# PERSONNEL TRAINING AS A CONDITION FOR INNOVATIVE DEVELOPMENT OF AN ENTERPRISE IN THE CONDITIONS OF THE DIGITAL ECONOMY

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(ON THE EXAMPLE OF THE HOTEL BUSINESS)

Anna Ivanova<sup>1, \*</sup>, Elena Nikolskaya<sup>2</sup>

<sup>1</sup> Plekhanov Russian University of Economics, Moscow, Russia <sup>2</sup> Plekhanov Russian University of Economics, Moscow, Russia

\*Corresponding author. Email: 4466555@mail.ru

### ABSTRACT

The article examines the role of personnel training for the innovative development of an organization using the example of hotel enterprises in the capital region, analyses the dynamics of the personnel innovativeness indicator and the structure of innovations introduced. The authors emphasize the feasibility of continuous development of staff skills, highlight the main shortcomings of personnel qualifications in hotel enterprises and analyse the importance and advantages of digital transformation of educational activities, as well as the relationship between the development of employee competencies and the implementation of innovations. The results of the analysis obtained by the authors will allow the management of hospitality enterprises to monitor the dynamics of innovative potential in the context of such indicators as innovativeness of personnel, human capital and learning ability, raising the qualifications of employees, taking into account the advantages of digital transformation of the educational process, and improving the quality of services provided by enterprises in the hospitality industry.

*Keywords:* personnel qualifications, innovative development, digital transformation of education, hotel business.

## **1. INTRODUCTION**

Globalization, a dynamic competitive environment, changes in consumer demand stimulate the management of enterprises to constantly adapt to transformations in various sectors of economy, forming competitive advantages through the creation of new and improvement of existing qualities of enterprise activity.

Introduction of the results of innovative activities contributes to significant economic growth and progress in the socio-economic and cultural spheres of life. Innovations influence not only private business, but also government institutions and society as a whole. Innovative activity is of particular importance in times of crisis, when the main task of business is survival.

# 2. INNOVATIVE DEVELOPMENT OF ENTERPRISES

The 2020 pandemic has seriously affected the tourism industry. The tourism industry for many countries is a key element in the formation of national wealth (20% in Greece's GDP, 18% in Portugal's GDP, 15% in Spain's GDP, 13% in Italy's GDP) [9].

According to the World Travel & Tourism Council (WTTC), the share of the tourism industry in global GDP decreased by \$4.5 trillion in 2020. In 2019 this indicator was \$ 9.2 trillion, or 10.4% of global GDP.

As one of the largest and most profitable industries in the world economy, this industry is acutely responsive to global economic downturns and geopolitical changes, but it can quickly recover, reaching the levels preceding such changes. Research by the World Tourism Organization (UNWTO) shows an almost double increase in

international tourism flows over the past twenty years, reaching 1.5 billion inbound tourists in 2019 [6].

The tourism and travel sector has been growing by 3.5% for nine years until 2020, outpacing the growth rate of the global economy (2.5%), providing about 330 million jobs in 2019, which corresponds to every tenth workplace in the world. In 2020, about 60 million jobs were cut, which makes almost 20%, and this indicates fierce competition in the industry for the remaining jobs. The current uncertainty of the epidemiological situation threatens further job losses. This situation forces the management of enterprises to implement anti-crisis programs, develop an innovative development strategy in an unstable economy and make appropriate organizational and managerial decisions.

When considering the implementation of innovative activities, it is important to take into account the need for selecting high-quality personnel. The absence of such personnel can negatively affect the quality and efficiency of innovation activities, as well as serve as an obstacle to the implementation of innovations due to the low level of competence and misunderstanding of such a need.

Development of a modern enterprise of the hospitality industry is not possible without the introduction of innovations, which determines the need to assess its innovative potential.

# **3. ASSESSMENT OF THE INNOVATIVE POTENTIAL OF THE ENTERPRISE: PERSONNEL**

To determine the parameters for assessing the innovative potential of a hotel enterprise, it is necessary first of all to analyse the indicators of an organizational and managerial nature, which are presented in Table.

#### Table. Indicators for determining the parameters of the organizational and managerial indicator for assessing the innovative potential of a hotel enterprise

no.	Indicator s	Characteristic
1	Personnel innovative ness	The ratio of a hotel company employees engaged in the development and implementation of innovative projects in the total number of employees
2	Quality of human capital	The ratio of the number of employees of a hotel company with higher education (if they have a scientific degree, the number of such employees is doubled) to the total number of employees
3	Personnel training capacity	The ratio of the number of employees of a hotel company who have undergone additional training and retraining within the framework of hotel management during the year to the total number of employees

The coefficient of personnel innovativeness is determined using the formula:

$$Cpi = \frac{Pi}{Ptot},$$
(1)

where Cpi - the coefficient of personnel innovativeness;

 $P_1$  - the number of employees of the hotel company engaged in the development and implementation of innovative projects;

P<sub>tot</sub> - is the total number of employees of the hotel business enterprise.

