

**INFORMATION SYSTEMS  
AND INNOVATIVE TECHNOLOGIES  
IN PROJECT AND PROGRAM  
MANAGEMENT**

**Collective monograph edited by  
I. Linde, I. Chumachenko, V. Timofeyev**

ISMA University of Applied Science

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**INFORMĀCIJAS SISTĒMAS  
UN INOVATĪVAS TEHNOLOĢIJAS  
PROJEKTU UN PROGRAMMU  
VADĪBĀ**

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**I. Linde, I. Chumachenko, V. Timofeyev**

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The monograph presents the achievements of Ukrainian scientists on enterprise management, the use of economic and mathematical modeling, information technologies, management technologies and technical means in the field of enterprise functioning and development and project management at enterprises.

The publication is recommended for professionals in the fields of economics, information technology, project and program management - for undergraduate and graduate students, as well as academics and teachers of higher education.

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## **10. FEATURES OF STAKEHOLDER MANAGEMENT IN PROJECT ENVIRONMENT**

Malanchiy S.O., Hutsa O.M., Kyriy V.V.

### **Abstract**

The management of external and internal forces in the environment of projects is a pressing issue. It is well known that the best results are achieved by those projects and organizations that fully take into account the influence of stakeholders and competently build their relationships with all stakeholders, which creates value for all parties, not just for project owners. The systematization of the entire stakeholder management task is proposed, which is presented as a single process of sequential related actions, which allows the manager to see and control the whole process as a whole.

### **Introduction**

To date, project management research and publications have placed particular emphasis on planning and management techniques whereby a manager can control timeframes, costs, resources and quality. The project environment, including stakeholders, remains to be explored so far and does not have the sufficiently clear and accepted management practices.

At the same time, experience shows that many of the problems associated with the implementation of the project lie in the field of the environment, and the success of the project manager in achieving his goals depends to a large extent on his communication skills. Therefore, the quality and ability of the project manager to communicate with people is much more important than his technical knowledge [1]. In any case, this is why he is forced to devote a large part (80 ÷ 90%) of his working time.

An actual task is to summarize, analyze and form an idea of the possible existing approaches to managing the project environment.

### **Analysis of recent research and publications**

A review of foreign and domestic sources shows that the theory of stakeholders was actively discussed and developed not only by specialists in the field of management, but also by philosophers, lawyers and, what may be most interesting, by political scientists.

The founder of the theory of stakeholders is considered to be Robert Edward Freeman, who published in 1984 the work on strategic management, based on managing the stakeholders. Central to this approach is the notion of stakeholders, which over time was undergoing famous changes and clarifications. Scientific publications also use the terms

stakeholders, interest groups, pressure groups, members of the coalition, but they are not completely identical in meaning to the term stakeholder. Stakeholder theory is a relatively young in a number of management theories, the first and still the most concise definition was proposed by Freeman in 1984: "Stakeholders are groups of people without whom the organization could cease to exist" [2]. Further this concept was somewhat expanded and fleshed out by Freeman: "a Stakeholder may be an individual or group support (providing) activities of the organization in the same way as does the holder of the shares" [3].

Subsequently, Freeman's ideas were expanded by other researchers with a focus on a number of special areas of management theory and economics. Further researchers proposed new definitions, focusing on the interest or influence of stakeholders on organizations. Thus, in 1996, Lockwood identified stakeholders as people "really interested in the results of the organization's activities," and the same year Ryan proposed his own interpretation of the term: "a person or group of people who can influence the organization or are affected by the organization". In the British manual (part of the BS6079 1996 standard) on project management, a more detailed definition is given: "Persons or groups of people who are vitally interested in the success of the organization (project) and the environment within which there is an organization (project)" [4].

Some experts believe that dominating the definition is ownership of a part of a company, while other researchers find it more important to indicate "power or influence". At the same time, in both cases, the central to determine the stakeholder is the existence of a relationship. Some researchers and practitioners claim that the stakeholders that have relationships, but do not bear the risks of the company, are not the owners of a part of the company. Some authors point out a desire to take on risk, expressing loyalty to the company or adding value, striving to participate in organizational benefits or gaining the right to vote in management decisions or management through representatives. Out of many definitions, the most recognized dichotomous view ultimately stood out: a stakeholder is any group or individual who can influence and is affected by the achievement of organizational goals. [5].

Most researchers of the concept of stakeholders believe that a special important stage in its development is associated with the appearance in 2002 of the book by Post J., Preston L., Sachs S. "Rethinking a corporation: stakeholder management and organization wealth" [6].

