

MOTIVATIONAL READINESS OF PERSONNEL OF A HIGH TECH INDUSTRIAL ENTERPRISE TO THE CONTINUATION OF WORK AT THE STAGE OF ITS DECOMMISSIONING

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***Abstract.** It is in a common practice to decommission a high tech industrial enterprise after depletion of its technological resource. During the preparation to decommissioning of a state enterprise the number of staff is decreasing. In order to keep the resources of labour potential the management of the industry offers to the employees an employment in other enterprises of the industry. The employees of the enterprise to be decommissioned have to make a choice: whether to continue working in the same industry or to search for their new occupation themselves.*

The article describes the results of studying motivational potential of a high tech industrial enterprise during the decision-making process of decommissioning due to depletion of the technological resource. The motivational potential is considered as a motivational readiness to continuing or ceasing work at the enterprises of the same industry and nine types of the motivational profile. The motivational readiness is studied by a specially designed questionnaire. The type of the motivational profile is defined by Milman technique (2005).

The research results show that 82 % of the employees are ready to continue working at the enterprises of the same industry, 10 % are in the process of decision-making and 8 % are going to search for a new employment in other spheres.

Further the type of the motivational profile for each employee is defined by Milman technique (2005). For each group, defined by the criterion of motivational readiness to continuing working for the same industry, the rate of motivational types in the group is calculated.

The defined patterns are used while forming personnel reserve for the enterprise in power-down mode and during decommissioning stage as well as when rotating staff to other enterprises of the industry.

Keywords: *motivational potential, motivational type, personnel.*

Introduction

When closing an industrial enterprise because of depletion of its technological resource and impossibility of conversion, the management faces

the following tasks: (1) providing effective performance at the stage of decommissioning and (2) maintaining material and human resources for the industry (Kochan et. al., 1993; Maksimtsev, 2015). One of the enterprises to be decommissioned is a power station (the enterprise) situated in the Far North of Russia. Following the decision of the state structures concerning its decommissioning, the exploiting organization (the Concern) got the following managing tasks to fulfil: (1) designing the plan of the enterprise activity at the stage of decommissioning and (2) keeping human resources potential for the industry. According to the theory of management the system of staff management bases on various factors that can be reduced to two main ones: technological and human resources (Antonov et. al., 2012; Armstrong, 2015). In general, resources are considered as a complex system including a range of technological, financial, organizational factors and labour potential of the enterprise. The components of the labour potential are the qualification and the personal competences of the employees. In its turn, in the structure of personal competences the leading competences are motivational, intellectual, communicative and moral qualities of the specialists (Lobanova, 2015). Knowing the characteristics of personal potential of the employees allows optimal management of human resources while solving personnel problems.

The concern carried out a complex research aimed at indentifying resources of the enterprise at the stage of decommissioning. The authors took part in the research in the network of cooperation with the university and decided issues connected with studying motivation of the personnel by application of psychological technologies.

Research aim and objectives

The aim of the current research is studying motivational potential of the personnel during the period of preparation of the enterprise to decommissioning.

For reaching the aim of the research the following objectives have been formulated. The first one is defining motivational readiness of the personnel to continuing working at the enterprise at the decommissioning stage, to transferring to other structural departments of the same industry and to ceasing working for the industry. The second objective is specifying the characteristics of the motivational potential of the employees in the groups, defined by the criterion of motivational readiness to continuing work.

Research design

The research was carried out from 2014 to 2015 and consisted of two stages. At the first stage a survey for defining motivational readiness to

continuing work was carried out. 87 % of the personnel of all structural departments took part in the survey, and that provided representativeness of the sample.

At the second stage the objective connected with specifying characteristics of motivational potential has been solved. The sample, consisting of 270 employees of the general sample, has been created. While forming this sample the principles of randomized sampling and equal presentation of various staff categories from all main departments of the enterprise were applied (Nasledov, 2004).

Methods

For studying staff motivational readiness to continuing work we have designed a questionnaire including two blocks of questions. The first block consists of the questions aimed at defining motivational readiness to continuing working at the enterprises of the same industry and studying the employees' ideas of conditions of their labour organization. As the result three groups of employees are supposed to be marked out: (1) those who are ready to continue the labour contract; (2) employees in the decision-making process and (3) those who are not going to renew the labour contract.

