MONITORING INDICATORS TO MEASURE THE LEVEL OF WORK MOTIVATION IN INDUSTRIAL AND NON-INDUSTRIAL ORGANIZATIONS

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ABSTRACT
The article discusses the concept of work motivation by identification it’s level for getting more clear view about the possibilities to improve business performance. The article presents the sociological research methodology focused on longitudinal monitoring of work motivation level by three specific indicators performed in the Institute of the Social Technologies at Samara State University (Russian Federation), which is common to the harmonized EU Program of Business and Consumer Surveys of European Commission for monitoring the socio-labour issues. The level of work motivation has been determined on a base of the authors’ monitoring descriptive and inferential statistic data. The measurement of commitment, involvement and inclusion has been applied to focus groups at industrial and non-industrial organizations during the period 2005–2014. The highlighted results have been identified by longitudinal monitoring and displayed for identification the levels of work motivation at industrial and non-industrial organizations. Finally, the comprehensive analysis has been applied for generalization of main theoretical and empirical explanations and induction of conclusions.

KEY WORDS: work motivation, level of work motivation, monitoring indicators.

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Introduction
The changes in the modern organizational environment cause the employees’ skills and competencies resolution, staff change, labour productivity etc. Technological progress and globalization of business accentuates the employees’ needs and changes in their qualified work operations or decisions in order to create a competitive advantage for organizations. The work motivation framework takes a great focus on the workplace quality and motivation tools, which leads to inappropriate evaluation of employees’ results. Work motivation is becoming an important issue to reduce staff change or decline of total indifference in labour productivity, extra costs, recruiting staff and their knowledge.

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The base of motivation theories is the interaction between labour (industrial) relations and social capital (Suzuki, 2011; Flander, Clegg, 1960, cit. Acker, 2005; Wiklund et al., 2009; Žiogelytė, Kšivickaitė, 2014). The interaction between employees' motivation, organizational environment and labour productivity reveals the opportunities for organizations to apply motivation improvement tools.

Problem. Scientific research is conducted on the low motivation of employees, which is notably important problem in any industrial or service sector excluding self-employment case. Observing the competences of employees and searching for possibilities to increase their interest and involvement into the organizational activity, appears the opportunity to avoid staff change or use the specific work motivation tools. The increased level of work motivation is available under social partnership.

The longitudinal monitoring research is significant tool in clarification of statement of the intrinsic and extrinsic indicators of work motivation in large scaled (non) industrial organizations.

The identification of work motivation improvement tools inspires their application in different fields of business performance.

Purpose. To measure up work motivation indicators and identification of work motivation level in organizations.

Object. Work motivation in organizations.

Tasks:
- investigate theoretical content of work motivation in organizations;
- monitor general indicators of work motivation;
- identify level of work motivation by specific indicators – commitment, involvement and inclusion of hired employees in the activities at their industrial and non-industrial organizations.

Methods. The research methods are applied: monograph and descriptive analysis has been applied to reveal the theoretical content of work motivation concept in the modern scientific references of last decade; statistical meta–analysis leads to identify differences of work motivation level by using descriptive and inferential statistical data of period 2005–2014; and comprehensive analysis has been applied for generalization of main theoretical and empirical explanations and induction of conclusions.

The authors present the methodology of the longitudinal monitoring of work motivation by using three indicators – commitment, involvement and inclusion. These indicators have been generated at Samara State University (Russian Federation) by using the mass staff interviews and applied on focus groups to collect the inferential statistic data. The mathematic-statistical analysis has been completed by using MS Excel and IBM SPSS.

The research findings can be related to the conceptual work motivation model building and helpful as the issue to improve the staff competences and skills merely in industrial and non-industrial organizations.

1. Modern outlook to work motivation concept

Motivation helps to indicate the related initiatives to start change the working staff behaviour upon the goals of business performance. Distinguished levels of motivation – personal, organizational, group integration in work motivation construct, are concentrated on individual professional inputs and organizational integrative changes (Lewis, 1972).

Motivation is a direct determinant of entrepreneurial or business performance in the frame of organizational behaviour (Delmar, 1996). In some specific situations of business performance the knowledge and motivation serves for appearance of intra- or inter- individual variability of behaviour to force it (Kanfer, 1991). In self-employment activity, usually more knowledge and skills have to be coupled, and motivation is evolving into business performance in the major way. Hired employees are losing their ability to initiatives; otherwise, the work motivation is useful as an indispensable tool.

