THE IMPACT OF CONSCIOUS AND ORGANIZED CHANGE MANAGEMENT ON EFFICIENCY OF FUNCTIONING THE NETWORK ORGANIZATION

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Received: 26 April 2018
Accepted: 22 August 2018

Abstract
The paradox of enterprise management is the company must continually change in a dynamic and difficult-to-predict environment in order to achieve business continuity and profitability goals. The relatively low efficiency and awareness of the need for change at network organizations means the problems connecting with changes implementation, identification of conditions limiting their realizations and importance of final results are still significant. This article described this issue by the diagnosis of current state of the change management in various types of network organizations and showing how this state can be improved in the future. Assuming the organization will strive for conscious and organized change management.

Keywords
enterprise networks, knowledge networks, innovation (in development contexts), project management, social management.

Introduction

Change accompanies entrepreneurs from the first days and throughout the whole period of their companies’ operation, and is an inseparable element of reality, connected to nearly all areas of activity. The ability to flexibly adapt of organizations to internal and external changes is an essential condition for their survival and development. It is also important to be able to anticipate and forecast change, because it creates the conditions for taking advantage of opportunities, and for avoiding threats. Therefore, conscious and organized change management, or, more precisely, conscious and organized management of the change process, is particularly important in this area.

Organizational change is a typical path of evolution for all organization, including network organizations. According to Osbert-Pociecha [1, p. 7], a paradox associated with managing organizations is that a company, in order to achieve its goals of business continuity and profitability, must continually change in conditions of a dynamically changing and difficult-to-predict environment. The relatively low effectiveness of implementing change, but also the low levels of awareness and understanding of the necessity for change in network organizations, both mean that issues related to implementing change, and to identifying requirements for change and limitations of change, remain a valid and important subject for business theorists and practitioners [2, pp. 69–81].

Low effectiveness, often combined with low awareness of the problem of managing change in network organizations, suggests there is a lack of support for implementing and managing change, which in turn encourages attempts to examine the subject in greater depth. The research problem consists in insufficient awareness of the importance and value of
change management in network organizations. This results in a lack or a low degree of organization in the implementation of changes, which consequently affects operational efficiency of network organizations. Thus, the main goal of the paper is to carry out:

**MG**: An analysis of the impact of conscious and organized change management on the efficiency of functioning and the results of operations of network organizations.

In order to achieve the main goal, a study was prepared and carried out, with the following specific goals:

**G1**: Defining the concept of conscious and organized change management.

**G2**: Defining the concept of efficiency of functioning (operation) and the results of operations of network organizations.

**G3**: Identification of network organizations utilizing knowledge of change management consciously and in an organized manner.

### Theory of change management

Organizational change is a natural aspect of the development and functioning of every organization. The environment in which contemporary companies operate imposes difficult conditions for running a business and achieving competitive advantage. Progressive shortening of the period of commercialization of ideas and the life cycle of products, increasingly more aggressive competition, and chronic crises in the global economy increasingly, and more and more significantly, affect organizations around the world. Modern management tools, methods, and approaches can support this dynamic, and can also be useful in the area of efficient, organized, and effective response to changes.

There are two main approaches to defining the issue of change management. The first represents the view that change management is a specialized management method, similar to, for example, strategic management, human resources management, or quality management [3, p. 58]. The other approach states that “change management is an interdisciplinary subject that combines components of management theory, methods and techniques for organizing institutions and work, as well as psychological, sociological, economic, and technical knowledge” [4, p. 9].

The first approach is narrower than the second, because it applies only to the “type” of management and thus is contained in the first. The second approach focuses on managing change in an overall, comprehensive manner, while demonstrating the multi-level nature of the process. It is often remarked that it is not the change itself, but the process of change that is managed. In addition, according to Drucker, change cannot be managed, it can only be preempted and anticipated [5, p. 83], but this is a question of adopting a specific approach to the phenomenon, and to the scope of the analysis carried out. The term “change management” is commonly used, and it is understood to include preempting and anticipating change as integral elements of the management process in general. In summary, change management is a process that uses available resources, techniques and tools to allow the organization to move from its initial state to the planned final state, taking into account its needs, and the environmental conditions. Thus, in the simplest sense – change management is a category of management considered in relation to changes occurring in the environment.