For studying motivational potential the Milman Diagnostics of Personal Motivational Structure is used (Milman, 2005). According to the author's conception motivational scales reflect the main personal orientations – consuming and productive. The technique consists of seven scales. For complete diagnostics of personal motivational sphere each scale can be sub-divided to four others, reflecting: whole-life motivation (concerning the whole sphere of life activity); working motivation; “ideal” state of the motive understood by the author as “a level of a drive to act”; real state of a certain motive. The total index of personal motivational sphere according to the testing results consists of 28 scales of motivational profile (some scales can be consolidated). The whole personal motivational picture is reflected in a personal motivational profile representing in quantitative or graphical form the correlations between various motivational scales, registered by a psycho-diagnostic method. A character of motivational profile (MP) can be defined according to the profiles typology. That is why after specifying the characteristics of motivational sphere of each testee, his/her motivational profile can be attributed to one of nine following types: progressive (Pr), regressive (Reg), expressive (Exp), impulsive (Imp), flat (Fl) or combined (progressive-expressive – Pr-Exp, progressive-impulsive - Pr-Imp, regressive-impulsive – Reg-Imp and regressive-expressive – Reg-Exp).

In accordance with Milman's ideas, the *progressive type* of profile positively correlates with successful working activity. Most often this type of the

MP is met among creative people. At the same time, this kind of profile is typical for a socially-oriented person and that fact can be included into a concept of creative and productive orientation of a person (Milman, 2005, p. 42).

The *regressive type* is characterized by a pronounced orientation of consuming motives and their domination on the productive, developing ones.

The *expressive type* is related to self-affirmation in the society, developed ambition, eccentricity, constant rising of aspiration level. The *impulsive type* is characterized by the fact that it corresponds to the “impulsive” type of character accentuation (Groisman, 1995).

The *flat type* of motivational profile shows deficient differentiation of personal motivational hierarchy or its complete absence. All the motives of such structure have almost the same value, and that leads to wider entropy and ambiguity of their realization. It is known from the management theory that flat managing structures have low efficiency when dealing with complex structures.

There are patterns of motivational profile that can not be attributed to a certain type, but belong to two types at the same time. That happens when the expressive or the impulsive profile overlaps the progressive or regressive ones. In that case combined motivational profiles can be seen: progressive-expressive, progressive-impulsive, regressive-impulsive and regressive-expressive.

The obtained data were processed by mathematics and statistics methods; the comparative analysis was applied. While collecting data traditional methods were used as well as the programs Psychometric Expert 6, SurveyMonkey.

Results and discussion

Let us consider the results of the survey of the staff concerning their readiness to continuation of work. The survey shows that 82 % of the employees (Group 1) demonstrate their readiness to continue working at the enterprises of the industry. 43 % of them (Subgroup A) prefer to continue working at the enterprise in the period of its decommissioning despite of possible worsening of labour conditions (shift arrangement to be settled, living in the industrial community far from social structures etc.) It should be mentioned that the number of employees willing to continue their performance exceeds the estimated manpower.

22 % of participants (Subgroup B) mention that all possible variants of the employment in the same industry suit them. It should be underlined that this group includes specialists of the highest qualification levels and managers of linear levels.

35 % of research sample (Subgroup C) showed their readiness to continuing performance at other enterprises of the industry, situated in the regions with favourable climate and developed social infrastructure.

Table 1 demonstrates the motivation profile distribution (in percentage) of motivational profile types in each subgroup according the criterion of motivational attitude to continuing work at the station.

Table 1 The distribution of the employees who are ready to continue their work at the station in the period of its decommissioning

Motivational profile type, %	<i>Pr</i>	<i>Reg</i>	<i>Ex</i>	<i>Imp</i>	<i>Fl</i>	<i>Pr-Exp</i>	<i>Pr-Imp</i>	<i>Reg-Imp</i>	<i>Reg-Exp</i>
Subgroup «A»	30.5	12.6	14.7	6.2	1.2	14.7	4.2	7.4	8.5
Subgroup «B»	45.0	8.1	14.2	6.2	0	14.2	4.1	4.1	4.1
Subgroup «C»	15.6	24.7	15.6	5.2	2.5	9.1	5.2	7.8	14.3

The data presented in the table show that three types of MP dominate in the Subgroup A: progressive, expressive and progressive-expressive. In the Subgroup B there is a pronounced tendency to domination of a single MP type – the progressive one. In the Subgroup C two types of the MP can be seen: regressive and regressive-expressive.

