

# A MODEL FOR IMPROVING WORKER PRODUCTIVITY IN ACCOUNTING AND PRODUCTION DEPARTMENTS IN DEVELOPING COUNTRIES

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## ABSTRACT

*The purpose of the study is to show the importance of raising the performance of workers while stimulating economic development through scientific and technological progress and the growth of human capital. Where this research provides theoretical evidence that scientific and technological progress and human capital should be considered as factors of economic growth and economic development only while raising the tool and productivity of workers. Where this research shows the cumulative effect of increasing the level of human capital on increasing the performance of workers, which resulted from the increase in the level of human capital, which in turn is reflected in an increase in the efficiency of workers' performance and the complexity of it. And productive relations that increase the need for human capital and accelerate the increase in the performance of workers.*

*Also in this research, some solutions are proposed to the problems of stimulating economic development resulting from the increase in the performance of employees in the institution: by studying the negative external factors, organizational difficulties, and the need for continuous stimulation of scientific and technological progress and the growth of human capital. As for the question that arises here, which relates to the advisability of continuous stimulus to economic growth, which turned out to be necessary at this stage of economic development? The results obtained can be useful in the implementation of national projects and the formation of state programs for economic development.*

*It is known that the slow growth in the global economy, which resulted from the imposition of structural restrictions in the developed countries, with the presence of some accumulated imbalances in the economies of developing countries, which slows economic development in those countries. One of the most important factors affecting the economic development of these countries is scientific and technological progress in addition to human capital, as its use does not always lead to economic growth and economic development.*

*The subject of the research is the search for mechanisms to stimulate economic development through scientific and technological progress and the growth of human capital to improve and raise the performance of worker.*

**Keywords:** Stimulating Economic, Projects, Programs, Performance of Workers, Global Economy, Technological Progress

## INTRODUCTION

The national goals of developing countries are to ensure growth in the well-being and competitiveness of every person, family, society and country, which is a vector for the development of the country's economy in the near future. One of the main objectives of the national projects of

these countries is to improve the performance of workers, increase labor productivity, support employment, education, health care and demography, and this is what is known as human capital development (Emerson, 2005; Crumpton, 2019; Heidorn & Centeio, 2012).

Another definition of human capital states: "The knowledge, skills and health that people accumulate during their lives, which allow them to realize their potential as useful members of society. It brings tremendous benefits to people, communities and countries." It expresses quite clearly the importance of the health factor that constitutes the productivity of human labor. Whereas the second definition is more reasonable than the first. It is understood that "human capital complements physical capital, which serves as an important resource for technological progress and long-term economic growth".

The operating conditions of small enterprises, as a rule, are associated with a dynamically changing external environment, intense competition, high labor intensity, which creates

the need for a continuous increase in the efficiency of personnel labor, improvement of the enterprise's activities, an increase in the competitiveness of goods and services, its constant adaptation to a changing external environment (Emmy, Van Esch & Flora, 2016; Hagg, Stephen, Cummings, Meave, McCubbery & Donald, 2005; Almomani, Altarawneh, Althonaibat & Alrawashdeh, 2021).

The owners of small businesses, hiring employees, expect from them high labor efficiency, economical use of limited resources, involvement in the development and improvement of the enterprise. However, the absence of property rights, the alienation of labor, as a rule, does not allow the formation of an employee's attitude to the enterprise as to its own business, to seek the maximum participation of the employee in the development and improvement of the enterprise, to find ways to save resources. This does not allow reaching the possible level of personnel labor efficiency, which in turn slows down the development of small enterprises, worsens economic indicators, reduces the efficiency of investments and can often lead to a decrease in the competitiveness of products and the closure of an enterprise (Hassan, 2016; Imran & Muhammad, 2015).

Raising the level of remuneration, the formation of a system of remuneration for target results, a system of incentives and punishments, widely used by entrepreneurs in Practical activity, often does not lead to the achievement of the expected level of personnel involvement and an increase in the efficiency of its work.

As a result of studying the scientific literature, you can trace a wide range of activities to assess, increase the involvement and efficiency of employees. However, as a result of the analysis of the methodological literature, it became clear that there was no common understanding of labor efficiency, personnel involvement, research on the impact of the level of corporate culture development on the level of employee involvement (Kemoh & Linda, 2016).

