

Labour productivity management model taking into account organizational culture of enterprise

Alexey Ivanov

Postgraduate student, ORCID: 0000-0002-4379-2648, e-mail: alexeyivanov10@mail.ru

Moscow University for Industry and Finance "Synergy",
80, Leningradsky Prospect, 125315, Moscow, Russian Federation

Abstract

Slowdown in global economic growth and in productivity growth complicates socio-economic development of Russia and other countries. Raising income inequalities and their continued stagnation lead to an increase in economic, social, and political tensions in society. Automation and robotization of production processes stimulate uncertainty increase in the labour market. Labour productivity improvement at both micro- and macroeconomic levels is the factor of intensive economic growth, which is caused by the improvement of efficiency of use of available resources. Results of the implementation of the Russian national project "Labour productivity and employment support" show that the key part of successful innovations is related to the transformation of organizational culture of enterprise. Specifically, through reorganization of working space of employees and their working hours, reduction in the share of "unnecessary" actions and movements of workers, improvement of self-organization skills, and focus on long-term development.

The article concludes that labour productivity management includes management of organizational culture of enterprise. Labour productivity management model has been presented, consisting of three phases: diagnostics, development, and implementation. Each phase involves a sequence of actions, gradually leading to its realization. The model is cyclic and can be repeated unlimited number of times. Use of the model allows you to structure the process of labour productivity improvement, determine the optimal set of resources for its realization, monitor its realization, and make timely adjustments. Specification of system elements of the model has been presented, including: goal, functions, principles of effective functioning of the model, informational support, human resources and organizational structure, methods and tools. The criteria for the following results of using the model: effective, limitedly effective, and ineffective have been defined. The model for use to enterprises of any scale and specification that intend to make organizational changes in order to improve labour productivity has been recommended.

Keywords: development, diagnostics, economic growth, implementation, labour productivity, management, national project, organizational and economic model, organizational culture, socio-economic development.

For citation: A.O. Ivanov. Labour productivity management model taking into account organizational culture of enterprise (2020) *Upravlenie*, 8 (3), pp. 33–41. DOI: 10.26425/2309-3633-2020-8-3-33-41

Модель управления производительностью труда с учетом организационной культуры предприятия

Иванов Алексей Олегович

аспирант, ORCID: 0000-0002-4379-2648, e-mail: alexeyivanov10@mail.ru

НОЧУ ВО «Московский финансово-промышленный университет «Синергия»,
125315, Ленинградский проспект, 80, г. Москва, Российская Федерация

Аннотация

Замедление темпов роста мировой экономики и темпов роста производительности осложняют социально-экономическое развитие России и других государств. Повышение неравенства в доходах и их продолжительная стагнация ведут к росту экономической, социальной и политической напряженности в обществе. Автоматизация и роботизация производственных процессов стимулируют повышение неопределенности на рынке труда. Повышение производительности труда как на микро-, так и на макроэкономическом уровне является фактором интенсивного экономического роста, создаваемого через повышение эффективности использования имеющихся ресурсов. Результаты российского национального проекта «Производительность труда и поддержка занятости» показывают, что ключевая часть успешных нововведений связана с преобразованием организационной культуры предприятия. А именно, через реорганизацию рабочего пространства работников и их рабочего времени, снижение доли «лишних» действий и движений работников, улучшение навыков самоорганизации и ориентацию на долгосрочное развитие.

В статье сделан вывод, что управление производительностью труда включает в себя управление организационной культурой предприятия. Предложена модель управления производительностью труда, состоящая из трех этапов: диагностики, разработки и реализации. Каждый этап предполагает последовательность действий, постепенно приводящих к его реализации. Модель является цикличной и может повторяться неограниченное количество раз. Использование модели позволяет структурировать процесс повышения производительности труда, определять оптимальный набор ресурсов для его осуществления, осуществлять контроль за его исполнением и своевременно вносить корректировки. Представлена спецификация модели, включающая цель, функции, принципы эффективного функционирования, информационное обеспечение, кадровые ресурсы и организационную структуру, методы и инструменты. Определены критерии следующих результатов использования модели: эффективного, ограниченно эффективного и неэффективного использования. Модель рекомендована к использованию предприятиям любого масштаба и спецификации, которые намереваются вносить организационные изменения с целью повышения производительности труда.

Ключевые слова: диагностика, национальный проект, организационная культура, организационно-экономическая модель, производительность труда, разработка, реализация, социально-экономическое развитие, управление, экономический рост.