Different level of work motivation have mainstream on the same indicators (determinants) of the motivation theory – behaviour, activity and intentions development; and the performance theory – situational
business constraints, market structure, organizational tasks and abilities (Delmar, 1996; The business motivation..., 2010).

In real situations within large scaled sectoral enterprises, motivation tools for staff are changing by different impact on business performance results under different factors (Hajiphanis, 2012). Therefore, motivation is a powerful tool in large scaled business organizations, when the individual knowledge and skills have been applied in different entrepreneurial behaviour and business performance.

2. Conceptual role of work motivation development of self-employed and hired staff

The basic concepts of changing the content of the labour relationship, satisfying development of industrial sector, have been developed by scientists and US managers (Maslow, 2013). Therefore, and a number of other scientific discoveries have enabled the industrial management leaders use advantage of social technology in a wide range of social and psychological needs of the hired employees, the satisfaction of whom in the production process has created by a high level of motivation.

The necessity to recognize the rights of hired employee to be treated with the respect, that the possibility to express their opinion about the working conditions and the activities of management are taken as initiative and creativity.

Based on the concepts of American and European researchers of the second half of the XX century, the defining characteristics of the modern hired employees should become identification of the goals and objectives of the organization, where they work. In the industrialized countries of Western Europe and the United States passed in the 70s years of the XX century, the transition from an industrial economy to an economy based on increment use of knowledge started as information modernization stage. It means, that the transition of industrial organizations to electronic industry, computer technology and robotics, nano-technology, adhesive-precision technology, etc. (Ịam, 2014), need to work on such equipment highly motivated employees.

The transition to the new post-industrial way of production places new demands on the people, who are engaged in it. Particular importance of their relations and interest in the success of their work, is due primarily to the fact that, as the changes in the technical way of production and the introduction of innovative technologies, along with a considerable number of positive results obtained in this case, there is a possibility of reduction of external, non-destructive testing of the direct executor activity.

Low-quality products can be found in the new conditions only on the final production phase, or even only at the stage of consumption of these products. As a result, the organizations become hostage of conscientiousness of hired employees, their interest in the success of the production as a whole. Such problem is called “crisis of human activity” (Bоchаров, Тукумцев, 2015а). Manufacturing organizations using the sophisticated new technologies and producing new generation products have started to incur losses from emergency situations with poor quality of sales to customers. In industrialized countries began to seek solutions to unexpected problems. Therefore, it was substantially changed the nature of employment (industrial) relations, there was a significant democratization of them, including through changes in labour legislation. Received wide spread concept of participatory management practices, the development of communication with the business management staff, as well as the use of a variety of non-material motivation incentives. Ideas made it possible to address the seemingly unsolvable task: motivate hired employees to improve the quality of work and taking the initiative in business performance.

Managerial social innovations have been effective, managed to form the employees concerned with the success of their companies and activities. Wide spread development of innovative methods for the behaviour of employees, that is, the development of creative and innovative activities. The main attention was paid to the realization of the ideas of attraction of employees to participate in the management of the production process, to cooperate in the field of labour organization, to develop proposals to improve the work quality, the widespread use of competitive motivation.
By the end of the last century, there was a formation of a new technological era as adequate staff culture activities. It, above all, was aimed at changing attitudes of employees to the work organization. The studies of this period and the concepts were formulated as “commitment with the company”, “identification with the company” (Maitland, 2003; Dick, 2006). In the Russian sociological literature can be found the concepts used in studies of the labour relationship as “loyalty to the organization”, “involvement in the organization” (Dominyak, 2003; Ostania, 2010). At its core idea the search for ways to change the attitude of employees to their work is innovative. In the current situation, now the scientists and experts of management in many countries of the world, without being able to eliminate the alienation as an objective factor influencing the behaviour of the employees and their relationship to the organization, did their best to maximal neutralization of this effect by their behaviour. By the end of the 20th century it was created not only to the general concept of the formation of employees’ new qualities, it has been developed and the means of control over the state of these qualities. The European research terms are used to designate these qualities as “employee commitment to the company”, which is primarily characterized by a stable and “identification of the workers with the objectives of the organization”, which primarily means the presence of the employees’ positive attitude towards business performance.