The urgent need for owners of small businesses to improve labor efficiency and staff involvement in the organization's affairs and the lack of methodological tools make it an urgent scientific and practical task to develop methodological provisions for increasing the efficiency of staff labor based on increasing involvement in the organization's affairs and the development of corporate culture (Khalil & Tarek, 2011; Kisby & Kilman, 2008).

The purpose of this article is to develop methodological provisions for increasing the efficiency of the personnel of a small enterprise based on the management of involvement in business, organization and development of corporate culture (Kulkova, 2009).

## THE SUBJECT OF THE RESEARCH

The search for mechanisms to stimulate economic development through scientific and

technological progress and the growth of human capital to improve and raise the performance of workers.

### THE PURPOSE OF THE STUDY

To show the importance of raising the performance of workers while stimulating economic development through scientific and technological progress and the growth of human capital. Where this research provides theoretical evidence that scientific and technological progress and human capital should be considered as factors of economic growth and economic development only while raising the tool and productivity of workers. Where this research shows the cumulative effect of increasing the level of human capital on increasing the performance of workers, which resulted from the increase in the level of human capital, which in turn is reflected in an increase in the efficiency of workers' performance and the complexity of it. And productive relations that increase the need for human capital and accelerate the increase in the performance of workers.

### RESEARCH METHODS

A comparative analysis.

### THE SET GOAL OF THE STUDY WAS ACHIEVED BY SOLVING THE FOLLOWING TASKS

The transition to a fundamentally different method of rationing, which allows an enterprise to focus on target performance indicators.

Development of a methodology for the distribution of the generated bonus funds, which makes it possible to stimulate employees to fulfill their goals, as well as reduce non-productive costs and loss of working time.

### LITERATURE REVIEW

In everyday practice, entrepreneurs and managers of small businesses often use the concept of personnel labor efficiency; strive to increase the efficiency of personnel. However, the understanding of labor efficiency in practice is different. Foreign scientists Taylor, Emerson, Ford, Deming & Drucker studied the concept of labor efficiency. In work on domestic scientists Abalkin, Aganbegyan, Belkin, Belkina, Yermansky, Gastev, ... & Khachaturov et al., The term efficiency was first proposed by the American scientist G. Emerson in his work "The Twelve Principles of Productivity" published in 1913, (Vesnin, 2014), Since then, the term efficiency in the most general sense of this concept has hardly changed. The study of scientific literature has shown that the authors have different understandings of the concept of labor efficiency. Labor efficiency is often understood as the concept of labor productivity (Martynenko & Gardariki, 2007).

### LABOR EFFICIENCY OF PERSONNEL OF SMALL ENTERPRISES

However, according to the authors, the essence of the economic category labor efficiency reflects the definition proposed by Belkin & Belkina in the theory of the system of concepts of labor: Labor efficiency - the value of the beneficial effect per unit of working time (Maringe, 2012).

$$eff = \left( good \frac{eff}{WT} \right) - prod T \times prod lev / WT \quad (1)$$

Where: good eff - useful effect of labor;  
 Prod T - product of labor;  
 Prod level - - the level of quality of the product of labor;  
 WT- - the level of quality of the product of labor;

The beneficial effect of labor (good eff.) shows the extent to which labor satisfies a particular social need by consuming the created product.

$$\text{good eff} = \text{prod T} \times \text{prod level} \quad (2)$$

The product of labor (Prod T) shows how many material goods were created by workers during working hours.

The quality level (prod level) shows the extent to which a given product of labor satisfies a particular social need, *i.e.*, shows the degree of its usefulness.

In practice, the relative Level of Quality of Labor products (LQL) can be determined by dividing the Actual Level of Quality (ALQ) by the Average, Normative Level (ANL), recorded in standards, technical conditions, regulations, etc. (Noe & Raymond et al., 2006; Luchs, Brower & Chitturi, 2012).

$$LQL = ALQ/ANL \quad (3)$$

Consider applying this approach to the example of small businesses in developing countries:

## **THE MOST IMPORTANT FACTORS AND METHODS FOR EVALUATING EMPLOYEE PARTICIPATION**

In modern research and in practice, the opposite of the alienation of labor is the state of the worker, in which he seeks to do his job as best as possible, putting in additional efforts and getting results higher than planned. This property is usually called the term involvement.