Цитирование: Иванов А.О. Модель управления производительностью труда с учетом организационной культуры предприятия//Управление. 2020. Т. 8. № 3. С. 33–41. DOI: 10.26425/2309-3633-2020-8-3-33-41



Introduction

Since the global economic crisis of 2008, most industrialized countries have faced the problem of slowdown in rate of productivity growth. Existing technologies are gradually exhausting their potential, which is reflected in reaching the limit of productivity that contributes to slowdown in global economic growth. A number of experts identify the reasons of the decline in productivity growth as follows: reaching the limits of capacity of traditional technologies [Idrisov et al., 2018], poor quality of labour force [Vandenberghe, 2017], inefficient use of resources and institutional inferiority of system of work with innovations [Adler, Siegel, 2019].

Over the past 50 years, the growth rate of labour productivity in the economies of member countries of the Organization for Economic Cooperation and Development (OECD) has decreased more than 6 times: from 6 % in the first half of the 1970s to 0,5–1 % in the second decade of the XXI century¹.

The value of labour productivity indicator in Russia lags significantly behind leading countries. In 2018 in Russia, the share of gross domestic product (GDP) per employee in current prices at purchasing power parity was about 42 % of the value achieved by the United States².

The growth of economic problems provokes the manifestation of social imbalances. The study [Alvaredo et al., 2018] outlines that increasing income inequalities and their continued stagnation lead to an increase in economic, social, and political tensions in society. Automation and robotization of production processes stimulate uncertainty increase in the labour market.

Among the main factors of economic growth, expressed as GDP growth, we highlight human capital and scientific and technological progress. According to the model, presented in the article [Ivanov, 2020], human capital and scientific and technological progress are factors of economic growth and socio-economic development when there is an increase in labour productivity. In this case, labour productivity itself also acts as factor of economic growth. It should be noted, that labour productivity is factor of intensive economic growth, which is caused by the improvement of efficiency of use of available resources.

Returning to the issues of growing uncertainty in the labour market, it should be stated that scientific and technological progress could contribute to the release

of a large number of human resources. Criteria for the effective management of labour productivity were proposed in the paper [Ivanov, Mikhnenko, 2019]. One of the criteria is socially-oriented enterprise policy, which makes it possible to smooth the negative consequences of rapid automation of production. The criterion involves the rejection of radical measures to reduce a significant part of the organization's employees in order to improve labour productivity.

Brief interim results of the Russian national project "Labour Productivity and Employment Support"

Such criteria, restricting social shocks from the implementation of policies to improve labour productivity, seem necessary in the context of the Russian national project "Labour Productivity and Employment Support". The project is aimed at improving the efficiency of use of labour resources of Russian industrial enterprises. Based on the analysis of the interim results of the project, published as a part of the All-Russian Prize "Labour Productivity: Russian Industry Leaders – 2019"³, the following conclusions can be drawn.

1. There are significant differences in labour productivity both between enterprises of different industries, and within each considered industry.

2. The key idea of innovations, leading to an increase in labour productivity, is the application of principles of lean production.

3. The main part of the implemented technologies is aimed at improving the quality of organizational processes at enterprise. Information centres, aimed at improving the quality of monitoring the implementation of current tasks and long-term goals, are being introduced.

Main part of the innovations are organizational transformations. They are aimed at:

- reorganization of working space of employees and their working hours;
- reduction in the share of "unnecessary" actions and movements of workers, leading to losses of time that could potentially be used for production needs;
- improvement of self-organization through improving goal-setting skills;
- focus on long-term development.

A large number of organizational transformations demonstrate that the introduction of changes in labour productivity management requires taking into account organizational culture of enterprise.

¹ "GDP per hour worked (indicator)", OECD. Available at: https://www.oecd-ilibrary.org/economics/gdp-per-hour-worked/indicator/english_1439e590-en (accessed 20.06.2020).

² "Level of GDP per capita and productivity, GDP per person employed, USD current prices, current PPPs", Organization for Economic Cooperation and Development (OECD). Available at: <https://stats.oecd.org>. (accessed 20.06.2020)..

³ All-Russian award "Labour Productivity: Russian Industry Leaders – 2019": final review. Available at: http://www.up-pro.ru/imgs/specprojects/lidery-promyshlennosti/2019/Productivity_2019.pdf (accessed 20.06.2020).