### Characteristics of network organizations

The concept of a network has been known for a long time and used in various meanings: technical, biological, geographic, economic, etc. The economic importance of a network is connected to the other meanings. It has a unique dimension, because the economic factor verifies the existing relationships between units in terms of rational operations. First of all, it is about infrastructure networks, e.g. networks of retail outlets, territorial networks of business entities, and their relationships with each other. The growing role of network connections between business entities requires taking into account the methods for managing them and coordinating their activities [36, pp. 7–19]. Bearing in mind the importance of the presented issues, the definitions, kinds and types of network organizations were analyzed, as well as factors determining their cooperation and management.

Network organizations are defined depending on their nature and mode of operation. Traditionally, network organization was defined “as a set of independent units, creating a common structure to carry out specific and defined operations” [7, pp. 426–427]. Currently, the concept is broader, as network organizations also include chains of dispersed units forming one capital group [8, p. 281]. In Table 1 are presenting selected definitions of network organization.
Table 1
Selected definitions of network organization.

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnes J. A.</td>
<td>1954</td>
<td>Social connections between individuals spread in the society on a network basis, and relations and relationships between individuals “en-twine” society.</td>
</tr>
<tr>
<td>Porter M.E.</td>
<td>1990</td>
<td>Geographical clusters of interconnected companies, specialized suppliers, companies operating in related sectors and connected institutions (e.g. universities, standardization bodies, and industry associations) in particular industries, competing with each other, but also cooperating. The value of the group as a whole is greater than the sum of the values of its individual parts [34].</td>
</tr>
<tr>
<td>Nohria N., Eccles B.</td>
<td>1992</td>
<td>The system of relationships between companies, characterized mainly by horizontal links, allowing for decentralized planning and control of network elements.</td>
</tr>
<tr>
<td>Dwojaki P., Nogalski B.</td>
<td>1998</td>
<td>Relatively permanent grouping of autonomous, specialized entities or enterprises participating in the system of mutual cooperation according to market principles. The network may be a system created by enterprises with independent equity or linked to a small extent, or may also exist in a capital group, or even within one enterprise.</td>
</tr>
<tr>
<td>Daszkiewicz N.</td>
<td>2004</td>
<td>A certain social skill, consisting in establishing contact, building relationships, or activating connections. Daszkiewicz uses the concept of network capacity meaning the ability to build networks, that is relations and contacts between people and organizations.</td>
</tr>
<tr>
<td>Jones C.</td>
<td>2007</td>
<td>Purposefully selected, durable and structured set of autonomous entities that are involved in the production of goods and services on the basis of implied by default and indefinite agreements, and coordination of exchange transactions. Arrangements between entities support adaptation to unforeseen changes in the environment.</td>
</tr>
<tr>
<td>Kaczmarek B.</td>
<td>2010</td>
<td>The network as cooperation can take two forms: general, and economic/organizational. In general, it means: contributing to something and working with someone. In the economic and organizational sense – various relationships between given entities simultaneously striving to achieve a common goal or aiming at preventing each other from achieving divergent goals. In cooperation, the existence of negative ties, which may be a manifestation of competition between enterprises. Thus, the definition and consideration of cooperation in the broadest sense concerns contacts and relations resulting from competitive behaviors of enterprises.</td>
</tr>
<tr>
<td>Czakon W.</td>
<td>2012</td>
<td>A collection of actors connected by a set of bonds. Inter-organizational ties can have the character of friendship, advice, liking, but also economic cooperation. A special way of coordinating cooperation as a result of establishing specific relations, including the organization and control of this cooperation [32].</td>
</tr>
<tr>
<td>Masłyk-Musiał E., Rakowska A., Krajewska-Bieńczyk E.</td>
<td>2012</td>
<td>An organization with a flat horizontal structure is a manifestation of a departure from the hierarchy principle in favor of the voluntary creation of cooperation networks of various entities in order to implement specific strategic intentions.</td>
</tr>
</tbody>
</table>

A modern network organization should be built on an innovative platform, understood as a set of units cooperating within the organizational, functional and process networks, working on new ideas, new solutions, new methods and tools, new products and services, and creating a common structure and strategy, taking into account standards for effective management of creativity and innovation [33]. Many authors dealing with network organizations classify them as follows due to the nature of relationships between partners [9, p. 195]: supplier networks, producer networks, client networks, standards networks, technological cooperation networks.

Another criterion for classifying network organizations is the durability and strength of connections between the entities creating the network. On the basis of this criterion, integrated, federated, contractual, and direct relations networks can be distinguished [7, pp. 426–427].

