



SOUTH-WEST  
UNIVERSITY  
·NEOFIT RILSKI·  
BLAGOEVGRAD, BULGARIA

VOLUME 14  
2016

# SCIENTIFIC Research

ISSN 1312-7535

ELECTRONIC  
ISSUE

# TREE TYPE MODEL OF PROJECTS MANAGEMENT

Ștefănescu Roxana  
roxanastefanescu72@yahoo.com

## **Summary:**

*The paper refers to the management from the category of general management methods: Project Management. The tree type model of this kind of management is showed. Within the model the objectives of a project, the main group of active persons within a project are exhibited in detail, namely: the Beneficiary, the Project Manager and the Project Team. The external environment of the project and its elements are further defined. At the end the phases of the project within the processes that take place from the project start until its finalizing are specified. In the end by means of the function diagram the most important interconnections are cleared up.*

**Key words:** project management, tree model, project beneficiary, project team

## **1. Introduction**

Out of over 500 known management methods and techniques, a few impose priority, both by capacity and by performance.

The diversity of these methods and techniques imposes the need to classify and so to order, the most used criterion of classification being the one which refers to association between these and the functions of management.

Following this criterion two classes and methods of management may be distinguished (as introduced in Nicolescu, O., Verboncu, I.(1999) – Management, pg. 338)[4]:

- It targets the group of processes and managerial relations: management by objectives, management by projects, management by budgets, management by exceptions, management by product etc.

- It targets solving specific problems for different functions of the management: method of delegation, brainstorming, meeting, method of diagnosis etc.

If the management by objectives (as Ivancevich, Donnely, Gibson (1989)[2] in Management. Principles and Functions, pg. 29 introduce the main elements of planning) was outlined and developed as consequence of the criticism brought to traditional methods and has been concentrated by the analysis of the human behavior and relations in fulfilling the proposed objectives, the management by projects (according to Le Saget, M.(1989)[3] in Project Management, a managerial approach pg. 35) reunites the processes and the activities carried out during a limited period of time in view of reaching the specific objectives worded.

In other words, the management by projects is conceived in view of solving certain complex but specifically defined problems, by a team of specialists led by a Project Manager (Burdus, E. (2000)[1].

The most known method of application of the management by projects are those with individual responsibilities, with general staff or mixed with the known advantages and disadvantages, the three models with appreciable spreading and remarkable results .

Considering these advantages, I believe the tree model of the management by projects may be imposed, relatively easier, in the Romanian management.

## **2. The conceptual tree type model of a project**

### **2.1. Definition of the notion Management by Projects**

In order to delimitate the field of tasks of the project management, the notion of management by projects must be defined.

The **management by projects** means planning, coordinating and controlling processes and resources of a project following a certain purpose. The project management includes only the activities of directing and coordinating within a project.

## 2.2. The tree type model

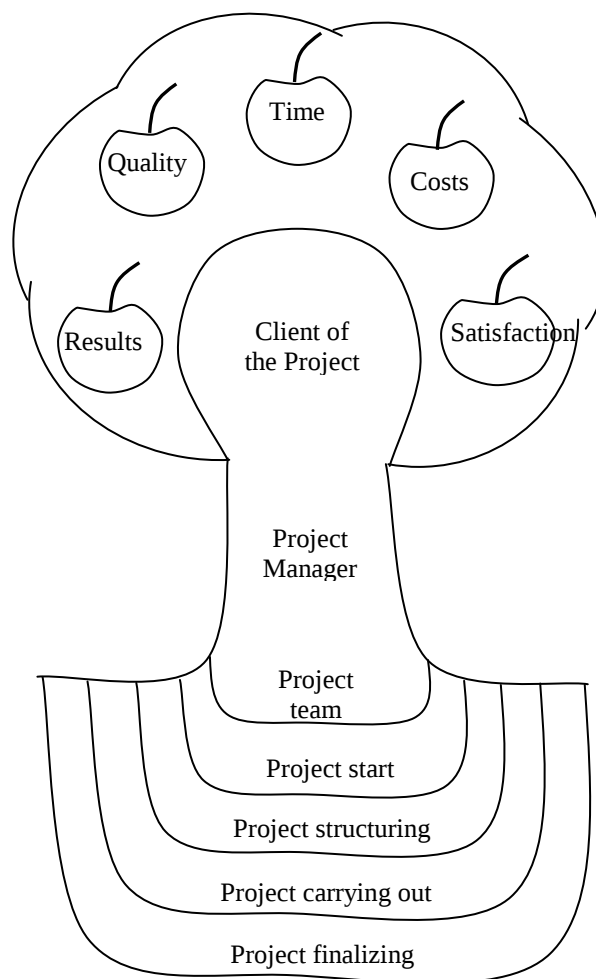
During the development of projects, a multitude of factors that are mutually influencing each other act. The parties involved in the project have the mission of keeping under control, the dynamics and the mixed effect of these factors.

