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RUSSIAN ENTERPRISES DEVELOPMENT BASED ON EUROPEAN EXPERIENCE OF LABOR PRODUCTIVITY ENHANCEMENT

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Abstract

The article is devoted to one of the most painful points of the Russian economy - labor productivity (PT) issues at medium and large enterprises. Strategically important tasks labor productivity enhancement are solved in the developed countries of the world with the active participation of the state, using targeted programs and teams of specially trained experts. More than a dozen European countries are members of the European Association for Increasing Labor Productivity. The study of European experience in the field of labor productivity can provide serious support in ensuring the continuity of economic entities. At present, the systematic, integrated approach of the Government of the Russian Federation to the problem of vocational training is reflected in the passport of the national project "Labor productivity and employment support". This document defines the following targets until December 31, 2024: growth in labor productivity at medium and large enterprises performing at the basic non-resource sectors of the economy should be not lower than 5% per year in 2024. Taking into account the provisions of the national project "Labor Productivity and Employment Support" and generalizing the experience of European manufacturers, the authors propose manufacturing enterprises to conduct risk-based diagnostics and self-assessment (RBDiS) of labor productivity. This process will help to identify key production problems, potential growth points, compare their performance indicators with the benchmark, qualitatively prepare for entry into the program "Labor Productivity and Employment Support" and continue to participate in the All-Russian award "Labor Productivity: Russian Industry Leaders".

Keywords: National project, labor productivity, European experience, enterprise.

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1. Introduction

Regulation of labor productivity at an industrial enterprise is implemented on a technological, managerial and personnel basis. It is especially important that all personnel of the enterprise to be included in the processes of increasing labor productivity. European studies turn to diversity management at this point (Velinov, 2018). Also, the great number of researches concentrates on the influence of green economy principles or environmental issues on productivity growth (Albrizio, Koźluk, & Zipperer, 2014; Besco, 2014; Mulder & De Groot, 2007; Renner, Sweeney, & Kubit, 2008).

“The negative dynamics of labor resources might be changed by the redistribution of resources between more productive industries and organizations, as well as by increasing the internal resources of enterprises, such as expanding innovative potential, increasing the production capital intensity." (Basic trends of budget, tax and custom policy for 2019 and plans for 2020-2021, 2018). Also, such tools as borrowing advanced technologies, improving managerial competencies and qualifications of employees might be useful.

It should be noted that there is also a serious problem of low innovation and information activity of workers in industrial enterprises. To perform RBDiS, complete and objective information is needed on up-to-date and systematic data on products (work, services), competing enterprises, industries, regions. It should take into account the impact of such digital technologies as the industrial Internet, wireless technology and other infrastructure elements of the digital economy.

Analyzing the impact of the digital economy on changes in GDP and on the change in total labor costs, which determine the dynamics of labor productivity, the following can be noted: despite the extreme relevance and acute need for the development and implementation of digital technologies, the situation of using digital technologies in production processes is characterized by ambiguity and inconsistency. Thus, the study of issues in the R&D process related to labor productivity and the influence of the digital economy helps to identify factors that negatively affect labor productivity and identify hidden resources.

2. Problem Statement

The production enterprise in the framework of risk-oriented diagnosis and self-assessment (RBDiS) of labor productivity should solve the following tasks:

- to determine the place of the enterprise at the market (industry, region, product), taking into account the availability of unified statistical data on the industry;
- to compare its performance with the benchmark;
- to diagnose key production problems;
-to identify the main factors affecting labor productivity in the enterprise;
- to adjust the development strategy for points of potential growth;
- to prepare qualitatively for the entry into the program "Labor Productivity and Employment Support".

We also propose focusing on special tasks in order to conduct RBDiS in accordance with the recommendations of the program "Labor Productivity and Employment Support" (The Russian

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Government, 2018): 1) achieving an increase in labor productivity; 2) involvement of enterprise personnel in the implementation of measures to increase labor productivity; 3) training for employees of an enterprise participating in a national project; 4) the creation and ensuring the effective functioning of the infrastructure for increasing labor productivity.

In order to solve the task of labor productivity increase, it should be taken into account that the optimization of any process cannot be justified if in the future it leads to a decrease in product quality and, as a result, to a decrease in customer satisfaction of products (works, services).

