

## Assessment of the Impact of Globalization on the Introduction of Innovative Technology Companies in the Hospitality Industry

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### ABSTRACT

The importance and relevance of the study of the globalization effects on the introduction of innovative technologies in the hotel industry is difficult to overestimate, as only those hotels that are able to change with demographic, technological and economic changes, and to adapt to occurring changes, will be able to succeed. The aim of this work is to study and assess the impact of globalization on the introduction of innovative technology companies in the hospitality industry. For the analysis of contemporary processes in the hospitality industry, the authors of this article used theoretical and empirical methods of research economic-statistical and factor analysis, expert assessment. In the article a list of the external aspects of globalization in the hospitality industry, the peculiarities of network forms of business organization in the hospitality industry and its benefits for innovation in the context of globalization is given. The main trends of innovation in the hospitality industry are identified, the estimation of the impact of globalization on the innovative technologies implemented by the hospitality industry is done. The authors proved that the processes of globalization impact on the innovation management long-term growth potential of the hotel business, including a basic set of tangible and intangible business assets of strategic importance for sustainable development of enterprises in the hospitality industry.

### KEYWORDS

Globalization, innovation, hospitality, technology,  
network business

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## Introduction

Referring to the research of the last century, it may be said that in the second half of the 20th century the features of the new economy began to show – the global economy. Its main distinguishing feature is that all the principal economic activities: consumption and production of goods and services,

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management, dissemination of information and technologies, the functioning of markets – are carried out on a global scale. In one of the widely known definitions of M. Castells (2000), the global economy is defined as "economy, able to work as a single system in real time across the planet".

The basis of globalization is the internationalization of the world economy. This process has started to develop particularly intensively since the mid-1960s. The internationalization leads to the development of international economic cooperation, its deepening and intensification (Dumulen, 2003). The main indicator of this process is the strengthening of economic exchange between states based on growing international division of labor. In the mid-1990s, this process led to repeated compression of the economic space of the planet, development of a complex system of international economic relations (Alekseeva, 2012).

One of the main "drivers" of the global economy is innovation, both at the level of individual enterprises and at the project level on a national scale. Innovation policy plays a particularly important role in developing countries and emerging market countries in which the promotion of innovation is one of the main elements of the plans and development strategies, as well as a key factor in the solution of acute social problems such as environmental pollution, problems of health, poverty and unemployment (Ponarina, 2011).

However, industry innovation has its own characteristics, which are associated with the specifics of the business: the predominance of small and medium enterprises, high competition for customers in a decline in an effective consumer demand due to the economic crisis, and other (Bunakov et al., 2015). All this leads to the fact that many hotel companies are forced at their own risk to innovate, in order not to lose their competitiveness, not realizing how it can affect the processes of globalization, with scientific methods of application of innovative technologies by the enterprises of the hospitality industry.

### **Methodological Framework**

Methodological basis of the problems research were the works of scientists Lynn van der Wagen (2001), J.R. Walker (2012), D.A. Chudnovskiy (Bunakov et al., 2015), Wen-Jung Chen (2011), J. Nieves & M. Segarra-Ciprés (2015) and others who studied the scientific basis and essence of the development of the hospitality industry, the impact of globalization on the development of the hospitality industry. However, in the highlighted resources the problems of the globalization impact on the implementation of innovative technologies in the hospitality industry did not receive indirect lighting, or were not considered at all.

Together with the scientific approaches to assess the impact of globalization on the introduction of innovative technology companies in the hospitality industry were used the results of global research, including The Global Innovation Index (GII)". This is a global study and the accompanying ranking of countries by indicator of the development level of innovation. GII is calculated according to the method of the international business school INSEAD, France. The GII study has been conducted since 2007 and currently represents the most complete set of indicators of innovation development in various countries of the world.



