

ORGANIZATIONS FROM A SYSTEM PERSPECTIVE

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Abstract

Different historical phases of development of management put stress on different aspects of corporate life. Unfortunately, experience indicates that this is not enough. Focusing on one aspect of organizational life does not bring success. If want to succeed, managers must manage their organization in systemic way. This article is as theoretic article collects, describe and evaluate different approaches and different ideas on systemic perspective on management and on approaches to system of organizational management. The data used are secondary data collected from traditional and electronic media. The article pays attention to both historical approaches and latest approaches in the field. The article shows that ideas on systemic approach to management differ not only historically but also based on the standpoint the author of the approach adopted. The article offers organizations different options on how to address their own problems with system of organizational management and creates the theoretical background for future empirical research.

Keywords: management, organization, system, system of organizational management.

JEL Classification: M10.

Introduction

This objective of the article is to discuss organizations and their management from a systemic perspective. Organization is a group of people with underlying sense and mission (Veber, 2009). Or it can be defined as a living system based on networks of stakeholders bound together for a range of reasons (Millett, 1998). Millett also stresses that "First, organizations constitute a complete system made up of interdependent parts. Second, organizations are open systems distinguishable from their environment. Third, organizations are transforming systems that produce goods and services based on conditions of equilibrium and are managed by cybernetic control loops (Millett, 1998). As a group of people any organization represents a system whose elements build relationships among each other and even to the external environment. Elements and their relationships create the structure of the organization. This structure influences behavior of the organization and is parts.

Historically managers were advised to pay attention to various parts of the organizational system. This unsystematic approach led to exploration of rules of management in separate parts of organizational system and might lead to short term competitive advantage; still other organizations in the market managed to do the same. In long term perspective, such approaches always fail. Elements of any organizational system are interlinked and improving one aspect of the organizational system misbalances the organizational system as a whole. For example, the best possible style of knowledge management cannot meet its objectives if implemented in organization whose organizational structure is hostile to knowledge management. The best strategy will fail if not supported by appropriate human resource management. Etc.

Experience shows that organizations that manage to balance individual elements of their corporate system create stable environment that can more efficiently answer changes and challenges of the external environment. In such balanced corporate system individual elements create positive synergic effect. E.g. if want to be successful in the long run, organizations should build proper system of organizational management.

System of organizational management is a set of methods, techniques and approaches, usually divided to subsystems and interlinked to logical complex. It is used for organizational management. Systems of organizational management are based on prerequisite that any resource must be used in relation to other resources. If the system of management is not complex, the exploitation of the resource may be less productive, even contra productive (Truneček, 2007).

The article provides the review of ideas on systemic approach to management. It is a theoretic article (white paper) based on the review of the literature. Its objective is to collect, describe and evaluate different approaches and different ideas on systemic perspective on management and on approaches to system of organizational management. The data used are secondary data collected from traditional and electronic media. The article pays attention to both historical approaches and latest approaches in the field. Methods used for creation of this article include typical methods of theoretical work, e.g. methods that allow interlinking separated pieces of knowledge like analysis and synthesis, comparison, induction, deduction,

abstraction, generalization and critical thinking. The article offers organizations different options on how to address their own problems with system of organizational management and creates the theoretical background for future empirical research.

Organization from as a System Perspective

In management system perspective involves holistic thinking and understanding of situations, events and processes as interconnected. As any complex social system organization can be seen as a set of elements that all together create the greater whole. It is separated from its outer environment by more or less permeable borders. Organizations have input, outcomes and typical relationships between elements. Subsystems of such complicated system like organization may be bordered and develop various relationships with other subsystems and even external environment.

System is a purposefully defined set of elements and relationships among them that has as a whole certain qualities. These qualities determine the behavior of the system. The element of the system is its part that does not presume further structuring. System relation is connection between two elements or their groups (subsystems). Relations show interaction between subsystems and their parts. Structure of the system is organization of elements and relations (Vodáček & Vodáčková, 2009a). Peter Senge (1990) stresses importance of structure for behavior of any organization. "The term structure does not mean the logical structure of a carefully developed argument or the reporting structure as shown by an organizational chart. Rather, a systemic structure is concerned with the key interrelationships that influence behavior over time" (Senge, 1990).

Millett writes that "first, organizations are comprised of a set of interdependent parts, or sub-systems, that interact with each other to form a unified whole that gives the organization its unique identity. The organization is seen as being capable of making changes to these sub-systems, although it is recognized that this is not a simple process. From the presence of these interdependent parts, the organization develops configuration and structure. The sub-systems can form into a hierarchy of systems. For example, organizations are made up of individuals at the micro level. Individuals work within the context of groups at another level. The organization is also seen as a sub-system of a larger macro system, which may be identified as a larger organization, industry, society or economic zone" (Millett, 1998).

