

## ARTICLE

# ALGORITHM OF ORGANIZATIONAL DESIGN OF THE COMPANY

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### ABSTRACT

The article describes the algorithm of organizational design of the company. The terms "organizational design", "organizational management structure", "organizational design" are considered as identical. The methods and modern tendencies of organizational structure are also being studied. The emphasis on modern trends in the organizational design is important, since they determine the nature of organizational management structure of the company: whether the hierarchy will prevail in it, or whether modern reality will require transition to more flexible structures ("teal" organizations, project management, etc.). The algorithm of organizational design is considered both from a theoretical point of view and from a practical one. The theoretical part is aimed at studying the approaches of various authors who offer their methods and tools of organizational design. This part includes not only enumeration of the sequence, but also all the actions to be performed at each stage. The process of organizational design is also considered in an applied aspect, which makes it possible to verify the reality of the application of the theoretical knowledge in practice and their effectiveness. The proposed tool can be applied in any company, which proves its universality.

### INTRODUCTION

Organizational design is a rather complex process. It includes the formulation of goals, objectives, the definition of composition, the location of units, the provision of resources, the formation of necessary documents, regulations, etc.

According to A.P. Agarkov, today it is possible to allocate following four basic methods at organizational construction [1]: analogy method; expert-analytical method; goal structuring method; method of organizational modeling.

The analogy method includes the use of organizational forms and management mechanisms in relation to the designed company. This method includes the formation of typical organizational structures of production and economic companies, the definition of boundaries and conditions for their application.

The expert-analytical method includes examination and analytical study of the company by the highly qualified specialists in a team with the head and employees of the organization. The method involves interviewing managers and employees of the organization with the purpose of identifying and analyzing the specifics of the structure and functioning of the management apparatus.

The goal structuring method includes the development of the company's goal system, which includes their formulation in the quantitative and qualitative forms. When using this method, the following steps are passed through [2]:

- development of the goal tree: the structural basis for linking all activities of the organization, based on the final results.
- expert analysis of options proposed for the organizational design.
- formation of maps of rights and responsibilities for the achieved goals for individual units; results for which achievement the responsibility is determined.

The method of organizational modeling includes the development of mathematical, graphic, machine and other types of mapping the distribution of responsibility and authority in the company.

The design of the organizational management structure should be conducted on the joint use of the methods described above: separate application of a particular method does not bring the desired result. The choice of methods directly depends on the company's features, the qualifications of the developers, etc.

### MATERIALS AND METHODS

The main stages of designing the organizational structure of the company include: diagnosis, composition, structuring, regulation [Fig. 1].

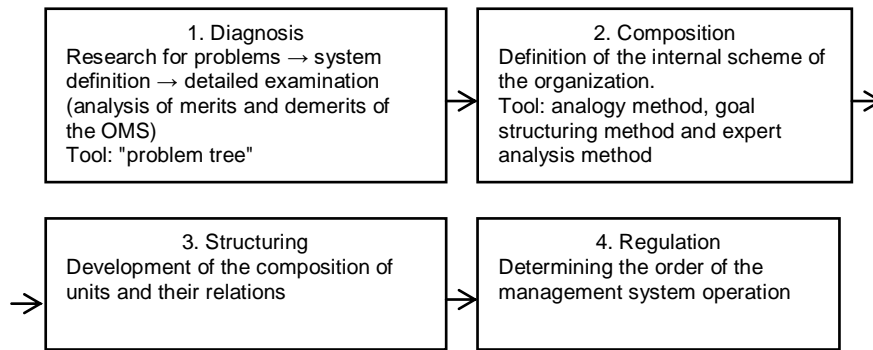
#### KEY WORDS

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**Fig. 1:** Stages of organizational construction of the company (systematized by the author)

1) Organizational design begins with the diagnosis. To do this, it is necessary to conduct a study for the problem of the company's reorganization. The next step is to define the system. At this stage, the problem is decomposed into clearly formulated problems (the construction of the "problem tree"), then it is formed the research object, its boundaries, elements, subsystems and super systems into which the firm enters and it is determined their main features. Further, it is analyzed the advantages and disadvantages of the operating organization and its management system. Then it is outlined the main directions of the future development of the company.

2) The next stage is composition. At this stage, it is recommended:

- a) to determine the company's mission, the system of goals and objectives of the organization, management apparatus and units;
  - b) to determine the number of levels in the management structure;
  - c) to determine the type of organizational structure;
  - d) to establish economic, legal, administrative and managerial factors and boundaries of the activities;
  - e) to select the main functions and interrelationships of the units;
  - f) to determine the main directions, ways and methods of interaction of the company with other organizations;
  - g) to establish the forms of the company's relationship with the external environment;
  - h) to complete the documentation (unit composition, subordination, degree of centralization and decentralization of functions, evaluation of the activity effectiveness).
- The last action at the composition stage is the development of requirements for financial, material and technical, personnel and information support.