This term appeared in Russian science not so long ago, although it is widely studied abroad (see, for example, [8, 9, 10, 11]). As a result of research different definitions of involvement in scientific sources, the author formulated the definition of the involvement of personnel in the affairs of the organization, (Majumber, 2012; Mishkin & Fredric, 2001; Almomani, Almomani & Obeidat, 2014).

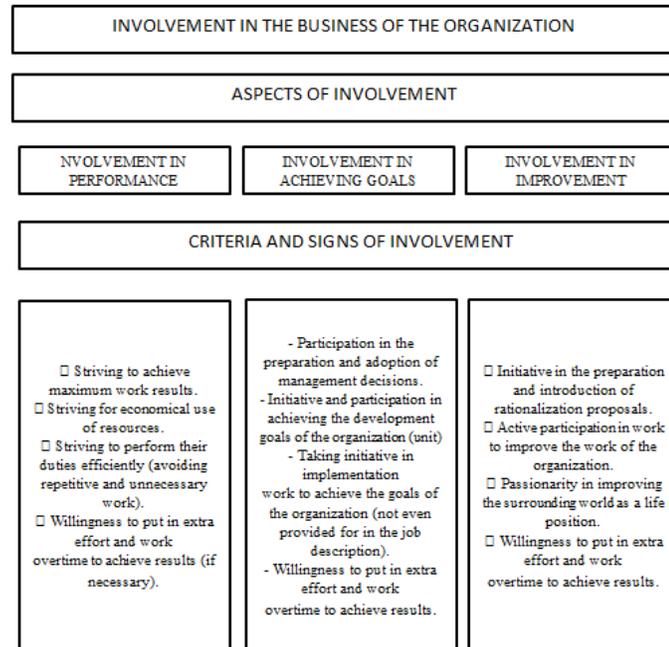
The involvement of personnel in the affairs of the organization is understood as the internal state of employees, caused by a combination of internal motives and external incentives, manifested in the desire to achieve maximum work results at minimum costs, improve the work of the organization by applying additional efforts in the labor process, which leads to an increase in labor efficiency and the improvement of the organization's work.

On the basis of this definition, the author formulated behavioral signs and a methodological approach to assessing the involvement of personnel in the affairs of the organization.

A methodological approach to assessing the involvement of small business personnel has been developed based on the following provisions:

- The assessment of involvement is carried out both from the standpoint of the internal state and external manifestation in the performance of functions.
- The involvement of the employee in the affairs of the organization is carried out in three aspects: involvement in the performance of functional duties, involvement in the achievement of goals and development of the organization, involvement in improving the work of the organization (divisions).

- A quantitative assessment of the behavioral manifestation of personnel involvement is carried out on the basis of a point scale using methods of observing behavior personnel in the performance of functions.
- The assessment of labor results at various levels of involvement is carried out by calculating indicators of labor efficiency quality of labor results (prod T).
- Determination of the level of involvement is based on the theoretical position, according to which the level of development of a property is determined by the presence (absence) of restrictions to increase the level of involvement, which required the application of the principle of minimum, namely: when determining the level, the smallest of the quantitative values of the indicators of involvement is selected.



**FIGURE 1**  
**CRITERIA FOR ASSESSING ENGAGEMENT IN VARIOUS ASPECTS**

The assessment of the behavioral manifestation of involvement is carried out by the method of expert assessment by the manager as a result of observation using a nominal point scale in the labor process (see Table 1).