Millett stresses that organizations are open social systems and as such they are capable of negative entropy. Entropy refers to the natural capacity for a system to fall into decline and decay over time. It can indicate the relative degree of disorganization or disorder in the system or the potential for it (Millett, 1998). Bartol and Martin call negative entropy as "the ability of open systems to bring in new energy in the form of inputs and feedback from the environment in order to delay or arrest entropy, the decaying process" (Bartol & Martin, 1991a).

Millett writes "with respect to open social systems, the concept of equifinality indicates that a manager can use various methods and resources to achieve a desired outcome" (Millett, 1998). It means that managers who want to adopt systemic approach to their organization must forget managing their organization accidentally or on personal preferences and must create a system of management that covers all aspects (elements, relationships, structure, inputs and outputs) of the system of their organization. Such a system of organizational management creates synergy and helps organization to achieve their objectives.

Synergy

Systemic managerial approach to organization may result in synergy. Word synergy comes from Greek synergos that means working together. Dictionaries offer two basic terms, synergy and synergism. Synergy is a mutually advantageous conjunction or compatibility of distinct business participants or elements (as resources or efforts) (Synergy, 2012a) or the interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects and cooperative interaction among groups, especially among the acquired subsidiaries or merged parts of a corporation, that creates an enhanced combined effect (Synergy, 2012b). Synergy is a state in which two or more things work together in a particularly fruitful way that produces an effect greater the sum of their individual effects. Expressed also as "the whole is greater than the sum of its parts" (Synergy, 2012c). Synergism is than combined action or operation and the potential ability of individual organizations or groups to be more successful or productive as a result of a merger (Synergism, 2012).

In management theory, synergy is an ambiguous term. It is not defined and understood clearly. Definitions of authors from different fields are used. For example, Corning writes that “synergy broadly defined refers to combined (cooperative) effects that are produced by two or more particles, elements, parts of organism - effects that are not otherwise attainable. In this definition synergy is not “more” than the sum of the parts just different (as Aristotle himself long ago argued). Furthermore there are many different kinds of synergy” (Corning, 2005). Bartol and Martin understand synergy as “ability of the system to be more efficient than sum of performances of its individual parts. It means that an organization should meet its objectives in more efficient, effective way than if its individual parts function separately” (Bartol & Martin, 1991b). Gatewood, Taylor and Ferrell see synergy as “ability of the whole system to do more than sum of its part. Synergy comprises cumulative improving effects of corporate strategy. Basic idea is that organizational resources should be interlinked so that the joint performance of individual units is bigger than in that of isolated unit” (Gatewood & Taylor & Ferrell, 1995). Synergy can also be understood as “difference between the combined effect and sum of individual effects. The combined common effect emerges from interaction of group of people, material factors or forces. Synergy is behavior of compact system and it cannot be predicted from behavior of its individual parts. Synergy emerges by cooperation of subsystems and creates new holistic behavior of the system. Synergy can be understood as a cooperation effect. Involvement of individual subsystems cannot be guessed from the holistic behavior or synergy” (Vodáček & Vodáčková, 2009b). Synergy brings the factor of interdependence. “It is not possible to realize change of one subsystem without influencing other subsystems and productivity of organization as a whole” (Truneček, 2009).

Definitions listed above indicate that synergy of individual subsystems of the system of organizational management helps organization to achieve effects that cannot be achieved by simple interlinking of effects of separated subsystems.

Approaches to System of Organizational Management in Literature

Literature offers three different types of systemic approaches to organizational management. They are systemic approaches to organizational management based on division of labor, dynamic approaches and autopoietic approaches.

Systems of management based on division of labor classify activities to subsystems by the principle of specialization. These systems work well especially in stable linear environment, where organization can predict future behavior of its constituents with high probability. Many of such systems were developed for hierarchical organizational structures and environment of centralized decision making and control (Mládková, 2010). One of first who created complex system of organizational management was Henry Fayol (Veber, 2000; Veber, 2009). His system is built of six areas of corporate activities; technical, commerce, financial, security, accountancy and administrative (managerial). Administrative area consists of five administrative activities; prediction (planning), organizing, directing, coordination and control. These five areas represent what we call managerial functions these days. The whole system is accompanied by 14 principles of management: division of labor, authority and responsibility, discipline, unity of command, unity of direction, subordination of individual interest to general interest, remuneration of personnel, centralization, line of authority, order, equity, stability of tenure of personnel, initiative and esprit de corps (Fayol, 1949; Veber, 2000; Veber 2009). Fayol’s system of management is a complex system that can be used even now. Of course in adequate conditions and individual activities and principles must be well performed and coordinated (Mládková, 2010).