The human capital quality indicator is used to determine the level of scientific knowledge and education of the employees of a hotel enterprise. The higher the value of the human capital quality indicator, the more inclined the staff of the hotel business enterprise is to develop and implement innovations.

The calculation of the value of the human capital quality coefficient is as follows:

$$C_{hcqc} = \frac{Phe}{Ptot},$$
(2)

where C hcqc is the human capital quality coefficient;

 $P_{he}$  - the number of employees of the hotel company with a higher education (if they have a scientific degree, the number of such employees is multiplied by a correction factor of 2);

P<sub>tot</sub> - is the total number of employees of the hotel business enterprise.

The third coefficient is the learning rate. This coefficient reflects the level of training and retraining of the personnel of the organization of the hotel business. The higher the value of the learning rate, the lower the level of resistance in the team to the introduction of innovative technologies and customer service services [2]. The calculation of this coefficient takes into account the following expression:

$$C_{lr} = \frac{Ptrain}{Ptot},$$
(3)

where Clr is the learning rate;

 $P_{train}$  - is the number of employees of a hotel company who have undergone additional training and retraining within the framework of hotel management during the year to the total number of employees;

 $P_{\text{tot}}$  - is the total number of employees of the hotel business enterprise.

The scale of innovative activity of hotel enterprises can also be considered through the prism of the share of employees engaged in the development and

implementation of innovative projects in their total number. In order to diagnose this aspect of the innovative development of the hotel enterprises of the capital, in Figure, we will consider the dynamics of the coefficient of staff innovativeness on the example of the city of Moscow [2, 12].

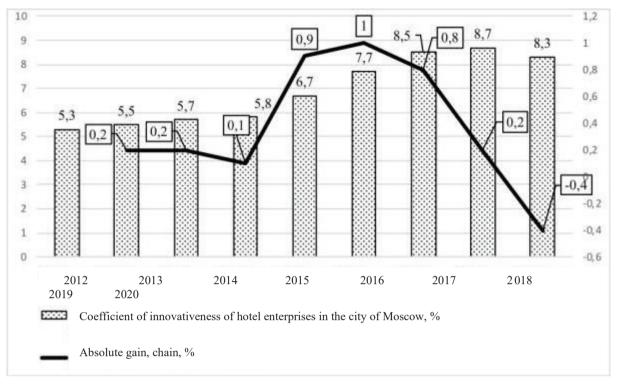


Figure. Dynamics of the coefficient of innovativeness of the staff of hotel enterprises of the city of Moscow.

The analysis of the presented information allows us to conclude that there was no radical drop in the coefficient of innovativeness of the staff of hotel enterprises in Moscow in 2020 connected with the negative influence of the pandemic. The value of this indicator in 2020 compared to 2019 decreased by only 0.4%, which indicates the desire of the organizations of the hotel industry of the capital to retain qualified personnel even in a difficult economic situation in order to use their potential in competition while restoring the market segment. In general, during the period from 2012 to 2015, the value of the innovation activity coefficient increases slightly and remains stable (an increase occurs from 5.3% in 2012 to 5.8% in 2015), after 2015, during the period under review from 2015 to 2019, the value of the personnel innovativeness coefficient steadily increases. The largest increase by 1% in this indicator occurs in 2017 compared to 2016, as well as by 0.9% in 2016 compared to 2015. In general, in 2019, compared with 2012, the coefficient of innovativeness of the staff of hotel enterprises in Moscow increased by 3.4%, which indicates the expansion of the scale of innovation processes.

It should be noted that over the past 10 years, about 45% of new hotel enterprises in the Russian Federation have been opened on the territory of the city of Moscow and at least 33% are foreign hotel chains and companies with international quality standards and striving to provide high-level service, which is a serious

competition for the domestic hotel segment of the tourism industry. Such conditions oblige to "listen" to the global trends in the hotel market, which are being introduced in the country through the emergence of international hotel chains that use various types of innovative solutions (architectural / design, product, management, marketing, process and technological).

The main international trends in the hotel services market include: robotization of hotel enterprises, introduction of "smart" hotel rooms, the use of environmental innovations (garbage sorting, plastic rejection, non-daily change of bed linen, etc.), the development of mobile online resources, blockchain technology, etc. The possibility of introducing innovative solutions into the activities of hotel enterprises is impossible without an appropriate personnel policy, which involves improving the skills of personnel and, accordingly, their innovativeness for the implementation of innovative solutions in the activities of hotel enterprises.

