

serve new technologies and so on). What they are interested in is that the results of the project would correspond to their expectations, would solve their problems, and thus would not render material or other damage. The users do not participate directly in execution of the project, but can affect the result of the project. In particular if to speak of the investment projects, for example, introduction of the automated system of class ERP, unwillingness of the users to work with the system and correctly reflect the data can minimize the expected economic benefit.

Other participants of the project (sometimes in the literature there is such a term as “stakeholders”) can not be referred to the above-stated groups, but can influence the project or its results. So for example, according to the legislation while constructing objects (residential or industrial), it is necessary to meet public requirements or the project can be rejected or considerably changed (an example of such a project change can be the trajectory of the oil pipeline which was originally supposed to pass near the lake Baikal). This group of persons can have economic or non-economic interests and expectations within the project, and ignoring these interests can affect both realization of the project, and its results.

Actually all these groups form social network of the project, i. e. cover all the interested persons (the question is natural persons) and if while planning the project one does not take into account interests at least the most important ones, the project can turn to be unsuccessful.

For example, if to speak of investment projects at the enterprises that are vitally important for a city, sometimes it is possible to note the following: with changing the proprietor the new owner first of all tries to realize the projects that raise profitability of the manufacture. Among such projects there can be change of suppliers for external ones in relation to the municipal formation or the region, attracting better-qualified man power (including other regions), or just reduction of

some specialists. However if the enterprise is vital to the city, it goes without saying it will be the largest (or the only) employer, and any measures touching interests of the majority of the employees will give negative reaction not only from them, but also from the local and regional authority, that in its own turn can entail additional financial loading on the project (in particular the owners may be forced to create additional jobs for the dismissed specialists of the company).

Apart from that it is possible for groups of persons (including legal persons) to participate in the project, for example, the credit organizations which are interested in the project due to the opportunity of getting income on the enclosed funds. Thus within the legal person there can be separate stakeholders, for example, the specialist who is engaged in delivery of credits and is interested in increasing of their quantity, the project is interesting to him/her as an opportunity to fulfill transaction which will affect his key parameters of efficiency.

The next prominent aspect is delimitation of the project. In investment projects the positive monetary stream from the project is usually defined. It means that limits of the project should include also activity which will follow the investment of the funds (for example if we calculate the project by investments in the new equipment, we should include in it also the production by means of this equipment, and handle these processes). However, frequently when planning projects this activity is ignored. So there are examples of investment projects when only investment charges are included in the budget but the ones for the start of manufacturing and the beginning of sales are omitted. Hence these funds were not involved initially and when the investment part was over, the investors immediately waited for a monetary inflow which was not possible.

Thus at planning investments it is necessary to determine the purpose and limits of the project as well as the social network of the project.

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DELIMITATION OF THE INVESTMENT PROJECT

Project's scopes and works management is the important component of any investment plan. One of the ways of project's risks minimization involves more exact definition of those works which should be executed for the benefit of project completion and desirable cash flow obtainment.

Keywords: the investment project, a cash flow, project works.

Process of structuring (decomposition) is an integral part of the general project planning process, its purposes defining. It also includes preparation of a general project plan and a matrix of responsibilities and duties. Thus, it is necessary to attribute the following to the primary goals of structuring:

- splitting the project into sections;
- distribution of the responsibilities among various elements of the project and coordination of works with

structure of the organization (resources);

- exact estimation of required expenses – means, time and material resources;
- creation of uniform base for planning, estimating and control over expenses;
- transition from overall aims to the specific tasks which are carried out by the divisions of the organization;
- determination of work complexes (contracts).

Process of project structuring is, as a matter of fact, construction of hierarchical structure of works (a tree, in foreign sources – work breakdown structure, WBS), that is a consecutive multilevel splitting of the purpose for works to be executed to achieve the ultimate goal of the project.

While managing the cost of the project it is necessary to define cost of each work in the first place. Usually estimates are made under each section of works. The finer the structures, the more correct the calculation will be.

The layout showing the order of works is necessary for project time management, i.e. calculation of project finish date, minimization of time. To draw up the layout it is required to determine and specify the works. The more detailed are the works, the more optimal is the time plan of the project. If to operate with the integrated sections and to determine the order of works from their interrelation it is possible to miss reduction of time due to simultaneous works inside the section or due to works interrelations inside sections.

The level of detailed elaboration depends on the complexity of the project. In some cases it is recommended to split sections according to the need for resources: the nomenclature of resources for single work should not exceed 5 units, or number of project team members should not exceed 5 people. The other way the lowermost level size of works determination is the amount of time necessary for work, for example no more than 1 month. All works which term exceeds one month should be detailed.

It's important to note, that while detailing it is necessary to focus not on the stages of the project, but on the results targeted. Thus, probably to more fully determine the scope of actions for the project.

Frequently in many projects the time required for some kinds of works is not taken into account. For example, "financial support obtainment", "financial and accounting reports collection", "resources obtainment", "personnel provision", "sales promotion", "approval documentation collection". For some projects, for example in construction, the investment component is frequently external to the project. The current financing provision is the obligatory section of works, firstly, because it demands expenditures of labour, frequently – of single experts. Sometimes single experts responsible for project expenses, accounting or tax accounting are not stipulated. In case of a small project, as a rule, these functions are assigned to experts of the operating enterprise. However actual time spent on servicing the project is included into the project costs.

"Resources obtainment" includes signed contracts, delivery of a resource, its acceptance, storage, etc.; "personnel provision" includes search, hiring, training, certification of experts; "sales promotion" – marketing analysis, advertising, selling; "approval documentation collection", and other works which do not result obviously from essence of the project but without which the project is not possible.

Structuring can have "functional" and "organizational" attributes.