Role of organizational culture in enterprise management

Success of implementing measures to change labour productivity policies is associated with organizational culture of enterprise. Organizational culture is a set of formal and informal rules, norms, and traditions that affect behaviour of employees and the effectiveness of their activities. Formal elements of organizational culture are documented norms and binding rules, whose violation leads to imposition of fines. Informal elements of organizational culture are undocumented pronounced features of the behaviour of employees, which influence significantly the financial and economic activities of enterprise.

The article [Kuznetsova, Ugol'nikova, 2019] highlights that the effective management of organizational knowledge of enterprise, considered as the result of synergistic effect of the exchange of knowledge between employees in the process of production and economic activity, contributes to improved labour productivity, improved product quality, and enhanced competitive advantages of company. The work [Bishin, 2017] emphasizes that the development of intellectual capital of enterprise, one of the elements of which is organizational capital, contributes to labour productivity improvement by forming creative thinking among employees and increasing their professional adaptability to changing conditions.

Introduction of organizational changes at enterprise is a complex process of restructuring the established type of management and control over the results of personnel activities. Quality of work, performed by personnel, is the main object of organizational change management. Therefore, the personnel plays a crucial role in the implementation of programs dedicated to labour productivity improvement.

Formation and modification of organizational culture is a complex process that is not always amenable to targeted management. However, the introduction of managerial innovations for the implementation of programs for labour productivity improvement may be ineffective if organizational culture of enterprise is not well prepared for the application of innovative management methods and can possibly impede the implementation of the program. The research [Andropova, 2020] states that traditional managerial stereotypes about the prevalence of men in management structure impede career progression of women even demonstrating outstanding performance.

As a result, program for labour productivity improvement should be considered from the very beginning not only as a set of requirements on how to allocate resources in enterprise, but as a complex system of organization of work activities that requires employees to have certain type of thinking. This type of thinking is behind the concept of organizational culture. In other words, labour

productivity management includes management of organizational culture of enterprise.

Labour productivity management model: specification of elements

In the framework of this paper, the organizational and economic model for labour productivity management is presented. Use of this model can increase efficiency of the implementation of programs dedicated to improve labour productivity. The model is universal, that is, it is suitable for enterprises of different size and specialization. Table 1 presents basic principles for the construction of labour productivity management model.

In accordance with the above specification, labour productivity management model has been compiled. The model itself and its detailed description are given below.

Main phases of the model

Labour productivity management model includes three phases: the diagnostic phase, the development phase, and the implementation phase. The phases follow one after another. Moreover, the scheme is cyclic, which indicates the possibility of multiple use of the model. After the final implementation, business processes can be re-diagnosed, new drawbacks can be identified and then optimized in the future.

The diagnostic phase is a sequential process of analysing the existing conditions of enterprise performance and identifying opportunities for its optimization. The main objective of the diagnostic phase is to find potential for improvements of enterprise management model. Later this potential will be transformed into a specific program for labour productivity improvement and will be realized in the future. Figure 1 shows a diagram of the diagnostic phase.

Description of the elements of the diagnostic phase.

1. Assessment of the influence of internal environment on labour productivity occurs by identifying the organizational culture of enterprise. Identification can be carried out using special models presented in [Cameron, Quinn, 2001; Quinn, Rohrbaugh, 1983]. This analysis allows us to highlight the formal and informal features of organizational culture that stimulate or hinder the growth of labour productivity. The highlighting of these features is the result of this first diagnostic step.

2. Assessment of the influence of external environment on labour productivity is carried out through the analysis of incentives and restrictions on the financial and economic activities of enterprise that can be imposed within the following areas: (a) legislation of region or country, (b) quality standards and technical conditions of manufactured products, (c) features of inter-regional and international trade.

