

Personnel Management through Proper Motivation (on the Example of a Medical Equipment Manufacturing Company)

Silviya Hristova

*Department of Economy and Management,
University of Chemical Technology and Metallurgy, Sofia, Bulgaria*

Received 22 October 2022, Accepted 15 November 2022

ABSTRACT

This article is devoted to the motivation of personnel in general and in production in particular. The survey results among employees in a medical equipment manufacturing organisation are presented. Different authors' views on improving the motivation of the personnel in the particular organisation are presented.

Keywords: motivation, personnel management, manufacturing organisations.

INTRODUCTION

Organizations in the modern world face many new challenges. Some of them stem from the globalisation of markets. Others are related to the boom in information technology or the scarcity of resources. And others characterise societies in transition to a market economy. All these multifaceted problems facing organizations can be summed up in one single word - change. Today, the problems of the economy must be viewed through the prism of constant change (modern economic processes are accompanied by constant change) [1].

Change is the word that begins to take on an almost magical meaning. It is used to emphasise

the complexity of the issues and simultaneously to indicate the success or failure of an organization. Organizational change is no longer perceived as a passive act. It is a way of life, an ongoing process that aims to both improve performance and increase people's satisfaction and mental well-being.

Although intended for successful multinational corporations, this definition of the prerequisites for social change seems tailor-made for the current situation in our society. Rethinking the values related to work and assigning a new personal meaning to the most significant activity is a phenomenon characteristic not only of the current social situation in our country but also on

**Correspondence to: Silviya Hristova, University of Chemical Technology and Metallurgy, 8 Kliment Ohridski blvd., 1756 Sofia, Bulgaria, E-mail: sad_1981@abv.bg*

a more global scale. The grounds and reasons for the interest in values, attitudes and motives for work are strictly specific to each type of culture.

In the last few years, Bulgaria has undergone several significant changes, both in economic and social aspects. Unsolved questions arise: What does a person look for and expect from work? What are his values, goals and motivations? How to overcome alienation from work? How to increase organizational effectiveness? What are the grounds and reasons why the person gets involved and actively participates in the labour activity to satisfy both his own and social needs? Why does a person become attached to an organization and identify with it? What are the mechanisms for the formation of job satisfaction and a sense of mental well-being as a result of a person's professional achievements? The need to answer these questions is determined by the difficulties of the transition to a market economy. It requires overcoming the global crisis in work motivation, alienation from work and rethinking its meaning in human life.

The existence of multiple concepts and understanding of human motivation and the need for affiliation testifies to the great complexity of these problems. On the other hand, this speaks of the enormous importance of this problem, both for the individual and for the organization and society as a whole. The purpose of this article is to analyse and understand what motivates the staff and to explore the possibilities of increasing the work motivation of the human resources in the organization. The tasks that are set are directly related to the set goal and are united in the following areas:

- study of the theoretical views on motivation;
- conducting a study of the motivational policy and strategy regarding human resources management in a company for the production of medical equipment;
- determination of the essential motivational factors and their influence, as well as the

degree of satisfaction with them;

- formulation of a strategy - how to increase the motivation of labour resources.

The object of research is a company for the production of medical equipment.

EXPERIMENTAL

What does “labour resource” mean?

Labour resources are part of the population. They are a quantitative set of people with certain qualitative characteristics for the exercise of labour, considered within the limits of population reproduction. Labour resources cover the working population at present. They are identified with the labour force, understood as the ability to work or the totality of people's intellectual, physical and creative abilities. Labour, on the other hand, is labour-power in action, functioning labour power. Therefore, all those who at any given time perform socially useful work constitute the country's labour force. The source of this workforce is labour resources. The labour force plus the unemployed population that is able to work forms the labour resources. In turn, labour resources are part of human resources. They also include all those who develop their education or, if necessary, retrain [2].

Characteristic features of human resources

By its very nature, human resources clearly stand out from other resources. The more important characteristics, presenting them as a special species, are:

- part of society, on the one hand, and society is a human resource, on the other hand. The vital needs of this society are met through human resources created and prepared for this by the society itself. Carrying out all socially useful activities, human resources development and improving this society;
- The human resource included in the production process is the only one that creates new value;
- Human resources are the engine of progress.