3) The composition stage is followed by the structuring stage. Here it is formed the organizational structures of different units, management apparatus, organization as a whole, as well as the regulations and schemes about them, the interaction schemes with other companies. In addition, this stage includes the analysis of trends in changes in the external environment and the organization's development, the identification of the company's needs in the resources for today and in the future, the formulation of the proposals for improving the organizational structure, management mechanisms, the development of ways to motivate the employees and of performance indicators of their activities.

4) The regulation stage is characterized by the following works:

- clarification of the features and procedures of the company's activities, the composition of units, the management apparatus; distribution of tasks, duties, rights and responsibilities between the performers;
- determination of labor intensity of the main types of work, qualification of the staff, their number from each unit;
- development of staff schedules;
- determination of the interaction order between units and specific positions in the performance of interrelated works;
- development of procedures for performing the main types of work;
- design of the documentation processes and information flows;
- formation of a favorable socio-psychological climate in the management bodies and divisions;
- clarification of the organization provision;
- development of regulations on structural divisions, job descriptions;
- calculation of the effectiveness of the designed organizational structure.

As a result of these works, it is made the design decisions on the main directions for improving the organizational structure and documents that regulate the processes of the company's operation and management.

G.Yu. Tikhomirova distinguishes only three stages in the construction of the organizational structure: analysis of the current organizational management structure, design, performance evaluation [3]. Unlike the previous author, she pays more attention to the evaluation stage, suggesting the introduction of quantitative criteria for evaluating the effectiveness of organizational design.

Over time, the company's management comes to a decision on restructuring the OMS. This statement requires the definition of a system of factors affecting the organizational structure of the company and causing a need for its change. Let us consider these factors, identified by E.N. Kabkova [4].

- 1) Unsatisfactory functioning of the company: an unsuccessful attempt to reduce costs growth, increase productivity, search for new markets, attract new financial resources.
- 2) Lack of perspective orientation. Many of the leaders prioritize operational issues. The result is a simple extrapolation of current trends in the future.
- 3) Overload of senior management.
- 4) Growth of activity scale.
- 5) Disagreements on organizational issues.
- 6) Association of economic entities. The merger requires changes in the organizational structure.
- 7) Changing management technology.
- 8) External economic situation.

The above circumstances lead to improvement of the organizational structure.

The next stage is directly the OMS improvement process itself. Let us pass to studying the current trends of the OMS [5].

Firstly, it is the desire to form a horizontal structure. The main features of this structure are as follows: fewer hierarchical steps; availability of an information system that automates current management tasks and provides an opportunity for managers to focus on the main tasks.

Secondly, the tendency of the desire for a more flexible management structure. It manifests itself in: the latest information and communication technologies; maximum adaptation to changes in the external environment and timely response to them; maximum flexibility of the structure; ability to self-reorganization; flexibility of the competition forms, where the cooperation prevails.

But there are features inherent in all organizational structures that characterize this stage of economic development [6]. They are presented in [Table 2].

**Table 2:** Trends in improving organizational structure

Trends	Feature
1. Transition from formal management systems to informal organic ones	1. Production automation 2. The employee's desire to implement his skills and abilities
2. Development of economic independence and responsibility of the company	1. Creation of business centers 2. Full satisfaction of the market needs
3. Strong personnel policy	1. Guarantee of employment 2. Respect for the person 3. Provision of the uniform status of all employees
4. Employee orientation	Provision of an opportunity to show: 1. creativity 2. initiative, independence, entrepreneurial spirit
5. Formation of effective ties within the firm	1. Development of information technologies 2. Improvement of intra-company horizontal links

It is significant that the development of new information technologies changes the perception of the management structure as a clear system of division of labor, authority, responsibility, formal control procedures and power.

Not only the development of information technology is the reason for changing the management structure, but there are a number of other reasons: an increasing importance of the output of science-intensive, high-tech products changes the decision-making processes. Now the employees are better educated, more qualified and as a result there are new organizational principles: now the employees are able to perform not one but several functions. They are formed into professional teams, thus creating a method for group problem solving.

## RESULTS AND DISCUSSION

Let us consider the examples from the practice of organizational design and the experience of companies following the current trends in the OMS construction.

For this purpose, we briefly describe the stages of organizational design discussed in the previous sections: diagnosis, composition, structuring, regulation. Under this algorithm, we will analyze an example of the OMS reorganization of Santa Rosa Systems Division (SRSD) of the company Hewlett Packard [Table 3].