Table 1

Specification of system elements of the labour productivity management model

Elements	Specification
Goal	Ensuring sustainable development of enterprise, aimed at improving the efficiency of use of labour, technical, material, and financial resources
Functions	General: planning – determination of strategy for labour productivity improvement; goal-setting - development of short, medium and long-term targets; forecasting – identification of potential problems of the implementation of the strategy and its external effects; organization – creation of system of formal and informal elements that coordinate the process of the strategy implementation; control – measurement of the results, achieved by a specific deadline and their comparison with the targets; regulation – adjustment of the strategy or targets, if any significant deviation from the intended targets occurs. Specific: analysis of organizational and economic activity in order to improve labour productivity; stimulation of use of managerial technologies in order to improve labour productivity
Principles of effective functioning of model	Resulting character – desire to achieve targets; profitability – desire to minimize material, temporary, human, and monetary resources used during the formation and implementation of policies to achieve targets; flexibility – adaptation to changing conditions; modernity – use of the latest methods and controls; efficiency – high reaction rate to changing conditions; rationality – attainability of goals; comprehensiveness – taking into account all the available factors during the analysis and decision-making processes; systematicity – taking into account interdependence of analysed factors; openness – participation of all the involved employees in the implementation and adjustment of the strategy on the basis of free expression of proposals; hierarchical management - multi-level management, implying control of a higher level over the activities of a lower level; accountability – responsibility for the result. Compilation of a periodic report on the effectiveness of the work done by each employee. The report is compiled by each employee separately for their own results and for the results of those employees, with whom the compiler of the report worked for a given period. The report may be later used to apply monetary or non-monetary incentives to increase efficiency of labour force
Informational support	Analytical information based on: system of indicators of the effectiveness of labour productivity management; constructive proposals, expressed by the project participants in order to increase efficiency of the model; individual reports, provided by employees on the effectiveness of the work done; reports, submitted by managers of departments, on the effectiveness of the implementation of labour productivity management model
Human resources and organizational structure	Senior manager for labour productivity management – developing strategy for the implementation of labour productivity management model, monitoring its effective functioning, making adjustments to the model, if necessary; labour productivity management analyst – data analysis, based on a system of performance indicators for labour productivity management, constructive proposals of project participants, individual reports of employees, and reports of department managers in order to structure them and provide them to senior manager; division managers of labour productivity – monitoring the realization of the strategy to implement the labour productivity management model within individual divisions and generating reports on the effectiveness of strategy implementation with the aim of providing them to analyst
Methods and tools	Mechanisms for labour productivity improvement

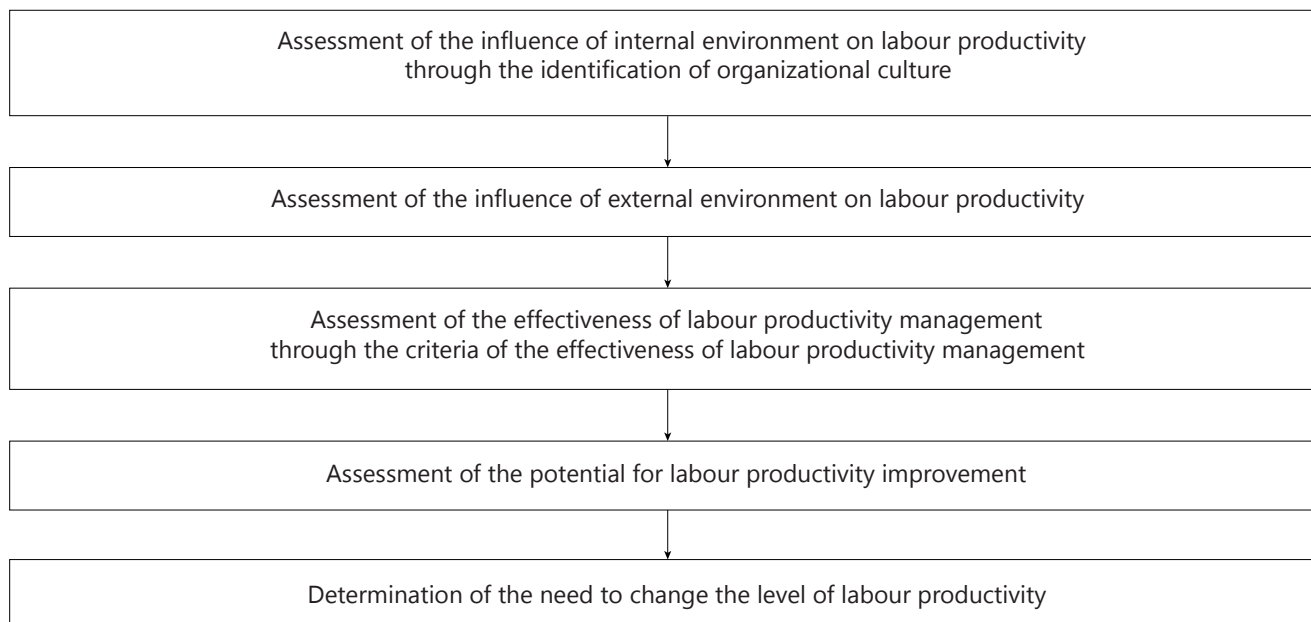
Compiled by the author on the materials of the study