Many authors have noted that the classification of stakeholders is difficult because of the existence of significantly different narrow (legal) and broad (managerial) definitions. The legal aspect proceeds from the relations that are fixed in the contracts: the stakeholders have rights, and the firms have obligations and obligations; or stakeholders are those persons

without which a firm cannot exist.

The managerial approach, based on theories of organization and sociology, is more pragmatic: it is based on aspects of the relationship between stakeholders and the company; however, this approach has ambiguity, since those whom the company can influence are not always able to influence it. This broad management approach leads to the need to pay attention to all stakeholders that are worth taking into account, to take care of them and respect them. The narrow legal approach leads to the selection as stakeholders of a much more limited group, which is associated with the company under consideration contractual relations, the intensity of which can be assessed. These approaches are not mutually exclusive: stakeholders who influence or which a given firm can influence can have a contractual relationship with it, and stakeholders who do not have a contractual relationship can also influence or influence the activity of the firm.

However, many authors point out that when using a narrow approach, competitors should be excluded from the composition of the stakeholders, although they should be integrated into the stakeholder system on the basis of a broad approach, as they can damage or provide benefits to the company, i.e. they should be considered in a strategic perspective. Managerial interpretations involve multiple relationships with wide variations in intensity and intensity of impact. However, this approach leads to a very significant increase in the number of stakeholders. Thanks to globalization and technological development with improved communication and information systems, virtually everyone is connected to everyone, and everyone influences everyone and is influenced in their activities.

Thus, like any young theory, the stakeholder theory is somewhat ambiguous, and many practical situations cannot be explained and predicted on its basis. One of the reasons for these difficulties is the ambiguity and variability in time of the identification of the stakeholder and its influence on the organization. Another reason is that today practically any company operating in developed markets is, in a certain sense, a stakeholder firm, i.e. each market entity is a stakeholder for others. In other words, determining the number, analysis and making informed decisions on all stakeholders in this situation become almost impossible.

At the same time, the need to manage relations with stakeholders objectively exists and is recognized. Resolving the problem requires the development of a holistic methodology, the basis of which is the definition and classification of stakeholders.

The conclusion is that the processes of managing relationships with interest groups and the mechanisms for evaluating the effectiveness of this management have not yet received a corresponding systemic development, either in theory or in practice. Such mechanisms

would clearly indicate the role and contribution of each of the participants in the relationship and, accordingly, build effective communications, set specific tasks for management and monitor their implementation.

### **Aim of the study**

The aim is to summarize and systematize the existing approaches to the definition and interaction of interested groups of persons in projects.

### **Description of the work results**

To understand what environmental factors affect the project, the manager should consider the organization implementing the project as a subsystem operating within a larger system (environment) and interacting with other subsystems. To the environment refers (Dict.) - "a set of things, conditions and influences" [7]. Thus, the environment includes almost everything outside the scope of the project, including:

- factors of the internal environment:
- company owners, management, heads of functional departments, coordinators of other projects, temporary project personnel and personnel transferred on a permanent basis;
- as well as factors and actors in the external environment:
- state institutions and public organizations;
- legislation and regulations;
- politics, economy, ecology, security, culture, morality, religion;
- technologies;
- other project participants represented by the customer, suppliers, consumers, competitors, contractors, financial institutions, land owners, real estate, etc.

The main conclusion is that the project is connected with other subsystems or organizations in the environment surrounding the project. This creates a bilateral relationship of interdependence. That is, to achieve success, the manager should not be limited to the scope of the project as such. He must study and try to control, or appropriately adapt external forces, on which effectiveness and results depend. But the fact is that all these factors belong to the general environment of the project and lie outside the direct control of the project manager. The manager does not have traditional power over key figures and factors in the project environment. The only exceptions are permanent members of the team who are directly subordinate to him.

Power is built in the form of influence and means the ability to force someone to act in accordance with someone's wishes [7]. The basic rule concerning the distribution of power and influence is that “persons who are not subordinate directly to this manager have the right not to follow his instructions at all” [1]. In order to get the support of important (influential) people inside and outside the organization, the ability to build interpersonal relations is extremely important to the manager. In fact, managers have to become diplomats in order to achieve a certain influence and understanding in order to provide the necessary control over the environment and the effective completion of the project. The process of analyzing the project environment (see Fig. 1) begins with an examination of all the actors and factors that have or those that may affect the success of the project.