Many interesting studies regarding network organizations have been carried out as part of the research taking into account different national cul-
tures and economic traditions in developed countries [9, p. 195]. For example, in the Japanese economy, business groups are organized within the following networks: horizontal and vertical, grouped around large specialized industrial corporations. Network organizations in Western culture (U.S. and Western Europe) have slightly different origins and take other forms. A typology of these networks, which function primarily in the sector of small and medium enterprises, distinguishes networks that are [10, pp. 139–141]: built around large manufacturing companies (e.g. around Fiat and Olivetti in Italian Piedmont, or around Peugeot in France); territorial, resulting from history and tradition; created as the result of a consciously used strategy of splitting by a large enterprise; created by incubation (as in the case of Silicon Valley). Selected typologies of network organizations presented above indicate the large number and diversity of organizational forms falling within this category.

The key person in any network is the coordinator, also known as the manager, whose tasks include organizing the functioning of the network. They define its goals, scope, and the way the goals are achieved. They determine the members of the network, define the role of each partner, and each partner’s relationship with others. They introduce a motivation system that ensures a specific agreed distribution of benefits to all partners. They develop a system for monitoring the activities of the network as a whole, and its individual entities. Such a system should allow to assess the extent to which the results meet expectations, whether the coordination mechanisms ensure the achievement of goals, and to what extent the members of the network meet their obligations.

The tasks that the coordinator has to deal with indicate that they should replace management with leadership capable of causing other organizations participating in the network to behave in a desired way [11]. This is in accordance with the definition of leadership, which defines it as “the process of using influence, without resorting to coercive measures, with the intention of shaping the goals of a group, team or organization and motivating behaviors aimed at achieving these goals” [12, p. 6]. A network organized and managed in this way should complete tasks and achieve goals faster, and generate greater added value than organizations located outside the network.

### Research framework

The study utilized desk research. The desk research consisted in the analysis of specific information in selected subject areas. In the presented case, the literature on the subject of network organizations and conscious change management was examined. The following types of entities were included in the research group: economic clusters, capital groups, holding structures. 47 clusters, 3 capital groups, and 3 holding structures were examined. Based on the analysis and comparisons carried out, conclusions were arrived at regarding conscious and organized change management, as well as operational efficiency and results of operation in network organizations.

In order to achieve the main goal and the specific goals, the analysis focused on answering the following research questions (Table 2).

The detailed course of the research process is presented in Fig. 1.

Two research questions were assigned to each specific objective, according to the numbering. The results of the research are presented below.

<table>
<thead>
<tr>
<th>Specific goal</th>
<th>Research question</th>
</tr>
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</table>
| G1: Defining the concept of conscious and organized change management. | Q1: What is conscious change management?  
Q2: What is organized change management? |
| G2: Defining the concept of efficiency of functioning (operation) and the results of operations of network organizations. | Q3: What is efficiency of functioning (operation) in network organizations?  
Q4: How to determine the results of operations in network organizations? |
| G3: Identification of network organizations which utilize the knowledge of change management consciously and in an organized manner. | Q5: What types of network organizations operate in the economic space in Poland (possibly Poland and another country)?  
Q6: Do the identified network organizations use knowledge from the area of change management consciously and in an organized manner? |
Conscious and organized change management

Many definitions of management and change management refer to conscious and organized actions, also called structured actions. According F.E. Kast and J.E. Rosenzweig, "management is the process of coordinating collective efforts to achieve organizational goals by people, using technology, in organized structures, based on designated tasks. It can therefore be said that management understood in this way consists in conscious and rational shaping of mutual dependencies between separate elements of the organizational system" [13, p. 37]. Z. Krajewski states that "management is a conscious and systematic process (planning, organizing, deciding, motivating and controlling) consisting of repeatable stages of actions and activities aimed at ensuring the day-to-day functioning of the organization and its stable development in the future, as well as appropriate development of its relationship with the external environment, in accordance with established goals and adopted strategy" [14, pp. 31–41]. M. Oliński defines change as “permanent correction and modification of social structures, organizations, interpersonal relations; change of attitudes, methods of production, technologies; a conscious and goal-oriented activity consisting in the transitioning of the organization from the current state to a different state" [15, p. 9].

If the organization is managed in a conscious way, it develops a specific change management program depending on the situation, with a focus on achieving a stated goal, not forgetting all factors influencing the entire process, including risk [35]. All conceptual models of effective change implementation are based on the natural and previously proven potential of the company, and have the following characteristics [3]:

- the changes must be comprehensive;
- implementing change should be based on existing procedures;
- factors necessary for success should be indicated.

