotel to significantly reduce energy consumption, reducing consumption in empty rooms. The logic of presence detection is based on the signals from the door opener and the infrared motion sensor, which continuously analyzes the space of the room for the presence of the guest [9].

The new tendency in the development of the accommodation sector is the construction of hotels of conceptual orientation (in inactive monasteries, castles, churches; flotel, aquatics, bungalows; underwater; hotels in the trees like birdhouses, in houses of rock salt; ice, capsule hotels, agro-hotels, hotel-office centers, etc.). Such innovations are becoming the business card of the institution, create its image and attract a wider range of clients. The focus on maximizing the needs of the potential consumer of the hotel product is the main reason for the appearance of concept hotels in the tourist market [10].

The most common in the modern hospitality market are conceptual luxury hotels. The most striking representatives of this type are boutique hotels. The main features of such establishments are the unusual, bright, creative design with many amazing features – for example, the rooms have the name, which has its own staff serving specific guests, furniture grouped by color, etc. [11].

To satisfy the needs of tourists who are tired of the uniformity of chain hotels with a standard set of services and amenities, art hotels with stylization for a museum or theater of different genres and eras, which

have an entertaining and educational function with a small room fund (hotel-theater, hotel-museum) are created [10].

The creation of panoramic hotels in metropolises is the other direction of positioning the exclusiveness of hotel establishments, which have special features, such as bar location, restaurants, swimming-pools of the top of the buildings, where tourists can enjoy views of a city. Generally, the specialists enumerate 15 hotels with unforgettable panoramas (Jumeirah Beach, Dubai UAE; Lebua at State Tower, Bangkok, Thailand; Hotel de Rome, Berlin, Germany; Bairro Alto, Lisbon, Portugal; Gansevoort, New York, USA, etc.) [12].

Along with traditional full-service accommodation establishments, there are recently specialized hotels with a reduced range of services [12], which are focused on serving a specific segment of the tourist market (congress participants, exhibitions, horse racing, golfers, skiers and skiers' outfit, sommelier, etc.).

The increasing needs of modern tourists for active rest determine the development of agrarian tourism, which includes leisure in the open air, farm or private household, hiking, sports and recreation, hunting and fishing, sightseeing and more. The global experience in the use of agritourism products and services in the hotel industry demonstrates the wide range of offerings. Thus, agri-hotels (agri-motels), agri-camps have agricultural features, next-generation field games, family and country festivals, different kinds of agri-entertainment, e.g. walking through a corn maze, providing with additional services such as "gather yourself" type sales in the countryside or suburbs [13].

Due to the growing trend towards healthy lifestyles, wellness tourism, which aims to maintain the body in a healthy state and maintain a balance between physical and psychological health, is becoming increasingly relevant. The existing range of wellness services is very wide, which has proven to be a provocative factor for the reorientation of many hotels in this segment with the inclusion of additional services of the wellness complex [14]. Visitors of these hotel businesses are involved in yoga, drinking herbal teas, tempering, and outdoor activities. Within the framework of these establishments, along with carrying out wellness programs, the following directions of health tourism are being developed, such as [15]:

1. Thalassotherapy – the use of seawater heated to +32 °C, algae and marine mud combined with marine climate;
2. Balneotherapy – the use of artificially prepared and natural mineral water for the treatment and prevention the diseases;

3. Wine Therapy – a complex of cosmetic and spa-treatments that use wine in their ingredients;

4. Aromatherapy – the use of essential oils, herbal remedies and other aromatic substances for strengthening of physical and mental health and cosmetic body care;

5. Stone therapy – a relaxation and wellness procedure based on the application of hot and cold stones of different rocks to the active points of the body;

6. Apitherapy – prevention and treatment of diseases of bee products;

7. Chromotherapy – a non-contact method of light and color treatment and some others.

The decisive factor for the construction of hotel establishments providing health services is the choice of location with a natural resource base.

Considering the significant increase in the proportion of people with disabilities in the overall structure of the world population, they are an important segment of potential clients for hospitality businesses. The current tendencies of world socialization place new demands on service of people with disabilities, as it is not covered by the full range of services of the consumer segment.

One of the innovative trends in the hospitality industry that can solve the problem of service availability for this segment of consumers is the introduction of the concept of universal or inclusive design. Generally speaking, it is the process of making a hotel planning solution as comfortable for all clients as possible, despite their age, physical or cognitive abilities, without the need for the use of aids or compensation or narrowly focused specialized solutions [3].