**Table 3:** Stages of organizational design by the example of Hewlett Packard [7]

Stages	Actions
1. Diagnosis	- regular struggle between departments for the resources; - weak top management, which pays insufficient attention to strategic tasks; - mutual distrust of employees within the organization; - insufficient provision of growth and profitability.
2. Composition	1. Development of a unified vision of the company's development strategy formed a unified approach to understanding the status and functions of each unit. 2. When using the cross-polls (which were conducted from top management to ordinary employees), it was demonstrated significant organizational failures, which were announced to the management. The results of these polls strongly influenced the management's opinion, and they realized the need for an immediate correction of the situation.
3. Structuring	Top management developed the reorganization plan that included the following activities: 1. unification of rival departments into one; 2. creation of the OMS matrix of business processes headed by a manager responsible for profitability; 3. revaluation of the role of top management; 4. establishment of new rules for responding to conflicts and making managerial decisions.
4. Regulation	The reorganization plan was presented to the previously asked target groups of the lower levels. The staff made certain adjustments to the company's OMS as part of the developed plan. Then the leadership took on the official design of the transformations (development of necessary documents, etc.)

As a result of the reorganization, the staff once again felt the belief in their team and company, the level of mutual trust increased. A year later, the unit doubled its sales, the yield increased fourfold. Within five years, the lagging behind unit has emerged into the forefront and has become an example for imitation.

Now let us consider the companies that change their OMS in line with current trends. In recent years, the term "teal organizations" has often been used. The bottom line is that they are "living organizations", which include coaches instead of managers, as well as goals and values instead of KPI [6]. Concerning the organizational structure of teal organizations, it should be noted that there are no job titles there, and accordingly, job descriptions, the duties are redistributed within the group in the working order. The leader is a mentor, he trains and gives recommendations, but does not control the work. Instead of planning and budgeting, they practice internal counseling, where the whole team participates. [7]

To date, the practice of teal organizations has been tested and is applied by the leadership of Sber bank of Russia PJSC. The experience of organizations of a new type was applied to the Territorial Banks and more than 100 pilot departments. This helped to increase the level of employee involvement in the work [8].

Concerning the OMS, Sber bank constantly optimizes the structure of the Territorial Banks, introduces new operational office formats and an intelligent management system (IMS), due to which about 300,000 assignments a week are broadcast to all management levels in any region of Russia. This made it possible to synchronize the goals and work of the teams from different territories, respond more quickly to changes and reduce the number of operational errors by 7 times. [9]

The next step in optimizing the OMS of Sber bank is the transition to the Agile team organizational forms. The essence of this approach is that the project is not divided into successive phases, but into small subprojects, which are then "assembled" into a finished product. This allows transferring the results of these mini-projects faster, and by starting a new subproject, we can make changes to it without high costs and impact on the rest of the project [10].

The transition from managing individual structural elements to project management is becoming increasingly popular. According to forecasts of the Project Management Institute, 15.7 million project roles will emerge by 2020, which will create 7 major project-oriented industries [9].

## CONCLUSION

In conclusion, it should be noted that many factors influence the organizational structure. They include: industry affiliation of the enterprise, production scale, features of the technological process that are applied in production, level of specialization and co-operation of the firm.

So, having studied the modern trends of the organizational structure, we can formulate a conclusion that, firstly, the role of information technologies in management is increasing. Secondly, increasing attention is paid to the abilities of employees and their desire to participate in making managerial decisions. Personnel development, its self-organization and initiative are considered as the main factor in the growth of the company's efficiency. Thirdly, there is a transition from the management of individual structural elements to project management. All these factors lead to a reduction in hierarchy and a transition to organic structures with fewer management levels.

The algorithm of organizational design was studied from a theoretical point of view: we analyzed the approaches of various authors. Further, this sequence was used to illustrate the process of organizational design on the example of the company Hewlett Packard.

So, we reviewed the methods, stages and current trends in the organizational structure of the company. The methods of organizational design should be applied in a set. Each of them is used at different stages of the OMS design, which consists of the problem statement, organizational design, regulation, and calculation of the economic efficiency of the introduced organizational design.

Now many companies are moving from the formal structures to more flexible or project management. Domestic companies are still operating according to the "old scheme". But the organizations that follow current trends in the organizational design show positive results in a relatively short time.

Thus, the optimally constructed organizational structure of the company creates prerequisites for high efficiency of management and coordinated work of all structural units.

#### CONFLICT OF INTEREST

There is no conflict of interest.

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None

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