Works of German sociologist Max Weber represent another early attempt in the field of systemic approach to management. Weber’s system works on mechanical principles where every individual knows his duties and rights. In his researches in churches and army Weber discovered some principles of management that are generally applicable and summarized them in the concept called rational bureaucracy (Veber, 2000). Weber emphasizes that bureaucratic organizations are an attempt to subdue human affairs to the rule of reason and that it is possible to conduct the business of the organization according to calculable rules (Borgatti, 2010). “Weber made a distinction between authority and power. According to Weber power educes obedience through force or the threat of force which induces individuals to adhere to regulations. In contrast, legitimate authority entails that individuals acquiesce that authority is exercised upon them by their superiors” (Cutajar, 2010). Max Weber defined principles of his system of management on rational-legal authority. He highlights 6 principles: formal hierarchical structure, management by rules, organization by functional specialty, managers as salary officials, employment based on technical qualification, written documents. “Authority and responsibility are clearly defined and officially sanctioned. Job descriptions are

specified with responsibilities and line of authority. All employees have thus clearly defined rules in a system of authority and subordination.” (Cutajar, 2010).

Luther Gulic and Lyndall Urwick built on the work of H. Fayol and focused on systemic management of internal managerial functions. Gulic created classification of managerial functions called POSDCORB. The acronym includes seven basic functions – planning, organizing, staffing, directing, coordinating, reporting and budgeting. By the author, every executive should execute them as they are necessary for efficient management of corporate activities (Gulick, 1937; Veber, 2000). Urwick believed in social engineering and thought that employees should be managed in impersonal way. He integrated Fayol’s administrative approach with Taylor’s scientific management (Parker & Ritson, 2010; Veber, 2009) and human relations movement (Parker & Ritson, 2010) Urwick stressed that organization must understand its purpose which influences its behavior. Organizations should be organized by specialization, e.g. individual employees must be responsible for clearly defined jobs. Job descriptions should be in written form. In such organization, coordination must be executed; work of individuals and departments must be coordinated by managers. Principle of one authority should be obeyed and related to the principle of responsibility. In Urwick’s opinion, span of control should be small; number of direct subordinates should not exceed 6 people. Organizations should be continuously reorganized in relation to their needs (Mládková, 2010).

Tomáš Baťa, Czech entrepreneur, developed simple but functional system of management based on planning, cost centers, self management of workshops, clear responsibilities of managers, weekly accountancy, participation of profit and loss and stress on order and discipline (Veber, 2009). Baťa’s system was built on high ethical and moral values and is known for its relation to social responsibility (Zelený, 2010).

Dynamic approaches to system of organizational management reflect changes from static to turbulent global environment. Peter Senge the author of concept of learning organization and Elliot Jaques proponent of the theory of stratification represent these approaches. Senge understands the corporate system as a group of interlinked elements that depend one on the other and that create complex and unified whole with the sense. Structure of the system influences its behavior and behavior of its parts. Senge’s system of management is based on five disciplines that when used in balanced way promotes organizational learning. Such organization is perceived as a learning organization. Disciplines that support organizational learning are personal mastery, mental models, shared vision, team learning, system thinking.

Personal mastery is the ability of individuals in organization to learn and develop continuously. As Jedinák and Šugár (2011) write, human capital is the most precious resources of any organization and organizations should pay it prior attention. It is important because individual learning is basic prerequisite of organizational learning. Mental models are unconscious deeply rooted personal images that influence how we understand reality and respond to external and internal incentives. Mental models may accelerate or limit both individual and organizational learning. Shared vision is the ability to create and share objectives in organizations. Fully accepted shared vision motivates employees. Team learning represents interaction of individuals and teams and leads to acceleration of organizational learning. System thinking is a toolset how to understand the world in complex way (Senge, 1990, Mládkova, 2003).

Elliot Jaques addresses system of organizational management in different way than already mentioned authors. He divides organization to seven so called strata. Each stratum is a level represented with certain decision making complexity. The higher the stratum, the more complex are tasks from the point of decision making and the more cognitive capacity they require from the work performer. To achieve effectiveness of the system of organizational management, it is important that the level of work matches the current cognitive capabilities of the person in the role. Such a person can make more effective decisions and sound judgments (Stamp, 1992). The level of work in a layer (stratum), according to Jaques is the “target completion time of the longest task, project or program assigned to that role” (Jaques, 1989). In terms of time-span, Jaques has distinguished between very concrete levels of cognitive ability to the very abstract where a person has the capability of seeing several different possibilities and consequences and relating one possible outcome to the others. Jaques argues that when organizations’ hierarchies correspond to his identified strata, and when people have a clear picture of what is expected of them, companies can achieve “requisite organization”, allowing people to reach their full potential. The aim therefore is not to do away with or undermine hierarchies, but to rather make them work more effectively (Ross, 1992).