3. Research Questions

The experience of economically developed European countries shows that labor productivity is associated with all areas of enterprise activity: production, technical, organizational, financial, economic and social. In Russian Federation, according to Rosstat data on labor productivity in accordance with the OKVED2 classifier for 2015-2017: the share of industrial workers in employment across the country as a whole in 2017 was 19.0% (13.7 million people) (Analytical Center under the Government of the Russian Federation, 2019). The bulletin highlights significant differences by regions: the highest indexes were observed in the commodity regions with an export-oriented economy (25.5%), developed regions with reliance on the mining (22.9%) and manufacturing (22.2%) industries, and also in industrial and agricultural regions (22.5%). The smallest indexes of labor productivity belong to the regions with the highest and lowest levels of development: 14.1% - in regions with a large share of the population engaged in services (in financial and economic centers), 11.3% - in the least developed agricultural regions (11.3%), where the majority of the population is engaged in agriculture. In 2017, labor productivity in the whole economy of the country increased by 1.9% after an increase of 0.2% in 2016 and a decrease of 1.1% in 2015.

The general factors affecting labor productivity should be noted: material and technical; organizational and economic; legal; socio-psychological. The value of this or that factor in different periods has a different effect on the production activity of the enterprise, on cost, on the amount of costs.

And on the basis of the experience of European countries and the indicators of labor productivity index, labor productivity dynamics, additional factors are being investigated in the process of RBDiS: the desire of management to increase labor productivity and achieve results; experience in implementing lean manufacturing tools at the enterprise; the availability of resources for the implementation of labor productivity project; measuring the gap between current indicators of labor productivity, inventory turnover, and industry benchmarks; the possibility of increasing sales by increasing production volumes.

4. Purpose of the Study

If we consider labor productivity as a synthesis of management, production, manufacturability, safety, internal and external logistics, etc., the goal of our study is to compile a draft RBDiS map, which can include the following blocks:

- place and external factors (identification and systematization of external data on the basis of labor productivity);

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- internal factors, problems (identifying the causes of inefficiency and favorable conditions of production) that affect labor productivity;

- features and indicators (level of individualization of demand for a product, “digitalization” of business processes, analysis of financial and economic activities, etc.);

- mechanisms (available technologies for increasing labor productivity);

- control and evaluation (analysis and audit of the level of labor productivity).

Each block of the RBDiS card reveals certain structural elements related to labor productivity at the enterprise. The card can be modified in accordance with the individual characteristics of the enterprise and the planned level of labor productivity, growth rate and growth trends of labor productivity.

5. Research Methods

The labor productivity index (LPI) for the Russian Federation is calculated on an annual basis for the economy as a whole and for types of activity at the level of OKVED2 sections, as the ratio of the indices of the physical volume of added value and the index of change in total labor costs (Federal State Statistic Service, 2018a). Accordingly, the dynamics of labor productivity is the ratio of the index of the physical volume of output of goods and services of the certain industry group (type of economic activity) in year t to the index of the number of employees of the certain industry group (type of economic activity) in year (Federal State Statistic Service, 2018b).

The authors used such research methods as analysis, synthesis, description and comparison. Their application is determined by the theoretical nature of the study which included the following stages: formulation of the problem, analysis of information on this topic, comparison and description of different scientific views on the studied issues, synthesis of different approaches to the problem.

6. Findings

Using analytical tools in the “Risk-oriented Diagnostics and Self-Assessment” map format to determine and adjust the level of labor productivity at an industrial enterprise allows us to understand the relationships, measure and calculate the influence of various factors, see possible directions for increasing labor productivity and select optimal indicators. Let us consider each block of the RBDiS card.

1. The block "Place and external factors" includes:

- the study of external factors. These include: political, national, general economic, market infrastructure, macrostructural shifts in society, socio-economic conditions in society, logistical failures, climatic conditions, seasonal character of demand, natural resources, changes in legislation (industry, tax, etc.). The list is supplemented in accordance with the individual characteristics of the enterprise and its market position;

- the research, analysis of markets and competitors. As a result, free niches for selling products, weaknesses and strengths of competitors, strategic guidelines, new available technologies, market position are identified, quantitative and qualitative gaps with industry leaders are determined. For example, the final review of the All-Russian prize “Labor Productivity: Industry Leaders of Russia”

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offers companies specific and relevant figures that allow them to systematize data, compare their achievements with leaders, and understand their own growth opportunities (3).