3. Assessment of the effectiveness of labour productivity management through the criteria of the effectiveness of labour productivity management. These criteria are presented in the study [Ivanov, Mikhnenko, 2019]. This assessment allows us to outline opportunities for labour productivity improvement in the short, medium, and long-term through analysis of the quantity of manufactured products, the quantity of products sold, and the pricing policy of enterprise. The criteria include the justification and achievement of target values of labour productivity, effective growth of labour productivity, socially-oriented enterprise policy in managing labour productivity, effective growth of comparative labour productivity.

4. Assessment of the potential for labour productivity improvement is carried out using analysis of labour

productivity of (a) competing enterprises within a region or country, and (b) enterprises, representing a similar industry in other regions or countries that are ahead of the enterprise in terms of labour productivity.

5. Determination of the need to change the level of labour productivity is made through comprehensive analysis of external and internal constraints on the improvement of labour productivity, assessment of the effectiveness of productivity management at a given time, and the value of potential for labour productivity improvement. The above paragraphs of the diagnostic phase give a broad picture of the problem of labour productivity improvement in enterprise. On this basis, management can make a decision whether develop programs to improve labour productivity or not.



Compiled by the author on the materials of the study

Figure 1. Diagram of the diagnostic phase

The development phase is a consistent process for planning and modelling changes that affect labour productivity management. The main objective of the development phase is to determine the specific goals of labour productivity improvement and to form a detailed program to improve labour productivity.

Subsequently, this program will be implemented. The development phase diagram is shown in Figure 2.

Description of the elements of the development phase.

1. Definition of the main target for labour productivity improvement through previous assessment of the potential for labour productivity improvement. It occurs after determining the need to change the level of labour productivity and represents the numerical value of the labour productivity indicator, which is the main target of the labour productivity improvement program.

2. Determination of the budget, that enterprise is capable to allocate for the implementation of programs to improve labour productivity, occurs within the framework of planning the distribution of the enterprise budget for the coming periods.

3. Formation of the concept of the change of level of labour productivity within the budget is based on the target benchmark for labour productivity improvement. It is the identification of key tasks of programs for labour productivity improvement, directions for implementing innovations, and intermediate targets.

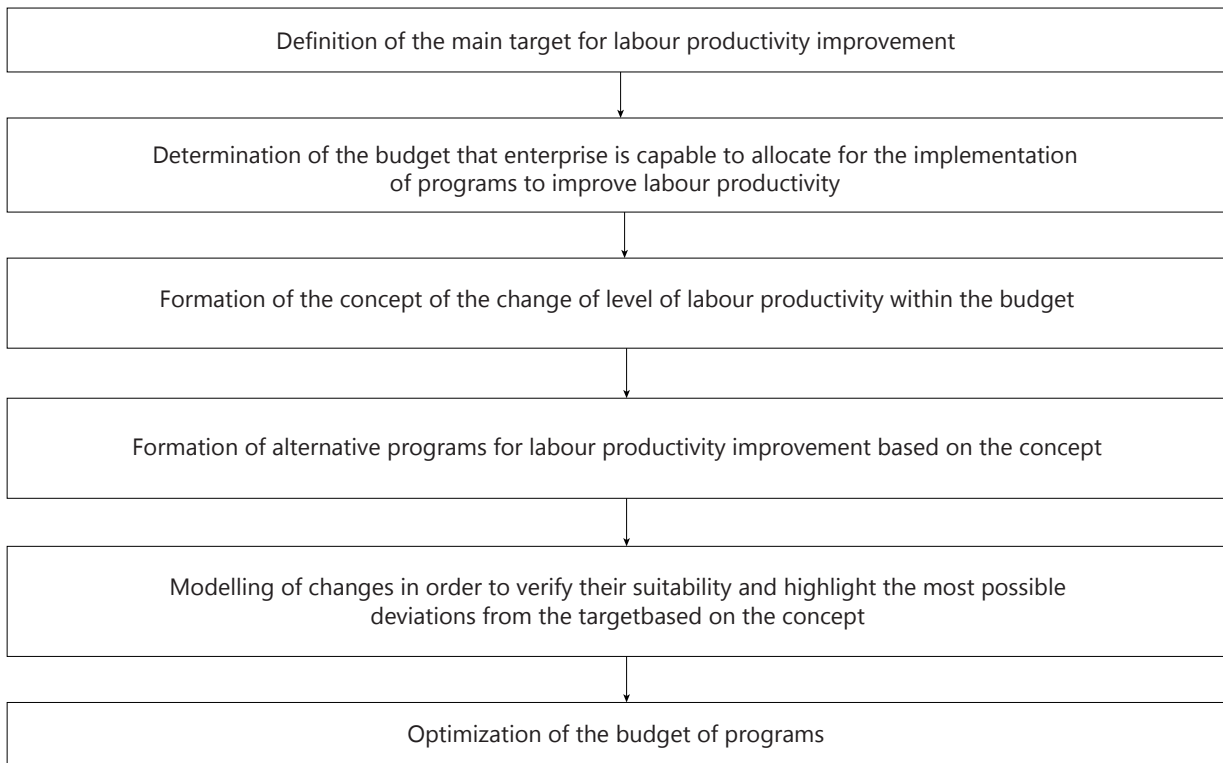
4. Formation of alternative programs for labour productivity improvement involves the creation of detailed plans for introducing changes in order to improve labour