The functional attribute means that all works connected to marketing, for example, get in one section. The organizational attribute assumes that in the section of works all works necessary for the result are included.

For example, for the project "Construction of an apartment block and sale of apartments" works on personnel selection and training can be allocated into the section "qualified personnel provision", or can be distributed separately among "civil works", "marketing" and "selling". Similarly, if we plan to involve contractors or subcontractors, then the search, estimation of contractors and contractual work can be allocated into the separate section or distributed between those sections in which participation of external organizations is planned.

Under correct detailed elaboration of works the choice of attributes selection will not affect the further scheduling. However, if we unite personnel search in one work, without specifying kinds of personnel, the problems with definition of works interrelation at the further scheduling can arise.

While planning the budget of the project all works which are included into the project should be considered. For this purpose we use, as it was mentioned above, the standard tool – structure of decomposition of works (work breakdown structure).

However prior to construction of a tree of works it is necessary to determine the scope of the project, i. e. procedures to be included in the project.

For the project delimitation first of all it is necessary to analyze the purpose and the results of the project determined by the customer, and to take into account the usability of all project participants (not only those who participate in the project directly, but also those who enters into a social network of the project).

As an example we shall describe the project the equipment redesign for aluminum manufacture in one of monocities of Irkutsk region. The social network includes the following groups:

1. Shareholders (proprietors) of group of the companies which include the enterprise. The purpose of them is obvious – to increase aluminum production and decrease production costs (it is necessary to specify that in the given project marketing of the manufactured aluminum is not included into scopes of the project as it is carried out by the head company with the use of exchange trade tools. Otherwise it would be necessary to consider sales works within the project frameworks; hence if there was a task of "recoupment" or "a positive cash flow", the terms of the project necessary for calculated sales would be a bit extended).

2. Regional management. The purposes are as follows:
 - inflow of investments into the region (for creation of a positive attractive to business image of the region);
 - additional investments into projects on the territory of the region are investments into regional economy (as the part of works is done by local contractors, hence additional workplaces appear and the taxable base raises);
 - preservation of social stability (if the project causes significant reduction of workplaces the administration will be compelled to take measures on employment assistance or benefits payoffs);
 - purchase of new equipment will allow to lower anthropogenic risks.

3. The management of municipal formation (including deputies of a representative body) is interested first of all both in the increase of tax payments and in preservation of

workplaces without deterioration of living standard. Therefore if the project initiates reductions due to some processes automation, the municipal government will be against the project.

4. Workers of the enterprise who will use the results of the project. Their purpose is to preserve the workplace and working conditions, including financial aspect.

5. Managers of the enterprise, including those connected to the project. As a rule at the stage of creation any project initiates plenty of problems for those who don't work in it directly, i. e. don't have financial interest, but accepts this or that participation in its realization. For example, while attracting other workers of the enterprise to project team work it is necessary to take into account that heads of those divisions, whence experts are withdrawn, will be against the project as it complicates their operational activity. Hence the purpose of this group is to minimize the negative consequences the project.

6. The project head. If speaking about the invited external expert whose allowance depends on whether the project will keep within target dates, than he is interested in finishing the project in due terms but with the minimal quality. If the project head will continue to work on the created manufacture his purpose will be to achieve the maximum quality that will allow to reduce problems in project results operation.

7. Project team, i. e. direct executors. If the system of motivation is constructed incorrectly, the project delay can become the purpose of executors. Sometimes there are situations when executors are more interested in their own career growth, staying with the project till they receive some alternative offer.

8. The inhabitants of the municipal unit who aren't directly connected to the enterprise. Their purpose is to avoid deterioration of living standard, including ecological aspect. Unfortunately, many projects are not transparent for the public, and cause a lot of rumors. For example, in public opinion the above project was represented as ecologically harmful. Even statistics on sharp deterioration of health of the population was presented, where the described above project was referred to as among the main reasons.

9. Ecological and public organizations. Due to the fact that Irkutsk region bad ecological conditions each project is a subject to additional ecological examination. The purpose of such organizations is to avoid deterioration of ecological conditions.

10. "Agreeing" managers. Any project, especially investment requires resources, including financial. Frequently the existing personnel is responsible for the project support. In conditions of unlimited access to resources it is not a problem, but in the current situation, in particular, when the companies have not enough own means, and the credit organizations are not ready to finance projects without sufficient support, the problem of financing is sharp enough as the project actually competes for resources with the basic activity of the company. In the situation when companies have to pay for the electric power (for aluminum factories it is a big sum) and to finance a certain stage of the project the financial manager will undoubtedly give priority to payments on primary activity as they are in sphere of his direct responsibility. Thus the purpose of such manager is to service the project so it does not worsen operational activity, i. e. the project is not a priority in the given situation.

The ideal succession of events while planning projects will be considering the purposes of every interested group, however in usual practice it is necessary to build the system of priorities. It is important to note that if the project considerably contradicts with the interests of any group it can affect both the course of the project and the use of its results.

An example of such project can be a transfer of the oil pipeline on demand of the ecological organizations and public because of threat to Lake Baikal.

Another significant aspect is delimitation of the project. In investment projects the positive cash flow from the project is usually defined. It means that scopes of the project should include both after investment activity (for example if the project concerns investments in new equipment we should include both production on this equipment, and processes operation). However, while planning the projects, this activity is frequently missed. So, there are examples of investment projects in which only investment charges were put into budget supply ignoring the fact that to launch a manufacture and to start sales a certain volume of turnover means is needed. Hence, these means were not involved initially and after finishing the investment part investors were waiting for cash inflow which of course could not be received.

Thus while planning investments it is necessary to determine the purpose, the scopes of the project and its social network, and only then create the structure of decomposition of the investment project works.