It is a factor increasing the possibilities of the remaining resources for the development of the activities carried out in the economic sphere and the public sector. The professional knowledge and skills of the people in the organization not only determine the degree of use of the remaining resources but also create them as such. Man has enormous intellectual and educational potential. This characteristic of it outlines its special role in the prosperity of any organization;

- The formation of human resources is a long-term process and requires long-term investments realised during the first 40 (and in some cases 50 and more) years of a person's life, carried out by the family, society and the employer;

The human resource is the only resource that increases its quality in the process of its realisation. Its property of self-organisation, self-training and self-improvement is used to increase the effectiveness of activities in the organisation [2].

Peculiarities in personnel management

The main features of human resource management arise from the fact that the objects of management are living, social beings intellectually united by common goals. With the disclosure of these features, a more complete picture of the essence of this management is achieved. The nature of the problems being solved and the directions for improvement are revealed. The following features distinguish human resources management:

- It is impossible to manage other resources before the management of human resources has been carried out;
- Human resources are both an object and a subject of management, while other resources are only objects of management;
- In his labour activity, the person as an element of human resources is a complex, dynamic, probabilistic system. This circumstance

makes it difficult to manage;

- HRM covers very diverse activities. According to the World Dictionary of Management, these activities are: recruitment and selection, training, pay, appraisal and promotion, layoff, planning, labour relations, safety and health, and keeping personal records.

Nature and specificity of the motivation of human resources

Motivation is an extremely important modern problem. It is associated with the quality of the work performed by the individual employee. How a person is motivated depends on what will be his attitude to his work activity, what personal time he will commit to its implementation and in general. Motivation includes all those processes that excite, direct and maintain the purposeful volitional actions of the individual. Through motivation, a person is mobilised and activated to achieve certain results. Motivation is a process that acts in a certain way in a certain form. Initially, the emerging need creates a state of disequilibrium in the individual. He will try to reduce it through his behaviour. In this way, the target behaviour or the actual activity is produced. Between the choice of behaviour and the actual behaviour comes an important individual characteristic - the ability. People may not have the necessary skills, experience or knowledge to meet the relevant need. The individual's performance is then assessed by himself or by others. The effectiveness of an activity aimed at satisfying a need, such as developing a sense of satisfaction with the work one does, is usually evaluated by the individual. Satisfying the need for money is usually assessed by a supervisor. Depending on the level of activity reached, rewards are given, or punishments are imposed. As a result, the individual evaluates how well the chosen behaviour satisfied the initial need. If this motivational cycle has satisfied the need, a state of equilibrium or satisfaction exists. When the

action is done, the need is satisfied, i.e. the goal is achieved, or the original stimulus is rethought, and another behaviour is provoked. This process clarifies the way and tools of motivation. It can be measured, and its structure formed. Motivation works through a complex mechanism of manifestation. It includes needs, external economic incentives, social relations between people working together, a person's striving for self-realisation, satisfaction with professionally performed work, etc.

There are various and well-known theories of staff motivation. They examine the main factors influencing his motivation. The most famous of them are Maslow's and Herzberg's. Based on their analyses of needs, a set of diverse human needs that motivate the individual are classified. Of utmost importance among them is the need for self-realisation, self-renewal and development. According to these authors, the most important needs from the point of view of long-term motivation are those related to performance and self-improvement. Herzberg also considered needs as a motivating factor for work. But he believes that the factors that drive and motivate man in his work behaviour are basically two opposing factors. On the one hand, there are factors that influence job satisfaction; on the other hand, a second group of factors influence a person's dissatisfaction with work. It is very often believed that the pay, the modern office and the social status that the workplace gives him are the main motivating factors in a person's work behaviour. But Herzberg proves that even if they are present, a person can be minimally motivated or even demotivated. The factors that move him forward are related to the quality of the work itself, the nature of the tasks performed, the recognition received, the realisation of abilities, and the professional competence obtained [3].

The company we are studying is engaged in the production, supply and service of medical equipment for physiotherapy and rehabilitation.

It was founded in 1997 in the city of Sofia by a team of scientists and engineers with many years of experience in the development and production of medical equipment.

The purpose of this research is to study the factors that motivate human resources to work in Bulgaria and in particular in the company under consideration, also measuring the degree of their satisfaction and developing a motivational profile.

Tasks of the research:

1. Ranking by the importance of the motivator factors that stimulate human resources in the company for work.

2. Summary of satisfaction, respectively, dissatisfaction and indifference for each factor.

3. Comparison of the motivational profile between managers and workers in the company.

4. Revealing the differences in the motivational profiles of managers and workers.

Given limited information, it is practically impossible to ensure the representativeness of the sample of respondents. The main factors motivating the company's employees on the one hand and the management staff on the other are sought. This, in turn, will provide a basis to subsequently look for significant differences and similarities in motivation between the two groups of human resources. Based on this, conclusions will be drawn regarding the ways and means of increasing the effectiveness of the company's motivational strategy. The research was carried out with the following sample: 20 - employees in the company; 5 - unit managers; 5 - team leaders.