Effective change management requires an organization to have and develop multidimensional resources, and in particular: strategic planning capital, enterprise capital, social capital, human capital, financing sources capital, infrastructure and technical capital [16]. In order for the process of implementing change to be conscious, organized and effective, it must be based on the following seven steps of the change process [17, pp. 50–72]:

- mobilization of energy and commitment through shared identification of problems and their solutions;
- development of an acceptable vision of a changed and improved future, shared by all stakeholders;
- identifying the leadership in change – i.e. the leader who manages the entire process;
- focusing attention on current results (short-term and partial) rather than on individual activities;
- starting the change from the periphery (smaller areas), and then spreading it to the entire area covered by the change, without pushing it “from the top”;
- institutionalization of success through formal principles, systems and structures;
- monitoring and adjusting change strategies in response to problems emerging in the change process on an on-going basis.
Acting based on the above presented steps will allow for a conscious, organized and efficient management of changes taking place in the organization.

Efficiency of functioning and the results of operations at network organizations

The concept of operational efficiency is related to utilizing opportunities emerging in the environment. It means, therefore, the ability to deal with continuous changes, instead of striving for stability, which is impossible to achieve in the current complex and dynamically changing environment. It is necessary to create relationships with external partners, to take into account individual customer needs, to develop new types of relationships with individual participants in the network organization and in the environment. Operational efficiency is therefore a complex issue. Analyzing it requires the use of diverse and useful criteria and measures that allow for a comprehensive assessment. “Their choice is always a matter for the decision maker. It is important, however, that the efficiency assessment is made on the basis of a set of criteria that will allow for a comprehensive evaluation of all results of the functioning (operation) of the institution” [18, pp. 19–20].

The basic form of efficient operation is effectiveness. That’s because efficiency is the basic condition for effectiveness, defined as the ability to choose correct goals and achieve results. Effective action does not always need to result in achieving the main goal, because it is sufficient that intermediate goals are achieved, the result of which will be to facilitate or bring closer the achievement of the intended main goal [19]. Thus, effectiveness of an action can be measured by the degree to which the goals are achieved or become closer to being achieved [20, p. 20]. If the goal has not been achieved, the action is ineffective. However, if the results of a specific action are beneficial, even if they are not measurable, such an action is considered to be effective. In such a case, the effect is a positive result, not necessarily related to the goal [21, 22]. Ineffective operation may still bring effects if any positive results are associated with it. Consequently, it can be concluded that effective action is efficient, whereas efficient action does not necessarily have to be effective.

Taking into account the previous considerations, and at the same time assuming that a person is aware of the essence of their activity goals, and has knowledge about the criterion for evaluation of their activity in specific circumstances, and thus is able to make the correct choice of the basic form of efficiency, and rank the effects of their actions according to their relevance, their decisions taken on this basis will aim at a real improvement of their operation. And if every change for the better is an improvement, then efficient operation leads to better effects.

Identification of network organizations utilizing knowledge of change management consciously and in an organized manner

Many different forms of operation can be considered to be network organizations, e.g. strategic alliances, joint research projects, logistics centers, holdings, or industrial clusters. Generalizing, a network organization is “a grouping of all entities characterized by a certain type of convergence, certain similarity, for example regarding their product, market, target group of buyers, utilized technology, knowledge or mode of operation, making it possible to achieve synergy effects” [23, p. 105]. The network organizations identified for the purpose of the analysis as organizations using knowledge of change management consciously and in an organized manner included the following categories of entities: economic clusters, capital groups, holding structures.

Clusters

The examination of clusters as network organizations that consciously and in an organized manner utilize knowledge in the field of change management, meta-analyses from Benchmarking of clusters from 2014 and 2010 were used [24, 25]. The benchmarking analyses were aimed at identifying the practices and processes used by the clusters in the specified areas. The analysis aimed to demonstrate the best practices used in the examined clusters, and to provide the clusters with information on the opportunities to improve their own operations.