The global innovation index is composed of 80 different variables that characterize details of the innovative development of countries at different levels of economic development. The authors of the study believe that the efficiency of any economy is associated not only with the presence of innovative capacity, but also with conditions for its realization. Therefore, the GII is calculated as the weighted sum of the scores of the two groups of indicators: resources and conditions for carrying out innovation (Innovation Input) and achieved practical results of the implementation of the innovation (Innovation Output). Thus, the final GII is the ratio of cost and effect, allowing objectively evaluate the effectiveness of efforts to the development of innovations in the country.

The utilization of theoretical and empirical research methods, methods of economic-statistical and factor analysis, expert evaluations allowed the authors to justify the list of the external aspects of globalization in the hospitality industry, the peculiarities of network forms of business organization in the hospitality industry and their benefits for innovation in the context of globalization, to identify the main trends in innovation in the hospitality industry.

## Results

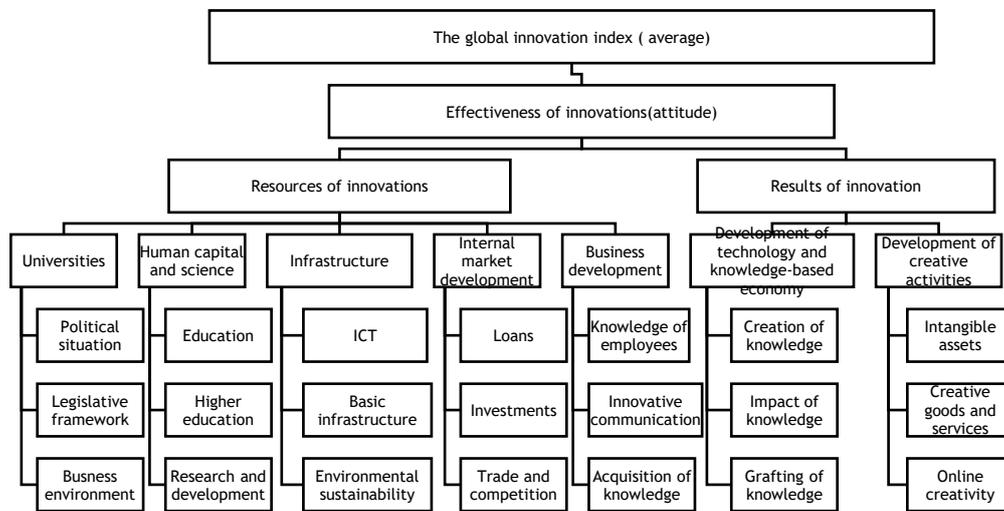
Assessment of the dynamics and trends in innovation policy of various countries on the basis of the Global innovation index.

The authors of the article analyzed the results of studies of the Global innovation index for the last three years and identified changes there and the dynamics of the index in the Russian Federation was defined.

It is impossible not to agree with the conclusions in the report "Global Innovation Index – 2016" that carefully coordinated policy in the field of innovation based on clear objectives and the related institutional infrastructure, is a conclusive success. The report's analysis shows that the improvement of business methods – linking of entrepreneurship with scientific activity and scientific institutions, involvement of foreign subsidiaries and employment of research personnel – is often the most difficult task which developing countries face. While significant resources are often directed at the involvement of foreign multinational corporations and investment, policymakers in developing countries should consider ways to maximize the effective use of positive spillovers in the national economy.

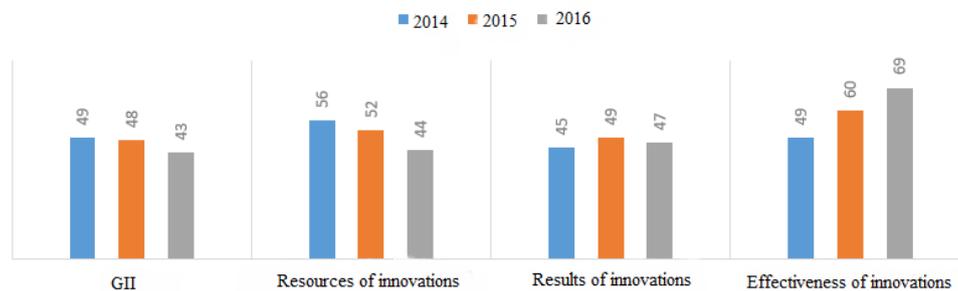
A special role in this process belongs to the modernization of the education system and science. The head of the Dean's office named after Anne and Elmer Lindseth Higher school of management named after Samuel Curtis Johnson at Cornell University's Soumitra Dutt said that "quality innovation is of a great importance. The creation of first-class universities, and investing in research activities are important factors in order to continue to take a leading position in the global race for successful innovation" (WIPO website).