Characteristics of the interviewed persons

The average age of the respondents is 37.8 years, and their work experience is between 4 and 11 years. The managers participating in the research and survey have a higher average age - 41.5 years, and the seniority of each of the respondents is between 17 and 21 years.

Ranking of motivational factors

The ranking is based on respondents' answers regarding the ranks of each motivational factor. The technology of self-ranking involves filling in an auxiliary table. It sequentially plots the ranks for each motivational factor from all respondents. The relative importance weight for each motivational factor averaged over the entire population of respondents is calculated. The sum of the ranks of each factor is divided by the number of persons participating in the survey. According to the relative weight, the motivational factors are ranked according to their importance on average for the group, with the factor with the lowest relative weight receiving rank 1, the next in importance - rank 2, and so on.

RESULTS AND DISCUSSION

In order to compare the motivational profiles of the company's personnel and managers, an analysis is made on the results of the surveys of the two groups. After processing the primary

information, a relative importance weight is calculated for each of the factors:

$$R_{iw} = \frac{\sum_{i=1}^n r_i}{\sum_{i=1}^n n} \quad (1)$$

where: R_{iw} - Relative importance weight, n - number of respondents; $r_1, r_2, \dots, r_n$ - rank of the specific motivational factor, according to the ranking of the i -th respondent.

The results for the ranks of the motivating factors of all managers and employees surveyed are presented in Tables 1 and 2. It is noted that the first most important factors are related to the benefits of the work performed - remuneration, job security and social benefits. This result can be fully explained by the economic situation in Bulgaria and the difficulties in the private sector of small and medium enterprises in the country, i.e. reasons such as the high level of

Table 1. Factor ranking (personnel).

№	Motivational factors	Relative weight of importance of the factors	Ranking of the factors by importance
	Opportunity to improve qualifications	10,25	13
	Opportunity for development	11,15	15
	Professional freedom	10,15	12
	Remuneration	1,85	1
	Feedback	6,95	6
	Fairness of remuneration	9,75	9
	Workplace security	3,95	2
	Social benefits	4,3	3
	Social environment	6,4	4
	Challenging work	9,8	10
	Participation in the management process	10,85	14
	Recognition by the supervisor	6,7	5
	Recognition from client companies	8,8	7
	Recognition from colleagues	9,2	8
	Moral satisfaction	9,9	11

Table 2. Factor ranking (company and team managers).

№	Motivational factors	Relative weight of importance of the factors	Ranking of the factors by importance
	Opportunity to improve qualifications	9.3	9
	Opportunity for development	11.9	14
	Professional freedom	3.4	2
	Remuneration	1.9	1
	Feedback	4.8	3
	Fairness of remuneration	8.5	8
	Workplace security	5.5	5
	Social benefits	5.2	4
	Social environment	11	12
	Challenging work	9.5	10
	Participation in the management process	7.9	7
	Recognition by the supervisor	7.5	6
	Recognition from client companies	12	15
	Recognition from colleagues	10.4	11
	Moral satisfaction	11.2	13

unemployment (including among this type of personnel), low incomes, etc.

The obtained high importance of remuneration as a motivating factor for personnel (employees and their managers) confirms the initial assumption. At the same time, an interesting fact is the ranking of workplace security among the first places. The highly motivating role of social benefits should be sought in their perception as a substitute or rather an element of remuneration. Especially with its low values in the sphere of small and medium-sized enterprises in our country, it creates a strong significance for the benefits.

The next three factors in importance are the social environment, i.e. relationships in the team, followed by recognition from the supervisor and opportunities for feedback from the direct supervisor. Good relations with the managers of the company and teamwork create favourable

conditions for the performance of official duties, as well as for their better performance. The role of the leader is also important. Recognition gives employees greater self-confidence, greater job security and the eventual receipt of additional financial benefits. The opportunity for feedback was identified by many surveyed employees as a significant motivational factor. In addition, the manager is often involved in the resolution of contradictions and conflicts between employees. Rank 7 and 8 received recognition of the factors from customers and colleagues, respectively.

The high evaluation of these factors should be sought in the strong connection between the emotional state of the employees. It is predetermined by constant interpersonal contacts, dealing with obligations, by the need for affirmation, recognition and significance in society.