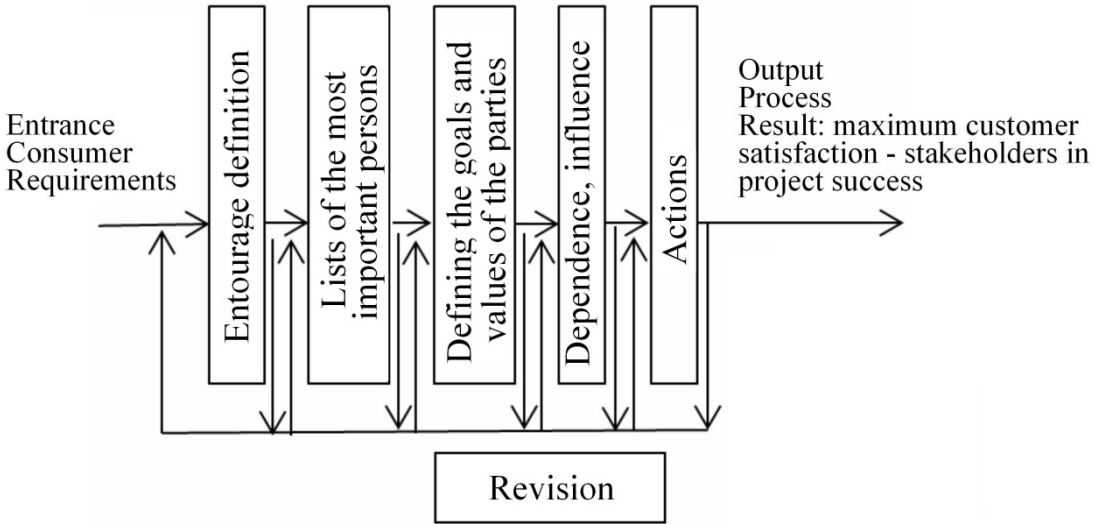


Fig. 1. The process of managing the project environment

The definition of the main actors is sometimes called the “mapping of persons” [7] who is interested in the project, i.e. identifying individuals or parties interested in a project’s success or failure.

Parties can be considered both in terms of possible assistance from them, and resistance to project implementation. After identifying the main driving and restraining forces, a “force field pattern” is built [8]. This can be done by conducting and discussing with the participants of the “working session” [7], which includes key members of the project team and already well-known important stakeholders from among the customer, key performers, and product developers.

To help members of the working group to “identify” stakeholders, you can use certain “categories” or “classifications” of standard types of stakeholders [8] and, knowing how these

groups (categories) affect the content and progress of the project, more clearly outline their future roles.

The second step is to identify the most important actors; assessment of potential problems, the probability of their occurrence and the power of influence.

You can identify problems in the categories of "high degree of dependence", "high risk", "insufficient effect" [7]. After identifying problems, you can cross out the least important ones.

Juhani Silvasti suggested using the SSWO-analysis [9] to determine potential opportunities and dangers. As a result of the SSWO analysis, a list of strengths and weaknesses of each interested party is obtained, as well as a list of their capabilities and hazards for the project. The manager should concentrate on those opportunities and dangers that are most important for the successful implementation of the project. The degree of importance depends on how influential the stakeholder is in general and how strong it is in an area where there are opportunities or dangers. You can decide which features to use and which dangers to prevent.

The next step to define the goals and values of the stakeholders is to collect information about the most important stakeholders. In order to influence the key figures and factors in the project environment, the manager needs to understand the nature of the business (activity) of each group of participants and, accordingly, their possible interests in the project, the understanding of their incentives and behavior in different circumstances, the guidelines.

In order to come to an agreement on goals, norms, to build a comfortable level of mutual relations and mutual obligations, S. Bushuyev believes [1] that it is necessary to understand the goals and values of all stakeholders:

- What are their stated goals?
- What are their hidden goals?
- How are they organized?
- How do they coordinate their actions, carry out general management?
- What are their orienting values?

The answer to these questions allows us to understand how we can serve "their" orienting values, through whom personally, through what sequence of actions and what could be an alternative to these actions.

Another important direction of the manager's thinking should be to consider the project from the point of view of the authority he has over external actors and factors. It is

useful, according to Robert Youker [7], to divide power into three levels: control, influence and understanding. Control means the ability to give orders and expect these orders to be executed.

An influence means less power than control. Although the actions of an individual influence the achievement of the goal, the complete achievement of this goal also requires appropriate actions by other persons over which the project manager has no direct control.