The global innovation index (The Global Innovation Index) is produced by Cornwall University, ISEAD and the world intellectual property organization UN (WIPO, World Intellectual Property Organization).



**Figure 1.** Structure of the Global innovation index - 2016

Considering the dynamics of Russia's position in the global innovation index for the period from 2014 to 2016 it may be noted that in general it is not unique.



**Figure 2.** The change in Russia's position in Global innovation index for the period from 2014 to 2016

**Compiled by the authors according to the materials of the Global Innovation Index - 2014 - 2016**

According to the criterion GII a clear positive trend is visible – a gradual increase in the rankings from 49th place in 2014 to 48 in 2015 and 43 in 2016, and also similar dynamics in terms of "Resources of innovation" - with 56 places in the rankings in 2014 to 44 in 2016. However, the remaining two criteria "results of innovation" and "efficiency innovations" have multidirectional dynamics. Particularly difficult situation is with a criterion of "innovative efficiency", according to which the Russian Federation has dropped 20 places – from 49 place in the ranking of 2014 to 69th place in 2016.

According to the report "Global Innovation Index – 2016", the strengths of the innovation system of Russia are related to the quality of human capital, business development, knowledge and technology. However, among states with



high income only the index of development of human capital has a value above the average for this group of countries. It is determined by the high positions of Russia on these sub-indices education (27th place), higher education (23), research and development (25), trade, competition and market size (22), and the creation of knowledge (21).

Weaknesses of the Russian innovation system include: gross capital formation (95th place) and GDP per unit of energy use (114) – resource indicators of innovation, and also a group of indicators of innovation outcomes – the results of creative activities (66), ICT and the creation of business models (94) (Global innovation index – 2016).

According to the results of another study on the list of most innovative economies in the world Bloomberg Innovation Index in 2016, Russia took 12th place, while a year earlier it took 14th place. First place went to South Korea, the following four are Germany, Sweden, Japan and Switzerland, respectively. In addition, Russia is ahead of Singapore, Finland, USA, Denmark, France and Israel.

The authors of the Bloomberg Innovation Index took into account the following seven indicators: expenditures for research and development work, the productivity, the concentration of high-tech companies, the prevalence of higher education, value added manufacturing as a percentage of GDP, the activity in the registration of patents and the number of researchers per 1 million inhabitants.

Similar results of cross-country comparisons highlight the need for integrated and balanced policy aimed at the comprehensive development of the national innovation systems of national economies and individual businesses, including the hospitality industry.

### ***Features of influence of globalization processes on the development of the hospitality industry***

Modern trends of hotel business development, the integration of the individual into the system of world economic relations and increasing competition imply the presence of established mechanisms for strategic management and continuous improvement of business processes. An important influence on the formation of the market of hotel services in the world has the trend of globalization, which is expressed primarily in creation of large corporations and hotel chains. Hospitality becomes a sphere of business interests in many countries, often beyond one country, which indicates the desire to develop and diversify its activities.

Strengthening of strategic emphasis in corporate management, in the light of which acquired not current profits, but future profits and the source of its generation (Petrovskaya et al., 2016) necessitates consideration of the influence of globalization on the development strategy of enterprises of the hospitality industry, as a partial accounting of internal and external factors affecting the business, reduces its investment attractiveness (Zaitseva et al., 2016).

The external aspects of globalization in the hospitality industry according to the authors of the article include:

— increasing the level of competition that leads to the higher level of hosting service,

— active acquisition of small entities of the hotel business by large companies.

