

**CREATING THE INFORMATION INFRASTRUCTURE
OF ORGANIZATION AS A TOOL OF STRATEGIC
MANAGEMENT QUALITY IMPROVEMENT**

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Abstract: For effective application of information technologies as a tool of management of organization, it is necessary to build a common integrated platform, which is called the information infrastructure.

Information technologies play a significant role in the process of improving quality management of an organization. For their effective application, it is necessary to build a common integrated platform, which is called the information infrastructure.

Strategic management is a process or processes which are more than the discipline which can be taught. It is the process by which organizations determine their purpose, objectives and desired levels of attainment; decide on actions for achieving these objectives in an appropriate time-scale, and frequently in a changing environment; implement the actions; and assess progress and results. The actions can be changed or modified whenever and wherever it is necessary. The magnitude of these changes can be dramatic and revolutionary, or more gradual and evolutionary (Figure).

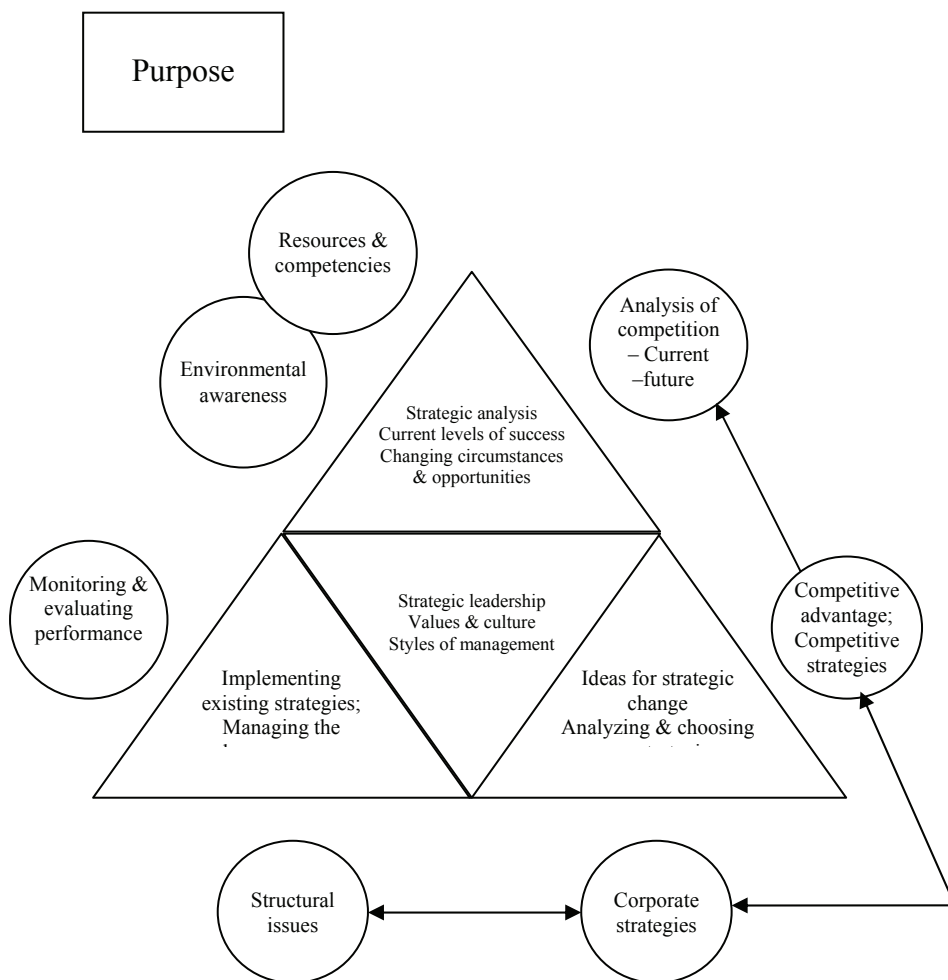
There are a number of aspects of strategic management.

The first one is the strategy itself. It concerns with the establishment of a clear direction for the organization and for every business, product and service, and a means for achieving this, which requires the creation of strong competitive positions.

The second requirement is the excellence in the implementation of strategies in order to make an effective performance.

The third one is creativity and innovation to ensure that the organization is responsive to pressures for change and that the strategies are improved and renewed.

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Strategic management

The fourth one is the ability to manage strategic change, both continuous, gradual changes and more dramatic, discontinuous changes. Innovation and change concern the strategy process in an organization.

Implementation and innovation should enable an organization to thrive and prosper in a dynamic, global environment, but in turn they depend on competence in strategic awareness and learning. Organizations must understand the strategic value of the resources and how they can be used to satisfy the needs and expectations of customers and other stakeholders while outperforming competitors.

The structural organization's IT infrastructure includes the following elements:

- Mission and strategy, strategic goals and objectives, defining priority areas of enterprise' development and program of action to achieve strategic goals;
- Business Enterprise Architecture, in which the necessary organizational management structure and functional model of the enterprise is defined

according to mission, strategy development and long-term business objectives. Functional model describes business processes of implementing the current challenges and future goals;

– Information needs – are needs of all enterprise' units in information that reduces uncertainty relating to exploring events, objects, processes or situations.

Technology infrastructure is applied information systems architecture that provides implementation of business functions and business processes.

Information infrastructure combines business planning of basic and supporting business processes of the organization, as well as technical and technological platform, which is necessary for their implementation. Infrastructure is built according to business strategy and must change with it.

