

Work Incentives of Specialist Engaged in Information Technology Project Activities

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ABSTRACT

The effective system of work incentives corresponding to the specifics of the organization, the categories of personnel, types of his work, is the key to the successful activity of the information technology company. Formation and development of work incentives complex system of specialists engaged in information technology project activities includes subsystems of material monetary and non-monetary stimulation. The presented orders and principles of development of the work incentives system of IT experts occupied in project activities allow to solve the problem of increase in overall performance and interest of all participants of the project in its successful realization in the conditions of rigid temporary restrictions, at observance of the budget.

Keywords

work incentives, information technology specialists, project management, material stimulation, non-material stimulation.

1. INTRODUCTION

Even more often, a question of development of an effective system of work incentives arises before the heads of companies of the information technology (IT) industry. At the same time, it is necessary to consider that generally the organization of project activity is used in this industry.

2. PROBLEM STATEMENT

One of the main objectives of stimulation of specialists of IT industry in the project, irrespective of a type of the project and roles of its participants, is the increase in overall performance and interest of all participants of the project in its successful realization in the conditions of rigid temporary restrictions, at observance of the budget. Despite this each project is unique in its own way and differs from others in purposes that obliges every time to form a new design team and develop a system of work incentives, different from previous in the majority of parameters, but which always has to contain the following qualities: justice, competitiveness, simplicity and clearness, transparency and publicity, compliance to legislative rules, compliance to personal needs of employees for whom it is designed, increase their motivation, dependence and the accounting of results of activity of employees, their qualification and professionalism with the maximum objectivity, immediacy (without temporary delays), compliance of the organization and the project (Fig. 1).

Only at observance of these requirements each employee will have an opportunity to control (to count independently) results of the activity.

Use of a uniform, most optimum algorithm for the formation of a system of work incentives of IT experts in the project (Fig. 1) will reduce the costs its development resources and will reduce the risks which are carrying out to inefficiency

when functioning in the conditions of uncertainty of the new project.

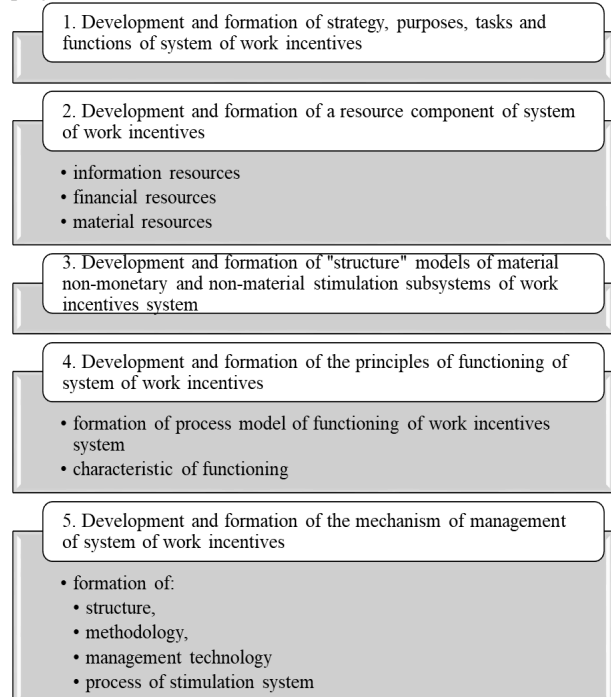


Fig.1. Order of works on development and formation of parameters of system of work incentives of IT experts in the project

3. RESEARCH QUESTIONS

As a result, ensuring the of success of the project, it does not dependent on its characteristics, there have to be principles (Fig. 2) below-mentioned according to which the system of work incentives of the heads and experts conducting design activity has to be created. It is necessary to consider that these principles affect the formation not only of "structure" and "structure" system of work incentives of IT experts in design activity, but also other parameters.

It must be kept in mind that participation of an IT expert in several projects complicates the control system which should provide coordination of activity of the worker, as on for each separate project, as well as for total projects and at all stages of management within one organization. If in the organization the system of parallel employment of heads and experts in several projects prevails, then guarantee of efficiency of stimulation of their work in this case, besides the earlier considered principles, will be: inclusion of indicators of labor and temporary load of the worker in key indicators of efficiency of the employee in various projects and careful distribution of his labor and temporary loading in projects.

