The information management of the projects

Creț Vasile[1]

Abstract

Methodologically point of view, the management of a company is studied based on the systems, methods, methodologies and techniques (general and specific) that the managers apply to fulfill the managerial functions. The managerial tool consists of systems, methods and management techniques that appeal to managers for foresight exercise, organization, coordination, assessment and control. Informal subsystem is perfect adapted to the profile of the organization. It is integrated in the informational system of the mother company, being advantaged, because of its physical distance between locations, the electronic communications in detriment of paper. This fact implies the existences of a very good communication infrastructure.

The main characteristic of a project is its newness. A project is a walk in unknown, full of risks and uncertainness. There are no two identical projects and even a project which repeats will be every time different in one or more commercial, administrative, social, politics or physic aspects.

Key words: project management, market, subsystems

1. Project management

The management is considered, by almost all the authors, to be the most important factor that influences the behavior of a company on the market. The person that works in this activity, the manager, is the one who takes the decisions that have a large or low influence upon the company, depending on the position he is in.

The study of the organization management consists in a management system (a set of methodological, decisional, informational, organizational, psychological, motivational elements and the relations between them, so as to enable the objectives outlined[2]), formed out of a lot of subsystems:

- The methodological subsystem
- The decisional subsystem
- The informational subsystem
- The organizational subsystem

The most important are the management systems, management methods, design methodologies, redesign and maintenance of operation management and its components.[3]

Through decision making system of an organization we refer to all the decisions adopted and applied in its frame, structured correspondingly to the system, its objectives and configuration of the management hierarchy.

The decisions are choices of the managers – chosen from several possible – that influence the behavior of decision making and operational behavior of other people. The decision making process is influenced by several factors, including the type of decision maker, the decision objective, the number and complexity of variants, the criteria and the consequences of the decisions.

The information system can be defined as a set of data, information, flows and circuits' information, procedures and means of information designed to help establish and achieve the organization objectives.[4] These

---

[1] *Agora University itof Oradea, Tineretului Square nr.8, 410526, Oradea, Romania, vasilecret@univagora.ro*
[2] I. Verboncu, Organizații orientate pe proiecte, Note de curs, A.S.E., 2009
[3] I. Verboncu, Organizații orientate pe proiecte, Note de curs, A.S.E., 2009
[4] Niculescu, O., Verboncu, I., Management, Economica Publishing House, Bucharest, 1999

information and data are offered by informational procedures and together with the informational means (manual and automated) used inside a company creates the informational system.

Every company has a formal organization, based on internal documentation, which determines the existence of some functions, and posts required for the objectives, and an informal organization, determined by informal groups, necessary to fulfill the personal interests of the company's members.

The management personalization, and the people that implement it, is necessary to assure the adaptation of the company to a fast rhythm of changes which happen every day. The personalization implies profound changes of the management subsystem, and the implementation of different classic management system (as for example: management through profit centers, management through objectives, management through projects, management through exceptions, management on product).

In the business affairs from Romania, the principles of the professional management began after the revolution from 1989, in especially because of the appearance of foreign managers. These principles where first applied at the multinational companies, and this thing forced the local companies to adapt, being threatened with bankruptcy.

With all of these, in many Romanian companies, in especially the state ones, the professional management remained an unknown, despite the certain advantage which this management can bring to a company.

1.1. The organizational subsystem

The leader is "the person which, because of its formal and/or informal status (power, prestige, influence), mobilizes, organizes and leads the members and the group activities through establishing and touch their purposes"[5].

The documents which regulates activity in a company are internal regulations (IR), collective work contract and job description. In the last one are specified: the position of the employee, the department from which the employee is apart, study requirements and the years of experience for occupying the job, hierarchical relations, functional and cooperation, the duties and responsibilities associated to the work.

Besides the formal leaders, there are team leaders (that might be considered informal leaders), which coordinates the activity of a 4-5 members. These are not signed as managers in the company documents, but they have a functional authority above other team members. In general, from this category are elected the future managers, putting a smaller accent on external recruitment at this level[6].