The competitive advantage of the hotel is the use of innovation in catering. The menu updates of restaurant establishments with the inclusion of dietary, vegetarian, gluten-free and lactose-free dishes or opening an additional restaurant at the hotel with “healthy cuisine” is relevant. To meet as many tourists’ needs as possible, the organizing of several food establishments with different national culinary trends is common. By the way, the national issue in the hotel and restaurant business is very important and modern hoteliers are trying to take it into consideration [11]. For example, depending on the preferences of a nation, rooms with a certain temperature regime, special furnishings, the availability of certain or other objects, corresponding to the guest’s culture are offered.

The development of the hotel and restaurant industry is impossible without the active introduction of information technologies, which include the latest developments not only in the field of management and reservation automation, but also for establishing communications with guests, marketing optimization etc. A promising direction for improving the efficiency of the accommodation facility is to automate the processes of communication of visitors with staff.

Such large hotel chains as Hyatt, Starwood, Marriott have recognized the growing preference for customers using mobile messaging applications and introduced their chatbots as customer service links. At the same time, the use of such technology allows to process up to 90 % of requests without the use of the hotel staff and significantly save [16, 17]. Virtual Concierge Edward appeared at 12 Radisson Blu hotels in the UK. He almost completely unloaded the staff, whose duties included correspondence with guests. Edward can talk about hotel services, help to book room service, advise tourists on choosing a restaurant, and accept customer complaints [18].

The most modern information technologies are rapidly being introduced into the hotel business and maximize the ability to meet the diverse needs of guests and improve quality [19]. Innovative developments in this area include the use of Skype Translator, which facilitates communication between people who speak different languages; Online check-in and Fast Checkout programs that allow guests to spend no extra time accommodating in the room or coming up to the check-in desk upon check-out; introduction of payment for hotel room with the help of fingerprints, which are registered at the special kiosks of the airports of the country and are connected with a bank card; access to a room by smartphone or Apple Watch; “Smart” mirrors with weather forecast, news; robotic butler services [6].

In the modern conditions of operation of hospitality enterprises, the optimization of their work is impossible without the use of automated systems, which are a specialized package of programs that ensures the work of hotel staff at their workplaces and prompt decision-making at all stages of the technological cycle, from booking a place to receiving a report on hotel activity for guidance. About ten automation systems are most common (OPERA, Fidelio, Epitome, Interotel, Edelweiss, Servio, R-Keeper, InStyle, etc.).

The introduction of interactive technologies in hotels and restaurants at hotels, which include electronic menu with the use of touch tablets or interactive surfaces on the tables, is quite relevant. From the consumer's

standpoint, the advantages of using this technology are that there is no need to wait for the waiter to place an order, to be able to instantly get complete information about a dish and to make clarifications about its preparation. The effectiveness of providing an interactive menu for the hotel is to attract new customers, save staff costs and track the statistics of popular dishes.

Thus, the introductions of modern information technologies not only facilitate the work of hotel staff, but also play an important role in forming the hotel's positive image [19].

Innovations in the restaurant industry are not just about information technologies. Hotels make extensive use of open kitchen practices when dishes are prepared directly in front of visitors. Such kitchens fit perfectly into modern interiors, do not give guests any inconvenience and become a great advertising tool for up-to-date hotels [11].

Besides the technical innovations, hotels offer services that adapt social innovations. A popular service is the organization of an intellectual game escape-room at the hotel, a kind of a quest when players are closed in a specially equipped according to the scenario room, from which they must go out in an hour, finding objects and solving puzzles [6]. The popularity growth of gaming among young people has led to the inclusion of online entertainment in the list of additional hospitality services. The infrastructure of such hotels includes specially equipped rooms with computers for e-sports and gaming forums [20].

One of the trends in the development of the hotel industry in the world is the tendency to form international hotel chains (combining hotels that have centralized management and form a single business complex). Developed international hotel chains are Fairmont, Hilton, Holiday Inn, Hyatt, Ibis, Intercontinental, Premier, Radisson, Ramada Encore, Marriott International and others. This situation is positive for the hotel industry in general in terms of corporate regulation of the quality of hotel services, knowledge of the clientele of the hotel brand, but the disadvantage of such chains is the decrease of competitiveness of small hotel establishments operating in a certain region [7].

Thus, a prerequisite for achieving economic success and ensuring the competitiveness of the hospitality industry is to develop an appropriate innovation strategy. It should be based on the novelty of services, the improvement of their technological availability, their economic and social efficiency. Successful implementation requires, first of all, increased investment in the innovation sphere, creation of an efficient

and high-tech infrastructure of the production base and restoration of the process of integration of science and commercialization of the results of scientific development. Considering the international experience of successful activity of the hotel industry, the alternative way of their survival in the conditions of global competition is based on an innovative basis with active use of modern scientific and technological achievements, as well as the readiness of hotels for innovation and innovations.

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