The second group (10 %) includes respondents in the process of decision-making: whether to renew the contract in the same industry or to resign and to search for a new job themselves. This group has the following distribution of the motivational profiles: progressive – 9.1 %, regressive – 27.3 %, expressive – 9.1 %, impulsive – 13.7 %, flat – 4.5 %, progressive-expressive – 4.5 %, progressive-impulsive – 9.1 %, regressive-impulsive – 22.7 % and regressive-expressive – 0 %). The tendency to domination of regressive and regressive-impulsive MP types is pronounced, and it corresponds to domination of consuming motives.

The third group (8 % of research sample) consists of the employees, who mention that they are not going to continue their work at the enterprises of the industry, but have their own plans for a new employment. There is the following distribution of the motivational profiles: progressive – 5.6 %, regressive – 11.1 %, expressive – 5.6 %, impulsive – 11.1 %, flat – 0 %, progressive-expressive – 5.6 %, progressive-impulsive – 27.7 %, regressive-impulsive – 27.7 % and regressive-expressive – 5.6 %. Summarizing the obtained data we can come to the conclusion on the domination of progressive-impulsive and regressive-impulsive types in this group.

Conclusion

Summarizing the data obtained in the course of studying motivational potential of the personnel of a high tech enterprise to be decommissioned, the following patterns are defined. First of all it should be mentioned, that 82 % of

the employees-participants are ready to continue working at the enterprises of the same industry. It should be mentioned that this number exceeds the expected figure significantly.

Despite of possible negative changes in work conditions at the decommissioning stage (shift arrangement, living in the industrial community far from social structures etc.) 43 % of the research sample are ready to continue working at the enterprise. It also exceeds the expected number and the estimated manpower for this period.

Three types of motivational profiles prevail in this group: progressive, expressive and progressive-expressive. According to Milman's conception those type reflect productive motivational orientation of a person and a tendency to achievements and development. The described patterns are used for further more detailed studying specialists' needs in the professional development as well as for designing programs of training and personal growth.

The quantitative potential of the employees who are ready to any possible variant of employment at the enterprises in the same industry is 22 % of the sample. Considering this fact it can be concluded that this category of staff has a high degree of mobility and that is a favourable factor when solving management issues connected with staff rotation. It should be underlined that this group consists of the specialists of the highest qualification levels and managers of linear levels. Only one type of motivational profile – the progressive one – dominates in this group, and it is a proof of high degree of involvement of the employees in the activity. A distinctive characteristic of the motivational profile of the progressive type is personal orientation on the development of the activity by one's initiative, and that, in its turn, reflects a creative approach to the activity and high level of social and personal maturity. The defined patterns can be applied for designing programs of professional growth and evaluation of individual achievements of the specialists.

More than one third of the respondents (35 %) demonstrated their readiness to continue their work for the same industry at the enterprises, situated in the regions with favourable climate and developed social infrastructure. In this group a tendency to regressive and regressive-expressive types of motivational profiles can be traced, which corresponds to domination of consuming motives and constant rising of the aspiration level.

The number of employees in the decision-making process, whether to continue working in the same industry, is 10 %. The analysis of motivational profiles in this group allows finding out a tendency to domination of regressive and regressive-impulsive types.

In the structure of motivational profiles of the employees who do not plan the activity at the enterprises of the industry (8 % of the research sample) there

is a tendency to domination of progressive-impulsive and regressive-impulsive types.

The patterns defined in the research allow making the following conclusions. Firstly, a high motivational readiness of the personnel of the enterprise to be decommissioned to the continuing work at the enterprises of the same industry should be mentioned. Secondly, a high degree of professional mobility of the specialists of the highest qualification levels and managers of linear levels has been demonstrated. Thirdly, the major part of the employees of the enterprise show high productive motivation and that is the sign of readiness of the staff to training, professional growth and development of activity and of personal potential. The volume of human resources, having shown readiness to continuation of work at the enterprises of the industry and their potential allows providing optimal staff rotation.

The defined patterns are used for designing technologies of working with personnel, reflecting demands of enterprise activity at the stage of preparation and actual decommissioning.

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