Autopoietic approach is a latest approach. By Truneček (2007) autopoietic system is internally differentiated system that defines its relevant external environment, and keeps semi permeable borders with its surroundings. These borders are result of internal processes which influence one another and are

responsible for regeneration of system elements. Autopoietic systems of management search inspiration in living cells. Theory of autopoiesis classifies selfmanaging systems as autopoietic. Autopoietic systems develop independently from themselves and manage themselves. Such system of organizational management simulates behavior of living organism (Truneček, 2007). Autopoietic systems of organizational management do not fully abolish previous two models of system of management, the one based on division of labor and the dynamic one. Modern system must have some structure as those based on division of labor and be dynamic as system of Senge or Jaques. Compared to two previous types of systems autopoietic systems put stress on different factors, mostly on human cooperation and knowledge sharing. Autopoietic systems are characteristic by flat organizational structure, suppression of model of sub ordinance and power of one employee over the other, stress on permanent learning and ability to self manage. Organizations in which this system was identified usually employ high number of knowledge workers (Mládková, 2010).

System of organizational management based on six bubbles provides the example of autopoietic systems (Truneček, 2004).

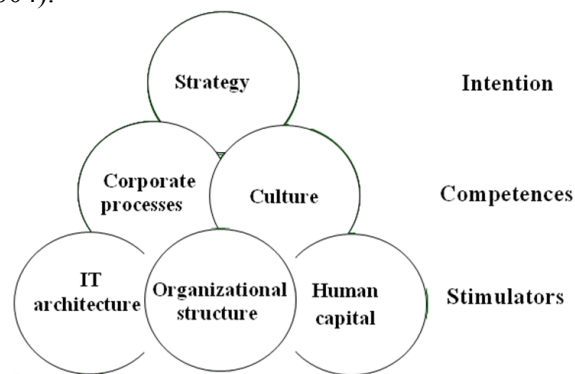


Figure 1. System of organizational management based on six bubbles

This system of management classifies all managerial activities to six organizational subsystems; strategy, corporate processes (processes of organization), culture, IT architecture, organizational structure and human capital. Six sub systems of this system of organizational management intercommunicate one with the other and are kept together by organizational knowledge. Organization should optimize individual sub systems so that they created synergy that is the benefit of this type of system of organizational management (Mládková, 2010).

Autopoietic management works in practice but does not have theoretical background. As many managers admit, they choose this system of management as the one most applicable in chaotic global environment. Their system of management was developed by method of experiments and failures. The pragmatic reality probably overtook the theory (Mládková, 2010).

Negative Synergy

Properly balanced system of organizational management creates a synergy. Synergy is a major motive why managers try to harmonize subsystems of the system of organizational management in the bigger whole. It is the benefit they want to achieve. But the result of synergy is not always positive. Practical life provides situations when synergy does not bring required effect; just opposite. Effect of the cooperation of subsystems of the system of organizational management may also interlink in undesirable way. In such situation we talk about negative synergy (Vodáček & Vodáčková, 2009c; Bartol & Martin, 1991).

Even though the aspect of the negative synergy of the system of organizational management is important, managerial literature does not pay adequate attention to it. Articles written on negative synergy are mostly limited only to negative synergy in human contact and communication and the author of this article failed to find works on negative synergy adequate to the topic of this article in the literature when writing this article.

Conclusions

The purpose of this article was to discuss the topic of systems of organizational management. First, the important terms system and synergy were defined. The literature offers many definitions of these terms, only

these relevant to the topic of the article were mentioned. Than the term system of organizational management was explained and three historical phases of development of ideas on this topic were discussed. As management is not an exact science and does not provide humans who use its results definite solutions and ideas, it cannot be said which of three approaches to the systems of organizational management is the best one. Historically autopoietic approaches follow dynamic approaches that replaced approaches on division of labor but it depends solely on real external and internal conditions of every organization which approach they choose and implement.

The author of the article is aware of limits of her work. First, not all available knowledge on chosen topic could be discussed in this article. It is planned to do other works to explore the topic in more detail, especially approaches of individual authors. Second, the author failed to find articles on negative synergy in relation to the topic of systems of organizational management. It seems that managerial literature does pay attention only to desired positive results of synergy and totally ignores possible negative outcomes. The author of the article thinks that topic of negative synergy is an extremely potential topic that deserves more detailed attention and both theoretical and empirical research in future.

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