- The conceptual tree type model represents a method of representation in order to be able to understand better the mutual conditioning within a project.

The same way as a tree is bringing up, the development of a project represents a dynamic process. This project may be stimulated or inhibited by internal and external influences.

In the conceptual tree type model the following elements are considered:

- Objectives of project (results, factors of success: quality, time, costs and satisfaction)
- Participants to the project: Clients of the project, Project Manager, Project team
- Project environment
- Development of the project: Project start, Project structuring, Carrying out the project, Finalizing the project.



*Figure no.1. The conceptual tree type model for the project management*

### 2.2.1. Objectives of the project

The objectives of a project may be structured as follows:

- The results describe what must be reached within the project.
- The quality, the duration and the costs of these results are established by the factors of success.
- The satisfaction refers exclusively to the cooperation process of all participants. The satisfaction means both the contentment of the client and of the team. The more the satisfaction of the participants to the project is higher, the higher is the acceptance of the result.

So the notions may be separated, meaning that the client is content if he obtains the desired quality, while the term of satisfaction in the process of cooperation during the project remains reserved to the participants.

In order to establish the objectives of the project, the following must be considered:

- To be worded clearly and without ambiguity,
- To be specified in writing
- To assure the motivation and
- The participants to the project to have unitary representation upon the content of the objectives

In many projects threatening conflicts are avoided with regards to objectives by choosing certain open wordings for these objectives. However, the Project Managers know that a conflict avoided is not fully removed. It will always occur during the process until it is solved.

#### *2.2.2. Client, manager and project team*

In the project three persons, groups of persons, respectively, are active:

- **The Client of the Project (the Beneficiary of the project)** is the person from the inside or from the outside who offers the project contract.
- **The Project Manager** is the person in charge with the achievement of the project. The notion of Project Manager has been preferred to the one of Project Coordinator, in order to accentuate the idea of a team oriented manager.
- **The Project team** includes both the Project Manager and the members by right of the project team. The team is a formal work group which is distinctive by a relatively pronounced co-belonging. A member of the project team is a component of the project. The members of the project team may be collaborators of the external client.

The client of the project has the task to show the contract and to take over the partial results or the entire project. Among the most important peculiarities is the fact that he knows very well his objectives and may describe them as clear as possible.

The Project Manager has the task to conduct the project and together with the project team to carry out the agreed objectives. In order to fulfill this task several competence are needed:

- **Professional Competence** presumes the knowledge of the domain of activity, but not a specialist in every thing.
- **Methodical Competence** imposes the analytical, systematic behavior but without losing sight the essence.
- **Social Competence** claims commitment, capacity of effort, cooperation, integration in the „we” concept, motivation, persuasion, correctness in the dialogue and in action, manifesting as good manager both outside and inside.

The task of the project team consists of the fact to assure the materialization of the contract of the project and in supporting the Project Manager. This means to provide the needed information and to achieve concepts.

A team must meet the following characteristics:

- Is structured in a functional way
- Has common objectives
- There are relatively intense reciprocity relations

- Specific form of work
- High team spirit
- Relatively high affinity

So that the project, as a whole, develops as much as possible without disturbance and the participating parties to know who they are, when and about what should they be informed, organizing the project is of special significance. During organizing, competence and responsibilities are regulated and are correlated between the different component parties of the project.