— formation of international hotel chains as a new approach to the organization of the hotel business in various countries, reflected in increased technological procedures of property maintenance, harmonization of procedures, development of process technology.

Thus, the network form of business organization in the hospitality industry is a major trend in the globalization process in this area, manifested at the same time the general trends of globalization. This is due to the fact that the network business has a number of advantages over individual players – single accommodation. A number of authors (Morozova & Popkov, 2010, Morozova, 2013) identify the following characteristics of hotel chains which allow them to gain significant competitive advantages compared to the independent businesses:

— more success in overcoming the increasing price and non-price competition by reducing the cost of doing business and the availability of clear standards of hotel services;

— use scale network deployment costs;

— greater financial resources for introduction of innovations in business;

— sufficient resources for presence in global reservation systems;

— use brand recognition and associated marketing advantages;

— the possibility of introducing integrated training programmes and promotion of personnel that are available for its financial resources;

— more efficient decision on the level of multinational network of hotel companies, issues of demographic ageing of population in developed countries, scarcity of local labour for the hotel industry and the necessity of its import;

— great opportunity in comparison with single accommodation, satisfy the increase in demand for hotel services that meet international standards and is known to the consumer.

However, as events in recent years show, despite the presence of the general characteristics of hotel chains, in their development can be distinguished different approaches in the implementation of innovations.

### ***The impact of globalization on innovation in the hospitality industry***

The processes of globalization have an impact on the organizational capital of the hotel through the introduction of advanced management technologies, able to mobilize and transform the process of change required to implement the development strategy: organizational culture, leadership Manager, management tools.

Hotels have similar resources and equipment, range of services, so personnel is a crucial resource, their knowledge and experience, ideas and innovations, the ability to communicate with guests, co-operate among themselves. Human capital business includes knowledge, experience and technologies that must evolve to remain relevant, meet the requirements of the time, create superior product and be able to implement a growth strategy.

Globalization of the world economy promotes the rapid development and exchange not only of technology, technical innovation, and human resources.



The processes of globalization expand opportunities to increase staff skills and staff that have passed training or training abroad, are internal factors in the growth of business value. As knowledge and skills are assets that support the implementation of all business processes of hotel business.

Thus, the processes of globalization have an impact on the components of managing the long-term growth potential of the hotel business, including a basic set of tangible and intangible business assets of strategic importance for sustainable development of enterprises in the hospitality industry.

Innovation in the hospitality industry is mostly concentrated in two activities: the provision of material and technical conditions for the provision of services to guests and potential clients and expanding the range of basic and additional services of hotels with innovation.

According to the study of a variety of resources, the authors identified the following global trends, which ultimately will have a major impact on the development of the hospitality industry:

- change in the balance of power in the world economy: the number of tourists coming from emerging economies will increase. Hotels would have to provide services to customers, representing countries with different cultures;

- the aging of the Western world population, social changes and the lack of growth of the average yield in all the developed countries – all these factors variously impact the status of the hotel sector and push the hotel business to search for new effective strategies for the development of its facilities.

- achievements in the field of technology will become major factors of competitiveness of the hotels. It is difficult to argue with information globalization. The speed of processing and dissemination of information has become more rapid.

- the increasing role of information to create a "reputation" of the hotel. Virtual tours, open ratings, book the Internet for games and chatting, social networking - the inability or unwillingness to manage information detrimental to the development strategy of hotel business.

Summing up what was mentioned above and developing the approach proposed by C.V. Zverev (2004), we can distinguish the following kinds of hotels according to the degree of innovativeness (table 1).

**Table 1.** Classification of hotels by the degree of innovativ"

Category	The main classification characteristic of the hotel	The basis for comparison
1st "exclusive"	Exclusive additional services, the dominant characteristic of the object of tourist business	Has no basis for comparison
The 2nd "luxury"	Additional services are not regulated by national standards; the highest category in accordance with the national standard	Hotels of "5 stars" category
3rd "growing"	Meets all requirements of the national standard for its category, has the intention to move to a higher category	National standard of categorization
4th "moderate"	Meets all requirements of the national standard for its category, and does not intend to increase the category	National standard of categorization

5th "zero"

Has no category

National standard  
of categorization

However, the pace of innovation in the past few years has significantly increased because of the introduction of advanced technologies with the elements of innovation that the client would like to see, depends the financial stability and the competitiveness of the hotel.