Table 1 THE ENGAGEMENT BEHAVIORAL SCALE					
Number	Engagement rate	High – 3 points	Average – 2 points	Low – 1 point	Very low – 0 Points
1	2	3	4	5	6
Involvement in the performance of their duties					
1	Labor efficiency	Performs work as efficiently as possible, increasing work efficiency	Performs work trying to complete the necessary efficiency requirements	Meets the required performance standards, but only with external stimulation and continuous	Does not meet the required minimum efficiency with external stimulation and continuous monitoring

				monitoring	
2	Attitude towards enterprise resources	Finds and suggests ways to reduce resource use	Economically consumes enterprise resources	Wastes enterprise resources, does not try to save	Abuses enterprise resources, (possibly theft)
3	Attitude towards the quality performance of their duties	Always efficiently and responsibly fulfills its duties	As a rule, it performs efficiently and responsibly own responsibilities	Often not high-quality and irresponsible fulfills its duties	As a rule, it does not perform well and irresponsibly responsibilities
4	The importance of achieving labor results for employee	Always strives for the best possible labor results	Mainly achieves the best possible results Labor	Usually achieves the required minimum of labor results when constant monitoring	As a rule, it does not achieve the required minimum of labor results, even with constant monitoring
Involvement in the achievement of goals and development of the organization					
5	Identification of own interests, goals and interests, goals of the enterprise	Interests, goals of the employee and interests, goals of the enterprise Identical	Interests, goals of the employee and interests, goals of the enterprise in mostly coincide	The interests, goals of the employee and interests, the goals of the enterprise are not Match	Own goals, the interests of the employee come into antagonism with the goals, interests of the enterprise

Indicators for assessing the qualitative characteristics of learning correspond to the quantitative values of the scale in points. The maximum value is 36 points.

The minimum is 0 points. Each quality level of involvement corresponds to a certain number of points.

The indicator of engagement in the process is calculated as the sum of the indicators of engagement for each aspect:

$$P_{involv} = P_{eng.respon} + P_{goal} + P_{involv.improv} \quad (4)$$

Where:  $P_{involv}$  - an indicator of the employee's involvement in the affairs of the organization, shows how the employee seeks to work as efficiently as possible in the main aspects labor activity.

$P_{eng. Response}$  - the indicator of involvement in the performance of their duties shows the level of employee involvement in the performance of their duties;

$P_{goal}$  - the indicator of involvement in the achievement of goals and development of the organization shows the level of involvement in the achievement of goals and development of the organization;

$P_{involv. Improve}$ - The indicator of involvement in improving the work of the organization shows the level of involvement in improving the work of the organization (its unit) in its workplace.

As a result of assessing the involvement of personnel, the author identified the qualitative levels of involvement (see Table 2).

<b>Number</b>	<b>Engagement metric value</b>	<b>Engagement rate</b>
1	0 to 9 points	Very low engagement rate "not involved"
2	10 to 18 points	Low engagement rate - "driven"
3	19 to 27 points	Average level of involvement - "leading"
4	28 to 36 points	High level of involvement - "entrepreneur"

As many studies have shown, the productivity and efficiency of staff work largely depends on the involvement of staff in organization affairs. Therefore, increasing the level of involvement of personnel in the affairs of the organization contributes to the growth of labor efficiency for personnel, increases the initiative and participation of employees in improving the activities of the organization, in achieving the goals of the organization.

Involvement, according to the definition, is an internal state of an employee caused by a combination of internal motives and external stimuli, hence factors strengthening the involvement of personnel are, on the one hand, strengthening of internal motives to achieve maximum labor efficiency in the performance of their duties, improvement of the organization's work, participation in the achievement of goals and development of the organization. With the other hand, the creation of external incentives and conditions for the development of a state of involvement from the staff.

### **ASSESSMENT OF CORPORATE CULTURE AS A TOOL FOR INCREASING EMPLOYEE ENGAGEMENT**

To assess and change the personnel management system, develop corporate culture, culture of personnel management in practical activities for entrepreneurs and business leaders need an easy-to-use, hands-on tool to diagnose and prioritize change.

Domestic and foreign scientists Abramova, MBelkin, Velkinoa, Gostenchuk, Jrylov, Kulkova, ... & Davis et al.,

For a comprehensive assessment of the personnel management system, corporate culture and culture of personnel management, the authors developed a methodological approach based on the instrument proposed by Kulkova. Using a methodological approach to assessing and determining the development directions of the management system and corporate culture at one of the small enterprises is presented in Table 3.

