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## Innovative human capital in the world and Ukrainian aviation

Innovative human capital as one of the factors of the formation of a modern model of economic development based on the introduction of elements of the knowledge economy is considered. The place of innovative human capital in the world and Ukrainian aviation is determined. The value of forming a new type of human capital for the development of modern aviation is being established.

Under human capital is traditionally understood the stock of knowledge and skills that society has. Human capital is capital in the form of mental abilities, obtained through education or through practical experience. The concept of human capital is widely used to characterize a particular form of capital reflecting the production capabilities embodied in a human being.

Innovative human capital is the knowledge and experience of creatively thinking, entrepreneurial specialists in the field of technical and natural sciences, marketing and management technologies [1]. The formation of innovative human capital requires significant investment.

If we talk about innovative human capital, in this case, so-called "narrow" investments - investments in formal education (school, colleges, university) acquire special significance and the formation of a specific innovative component of the employee. This is due to the fact that the development of modern technology and organization, even mass production is impossible without highly qualified specialists. According to OECD estimates, one additional year of formal education on average in the country can increase employment by 1.7 percentage points, and productivity by 5%. It should be noted that practically in all countries there is a tendency to increase the proportion and number of persons with a broad academic background with theoretical training at the university. In 2000-2010, the average annual increase in this number was: in Germany - 1.3%, in Austria - 3.3, in Denmark and Canada - 2.4, in Australia - 3.2, in the United Kingdom - 4, Ireland - 7.3% [2]. It should be noted one of the features of investment in education: formal education is acquired before the beginning of work and is maintained for a long period. Investments in special education can go the whole life.

Thus, the analytical center of the company "Aviapersonal" carried out the calculation of the average annual labor productivity of some Russian, European and American airlines following the results of 2016, using the official annual reports of the companies [3]. The analysis was subject to the activities of both groups of companies, including a number of airlines and airlines separately.

The leaders in terms of the average annual labor productivity calculated by the number of passengers served were «Sibir» Airlines, «UTair Aviation Company» and «SWISS» Airline.

Leaders in the average annual labor productivity, calculated as the ratio of annual revenue to the average annual number of employees, are: «Siberia» Airlines, «Austrian Airlines» and «SWISS» Airline.

Among the groups of companies, it is worth noting the activities of the Lufthansa Passenger Airlines Group (Austrian Airlines, SWISS, Eurowings, Lufthansa, Brussels Airlines, Edelweiss, SunExpress), which in 2016 received revenue of 23,891 million euros, surpassing the group "American Airlines Group" (American Airlines, US Airways), which received revenue of \$40,180 million in 2016.

In turn, the British consulting office Skytrax, specializing in the analysis of air carrier service, named the best airlines in the world in 2018, based on the analysis of questionnaires from 20.36 million respondents [4].

The TOP-10 airlines in 2018 according to Skytrax are as follows:

- 1. Singapore Airlines (2nd place in 2017)
- 2. Qatar Airways (1st place in 2017)
- 3. ANA All Nippon Airways (3rd place in 2017)
- 4. Emirates (4th place in 2017)
- 5. EVA Air (6th place in 2017)
- 6. Cathay Pacific Airways (5th place in 2017)
- 7. Lufthansa (7th place in 2017)
- 8. Hainan Airlines (9th place in 2017)
- 9. Garuda Indonesia (10th place in 2017)
- 10. Thai Airways (11th place in 2017).

The best airlines in Europe are recognized by Lufthansa. At the same time, Swiss and Austrian Airlines, which are part of the Lufthansa Group, received the second and third place in the region.

On May 30, 2018, the government approved the National Transport Strategy by 2030. And on June 21, the Ministry of Infrastructure presented the document to the general public in Ukraine. 45 million passengers, a Boryspil hub with a passenger flow of 30 million people, more than 20 regional airports with updated runways capable of accepting modern Boeing and Airbus aircrafts, established air communication of Ukraine with 110 countries, domestic airlines use the fleet no older than 8 years. Like this should look Ukrainian aviation in 2030 on the plan of the authors of the "Strategy for the development of aviation transport and airports for the period until 2030" [5].

The above indices of the development of the industry can not be achieved without improving the education system. Ukrainian universities that train aviation personnel need to update the material and technical base. Therefore, experts who worked on the Strategy, offer to introduce tax incentives for enterprises that will employ young people.

According to the latest information, five Ukrainian airlines carried out 93% of air traffic in 2017. This is stated in the study YouControl.

For comparison, in 2016, 6 Ukrainian airlines performed 95% of the volume of all air transportation. The leader was the UIA company, which in 2017, compared with 2016, increased passenger traffic by 16.5%.

Also in the top 5 were Rose of the Winds (150% increase in passenger traffic), Azur Air Ukraine (+ 17%), Atlasiet Ukraine (+ 74%) and Bravo (+ 50%).

In 2016, the leaders included: UIA, Azur Air Ukraine, Wind Rose, Yanair, Bravo and Atlasjet Ukraine. At the same time, Bravo just started working on the Ukrainian air market in April 2016.

In total in 2017 in Ukraine, 18 Ukrainian airlines were engaged in passenger air transportation. Regular flights between Ukraine and other states were carried out by 10 Ukrainian airlines (in 43 countries) and 29 foreign (in 27 countries).

Ukrainian air carriers transported 5.84 million passengers by international flights, and foreign passengers - 4.97 million passengers.

Indicative is the gap between airlines in terms of income, which indicates a high concentration of the Ukrainian air market. So, in 2016 UIA by this indicator has overtaken the nearest pursuer - Wind Rose - 6 times. The Wind rose, in turn, earned twice much as Azur Air Ukraine [6].

Thus, effective tools for managing the labor productivity of airlines is the effective management of personnel, which includes:

- continuous monitoring of the demand for personnel, planning to meet this need by hiring;
  - effective rationing of labor;
- formation and continuous development of external and internal personnel reserve;
  - development of pay and motivation policy;
  - improving the organization and working conditions, automation;
- rotation of personnel both horizontally (widening the range of specialties to be mastered, the number of processes serviced, etc.), and vertically (assigning regular or extraordinary tariff grades, classes, categories, ranks and holding higher positions);
  - development of forms of mentoring:
- creation of comfortable social and psychological working conditions for everyone and the collective as a whole.

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