## 4. PERSONNEL QUALIFICATIONS IN THE INNOVATIVE DEVELOPMENT OF THE ENTERPRISE

Despite the indicator of staff innovation expressed quantitatively, it is impossible to improve the quality of

hotel services without a high level of staff qualification, and the need for innovative development determines new requirements for their training. Currently, a number of experts note a shortage of personnel with a high professional level for the innovative development of hotel enterprises. This especially refers to regional hotels, where the professional skills of the staff often do not correspond to the necessary level of competence. The personnel policy of the management of an enterprise striving for innovative development is obliged to focus on improving the skills of employees in a new reality, where the digital transformation of educational activities simplifies and often reduces the cost of the learning process and allows regional enterprises to get their staff trained remotely. This format of training is feasible owing to the digital transformation of education, which is an integral element of the evolutionary development of the form of providing educational services, including raising the level of qualifications in the context of an innovative paradigm.

According to the Agency for Innovation and Development of Economic and Social Projects [7], the largest volume of innovations currently relates to technical innovations (about 50%), followed by communication (about 30%), management (about 12%), environmental (about 11%) and other types of innovations (about 4%).

The rapid development of technological innovations requires the management of hotel enterprises to automate the processes of operational activities. Currently, booking rooms is actively carried out through various mobile applications (Booking.com , Ostrovok.ru , Hotels.ru , Trivago.ru, etc.), contactless service is provided to guests via messengers (WhatsApp, Telegram, etc.), cleaning is carried out by robot vacuum cleaners, etc. [4, 6].

Moreover, within the framework of providing service to the staff of hotel enterprises, it is necessary to take into account changes in the portrait of the modern consumer of hotel services. The modern consumer is represented by a category of people aged 50+. This age category has free funds for tourist trips and the availability of free time for their implementation. The main purpose of tourist trips of this consumer category is to increase immunity (improve health), and therefore hotel companies should at most focus the services offered on the desired request (disease prevention, detox programs, etc.). The modern consumer of hotel services actively uses innovative IT solutions and, through mobile applications, actively communicates with the outside world, while making a conscious choice to a healthy lifestyle and actively participating in various sports events. Such progressive development of the service necessitates the training of personnel corresponding to advanced trends and standards based on certain methods and forms of interactivity training, including and practiceorientation.

Thus, the level of qualification and experience of the staff directly affects the innovative development of the hotel enterprise and, as a result, the quality of hotel services, the satisfaction of guests and their loyalty, as well as the steady income of the hotel enterprise.

Based on the analysis of the qualifications of the staff of various modern domestic hotel enterprises, according to a number of experts, the following disadvantages are highlighted: the qualifications of hotel staff which do not meet international requirements and standards, weak intercultural communication skills and knowledge of digital technologies, lack of experience in implementing environmental innovations. This analysis primarily applies to regional hotel companies, because based on the information presented in Figure 1, the level of staff innovativeness in the metropolitan region is at a fairly high level.

# 5. ADVANTAGES OF DIGITAL TRANSFORMATION OF EDUCATION FOR STAFF DEVELOPMENT

Based on the analysis carried out, it is necessary to emphasize the importance of digital transformation of educational activities, which by means of a remote form allows to carry out timely professional development of personnel "on-the-job", which is of particular importance for regional hotel enterprises. Digitalization of education allows the staff to choose the optimal training mode taking into account the latest changes in the field of education, to gain knowledge despite the workload of the work schedule and based on the needs of the business.

Therefore, the digitalization of educational activities forms an effective environment in which the education system and business are integrated, which allows training professionals for various industries who are able to work in the conditions of the development of innovative activities. Thus, it can be concluded that the digitalization of educational activities has the following advantages:

- proactive nature of staff training (accessibility and simplification of the electronic method of providing educational services, including remote involvement of expert practitioners in educational programs, taking into account what the business needs),
- continuity and personality-oriented approach (flexibility of staff professional development to master the latest innovative methods of work "on-the-job" and in accordance with the individual professional needs of each category of the employee),
- efficiency (price-quality control of educational programs, the possibility of forming a corporate program).

Digitalization of educational activities for the management of hotel enterprises should serve as a driver for making managerial decisions in the direction of:

- 1. Formation of new corporate modular educational programs;
- 2. The use of new methods of monitoring and evaluating the effectiveness of the staff of the hotel enterprise;
- 3. Assessment of the quality of services provided, as well as the effectiveness of the structural divisions of the enterprise using new methods;
- 4. Improving the quality of services provided and the economic activity of the hotel enterprise through the introduction of new methods.

All of these recommendations relate to management innovations, which acquire special value against the background of the main modern trends in the development of national economies in the context of digital transformation, which is multidimensional and affects not only education, but also healthcare, Internet banking, etc.