The fairness of remuneration factor is only

Table 3. Degree of satisfaction (employees in the company).

Rang	Motivational factors	Weight of satisfaction		
		%	%	%
	Remuneration	27	5	68
	Workplace security	39	8	53
	Social benefits	76	5	19
	Social environment	62	3	35
	Recognition by the supervisor	47	2	51
	Feedback	50	5	45
	Recognition from customers	59	0	41
	Recognition from colleagues	35	4	61
	Fairness of remuneration	29	4	67
0	Challenging work	73	0	27
1	Moral satisfaction	72	3	25
2	Professional freedom	43	17	40
3	Opportunity to improve qualifications	35	8	57
4	Participation in the management process	11	25	64
5	Opportunity for development	14	7	79

ranked 8th and 9th. This is a consequence of the existing system of payment of labour and the weak flexibility of remuneration. The factors with the lowest importance are: moral satisfaction, the opportunity to increase qualifications, participation in the management process and the opportunity for development and career growth.

Satisfaction of needs

An auxiliary table is used to present the results, in which the motivational factors are ranked by importance according to the results of the previous stage, and for each the percentage of persons for whom the motivational factor is satisfied, unjudged or unsatisfied is determined. They are presented in Table 3.

To establish the priority values of the studied persons, the methodology of M. Rokic was used, which consists of two types of values - 18 terminal

and 18 instrumental. To establish the priority values of the studied persons, the methodology of M. Rokic was used, which consists of two types of values - 18 terminal and 18 instrumental. Respondents rank the proposed values according to their own views and significance in personal and professional terms. Terminal values refer to life goals and professional fulfilment. Instrumental - to preferred qualities and ways of acting for self-realisation and are also called values - means.

Leading by rank in the hierarchy of terminal values among the studied persons, the personal life values stand out followed by values of professional realisation: health; happy family life; material security; self-confidence (absence of internal contradictions and doubts); active life and interesting work. Bringing human health as the highest value is not accidental. Considering the company's activity related to the improvement

of human health, it is not only a personal but also a professional value. Further, desirable values are outlined as: love (spiritual and physical closeness with close people); friendship (good and faithful friends); life wisdom (maturity of mind and life experience); and an opportunity for creativity, solving problems significant to the individual. The lowest point of the hierarchical ladder is occupied by passive individual values: pleasures; independence; assessment independence and affluence.

Diagnostics of instrumental values show that the values of professional realization and altruistic values are the most significant: responsibility, courage, education, honesty, initiative, execution and firm will. In the middle of the ranking, there are self-affirming values of personality and interpersonal interaction. At the bottom of the ranking are the values: sensitivity, politeness and intransigence to the shortcomings of others.

Analysing the results, several meaningful cores of terminal values are formed in sequence: personal life values; values of professional realisation; individual values; abstract and passive values.

In order to achieve optimal levels of motivation, i.e. to engage employees with the organisation's goals and improve their work performance, it is necessary to know the factors that influence work behaviour. Once these factors or motivators have been identified, actions and measures should be proposed to influence them, increase employee motivation and change work behaviour in the desired direction.

The feeling of insecurity is one of the main stress factors for the individual that affect his motivation to work. It can be a reason for the desire to change the workplace. Therefore, its timely detection can have a preventive nature for the organization. Half of the company's staff (51 %) cites the higher pay as the main reason why they would change jobs. Almost the same

percentage (46 %) would not change jobs, while 14 % indicated that they would change jobs because of better collegial relations. The data show that the greater percentage of employees feel dissatisfied with the so-called "external" or "hygienic" factors in Herzberg's terminology. These are the payment in the company and the search for better collegial relations. The two factors are listed alone as main or in combination. The absence of other demotivating factors and the large percentage of employees who prefer the researched organization as a workplace outline a favourable working environment that fulfills its motivating function.

As the main motivating factors, 46 % of the employees indicate linking the results of the performance with the remuneration, 34 % - the interesting and challenging work; 31 % - the possibility of personal growth and development; 26 % - the feeling of recognition and respect; a lower percentage (14 %) indicated the need for workplace security; 11 % the presence of good collegial relations.