productivity, based on the concept created earlier. The term “alternative” involves the creation of diverse, unrelated programs, each of whose is oriented towards achieving the main target with the current state of enterprise.

5. Modelling of changes of each compiled program is carried out with the aim of checking their suitability and highlighting the most possible deviations from the targets. Modelling can be carried out both on the basis of mathematical predictive models, and by creating a chain of logical judgments. The main objective of this paragraph is to anticipate the largest number of possible deviations and to design changes in the level of labour productivity.

6. Optimization of the budget of labour productivity improvement programs implies an analysis of the costs necessary for their implementation and their adjustments if necessary. Adjustment of the budget may occur when the projected budget goes beyond the capabilities or plans of enterprise regarding the implementation of labour productivity improvement program. In this case, costs are being optimized to find ways to reduce costs under the condition of no deterioration of the quality of program. If it is not possible to bear the budgetary burden, the enterprise may decide either to completely abandon the implementation of the labour productivity improvement program, or move on to the next priority option.

The program budget should also include additional amount of financial resources, stored in case of failures in the implementation of the program or the need to review its individual elements.



Compiled by the author on the materials of the study

Figure 2. Diagram of the development phase

The implementation phase is a sequential process of implementing changes and monitoring the quality of implementation. The main objective of the implementation phase is the effective implementation of previously formed innovations with the purpose to practically improve labour productivity. The implementation phase diagram is shown in Figure 3.

Description of the elements of the implementation phase.

1. Ranking of ready-to-implement programs by priority. The readiness for implementation assumes that the implementation of the program is possible within the allocated budget and that the simulation of the implementation of the program has shown that it is able to achieve the necessary targets within the given resources. Priority is determined individually. Priority criteria may include: the final cost of program; velocity of program implementation; number and degree of possible deviations of program, which can be taken as the degree of risk of program implementation.

2. Highlighting a priority program is carried out after ranking according to the characteristic determined by enterprise's management. The priority program is the one in which the highlighted feature, aimed at labour productivity improvement, is manifested most significantly.