1. Orientation of work incentives system to achievement of ultimate goals of the project.
2. Development of the indicators system, the effectiveness of each head and the expert involved in the project and their forming in system of indicators at which the individual purposes of the participant of the project wouldn't contradict common goals of design group uniting indicators.
3. Development of indicators system of project group activity result where the common ultimate goals will make set of the individual purposes.
4. System of objective quality standard of a contribution of each participant of the project, its effectiveness (quality, timeliness), and also his functional role in the project, time spent for realization of the functions according to indicators of efficiency of implementation of the project. Minimization of subjectivity in an assessment.
5. Dependence of system of stimulation on characteristics of the project: its complexity, look, term.
6. Development of optimum system of the compensation for heads and experts allowing to gain rather stable regular income without awarding inclusion, considering various terms of implementation of the project.
7. Escort of participants of the project about contents his contents, technologies, terms, responsibility and system of stimulation is information.
8. Active use of methods of non-material stimulation.
9. Awarding has to have periodical character and to be tied to the termination of the project and its stages. At the same time his considerable part has to be carried on the termination of the project.
10. Allocation of bonus fund of the project and fair principles of his distribution.

Fig.2. The principles of formation of system of work incentives of the experts occupied in project activity of the IT organization

Thus, on the basis of the presented principles of work incentives of the heads and experts occupied in one project or several in parallel, we will consider an order of formation of "structure" and "structure" of a subsystem of material stimulation of the experts involved in design activity of the IT organization (Fig. 3).

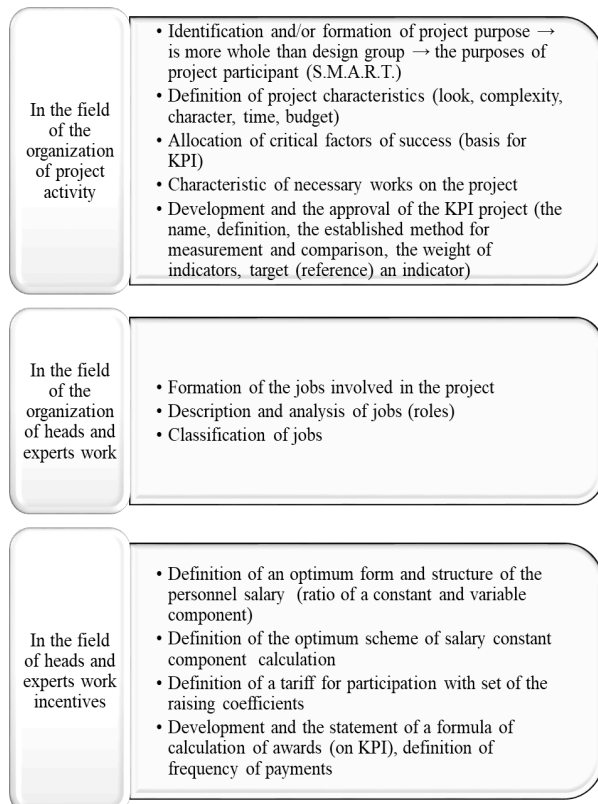


Fig. 3. An order of formation of "structure" and "structure" of a subsystem of material stimulation of experts of IT involved in design activity of the organization

The solution of a task of optimum "structure" of a subsystem of material monetary stimulation of IT experts occupied in design activity of the organization, first of all, consists in the choice of a price-work or time form of compensation (Tab. 1).

It should also be noted that the price-work form of payment has property of self-control. It is revealed in the competition between employees for performance of a task, on the other hand the overloaded employee will refuse excessive loading.