Table 1. Measures of work motivation assessment (Eurofound…, 2015)

<table>
<thead>
<tr>
<th>Dimensions of work motivation</th>
<th>Responsible EU organizations for work motivation improvements</th>
<th>Resources for search</th>
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<tbody>
<tr>
<td>1. Workplace indicators’ group</td>
<td></td>
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<tr>
<td>Potential of strategic employees</td>
<td></td>
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<td>Temporary employment, social inclusion</td>
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<tr>
<td>Indirect and direct employee participation</td>
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<td>2. Workplace innovation indicators’ group</td>
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<tr>
<td>Non-R&amp;D innovation expenditures (% of turnover)</td>
<td>CIS</td>
<td></td>
</tr>
<tr>
<td>SMEs introducing innovations (% of SMEs)</td>
<td>EUROSTAT, Innovation Union Scoreboard (IUS), CIS, EWCS, ECS</td>
<td></td>
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<tr>
<td>Employment in fast-growing enterprises in innovative sectors (% of total employment)</td>
<td></td>
<td></td>
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<tr>
<td>3. Workplace health promotion (WHP) indicators’ group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced staff turnover</td>
<td></td>
<td></td>
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<tr>
<td>Improved job satisfaction</td>
<td></td>
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<tr>
<td>Improved organizational culture/employee loyalty</td>
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</tbody>
</table>

Source: authors’ elaboration

In nowadays, against the economic and political crisis of the world the goals of work motivation in the large scaled companies are focused on the increase of continuous innovation process and sustainable growth. Workplace invention is contributing to competitiveness by resulting in higher productivity, improving employees’ work satisfaction and their individual needs. The structural changes in the industrial, service and public sectors were driven by innovation and transformative solutions in work organization, human resources, social capital, social and financial support systems (Eurofound, 2015) (1 tabl.). European Working Conditions Survey (EWCS, 2015) reveals the fact, that work autonomy has built 47 percent of work aged people in EU countries, who really want to take part in the improvement process of their organizations (Eurofound, 2015).
In large scaled European industrial companies, WPI-Index scores distribution of 14 EU countries shows their aggregated position from 1 to 28 scores, and Lithuania takes place in the middle (15 scores) (Eurofound, 2015). Therefore, the working aged people equally prefer to conduct their knowledge and skills in their organizations. Particularly, the highest level of loyalty of employees to their organizations is observed in Norway, Denmark, Austria and Spain – 76 %; and the lowest – in Ireland – 55 %, UK – 59 %, Poland – 66 % (EWCS, 2015). Generally in EU countries large scaled companies are culture-oriented 23.6 %, and of those 28.4 % are industrial companies, 12.5 % – commercial service companies, and 14.8 % – social (public) service organizations. These results reveal the conclusion, that the driver “quality of business performance”, not “quality of organizational performance”, is more expressed in culture-oriented companies (Dobre, 2013).

Thus, today’s level of motivation of the majority of employees of the EU countries is high. A significant part of the staff of industrial and non-industrial organizations has creative potential and experience a sense of satisfaction, if it can be sold. For many employees, the companies have a place of constant work and professional development that meets their interests.

The authors consider this fact and with the help of this tendency, selected the specific indicators of work motivation, which were assessed as the contribution to identify the quality and competitiveness of business performance against the organizational performance. In this test were used two indicators: 1) commitment to the organization; 2) personal identification with the activities of the organization, which have been measured as the loyalty of employees.

The indicator “commitment to the organization” characterizes the stability of employee position in the enterprise. With the regard to the indicator “personal identification with the activities of the organization”, the hired employees connect their goals and objectives with the organization as well as their willingness to facilitate their knowledge and skills. The higher degree of staff integration within the organization is considered as the assessment of hired employees’ behaviour, and characterizes the degree of development of social partnership and the state of co-operation and labour relations. The data of this test is presented in a percentage of the total number of hired employees in the sample of the surveyed organizations: 1) the proportion of committed employees to the organization – 70 %; and 2) the proportion of identified employees with the activities of organization – 51 %.

Sufficiently, in high proportion, hired employees have a positive attitude to the organizational performance, and they approve their personal goals and objectives indicating with a high level of organizational culture and possibilities to higher business performance. Active workers are closely monitoring by their success in business performance, assessing the reliability of the organization to work for the enterprise and its management.