Structural organization of the company it's a way of trimming of some organizational subdivisions in a certain configuration, for achieving the objectives[7]. In most of the companies, the structural organization is adapted to certain needs. Management functions are reduced as much as they can; the accent is moved on execution functions. The numbers of hierarchical levels are low, realizing a flattened structure, in which the information moves vertically very fast.

Informal organization, which is formed from informal groups and their connections[8], varies from a project to another. The groups are formed especially in accordance with putting different teams in a commune physic space and their experience in the company, and less on friendship relations between employees.

The authority relations are established in the company between managers and subordinates (the hierarchic authority), but even in different departments. Cooperation relations are established between jobs and compartments placed on the same hierarchic level, especially in the case in which compartments are involved to realize a project (for example between developing and testing).

Methodological subsystem

From methodological side of view, the company uses in a higher grade than most of the Romanian companies a modern managerial instrument. So, in the moment in which the company leadership is changed,

---

[5] S. Chelcea; P. Ilut; Enciclopedie de psihosociologie, Economica Publishing House, Bucharest,2003, pag.207
[6] Nicolescu, O., Verboncu, I., Management, Economica Publishing House, Bucharest,1999, pag. 42
[7] I. Verboncu, Organizatii orientate pe proiecte, Note de curs, A.S.E. 2009
[8] Op.cit.

there takes place a total reorientation of society management, moving from the classical management to the management through project, to be more exact, project management with staff.

Management through project is a management system with a limited duration, which facilitates resolving some complex problems, with a innovational character, by specialists, which work side by side with the formal organization structure.

1.2. Informal subsystem

Informal subsystem is perfect adapted to the profile of the organization. It is integrated in the informational system of the mother company, being advantaged, because of its physical distance between locations, the electronic communications in detriment of paper. This fact implies the existences of a very good communication infrastructure.

The information that can be transmitted in the company, between different compartments, are:

- Technical documents, which contain information regarding realizing the company products (for example the design of different new capabilities integrated in products, the documentation of products, different trainings etc.);
- Administrative documents (announces, requests, reports);
- Information regarding the evolution of current activities, designated to management.

Beside these information, there are exogenous information (from the exterior of the company), which contain data about the perception of clients about company products, information regarding the progress of rivals products and the university researchers from the interested domain[9].

The way of treating the information should be, in a big way, automated. The internal network (intranet) of a company can include equipment's and specialized programs for the majority of the administrative activities, but also of project management. Where is not possible the automated way of information, it is preferred using the email than paper, and this is how we can obtain a "paperless desk".

The advantages of using electronic information's are:

- The fact that finding information's take seconds, comparing with minutes or even hours in paper documentation;
- Reducing operating costs by avoiding large archives and replace them with electronic archives;
- Reducing the risk of spreading information to unauthorized persons, secure information, destroy information quite easy[10].

1.3. Decision subsystem

From the decision way, in the majority of the companies we mostly find the participative style, in which all the decisions are discuss with the involved parts. The final decision is individual, being taken only by the manager.

In the annual prevision plan there is a larger decisional circle, where are included even lower level managers (even employees with experience), especially from the productive compartments.

The decisions adopted at all levels have to target the following conditions: to target one or more precise objectives so that their achievement to be quantified exactly; to have more options from which to choose the optimum solution for achieving the objective, as well as a back-up solution; to take notice of economic, financial, temporal and social limitations.

Control function of management assumes the evaluation of results, comparing them with the objectives, finding the cause of the main positive and negative source and taking decisional solutions with corrective or

[9] G. Johns, Comportamentul organizational, Economica Publishing House, Bucharest, 1998
[10] I. Verboncu, Organizatii orientate pe proiecte, Note de curs, A.S.E. 2009

prophylactic character[11]. In the studied company, this function is tied with the rewards given to employees, the control result being the base foundation for material rewards.

In the studied company, the control is decentralized, being made for each team. The results obtained are compared with the initial objectives for each employee, for each project, and in the quarterly and annual evaluation. The procedures are changed every year, based on the experience from the last years.