Tab. 1. The comparative characteristic of price-work and time forms of compensation in project activity

Criterion	Price-work form	Time form
1	2	3
Compensation proportions	The main sum of payment price-work, constant - minimum (under the Labor Code of the Russian Federation).	The constant component of compensation is more considerable than a variable.
Compensation payment	Depending on employment in the project.	It isn't dependent on employment in the project
Dependence of compensation	Variable from volume and complexity of tasks (quality and periods).	The permanent part of compensation depends on a situation in labor market and personnel policy of the company. The variable depends on efficiency of execution of detailed designs.
Accounting of factors of work	There is no accounting of labor input. Tools of the account and planning of loading of personnel aren't used.	The accounting of expenses of each employee time in the project and other employment. Planned labor input is formed proceeding from the expert estimates based on experience of performance of similar works.
Principle of calculation of compensation	Distribution by the head allocated the sums in rather equal shares on condition of respect for quality and terms.	By an expert assessment of labor input of experts of different qualification (in normo-hours) and their external hour rates.
Principle of allocation of labor costs	1. From the cost of the corresponding works fixed in the contract. 2. From relative cost (as a percentage) sections of the project documentation.	The work of labor input on the internal rate of the employee reflecting prime cost of his man-hour. Join in this prime cost directly: a salary, charges on her, the employee's insurance.
Scheme of the accounting of labor costs	Expenses in the sum equal to task cost, belong on prime cost of the project on condition of observance of terms and quality.	Time which is actually carried according to the temporary card on each project is multiplied by an internal hour rate of the employee and belongs on actual cost of the project.

1	2	3
Assessment of efficiency of the employee	Annual development of the employee (cost of the detailed designs performed by this employee in a year).	- loading coefficient (the share of calendar time carried by the employee on implementation of projects); - coefficient of development of norms (the number of normo-hours developed by the employee for one man-hour during the work in projects); - annual development of the employee (the sum of shares of revenue of the projects falling on this employee in a year).

It is necessary to consider what can appear the most suitable form of compensation, among provided, mixed, that is price-work and time. A keyword parameter of a choice of the form of compensation and in case of a combination of their proportions, is the ratio of a base and variable unit of compensation which varies depending on economic stability in the organization and the prevailing motivation of a staff. Thus, it is recommended to create a compensation of principals and experts involved in project organization activity as follows (Fig. 4):

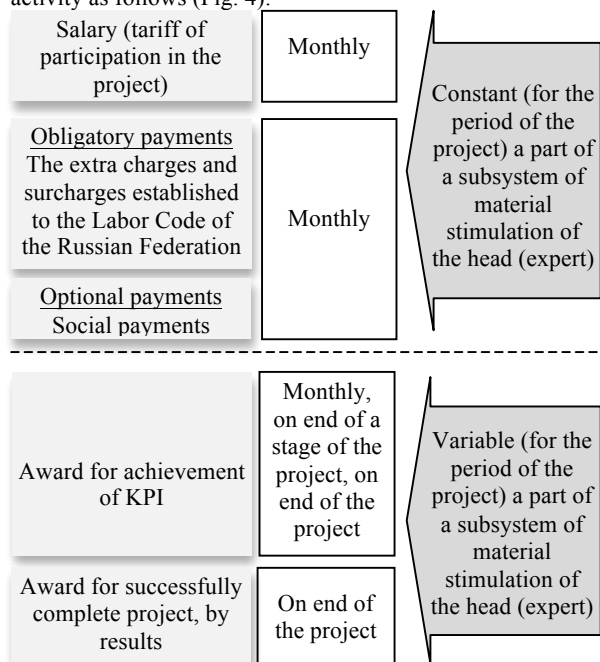


Fig. 4. "Structure" of a subsystem of material stimulation of experts of IT involved in design activity of the organization

Despite a variety of purposes facing IT experts at each stage of the project, an order of formation of a salary part of system of compensation should be based on the established tariff, not depending on the vocational level of the worker, and for participation in the project. Payment of participation in the project on the established tariff has to be made monthly. Here it should be noted that in a constant component of compensation indicators of an individual assessment of performance by the head or expert of tasks corresponding to the current stage of the project can be also considered. It is necessary to consider that in design activity, the tariff size for participation in the project should

be minimal, and shift the most part of material remuneration to system of awarding.

Formation and distribution of the variable part of monetary work incentives of IT experts in projects is always a very delicate question resolved by the top management, however, in such a way justice seldom reached. The most expedient for awarding is the development and application of KPI for each project manager and expert (3). This system meets the main requirements of stimulation and allows to estimate activity of each participant of the project most objectively. This complex and laborious work is one of the most important ones during the creation of a subsystem of material stimulation. Only when KPI are transparent, clear, unambiguous and brought to the attention participants and when each participant of design group is able to monitor the achievement of the indicators, it is possible to speak about the fair system of work incentives.