3. Implementation of the program to improve labour productivity is carried out using different organizational

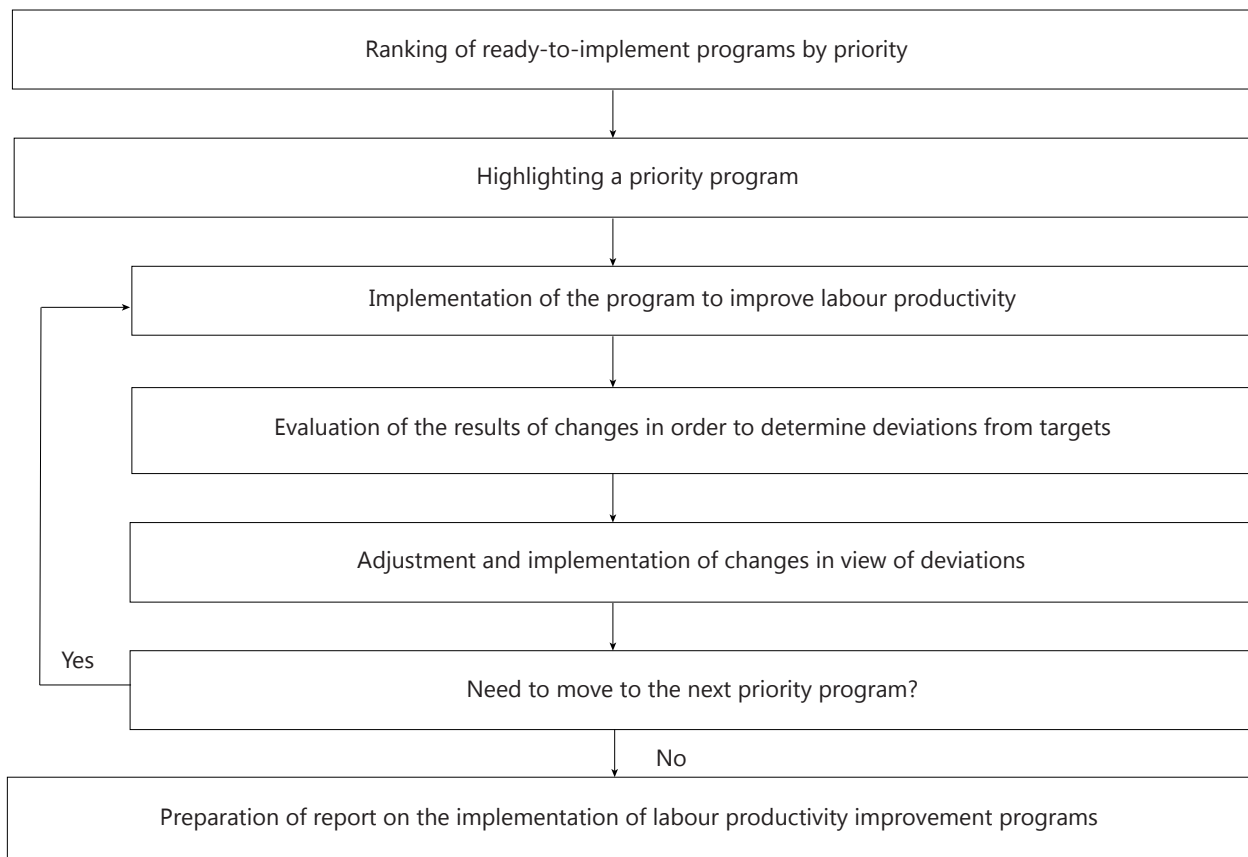
and economic mechanisms, practically applied at enterprise.

4. Evaluation of the results of changes is undertaken on the basis of a report on the implementation of the program. The purpose of the evaluation is to compare the results of the program with the benchmarks. Based on the evaluation, decision to make adjustments is made.

5. Adjustment and implementation of changes is based on the decision taken above. If there is no need for adjustments, proceed to the next paragraph.

6. The transition to the next priority program is carried out when (a) there are unsatisfactory results of the program and the adjustments made; (b) if it is not possible to implement the program. An important condition for the transition to the next program is the readiness of enterprise to finance its implementation.

7. Preparation of report on the implementation of labour productivity improvement program is compiled when a decision to stop introducing new programs is made. The reasons for that may include: (a) successful implementation of programs with the achievement of targets; (b) decision to terminate the implementation of programs made by management of enterprise. The report involves description of all the above points regarding the implementation of programs, comparison of the results achieved with the targets, and description of reasons for their achievement or failure.



Compiled by the author on the materials of the study

Figure 3. Diagram of the implementation phase

The result of the use of labour productivity management model is a changed level of labour productivity. The use of the model is considered effective if enterprise managed to achieve the target in the planned period and with the involvement of the desired amount of resources. The use of the model is considered to be limitedly effective if enterprise was able to achieve the target either later than on the planned date, or by attracting more resources than had been forecasted. The use of the model is considered ineffective if enterprise failed to achieve the target in the planned period and with the involvement of the desired and additional amount of resources.

Conclusion

The article presents the organizational and economic model of labour productivity management. The relevance of its use is explained by the need to improve

labour productivity in Russian economy in order to accelerate economic growth and socio-economic development. The model consists of three key phases: diagnostics, development, and implementation. Each phase is a sequence of actions necessary for its most complete realization. The model is cyclic, that is, it can be repeated an unlimited number of times: after the implementation of the program, new diagnostics can be carried out for future improvements. The model can be used at enterprises of different specification and scale. Using the model allows us to structure the process of labour productivity improvement, determine the optimal set of resources for its implementation, monitor its implementation, and make timely adjustments. The model is recommended for use by enterprises that intend to make organizational changes in order to improve labour productivity.