With all of these, there are some management components that could be better. From these we remind:

- Learning from positive and negative experiences
- Treating employees with respect as well as to suppliers and clients, realizing a overlapping of the personal objectives with the company objectives
- Better work conditions, to increase productivity
- To make a relation between the wage and performance
- To respect the principles of the management through projects: involvement   of all team members; approval from all the members of the project, measuring the success (in terms of quantity, quality, time, efficiency and costs), compromise, strategy, control, unique communication channel, culture[12]
- Reviewing and improving the methods used to identify the proper person for a job, he can a leader or worker, using in this way the optimum available human potential, rewarding of those who are worthy, avoiding conflicts between employees because of promotions on vague criteria, the bosses possibility to give orders to its employees etc

2. The Computerized Management of Projects

Project management appeared as a planning, coordination, realizing and controlling instrument of complex activities from industrial, commercial, social, cultural and modern politics projects. It uses software applications in computerized management of projects[13].

The main characteristic of a project is its newness. A project is a walk in unknown, full of risks and uncertainness. There are no two identical projects and even a project which repeats will be every time different in one or more commercial, administrative, social, politics or physic aspects.

Project management is the process of planning, organizing and control of phases and results of a project with the purpose of obtaining a well-defined objective which usually has time restrictions, resources and costs. Project management imposes planning, organizing, monitoring and control of all aspects and motivating all who are involved to realize the project objectives safety, in time limit, costs and targeted performance criteria.

Before starting project management it must be very clear identified its purpose. There are no projects without measurable objectives. The way the objective is set is specification. This is defined as a measurable expression of characteristics at which the product/service meet, being known by specialists as quantitative and qualitative needs offered by user. Strictly, specification is a document which, in technical terms, the requirements which the realized product has to fulfil. The specification shows an actual solicitation of the client or can be a prediction for potential clients gathering drawings, models, plans, instructions or a written documentation which describes the projects objective.

2.1. The concept of project

[11] I. Verboncu, Organizatii orientate pe proiecte, Note de curs, A.S.E. 2009
[12] D. Savescu, A. Budala, Metode si intrumente pentru managementul proiectelor, Brasov,2007
[13] N. Popescu, Managementul informatizat al proiectelor – Course notes

Project is defined as a no repetitive process which realizes a new quantity, well defined, in some specialized organizations. Projects characterizes as a unique action, specify, composed from a logic succession of activities, component, coordinate and controlled, with an innovation character by different nature, realized in an organize manner methodical and progressive, having time constrains, resources and costs, for obtaining with success complex results, needed to fulfill the objectives that are clear defined.

In some projects, objectives can be better, and, the characteristics of the project are defined and adapt progressively by project developing. An individual project can be part from a bigger project.

The realizing of a project is made through decomposing it in activities after "Work Breakdown Structure" (WBS) method. The activities (Work Elements) are grouped in logical crowds "Subprograms/Work Packages" with its subdivision in" Activities/Phases". The project is developing in an organization which creates only on the existence of project[14].

The new created organization is called "consortium". The performance of consortium is measured by its adaptability at realizing the projects objectives. The speed with which the employees of consortium unite their abilities and knowledges for finding solutions at realizing objectives is important.

Once a project objective is realized, the members of consortium make new different structure for realizing a new objective. The members of consortium have to have professional competences in the objectives problematics.

A finished project leads to dissolution of the named consortium and regrouping the members of consortium for new projects.

The flexibility and adaptability which characterizes a consortium, permanently permits the regrouping and recombining of human, physics and informational resources for realizing objectives.

2.2. Life cycle of a project

Life cycle of a project is defined as the time period in which the project take time, as follows: marketing, elaboration of project proposal, winning the funding contest, thematic research for project realization, design for thematic research, production with realizing the thematic of the project, evaluation of project result, selling the project result with obtaining benefits, reusing and recycling some project results. The project realization impose crossing it through all stages of life cycle.

Life cycle of a project has the following stages:
1. Identify, analyze, formulation;
2. Preparing, estimation (according with the fixed criteria), assuming;
3. Implementation, monitoring, reporting;
4. Final evaluation.