- analysis of new products;
- analysis of new technologies.

To disclose information for these units of the block , marketing methods are used.

2. The block "Internal factors, problems".

Internal factors are divided into three groups: material and technical factors, organizational factors, socio-economic factors (way of thinking and motivation of employees, skill level, and size of wages). The composition of factors for each group is well known and we will not dwell on it. We will focus on a set of problems that affect the productivity of a manufacturing enterprise. These include: inefficient organization of labor, incomplete utilization of production capacities, unskilled labor, imperfect labor legislation, worn out and low productivity fixed assets, outdated technologies, low creditworthiness and at the same time unwillingness of banks to lend to industrial enterprises at an optimal interests level, high investment risks, low R&D production losses.

We believe that if there is no opportunity in the short term to change equipment and use the latest technologies, then first of all it is necessary to find, analyze and eliminate the losses that exist in production: losses due to overproduction; loss of time due to waiting; loss due to unnecessary transportation; losses due to unnecessary processing steps; losses due to excess stocks; losses due to unnecessary movements; losses due to the release of defective products.

The managers competence in losses determination at the production site, development and implementation of measures that will subsequently lead to their reduction, and productivity increase influences greatly on further prospects for the growth of financial performance of the enterprise.

3. The block "Features and indicators."

In the structure of this block as a self-assessment, we include: analysis of the financial and economic activities of the enterprise; analysis of the main and auxiliary industries, donors and recipients identification. The management should carry out a technological audit, analysis of production management, analysis of the logistics procedures organization, and assessment of labor resources. According to the results of all procedures, actual, cash flows and potential indicators of labor productivity are calculated.

4. The block "Mechanisms".

To select effective mechanisms, we determine growth factors - material and technical (lean manufacturing, technology transfer, energy efficiency), financial and economic (stimulating demand, attracting investments, own investments), socio-psychological (training and professional development of personnel, improving motivation methods and incentives, improving performance and discipline). Next, we develop a strategy and tactics for the development of the enterprise on the basis of market research, analysis of promising technologies and products, develop and implement comprehensive projects to increase labor productivity. For example, an enterprise can invest in labor productivity increase in the field of personnel training in the tools of the production system, as well as implement software products that improve the efficiency of working time, such as the Warehouse Management System, a system for

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managing the movement of materials and components, and a solution for 1C: “Enterprise 8. Goal Management and KPI”, e-systems for distant learning (Production Management, 2018).

5. The block "Monitoring and Evaluation".

Within the framework of this block, the following parameters are evaluated: the degree of goals achievement and the performance plan, the degree of available resources usage, the degree of compliance with standards and specifications, the impact of labor productivity on increasing sales, the degree of influence on labor productivity of various factors. Benchmarks for assessing labor productivity in the enterprise include such indicators as the availability of highly qualified personnel, staff turnover rate, enterprise product profitability, the complexity of the production of basic products, and the level of equipment modernization.

The implementation of risk-based diagnosis and self-assessment (RBDiS) blocks of labor productivity at enterprises should be organized as a continuous cyclic process of movement from a comprehensive analysis to the development and implementation of specific projects and activities.

7. Conclusion

We were convinced that industrial enterprises have a need to create conditions for the growth of labor productivity on a technological, managerial, personnel and digital basis and by improving and optimizing production processes. It was noted that the impact of the digital economy on labor productivity is undeniable. Various industrial automation programs allow decreasing the risks associated with the human factor and providing an automatic solution to most complex tasks and the ability to respond quickly, clearly demonstrating the flow of information, resources and materials.

Recent studies in the field of the digital economy and its impact on the labor market, including wages and labor productivity, confirm the thesis that in the future, most likely, the correlation of wages and labor productivity will decrease due to the development and ubiquity of digital technologies, their impact on the political, economic, social and spiritual spheres of human life and society (Aranzhin, 2019).

Mapping "RBDiS" is a large-scale work that determines the actual level of labor productivity, prepares a solid foundation for making special decisions to its increase. As a result of RBDiS, the enterprise can effectively prepare for participation in the national project "Labor Productivity and Employment Support", which allows:

- to adopt the best practices of the Federal and regional centers of competence, forming a modern production culture and standards, study best practices with visits to leading regions in this field;
- to introduce modern technologies in the field of lean manufacturing,
- to mobilize production potential as much as possible without additional costly conversion.

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