Design KPI is unique for each specific project. For example, there can be such indicators in the project: a project date of performance, a stage of the project or work, completeness of realization of a task, quality of work, a deviation from the budget, etc. There can also be indicators stimulating works of experts, generation of extraordinary ideas, etc. It is recommended to appoint no more than seven indicators for one ordinary participant of the project and no more than five indicators for project managers (IT expert). Besides the progressive scheme of an assessment of results of work, it is necessary to designate a regressive one (conditions of decrease in effectiveness ratio), in case of unsatisfactory results of the participant of the project. It is important that measurements were carried out by means of certain tools or the known facts. Calculation is made in an expert way in the ratio pre-established planned target. By effectiveness, boundary conditions or minimum necessary effectiveness are introduced. If cumulative effectiveness of the project participant upon completion of the project or a stage of the project is less than 60 - 80%, then the participant of the project who has allowed such low effectiveness doesn't get an award by results and the question of his withdrawal from the project is considered.

The most optimum scheme for making decisions on distribution of bonus fund for the end of the project is the principle by which awards of employees are determined by the higher official in coordination with the project manager and the head of the organization.

The trust bonus fund of the project is defined by the guide to results of successful completion of the project depending on its importance (on terms, the budget, profit, complexity of realization, the planned efficiency). Rewarding is a very effective but expensive method of stimulation of labor activity of IT experts. In this regard, its allocation is an exclusive decision of the head of the organization or the sponsor of the project. The decision to allocate a bonus fund, depending on achievement of the KPI project, the actual bonus fund can be equal.

At distribution only those participants of the project who have KPI more than 60% - 80% can earn a premium (is established by the head). And the caused stir can count on super remuneration on which about 10% of total amount of the distributed bonus fund is allocated.

Thus, the direct dependence of the size of an award on results of work during all project stimulates each participant of the project for more effective implementation of production tasks.

Very important part of work incentives of experts of IT occupied in design activity are methods of material non-monetary and non-material stimulation which are undeservedly pushed back by the heads. As experience shows, the most effective and optimum scheme of non-

material stimulation for employees of design groups is combined - a combination of individual and collective stimulation. The stimulation connected with raising the professional level, optimizing work schedules and granting an opportunity to work at the interesting, enjoyable work is extremely effective. Change of the professional status can be expressed in increasing the zone of responsibility (change of a role in the project or process, combination), training and certification. It should not be forgotten that for the worker of brainwork important not only to study constantly, but also to train others. The work giving pleasure to the participant of design group is the creative work allowing to apply the knowledge and skills, to participate in invention and innovations, and also existence of a zone of responsibility and an opportunity to make independent decisions. These factors allow the employees to realize the importance which, certainly, should be confirmed then constantly, and it promotes development of the organization. As a collective non-material stimulation, it is necessary to apply various actions promoting increase in skill to communicate and unity in collective. It is impossible to underestimate the convenience of office, and a comfortable, ergonomic workplace equipped with modern technical devices will not only increase the worker's productivity, but also his motivation. In addition, the formation should pay attention to the "correct" corporate culture promoting on the one hand, to high motivation of heads and experts of design groups, and on the other hand, to fulfillment of the purposes of the organization.

4. CONCLUSION

Thus, the basis for methodical recommendations about modification of system of work incentives of IT experts occupied with project activities will be the following most urgent complexes as important:

- 1) Creation of the creative atmosphere allowing generation of the new ideas. Promotion of the new ideas and personal results during the team work.
- 2) Leaving from use of traditional schedules of work and forms of employment, also development of optimum schemes of compensation.
- 3) Official employment according to the Labor Code of the Russian Federation and liquidation of "grey" schemes of compensation in favor of officiality of the salary and full-measured compensations of a holiday and sick-lists.
- 4) Organization and introduction of programs of development of career and vocational education. Encouragement of professional development (participation in interesting projects, independence of performance of tasks, professional development, change of level of responsibility at the solution of tasks, etc.).

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