### *2.2.3. External environment of the project*

The external environment of the project defines all the processes and resources that do not belong to the project, but, which may influence it from outside. The external environment to the project includes not only the internal aspects of these processes and resources but also the external aspects, referring to the enterprise problems.

The external environment structuring (other persons, structure and resources) may facilitate the analyze of the factor of influence, thus:

- Other persons – are the persons or the groups of persons who may influence the participating parties to the project,
- The structures represent the mutual conditioning due to structural organizing or due to the process, which specify the way of action of the participants to the project,
- The resources represent the means which provides or may be obtained from outside.

The significance of the external environment to the project is emphasized by the way of thinking and action of the participant parties to the project. Each member of the team or this, as a whole, will be influenced by the exterior.

For example, the client of the project may be influenced as consequence of certain new products of its competitors, to modify the objectives of the project. Certain participants to the project, may also be withdrawn, as consequence of certain decisions came from higher levels, in view of solving other urgent tasks. Being given the fact that these influences cannot be neglected, they must be taken into account and settled in due course. Actually it is not possible that these influences be stopped. Most of the times, the knowledge of these influences is pursued in order that these could be considered or modified.

The external environment is materialized in:

- Modifications in the development of the project that could be probable, possible or could be foreseen.
- Determination of those who can start modification.
- The specification of the information to solve changes.
- Rhythmicity of producing influences upon the project environment.
- Reaction of the participant parties to the project at different influences.

It is obvious that the external environment concludes a series of factors of influence, that cannot be noticed by the project team. Therefore, the team must know the economic, the technological, the political and legal and social and cultural conditions of the client, in order to be able to fulfill successfully the mission..

Most of the times, the resources are regulated by contract, but the erroneous estimations result in further requests, losses for the beneficiary of the contract or for the enterprise of the Project Manager . The structures are many times unknown and often evolve in another manner than the one provided.

As consequence, the team will confront with a multitude of factors that get to be known during the development of the project only, which impose a flexible activity based on estimations on different horizons of time.

A frequent problem of the Project Manager is represented by the fact that certain management staff from the project environment put under question mark certain decisions

already approached or even the project as a whole. The experienced Project Managers identify timely who are the persons situated in the environment of the project and which are their opinions. The objective is that these persons be attracted towards the project and be gained as mentors in order to support the project.

As consequence of the new organizing imposed and of the necessity of changes in the existing structure, conflicts occur between the head of departments and the Project Manager. This occurs especially when the member of the team of project works only in part for the project or when the time resources and the capacities are limited.

In order to settle these conflicts the original knowledge of the conflict problem is needed and further, based on the knowledge of the „adverse party” viewpoint, the common identification of the solutions.

In case the management does not wish to designate a Project Manager with needed competencies and who corresponds to the importance of the project, the Project Manager must establish, before accepting the project contract, clear regulations for such situations. These can be, for example, represented under the function diagram (Table no.1).

|                        | Adjusting organization | Drafting contract | Structuring the development of the contract | Defining quality standards |
|------------------------|------------------------|-------------------|---------------------------------------------|----------------------------|
| Client of the Project  |                        | X                 |                                             |                            |
| Project Manager        | X                      | X                 | X                                           | X                          |
| Team of the project    |                        |                   | X                                           |                            |
| Development department |                        |                   |                                             | X                          |
| Marketing Department   |                        | X                 |                                             |                            |

*Table no.1. Function diagram*

By means of the function diagram the most important interconnections are cleared up:

- Competencies of the participants to the project and of the persons from the external environment of the project are delimited and may be clearly regulated.
- The „intersection” points of the participants to the project with the management staff from the project environment become transparent.

In case of certain large projects a differentiation between functions, in relation with activities, such as, for example: making decisions, act, collect information etc is recommended.

Even if at first sight the function diagram may be formal, this is however, useful in order to cancel any possibility of influencing the project by the external environment.

#### *2.2.4. From beginning to finalizing the project*

In order to carry out the project the so-called models of phases or life cycles of the project, may be considered, in order to show the succession of the intermediate stages of the project that must be followed.