Based on the analysis of the data from the conducted survey of employees and managers in the researched organization, the following conclusions can be drawn:

- For both groups of respondents - managers and employees in the company, the motivational factor with rank 1 is remuneration;
- There is a difference between the factors ranked in the following positions between the two groups:
 - ✓ with rank 2 for employees in the company is the workplace security factor. For managers, this factor is ranked 5th.
 - ✓ The second-ranking factor for managers in the company is professional freedom, which can be explained by their freedom related to the management of subordinates (this factor for employees is ranked 12th);
 - ✓ with rank 3 for employees in the company is the motivational factor social benefits,

while this factor is one position behind for managers (rank 4). For them, the feedback factor with the manager was ranked 3rd. However, this factor was ranked only in 6th place by the employees of the company.

- The motivational factor with rank 4 for employees in the company is the social environment. For managers, this factor is placed only in 12th place. The much lower degree of importance of this factor for managers can be explained by their leadership position among employees and, accordingly, the less importance for their work that they attach to the social climate among their subordinates;
- Fifth in rank for employees in the company is the factor recognition by the manager. This factor for managers is one position lower (rank 6);
- For employees in the company, the recognition of the motivational factors from colleagues and recognition from customers (respectively with rank 7 and 8) are of greater importance, which is much less important for managers - respectively in 11th and 15th place in the ranking list. This result can be explained by the fact that managers have already risen in the social hierarchy and do not have this need for prestige and recognition because they have proven themselves in their field.
- There is relatively equal importance between the two groups regarding the ranking of the factor fairness of remuneration - for employees it is ranked 9, and for managers, it is ranked 8;
- Given the significant differences in the scope of the duties of the employees in the company, there is also a significant difference in the ranking of the factors: opportunity to increase the qualification (for employees it ranks 13, while for managers - with rank 9) and participation in the management process (among employees it ranks 14, while among

managers - rank 7);

- The motivational factor of challenging work is ranked by both surveyed groups at the same position - rank 10;

As a conclusion, it can be said that the staff is most satisfied with the following factors: additional social benefits, social environment, job security, clarity about the level of work performance, clarity of goals and the evaluation criteria and clarity in the performance of tasks, relationships with the immediate supervisor. However, it is necessary to take into account that the relatively small number of surveyed employees in the company does not give reason to believe that with a larger sample of the study, significant differences in their motivational profile can be found.

CONCLUSIONS

In conclusion, some recommendations can be offered for improving motivation in the organisation. Rewards have an effect depending on how or when they are given. It is necessary to define exactly which the desired behaviours that will be rewarded and to set criteria for their performance. To be effective, rewards must vary and be diverse in nature. They should not be reduced only to the payment. Individual differences should be taken into account. Their motivational effect is greatest when they immediately follow the performance and are not delayed in time. So that if possible, they should be given after the desired behaviour. Payment has a motivating effect only if it affects performance. When motivation declines, work enrichment approaches can be introduced to make work more motivating. The role of personal responsibility is emphasised and this necessitates the need to delegate duties in the work process. Ways are recommended for the so-called vertical restructuring of work so that people have more autonomy and control in how they do it.

It is necessary for the company to make every

effort to protect the workplace of every single member of the company by following several steps. It is important that when closing certain positions in a certain department of the company, the employees are redirected to another team that currently needs personnel. From the results of the research, it was found that the employees lack clarity about the opening of new positions and the prerequisites for promotion. When opening new jobs and when opening old jobs, it is of great importance to give preference to employees from the company, taking people from outside the company only when absolutely necessary.

The management of the organization should not forget that, despite the lack of statistically significant influence on the turnover of some sources of dissatisfaction, their presence is a basis for predicting many negative effects (poor morale, low productivity of workers and employees, etc.).

A significant drawback in motivating the company's personnel is the absence of spiritual incentives. There is a tendency in our country to deny spiritual stimulation, which is wrong. This type of stimulation has its significant

place in the conditions of a market economy. This is proven by the practice of countries with strong economic development, which ensure the optimal functioning of economic units. Moral stimulation must complement and balance the material. The combination of the two types of incentives creates conditions for the development of a highly motivated company environment. These recommendations could be proposed and implemented by any organization for the proper motivation of its available personnel.

REFERENCES

1. A. Gospodinova, Construction of an industrial cluster for production of high-oleic sunflower oil, Conference proceedings International scientific conference "Modern management paradigms in the continuous change context", HTMU, Sofia, 2019, (in Bulgarian).
2. K. Vladimirova, K. Spasov, N. Stefanov, Human Resources Management, University Publishing House "Economics", Sofia, 2009, (in Bulgarian).
3. B. Kendall, Human Resource Management II, Sofia, 1996, (in Bulgarian).