In EU-28 countries individual knowledge and skills serve for hired employees more. In 2014 in Lithuania was finished two years research and presented a study for observation the structure of work-aged people with their motives to act in the modern business environment as hired or self-employed (Žiogelytė, Kšivickaitė, 2014). 67 % of interviewed Lithuanian respondents explained their wish to be hired in business organizations by their creativeness and motives to express themselves freely. 48 % of respondents explained their motivation to get higher income as hired employees, and only 14 % of Lithuanians’ want to be self-employed because they have targeted to realize their business idea or plan.

The experts of labour market declare intrinsic motives and self-control as typical determinants for entrepreneurial behaviour (Бочаров, Туккумчев, 2015б; The Business motivation model…, 2010). Such people are not limiting themselves in work time, efforts for self-education, activeness, creativeness or innovativeness (Sunil, 2004).

3. Research methodology

The methodology of the longitudinal monitoring researches for industrial sector serves as a programming tool to develop embedding business strategy, or objectives and values, to implement team work or managerial
optimization, leadership and special employees’ development programs. Therefore, motivation works on the changes in business strategy, organizational structure and process development conjoining lasting commitments and co-operation objectives by focusing on workshops, individual dialogues. The level of work motivation is a background to determine the share of hired employees included in the activities of the organization as a share of active staff (Бочаров, Тукумцев, 2011; Бочаров, Тукумцев, 2015а; 2015б). The Institute of Social Technologies at Samara State University (Russian Federation) in the late 90s started using research techniques of work motivation measurements of hired employees. The method in its present form, except of small additions, virtually identical to the procedure of the Joint Harmonized EU Program of Business and Consumer Survey of European Commission, which was launched in 1961 (The joint harmonized..., 2014).

The goal of monitoring longitudinal research in this article is focused on the generalization of the empirical data for getting more clear view about the factors influencing on the level of work motivation in large scaled (non) industrial enterprises. The primary data of 3420 respondents were collected through the interviews of the focus groups in large scaled industrial and non-industrial companies of Russian Federation of different industrial branches: manufacture of machinery and equipment, manufacture of transport equipment, chemical production, manufacture of rubber and plastic products, iron and steel production, the production of electrical equipment, manufacture of food products, beverages and tobacco, agricultural, aerospace cluster and municipal (public) education organizations in the periods 2005–2008 and 2011–2014 (Бочаров, 2014) (2 tabl.).

Table 2. The size of interviewed focus groups in various (non) industrial organizations of Russian Federation during the period 2005–2008 and 2011–2014

<table>
<thead>
<tr>
<th>Specialization of (non) industrial organizations of focus group</th>
<th>Size of focus group in a period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial companies</td>
<td>700</td>
</tr>
<tr>
<td>Transport companies</td>
<td>100</td>
</tr>
<tr>
<td>Agricultural companies</td>
<td></td>
</tr>
<tr>
<td>Municipal education (public) organizations</td>
<td></td>
</tr>
<tr>
<td>• Pre-schools</td>
<td></td>
</tr>
<tr>
<td>• Schools</td>
<td></td>
</tr>
<tr>
<td>Enterprises of aerospace cluster</td>
<td></td>
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</tbody>
</table>

Source: authors’ elaboration

For comparison, employees were interviewed up to age of 30 years, and active employees – the staff members, who were actively related on the results of their organizations.

The data obtained through this research technique reflects the level of work motivation of hired employees and the level of their readiness to contribute to the success of host enterprises. The research technique itself contains the following indicators of inclusion of staff into organization. Defined as the level of subjective predisposition to consider the problem of the organization, in which employees work as a personally significant for their willingness to contribute to the success of host organization. This inclusion is the adoption and approval of the managerial rules of the organization, as well as consistence with the objectives of it activities (Тукумцев, 2006).

The inclusion is based on two characteristics: 1) commitment consists of employees’ satisfaction with their workplace and its stability, when the lack of desire to change jobs is higher; 2) involvement in the achievement of the goals by the leadership within the organization, when employees are informed about the organizational objectives, which fit the organizational management, and they believe, that the achievement of these objectives will improve operational processes.

The authors proceed from the fact, on one hand, that the level of work motivation is measured as the inclusion of staff into the organizational activities should be considered as a ready indicator of individual...
efforts to work in the conditions of innovative business environment, and on the other hand, the share of hired employees, included in the activities of the organization, in which they operate, can be considered as a result of their perception of the model of social partnership.

The data obtained during the processing of the responding of surveyed employees are shown below in Table 3.