Библиографический список

- Андропова Т.Н. (2020). Анализ современных тенденций преодоления управленческих стереотипов // Вестник университета. № 3. С. 5–10. <https://doi.org/10.26425/1816-4277-2020-3-5-10>.
- Бишин А.С. (2017). Интеллектуальный капитал как фактор роста производительности труда // Вестник Южно-Уральского государственного университета. Серия: Экономика и Менеджмент. Т. 11. № 4. С. 126–132.
- Иванов А.О. (2020). Роль повышения производительности труда при стимулировании социально-экономического развития // Экономика труда. Т. 7. № 3. С. 237–252. doi: 10.18334/et.7.3.100680.
- Иванов А.О., Михненко П.А. (2019). Управление производительностью труда: новые критерии эффективности // Инновации в менеджменте. № 4. С. 40–45.
- Идрисов Г.И., Княгинин В.Н., Кудрин А.Л., Рожкова Е.С. (2018). Новая технологическая революция: вызовы и возможности для России // Вопросы экономики. № 4. С. 5–25. <https://doi.org/10.32609/0042-8736-2018-4-5-25>.
- Камерон К., Куин Р. (2001). Диагностика и изменение организационной культуры / пер. с англ. СПб: Питер. 320 с.
- Кузнецова Н.В., Угольников Н.А. (2019). Управление организационным знанием как условие повышения производительности труда // Современный менеджмент: теория и практика. С. 160–166.
- Adler D., Siegel L.B. (2019). The productivity puzzle: Restoring economic dynamism. CFA Institute Research Foundation. 284 p.
- Alvaredo F., Chancel L., Piketty T., Saez E., Zucman G. (2018). World Inequality Report 2018. Cambridge, MA: Belknap Press of Harvard University Press. 331 p.
- Quinn R.E., Rohrbaugh J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis // Management Science. Vol. 29. No. 3. Pp. 363–377.
- Vandenberghe V. (2017). The productivity challenge. What to expect from better-quality labour and capital inputs? // Applied Economics. Vol. 49. No. 40. Pp. 4013–4025.

References

- Andropova T.N. (2020), “Analysis of modern trends of overcoming managerial stereotypes”, *Vestnik Universiteta*, no. 3, pp. 5–10. (In Russ.). <https://doi.org/10.26425/1816-4277-2020-3-5-10>
- Bishin A.S. (2017), «Intellectual capital as a factor of growth of labour productivity», *Bulletin of the South Ural State University. Series: Economics and Management*, vol. 11, no. 4, pp. 126–132. (In Russ.).
- Ivanov A.O. (2020), «The role of increasing labour productivity while promoting socio-economic development», *Russian Journal of Labour Economics*, vol. 7, no. 3, pp. 237–252. (In Russ.). doi: 10.18334/et.7.3.100680
- Ivanov A.O., Mikhnenko P.A. (2019), «Productivity management: new performance criteria», *Innovations in Management*, no. 4, pp. 40–45. (In Russ.).
- Idrisov G.I., Knyagin V.N., Kudrin A.L., Rozhkova E.S. (2018), «New technological revolution: Challenges and opportunities for Russia», *Voprosy Ekonomiki*, no. 4, pp. 5–25. (In Russ.). <https://doi.org/10.32609/0042-8736-2018-4-5-25>.
- Cameron K., Quinn R. (2001), *Diagnosing and changing organizational culture*, per. s angl, Piter, St. Petersburg, Russia, 320 p. (In Russ.).
- Kuznetsova N.V., Ugol'nikova N.A. (2019), «Management of organizational knowledge as condition to improve labour productivity», *Sovremennyi menedzhment: teoriya i praktika*, pp. 160–166. (In Russ.).
- Adler D., Siegel L.B. (2019), *The productivity puzzle: Restoring economic dynamism*, CFA Institute Research Foundation, 284 p.
- Alvaredo F., Chancel L., Piketty T., Saez E., Zucman G. (2018), *World Inequality Report 2018*, Cambridge, MA, Belknap Press of Harvard University Press, 331 p.
- Quinn R. E., Rohrbaugh J. (1983), “A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis”, *Management Science*, vol. 29, no. 3, pp. 363–377.
- Vandenberghe V. (2017), “The productivity challenge. What to expect from better-quality labour and capital inputs?”, *Applied Economics*, vol. 49, no. 40, pp. 4013–4025.