The integrated conception on project management takes in sight 4 basic elements of a project:
- Time
- Budget(resources) – people, technology, money
- Quality (a certain technology, performance, some characteristics of a product)
- Participants expectations (financiers, members of project team, project manager, the beneficiaries, stakeholders – those involved in realizing projects – employees, shareholders, suppliers, public interest organism etc.).[15]

So the stages of a project are:
➢ Project conception;
➢ Project planning;
➢ Project implementation;
➢ Evaluation/control and project revision

Dividing the project into several activities/tasks is needed from certain reasons:

---

[14] D. Hodgson, Disciplining the professional: the case of project management, Journal of Management Studies, Volume 39, Issue 6, Pages 803-821,2002

[15] D. Hodgson, Disciplining the professional: the case of project management, Journal of Management Studies, Volume 39, Issue 6, Pages 803-821, 2002

1. The project looks like a logical line of activities which help determining the optimum time graphic;
2. The activities can be easily controlled and evaluated;
3. It can be easily determined the need of personal and their skills.

In the project management, planning means the "8P":

➢ Project – Why are we doing it?
➢ Paradigm/politics/procedures – How we do it?
➢ Paradigm refers at companies vision, what wishes it to obtain in future;
➢ Politics take care to establish the purposes, as modalities to reach a strategy, and procedures represent the action modalities through which the targeted objectives will be realized.
➢ Personal – who works?
➢ Program – when we do it?
➢ Performance – what we do?
➢ Price – who much does it cost?

Project implementation includes activities like monitoring, management of risks at which the project is exposed, finishing the project.

In the evaluation stage of the project, the evaluation strategy will be established. It is necessary to make the periodical control in a time process to identify the deviations from the plan and the corrections that must be made.

The fundamental processes can be found in the periodical reporting's regarding project execution (the stat of the project, the forecasts for the projects future) and global control of the changes.

Helpful processes are:

➢ The control of purpose change
➢ The control of schedule planning
➢ The control of costs
➢ The control of quality
➢ The control of risk answers.

The processes of closing are:

➢ Closing contracts;
➢ Administrative measures of closing – gathering and disseminating information to give a legal form to shut down the project.[16]

The post analysis of the project is a structure which gains a bigger importance. This is due the fact that the experience gathered on the course of the project will lead to avoid some past mistakes for the new projects.

There are situations when projects can end abnormally. The causes that are at the base of these failures are:

➢ Wrong initial planning
➢ Insufficient resources
➢ Changes that occurred in the companies strategies and interests
➢ Quitting some key people from the project
➢ Exceeding the given time.

Bibliography

1. C. Grey, Management as a technical practice: Professionalization or responsibilization, Systemic Practice and Action Research, Volume 10, Issue 6, Pages 703-725, 1997

---

[16] N. Popescu, Managementul informatizat al proiectelor – Course support

2. D. Hodgson, Disciplining the professional: the case of project management, Journal of Management Studies, Volume 39, Issue 6, Pages 803-821, 2002

3. D. Schweryler, Professionalizing Family Business Management, Understanding Family Business, April 2008

4. G. Benveniste, Professionalizing the Organization: Reducing Bureaucracy to Enhance Effectiveness, Jossey Bass, San Francisco 1987

5. G. Johns, Comportamentul organizational, Economica Publishing House, Bucharest, 1998

6. M. Reed, P. Anthony, Professionalization management and managing professionalization: British management in the 1980s, Journal of Management Studies, Volume 29, Issue 5, Pages 591-613, 1992

7. N. Popescu, Managementul informatizat al proiectelor – Course notes, 2009

8. O. Nicolescu, I. Verboncu, Fundamentele managementuui organizatiei, Tribuna Economica Publishing House, Bucharest 2002

9. O. Nicolescu, I. Verboncu, I. Cochina, C. Nicolescu, D. Popescu, Abordari moderne in managementul si economía organizatiei : vol. 1 Managementul general al organizatiei, Economica Publishing House, Bucharest 2003

10. O. Nicolescu,I. Verboncu, Management, Economica Publishing House, Bucharest,1999