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System Analysis Algorithm for Organization

System analysis is used to identify the hidden potential of the organization, options and ways of its development by means of the implementation of best management solutions in cases when traditional approaches are not efficient enough.

Eight stages to analyze organization as a system are developed.

- 1. Problem analysis. Here it is required to identify factors of the problem, its logical structure, development variants, its relationship with the environment and other issues.
- 2. System definition. Here the following should be performed: to have detailed elaboration of the problem; to separate subsystem elements, their boundaries; attention is paid to meta-systems and their characteristics, interrelation with the system.
- 3. Diagnosis of the current system. One should analyze current technological, informational, economic, social processes; determine level of control, degree of system centralization, identify the strengths and weaknesses of the system and its management; analyze distribution of rights, duties, responsibilities, labor division, and cooperation.
- 4. System structure analysis. It requires determining the number of hierarchy levels, subsystems and system elements and their relationships; defining the functions and processes the system has as well as the level of interaction between system management solutions and information processes; defining quality, level of influence as well as real and possible degree of system interaction with economic, informational, technological, and social structures.
- 5. Laying down common purpose and criteria of the system. It is necessary to lay down mission, tasks and sub-tasks of the systems, to determine limitations of the environment and criteria goals; to trace interdependence, compatibility and completeness of the system and subsystem goals and, to rank them according to their importance.
- 6. Analysis of the future system functioning and the necessary resources. One should analyze development tendencies of the system, possible variants of environment changes, new factors that are possible and their impact on the system as well as to predict possible changes in goals, quality criteria, need for resources and their limitations. It is also necessary to evaluate current technology and system capacity, state and the need for resources.
- 7. Identify goal variants. One needs to plan different ways of goal achieving, to find the best ones, to determine ways of measuring quality control.
- 8. Building complex development program of organization. It is necessary to take into consideration implementation of subsequent (after analysis) functions of its management cycle (planning, organization, motivation, and control).