Mindful of the above, the conditions of digital transformation of educational activities allow us to form a high-quality innovative scientific and educational environment for timely preparation and advanced training of personnel. The strategic planning documents of the Russian Federation (the Information Society Development Strategy for 2017-2030, approved by Presidential Decree No. 203 of May 9, 2017; the Digital Economy of the Russian Federation Program, approved on July 28, 2017 No. 1632-r, etc.) provide for stimulating the development of digital technologies and their dissemination in the socioeconomic sphere, educational activities, public and commercial sectors, which confirms the importance of digitalization and the need to eliminate or minimize the main factors constraining the spread of technological innovations: imperfection of legal regulation, shortage of personnel and low level of personnel competence, as well as information infrastructure and security.

## **AUTHOR'S CONTRIBUTION**

A.N. Ivanova. Generation of the idea of the research, selection, and systematization of the material for analytical work, writing and editing the text of the article.

E.Yu Nikolskaya. Formulation of the research problem, analysis of data for calculations in the analytical part of the study, consideration of the results obtained.

## REFERENCES

[1] A. Aganbegyan. To get out of stagnation, it is necessary to change the economic policy. Report of

Academician of the Russian Academy of Sciences A. G. Aganbegyan at the scientific and practical conference "Russian Economy and Russian Business Education: ways to overcome the Crisis and Opportunities for Growth", 26.11.2015. http://www.ras.ru/digest/showdnews. aspx?id=dd8cf6aa-ecd0-45b6-b91b-a7c78cb77811 (accessed: 17.09.2021).

- [2] E.A. Dzhandzhugazova, E.A. Blinova, L.N. Orlova, M.M. Romanova, Intellectual Resources Used in Developing Tourism and Hospitality Industry, in: Eurasian Journal of Analytical Chemistry, 2017, vol. 12, no. 5b, pp. 705-722. DOI: 10.12973/ejac.2017.00204a
- [3] L. Grainer. Evolution and Revolution as Organizations Grow, in: Harvard Business Review, 1998, p. 58.
- [4] E.Yu. Nikolskaya, M.M. Romanova, O.V. Pasko [et al.], Formulation of development strategy for tourism and hospitality industry, in: International Journal of Management, 2020, vol. 11, no. 3, pp. 467-474. DOI: 10.34218/IJM.11.3.2020.050
- [5] E.L. Ilina, A.N. Latkin [et al.], Crowdfunding as a Tool for Promotion and Development of Tourismrelated Innovation Projects, in: Journal of Environmental Management and Tourism, 2017, vol. 8, no. 4 (20), pp. 896-901. DOI: 10.14505//jemt.v8.4(20).19
- [6] A.V. Romanyuk, Hospitality industry in Russia: Key problems and solutions, in: Journal of Environmental Management and Tourism, 2019, vol. 10, no. 4 (36), pp. 788-800. DOI: 10.14505/jemt.v10.4(36).09
- [7] Official site of innovations in Russia. http://www.innoros.ru (accessed 17.09.2021).
- [8] M.M. Romanova [et al.], Entrepreneurial Clusters as a Model of Spatial Development of Russian Tourism, in: Journal of Environmental Management and Tourism, 2018, vol. 9, no. 4 (28), pp. 757-765. DOI: 10.14505/jemt.v9.4(28).08
- [9] A.V. Romanyuk, The system of indicators for assessing the effectiveness of the regions in the field of tourist services in Russia: Key problems and solutions, in: Journal of Environmental Management and Tourism, 2020, vol. 11, no. 6 (46), pp. 1347-1367. DOI: 10.14505/jemt.v11.6 (46).05
- [10] L.A. Popov [et al.], Booking Curves as an Instrument of Increasing of Independent Hotel Enterprise Efficiency. Case of Russia, in: Journal of Environmental Management and Tourism, 2017, vol. 8, no. 6 (22), pp. 1268-1278. DOI 10.14505//jemt.v8.6(22).14
- [11] E. Toffler, Shok budushchego [Future shock], AST, Moscow, 2008, p. 560.

- [12] N.A. Zaitseva, D.A. Kozlov [et al.], Evaluation of the competencies of graduates of higher educational institutions, engaged in the training of personnel for tourism and hospitality, in: Eurasian Journal of Analytical Chemistry, 2017, vol. 12, no. 5b, pp. 685-695. DOI 10.12973/ejac.2017. 00202a
- [13] Oxford Business English Dictionary. https://en.oxforddictionaries.com (accessed 10.09.2021).
- [14] P. Promsivapallop, A Critical Evaluation of Transaction Cost Economics Applied to Outsourcing in the Hotel Industry in Thailand / P. Promsivapallop, 2009, p. 314.
- [15] F.F. Reichheld, One Number You Need to Grow, in: Harvard Business Review, 2003, December. https://hbr.org/2003/12/the-one-number-you-needto-grow (accessed 10.10.2021).