The development of the project represents an interactive process, with decisions on stages and remaking depending on their achievement. Therefore, in order to control the activity and the results evaluated during their development. A model to include the succession of the stages and that considers the lifecycle of the project, must be established. One of the models often used is the model of 4 phases including: initiation, structuring, achievement and finalizing of the project.

Structuring the phases presents the succession of different stages of the project, where each of them is defined by a time beginning and one of end. In each phase tasks and factors of success are fulfilled, as well as the project as a whole, so that at the end to obtain a specific result.

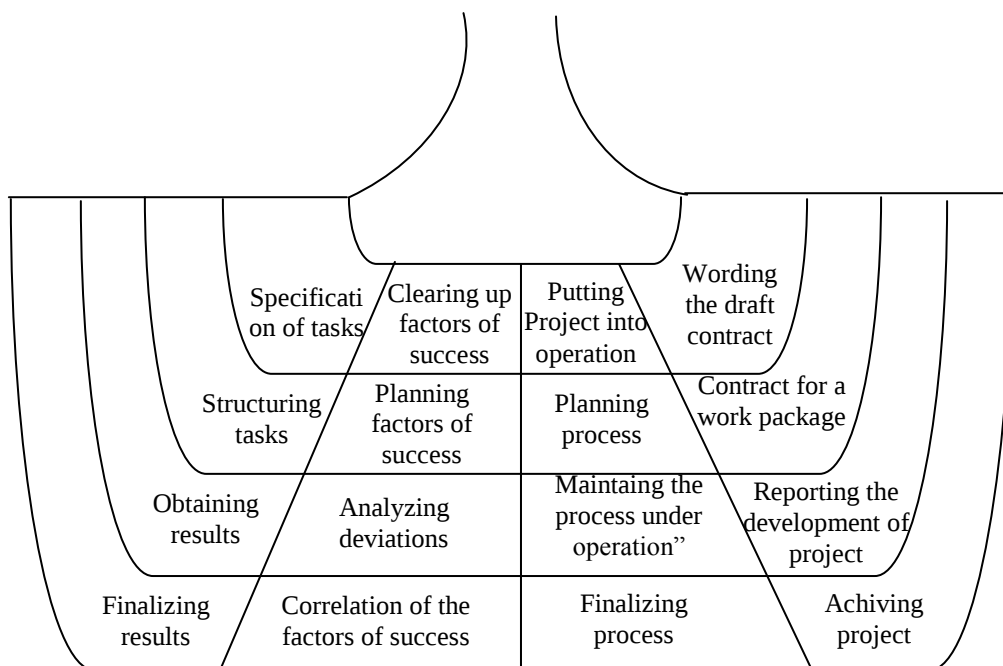


Figure no. 2. Phases of the project and the structure of chapters

It is important ion each stage to consider the connections with the other stages, because just thus the objectives of the project that the client desires may be achieved.

### 3. Conclusions

1. Large projects need a specific management.
2. The management of projects represents planning, coordination and process control and resources of a project, following a certain goal.
3. The tree type conceptual model provides the representation of inter-conditioning of a project..
4. The main elements of a project are: the objective, the participants, the environment and the development.
5. The objectives of a project represent the results, the factors of success and the satisfaction of the participants to achieve it.
6. The participants to the achievement of the project are: the client, the Project Manager and the project team.
7. The external environment of the project is represented by persons outside the achievement who may influence its development, the organizing inter-correlations and the external resources.
8. The development of a project represents an interactive process with decisions on stages and remaking depending on their achievement.
9. The phases of a project are: initialization, structuring, performing and finalizing.

### References

- [1].Burduş, E., a.o. (2000) – *Managementul schimbării organizaţionale*, Ed. Economică, Bucureşti
- [2].Ivancevich, J.M., Donnely, J.H., Gibson, J.L., (1989) – *Managment. Principles and Functions*. BPI Irwin, Boston
- [3].Le Saget, M.(1989) – *Project Management, a managerial approach*, John Wiley Press, New York
- [4].Nicolescu, O., Verboncu, I.,(1999) - *Management*, Ed. Economică, Bucureşti

Address for corespondence: roxanastefanescu72@yahoo.com