### ***The principal current trends in innovation in the hospitality industry***

The authors of the article basing on the study of various research (Hussain, Konar & Faizan, 2016; Fraj, Matute & Melero, 2015) and analytical sources (Hotel FAQ; WIPO; Hotelier.pro) highlighted current trends in innovation in the hospitality industry. The authors include the following global trends:

1. The degree of integration strategies for virtual reality in the interaction with the guests will determine the progressivity of the hospitality industry, as the growing popularity of virtual reality has been developing innovative ways of communication.

2. A priority for the hospitality industry will be the further development of digital technology, due to the understanding that the merging of online and offline marketing in the hotel industry is essentially a fait accompli.

3. The increasing importance of social networking (SMM) would make the work of the enterprise in the hospitality industry with the content permanent and SEO optimization for their own sites, the development of mobile sites and applications.

4. The development of services for clients such as AirBnB, Inspirato and American Express, allowing to satisfy a wide range of customer needs.

5. Due to the active development of robotics there will be a question about how mass would be the replacement of human labor in the hospitality industry on the robot. This year, Japan has opened its first hotel in the world, managed entirely by robots. Of course, it is unlikely that this trend will become widespread, but there is no doubt that further enterprises of the hospitality industry continue to introduce a variety of technological innovations for increasing the amenities of different categories to its guests.

6. There will be a continuing improving in the field of ecology requirements of hotel standards. An example of this is the signing of sixteen New York hotels obligations to reduce greenhouse gas emissions by 30% over the next decade.

The above trends characterize the different approaches in the implementation of innovative technology by companies in the hospitality industry – from applying human factors to the increasing individualization of service and customer focus to complete the transition to robotics.

### **Discussion**

As it was already mentioned, the study of issues of globalization in the hospitality business was done by Lynn van der Wagen (2001), J.R. Walker (2012), Y.V. Alekseeva (2012), D.A. Chudnovskiy (Bunakov et al., 2015) and others. However, the authors of this article may not agree with all developed scientific approaches.



So Y.V. Alekseeva (2012) identifies the following common features of globalization in the hospitality industry: the disappearance of national and regional preferences and a gradual alignment of the needs and demands of consumers; economies of scale of production through standardization of products or services; the benefits of global marketing. According to the authors of the article, the economies of scale of production through standardization of products or services relates to a network form of organization of the hotel business, and for small and medium independent businesses rather apply various forms of outstaffing and outsourcing. Formerly separate provisions of this studies have already been reflected in publications of some authors of this study (Zaitseva et al., 2015), and caused a certain scientific and practical interest.

The external aspects of globalization in the hospitality industry, substantiated by the authors of the article reflect the most recent changes in the world, and consider the trends that justified the last part of this article.

### Conclusion

In General, according to the results of the conducted research it can be noted that the creation of innovation infrastructure in the hotel industry depend on the level of technological and economic development of the national economy. Countries with a developed production infrastructure are characterized by the increasing role of immaterial, intangible production factors, information system development, advanced development services. Thus, there is a real possibility of creating a network of consulting, engineering, service, and information services that support innovation processes. And the development of innovative technologies have long-term character, and their driving force is, above all, the revolution in information and communication sector, the liberalization of markets and increased international competition.

Global trends and challenges are changing the hotel business. Only those hotels that are able to change with demographic, technological and economic changes, and to adapt to occurring changes, will be able to succeed.

The assessment of the impact of globalization on the introduction of innovative technologies which was held in this article will allow the hospitality industry to enhance the validity of management decisions, which ultimately will lead to improved efficiency innovation and their effectiveness at the level of individual enterprises and the entire hospitality industry.

### Disclosure statement

No potential conflict of interest was reported by the authors.

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