Table 3. The level of motivation of hired employees in industrial and non-industrial organizations of Russian Federation during the period 2005–2014

<table>
<thead>
<tr>
<th>The level of work motivation in the frame of the share of employees, %</th>
<th>According to focus group</th>
<th>Committed to the work of host organization</th>
<th>Involved in the activities of host organization</th>
<th>Included in the activities of host organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>38.0</td>
<td>24.1</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>41.1</td>
<td>20.0</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>33.5</td>
<td>16.8</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>24.7</td>
<td>16.0</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>41.8</td>
<td>16.9</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>34.4</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Transport companies (2011)</td>
<td></td>
<td>10.7</td>
<td>22.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Municipal education organizations (pre-schools) (2012)</td>
<td>35.5</td>
<td>25.7</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>Municipal education organizations (schools) (2013)</td>
<td>43.7</td>
<td>30.4</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>Agricultural companies (2013)</td>
<td>39.3</td>
<td>23.9</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>Young professionals (under 30 years) of enterprises of aerospace cluster (2014)</td>
<td>53.7</td>
<td>26.4</td>
<td>22.1</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors’ elaboration

Moreover, the obtained results, especially in terms of “involvement in activities of the organization” and “inclusion in the activities of the organization” have a downward trend for the enterprises of the Russian industry. In other focus groups, these figures are not great. The correlation analysis of the empirical data clearly depicts, that the main factors, that are able to currently affect the increase in the level of motivation of hired employees, are wages and their working conditions (4 tabl.).

Table 4. The factors, determining the employees’ “inclusion” in the activities in the host organizations (focus groups, %)

| The share of respondents, % | The proportion among focus groups, % |
|---|---|---|
| Young professionals (under 30 years) of aerospace cluster enterprises (2014) | 44.4 | 32.4 | 37.9 |
| Agricultural companies (2013) | 13.3 | 6.0 | 6.5 |
| Municipal education organizations (schools) (2013) | 28.3 | 23.9 | 24.3 |

Source: authors’ elaboration

When the motivation of hired employees depends on the realization of the primary needs (for hierarchies A. Maslow), it is possible to indicate the actual low level of wages and working conditions. This situation is confirmed by the data of monitoring sociological research (Бочаров, Тукумцев, 2015б). Obviously, the
management of organizations, which focused only on the short sighted financial motivation and believes of its employees, is the omnipotence as financial incentive. Only the increase in wages and the creation of a comfortable working environment is not enough for the active employee’s labour behaviour.

The combination of social and material motivation of employees is connected with the high organizational culture, and the decisions of problems of the enterprises’ competitiveness in the domestic and foreign markets (Workplace…, 2014). The absence of social partnership is impacted on the low level of motivation of hired employees. This great research problem, unfortunately, is ignored in the organizational management practices of mentioned focus groups. The designed employees’ engagement programs and reward systems should be considered vs payment system.

Conclusions

Formal approach to the management of organizations promoting social dialogue with the employees impacts better on informing the staff about the aims and objectives of business and organizational performance, predicts about unavailability of management to develop and support the initiative of hired employees. Generally, almost all surveyed (non) industrial organizations survived by using old culture of communication with staff, based on non-social partnership methods of interaction, as well as disregard for the opinion of employees, reluctance to use their efforts to take the initiative and creativity in improving the organizational performance.

To forward the increase of work motivation, internal social policy and partnership framework has a real base on the new labour relations and modernization of engagement employees into the host organizations. Obviously, mechanism, that can increase the work motivation of hired employees remain the same – higher wages and better working conditions. However, the material incentive measures are not sufficient in large scaled enterprises.

To form a highly motivated team of employees is required by implementing a package of measures to create an environment of co-operation and mutual support. At the fore-front social technology are unused reserves of social and labour relations. These reserves are associated with the satisfaction of people’s needs in recognition of their importance for the business performance in the respect for their work, with the ability of managers to reckon with on the organization of employees’ opinion in support of their creativity and rationalization, including the control of the organization.

Social partnership has been declared as the tool of work motivation: higher wages, better working conditions, high competence and labour discipline.

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DARBO MOTYVACIJOS LYGIO STEBĖSENOS RODIKLIAI
PRAMONĖS IR KITOSE ORGANIZACIJOSE

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Santrauka


PAGRINDINIAI ŽODŽIAI: darbo motyvacija, darbo motyvacijos lygis, stebėsenos rodikliai.

JEL KODAI: J21, J24, J28.