

THE METHODS AGGREGATED ASSESSMENT OF DIGITAL TRANSFORMATION MANUFACTURING INDUSTRIAL EFFECTIVENESS REPUBLIC OF BELARUS IN A GLOBALIZING WORLD ECONOMY

I. Zubritskaya

Belarusian national technical University (Minsk, Republic of Belarus)

In a globalizing world economy, there is need for integrated assessment of the digital transformation manufacturing industry effectiveness to Republic of Belarus. The aggregated assessment methods for digital transformation of industry effectiveness is due to social significance and takes into account the socio-economic and financial components of performance with the participation in the digital transformation of industrial enterprises various forms of ownership. This assessment will expand the possibility of alternative economically sound solutions at different levels organizational and economic digital transformation mechanism manufacturing industry Republic of Belarus.

Thus, the methods aggregated assessment of digital transformation manufacturing industry effectiveness Republic of Belarus there are base on following principles:

- the long-term cyclical monitoring. The results of digital transformation manufacturing industry should be controlled, beginning at the evaluation project efficiency of digital transformation of manufacturing industry on stages digital industrial modules development and their implementations to industrial activity manufacturing industry enterprises, up to by issue, sales and services of high-technology and high technology industrial output;

- the use of time lags and estimated effects of digital transformation industry on the economic result of the organizational-economic mechanism development digital transformation manufacturing industry Republic of Belarus in the time intervals;

- the discounting and impact inflation (reduction of currencies used in the process digital transformation manufacturing industry to a single currency, deflation by the base inflation index corresponding to this currency);

- the possibility comparability results without the introduction in production processes of digital industrial modules and with their implementation;

- the forecasting risk and various kinds of adverse significant prevention consequences in the process digital transformation manufacturing industry (in quantitative form in the discount rate);

- the influence of circulating funds volume, needed for digital transformation manufacturing industry.

In addition, the aggregated assessment methods of the digital transformation of the manufacturing industry effectiveness to the Republic of Belarus contain a social and industrial assessment of the impact of digital transformation of the manufacturing industry on the population and related sectors of the economy:

- the change in the value of citizens' property due to the development digital transformation of the manufacturing industry;
- the decrease in the level of retail prices for certain goods and services due to the increase in the supply of these goods in the development process digital transformation of industrial production;
- the impact of the digital transformation manufacturing industry on the health of industrial workers, including the environment and public health;
- the influence of digital transformation manufacturing industry on production volumes (works, services) of related industries;
- the significant saving of resources due to the use of high-tech industrial products integrated into broadband Internet networks using high-speed processing of large amounts data and other technical and technological means of the fourth industrial revolution.

To assess the effectiveness of the digital transformation manufacturing industry Republic of Belarus, can be identified five parametric groups, such as: economic, social, technical and technological, environmental, resource and raw materials. Each parametric group contains quantitative indicators, formulas for their calculation, are units of measurement.

The selection of indicators produced, based on the analysis of existing methods assessing the effectiveness of innovative projects, available statistical data of the National Statistical Committee of the Republic of Belarus, as well as indicators of the UN sustainable development goals.

Thus, the proposed methods aggregate assessment of the digital transformation effectiveness can be use in the complex diagnostics and evaluation of the results digital transformation industrial enterprises, industrial associations, sectors of the economy and the national economy as a whole. There are can also become the basis for management decisions, the development an alternative integrated methodology for assessing the effectiveness investment projects taking into account the diverse quantitative and qualitative effects.