Information infrastructure includes all business processes and organizational unit. They can be divided broadly into structural components of management (strategy, management, organization, and processes), information resources, information systems and technology.

Information infrastructure includes a set of generally accepted principles and norms, which are used during working with information systems: during information system selection, design, engineering, sales, use, maintenance and management. The main purpose of the information infrastructure is the achievement of strategic objectives, the effective combination of enterprise strategies and information resources. To achieve this goal the information infrastructure must provide single and systematic ways of understanding, planning and applying information technology.

Business strategy of the organization, long-term goals and objectives, external environment – all these determine the information infrastructure of the organization. Organization's business strategy is transformed into an information strategy in the planning of information systems.

Information strategy, developed with the help of such systematic evaluation, will give a number of advantages for organization: it gives mobility to the organization, combining the strategic needs of the planning with reengineering and systems development; it facilitates the rapid and effective decision-making on information planning, minimizes the risks associated with implementing the new system.

Introduction of new information technologies for some companies is strategically important, while for other enterprises such introduction is helpful but not that crucial. According to this aspect, there are four main categories of information technology.

1. *Strategic*. For an increasing number of organizations, the development of information infrastructure has a major impact on future success in the competition.

2. *Augmentative*. Some organizations get the benefit of its industrial activity from the use of information technology, but not completely depend on them to achieve strategic objectives.

3. *Operating*. Several organizations are highly dependent on the reliability of information technologies, e.g. downtime can cause major problem in the production process working, which in its turn can cause reduction in customers or significant costs.

4. *Supportive*. For some organizations, even investing heavily in the development of information infrastructure, the impact of information technology on the development prospects is not crucial.

The influence of information technology on the organization is determined, first of all, by the strategy of development of information infrastructure. However, in real life many decisions in the field of information technology are made not by analyzing the real needs of the organization, but under the influence of fashion, by the choice of technological solutions made by individual experts. For managers who are responsible for the activities of the organization a broader vision of problems, connected with information infrastructure and, first of all, with the formation of the communication strategy of the organization is necessary.

The improvement of strategic management performance of the organization, according to information approach is determined by four main factors.

1. Optimization of the hierarchy of objectives and information management tasks by clarifying the goals of development of information infrastructure, confirming them with strategic objectives of the organization and eliminating the contradictions between them, avoiding the unnecessary flow of redundant information and, conversely, if necessary, establishing additional control units and flow of information.

2. Optimization of the specified objectives and management structures through the use of improved management practices, their means of implementation and coordination of information processes.

3. Optimization of the internal structure of management units by rational distribution of functions between departments and specialists.

4. Optimization of information system in terms of its integration into management of organization.

The main tasks of organization' management, in terms of information aspect, should be divided into separate tasks, i.e. strategic, operational and administrative ones.

Strategic objectives:

1) creating an information infrastructure of the company: technical tools; applied systems; conceptual developments with regard to collecting, processing, storing and delivery of information, as well as continuous improvement of information technology and communications systems;

2) information technology management including:

– monitoring of technological and information advances in the field of collecting, processing, systematizing, analyzing and synthesizing information with its organization “under the problem”; estimation of the possibilities of using the information in strategic decision-making;

– exploring technological, technical and other needs of businesses on all matters of information and communication policy;

– strategic management of enterprise information systems: data decrypting and modeling, development of a data bank concept, system design and reliability of the information (data), the establishment of the strategic management of the organization in terms of informational aspect;

– the task of developing the system concept and organization structure of organization management (allocation and distribution of tasks, responsibilities and functions between employees and departments, organizing activities, relations with the external environment).

Operational and administrative tasks are interrelated, and therefore it is appropriate to consider them together. Studies have shown that following tasks have.

1. Technical nature: the development and operation of the system of organizational management; methods and projects of the work organization; software, communication system.

2. Advisory character: advising users of the information system; methodical assistance to consumers of information, justified by the nature of the information technology.

3. Identifying and systematizing (i.e. generalization) of real information needs of management.

4. Information management projects including planning and control.

5. Management of Information Systems Organizational Management at all stages of their life cycle.

6. Structuring the Information Collection System.

7. Organization of information security systems.

8. Acquisition of information services and products.

9. Personnel management, recruitment of specialists, their performance.

10. Leadership, planning and monitoring of information processes, providing stable work.

The evaluation of the information technology effectiveness in organizational management can be done in the following general areas:

– determining the effectiveness of management criteria and indicators of production efficiency;

– determining the cost-effectiveness of production management;

– creating a system of indicators that characterize the system management and production system;

– determining the effectiveness of management by quality and quantify objectives;

– determining the effectiveness of management decisions;

– determining the effectiveness of managerial work at all levels of management.

In the course of the evaluation of the effectiveness it is necessary to take into account the degree and nature of the effect and specific types of information resources on the improvement of the management process. The criteria of the effectiveness evaluation in this case can be:

– the degree of the information capacity of the management process (providing the necessary information);

– information-providing capacity of the management subject (the ability of management subject to produce a certain number of conditional operations in a period of time);

- the degree of completeness of the information used in the decision-making;
- the degree of relevance of information to organization management objectives, pragmatic evaluation of sources and information;
- the degree of redundancy of input information.

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Формирование информационной инфраструктуры организации как инструмент повышения качества стратегического менеджмента

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Ключевые слова и фразы: информационная инфраструктура; информационные технологии; стратегический менеджмент.

Аннотация: Для эффективного применения информационных технологий как основного инструмента управления организацией, необходимо сформировать общую единую платформу, которую принято называть информационной инфраструктурой.

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