An understanding means the absence of power or influence, but only implies knowledge or awareness of the potential impact (assessment) of the actor or factor. For example: a project manager can control his employee and exert a certain influence on the heads of other services (often acting through top management), but can only assess his dependence (degree) on representatives of various public institutions and organizations.

Opportunities for influencing and controlling the main environmental factors include both organizational forms and development strategies.

Organizational forms are:

- formal organizations;
- coordination groups (teams);
- communications managers;
- consulting centers.

Process changings include:

- management plans (relationships);
- reports;
- team building (involvement, expansion of the circle of stakeholders committed to the project).

To build organizational forms of communication, you need to have clear ideas:

- what stakeholders and what of their actions to control;
- forms, methods of their work, norms, procedures;
- forms of incoming and produced documents;
- form of communication to be maintained.

This information is the "key" to the further development of a formal organization that engages in interactions (its functions, roles, positions, competencies, areas of responsibility, instructions, forms and methods of work).

Interactions must be carefully planned. The development of an action plan - a plan for managing relationships and stakeholders, will require an answer to questions in relation to

each group of persons [9]:

- How to use the capabilities of a stakeholder?
- How to prevent the dangers caused by the interested party?
- How are the project capabilities for the stakeholder taken into account?
- How are the project hazards for the stakeholder taken into account?

The plan determines what will be done, why and how, who will do it and when, and what will be received as a result of the event.

To manage stakeholders means to maintain communication and inform about the results achieved and plans for further actions so that they are convinced that the basic agreements are being implemented and that their interests are respected.

The indicators in the progress reports should be consistent with the views of stakeholders on how success will look from their point of view.

A formal presentation of the criteria for project success, taking into account the views of key stakeholders, can be the matrix for determining success [8]. It can be used as a separate document describing the content of the project. At this stage, we use the roles of stakeholders already defined in the process of analyzing the project environment to build a vertical matrix field. The horizontal field of the matrix contains the main success factors that stakeholders have identified as indicative for assessing the success of the project.

Next, for each of the success factors, we determine a specific meter (indicator) that can be used after the project is completed to determine whether this project was really successful and how much from the point of view of its stakeholders. This indicator can be monitored during the project and reflected in progress reports.

One of the roles of the diplomatic efforts of the project manager is to expand the circle of people who consider themselves members of the team. A well-established method of team building is to conduct a seminar on the start of the project. Involving all interested parties at the initial stage of planning allows taking into account their interests and how they will affect the anatomy of the project. It can be longer meetings with members of the working group, or both.

The project has a clearly defined goal (mission). The desire to ensure the achievement of the main goal of the project is also one of the important sources of power and obliges all participants to constructive work.

The obvious way to achieve influence is to establish personal relationships. The project manager needs to try to establish appropriate relationships in order to increase the

degree of control and influence. What can a project manager do to increase influence or control? The key to success lies in understanding the goals and interests of the main actors and people interested in the project. Persons interested in the project act in accordance with their own interests.

The project manager will be able to increase his influence if he can understand their main interests and link them with the expected results of the project. One should skillfully appeal to the interests of actors, using the main sources of power over people: power through remuneration; power through coercion; the power of charisma; power of an expert (standard, example); legal authority (official, appointed).

But few managers understand that even for subordinates, the power in the organization is based more on spiritual leadership, rather than position and position [7]. Effectively acting managers know the sources of their power and use them to achieve the goals of the project, always occupying a leading position.

### **Conclusions**

1) Many of the problems associated with the implementation of the project lie in the field of the environment, and the success of the project manager in achieving his goals depends to a large extent on his ability to communicate.

2) The project environment, including stakeholders, is still less studied and does not have enough clear and accepted management methods.

3) In order to understand what environmental factors influence the project, the manager should consider the organization implementing the project as a system operating within the framework of a larger system (environment) and interacting with other subsystems.

4) To achieve success, the manager should study and try to manage, or in a certain way adapt external forces, on which efficiency and result depend.

5) An important direction of the manager's thinking should be to consider the project from the point of view of the power that it has over external actors and factors.

6) The project manager will be able to increase his influence if he can understand their main interests and link them with the expected results of the project.

7) The management strategy for the main environmental factors includes both organizational forms and measures aimed at developing the process.

8) To build organizational forms of communication, the manager needs to have clear ideas: what stakeholders and what actions (functions) to monitor, and in what form to maintain communication. This information is key to the further development of a formal

organization that supports relationships: its functions, distribution of roles, competencies, and areas of responsibility, instructions, forms and methods of work.

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