<b>Number</b>	<b>Elements of corporate culture</b>	<b>Specifications</b>	<b>Forms of manifestation</b>	<b>Methods of collecting information</b>	<b>"As it is"</b>	<b>"How to"</b>	<b>Responsible</b>
1	2	3	4	5	6	7	8
1	Material environment	Employee appearance	Clothing style, dress code	Observation, study of documents	The dress code is indicated in the organizational regulations, in fact it is absent	Monitor compliance with the regulations	Head of the organization
		Office space decoration	Unity in design, logos and proprietary digital gamut	Observation	There is no uniform design, there is a logo, there is no	Make a unified, modern office design, place a banner about the	Deputy development director

					corporate color scheme.	company in the office	
2	Code of practice	Regulation of the management process	The presence of a mission, philosophy of the company, strategy of its development, job descriptions, department regulations, rules internal regulations, work quality standards	Examining documents	There is no mission, there is a development strategy, there are job descriptions, but not for all positions, there is no department position, there are no work quality standards	The mission is regulated There is a mission, job descriptions for all positions, work quality standards, all employees know and share them	Head of the organization
		Corporate values	Availability of formulated corporate values, acceptance (rejection) by their employees, the presence of value conflicts, the presence of unwritten rules	Polls	General corporate values are absent in the formulated form, there is no information about the acceptance of values by employees, there is no conflict of values, there are unwritten rules.	General corporate values are formulated, understood and accepted by all employees. There is no conflict of values.	Head of the organization
3	Employee behavior	Attitude towards clients	The presence and application of standards for greeting, farewell, for behavior with regular customers, for behavior towards conflict situation	Poll	There are no standards for greeting, farewell, behavior with regular customers, behavior in a conflict situation.	There are standards for greeting, goodbye, behavior with regular customers, behavior in a conflict situation, accepted and used by the majority of employees.	Deputy sales director
		Relations with colleagues	Reaction to a new employee, interchangeability employees, communication with colleagues in front of strangers, behavior in a conflict situation, relationship with subordinates and managers, communication outside of work, congratulations to colleagues on the holidays.	Poll, observation	The reaction to a new employee is different for each employee. There is interchangeability of employees. The relationship with subordinates and managers is not regulated. Communication with colleagues outside of work is not systematic. Congratulations on the holidays.	The reaction to the new employee is friendly. There is interchangeability of employees and rotation of personnel. The attitude of subordinates and managers is regulated business rules. There are systematic events for communicating with colleagues outside of work and colleagues congratulate you	Head of the organization

						on the holidays.	
		Execution of functions	Psychological attitude, socio-psychological climate, conscientiousness of work	Interrogation, observation, study of documents.	Psychologically normal climate is maintained	The psychological climate is conducive to the work involved.	Head of the organization

## RESULTS

In this research, some solutions are presented to the problems of stimulating economic development that lead to an increase in the performance of employees in the institution: through the study of negative external factors, organizational difficulties, and the need for continuous stimulation of scientific and technological progress and human capital growth.

Development of a methodology for the distribution of the generated bonus funds, which makes it possible to stimulate employees to fulfill their goals, as well as reduce non-productive costs and loss of working time.

## CONCLUSION

The proposed methodological approach can be used by entrepreneurs, leaders of organizations as an example for assessing and determining the direction of development management systems, corporate culture and, as a result, the growth of personnel involvement in the affairs of the organization (Pinvolv) and the effectiveness of its labor (effect).

In this research, a methodology was developed within special criteria, as shown in Figure 1.

Assessment of the behavioral profile of participation by the expert assessment method was also carried out by the manager as a result of observation using a nominal point scale in the work process (see Table 1).

As for calculating the indicators that are included in the performance appraisal process, they were calculated according to Equation No. 4. The results from this stage are presented in Table 2.

To evaluate and change the personnel management system, the study concluded that the development of company culture and personnel management culture in the practical activities of entrepreneurs and business leaders need an easy-to-use practical tool to diagnose and prioritize change.

The participation index is calculated as the sum of the participation indices for each side.

This methodology can also be used to evaluate and determine the development trends of the management system and company culture in one of the small companies as shown in the table. 3.

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