Cluster coordinators participated in the study, assessing specific cluster resources on a scale from 1–10, where 1- the lowest value, 10- the maximum value. Our analysis of the research results from 2010 and 2014 revealed that it was only possible to obtain higher scores in 2014 (in comparison to four years previously) on 11 out of 20 analyzed measures. This may indicate that not all undertaken changes and plans were implemented. Another disadvantage was the fact that a large proportion of the clusters participating in the 2014 study were structurally and functionally the same as in 2010, yet they should have had developed into more mature forms than presented in the previous edition of the study.
the above, it can be inferred that clusters utilize the knowledge of change management to a limited degree.

**Capital groups and holding companies**

The examination of capital groups and holding companies as network organizations consciously and in an organized manner using the knowledge in the field of change management utilized the goals specified in their historical Development Strategies. Capital group and holding structures were represented in the study by three entities each: Powszechny Zakład Ubezpieczeń SA Capital Group (PZU Group), Orlen Capital Group, PGE Capital Group, Getin Holding, Polski Holding Nieruchomości Group, and Aforti Holding. The analysis aimed at identifying practices and processes in the field of change management used by those entities, as defined within their Development Strategy documents.

The development strategy of PZU for 2012–2014 focused on the vision for developing a strongly customer-oriented insurer, achieving high operational efficiency, and profitability [26]. The development strategy of PKN ORLEN for 2009-2013 focused on strengthening effectiveness and development. It assumed an increase in the company’s value in three areas: core business, creation of new segments, and disinvestment of non-core business assets. The strategy assumed that the company’s foundation would be the refining, retail and petrochemical segments. In addition, the Group intended to develop its mining operations and enter a new field – the energy industry [27]. PGE S.A. coordinated strategic projects implemented in the PGE Capital Group in accordance with the Development Strategy for 2009–2013, in key business segments, i.e. electricity generation from conventional and renewable sources, brown coal mining, sale and distribution of electricity to end customers, manufacturing and sales of heat, and wholesale electricity trading on the domestic market. The projects focused on improving operational efficiency and building shareholder value [28].

The ultimate goal of Getin Holding stated in their Development Strategy was achieving a high rate of return on investment, and thus tangible benefits for shareholders. Getin Holding intended to achieve growth through a systematic development of companies within the Group as well as through well thought-out, targeted acquisitions in Poland and abroad, or via creating from scratch additional entities operating in the sector of financial services for individual clients and entrepreneurs. The strategy was implemented by maximizing organizational growth, using the market potential and competitive advantages in target market segments, mainly retail banking for entrepreneurs, insurance, and financial intermediation [29]. The Polski Holding Nieruchomości Group is one of the largest in terms of the value of the portfolio of entities in the commercial real estate sector in Poland. Their Development Strategy for 2011–2015 focused on extensive restructuring activities [30]. Aforti Holding S.A. is a financial holding which aims to offer comprehensive customer service in the field of personal and business finances. Their Development Strategy for 2012–2014 assumed creating a competitive advantage based on building long-term relationships with clients. The Group’s offer is addressed to entrepreneurs and companies from the SME sector. Aforti Holding’s strategy assumed achieving financial stability and reporting net profit for the first time [31].

The analysis of the objectives set out in the Development Strategies of capital groups and holding companies yielded the following information for all studied entities:

- among the 38 examined goals, 29 have been achieved – with the average implementation rate of 76%;
- in the case of 7 goals, it was difficult to assess the level of achievement – average implementation rate of 18%;
- 2 goals have not been achieved – 6% implementation on average.

Capital groups were characterized by the following results:

- among the 23 examined goals, 18 have been achieved – with the average implementation rate of 78%;
- in the case of 4 goals, it was difficult to assess the level of achievement – average implementation rate of 18%;
- 1 goal has not been achieved – implementation at the level of 4%.

The holdings were characterized by the following results:

- among the 15 examined goals, 11 have been achieved – with the average implementation rate of 73%;
- in the case of 3 goals, it was difficult to assess the level of achievement – average implementation rate of 20%;
- 1 goal has not been achieved – implementation at the level of 7%.

The analysis of the achievement of the goals set out in individual development strategies allows us to conclude that capital groups and holdings are network organizations that manage change consciously and in an organized manner. From planning to the
goal completion stage, the examined entities were able to manage their resources in such a way as to achieve their goals. This may indicate that the changes undertaken and assumptions made led to the achievement of goals and implementation of the plans in the large majority of cases. Capital groups and holding companies, unlike clusters, are more centralized and dependent on the main shareholder, which in turn can significantly facilitate management, including change management, and explain the success of these entities.

In the case of clusters, the relationships between participants are significantly less formal, and often the decisions of the cluster coordinator do not go hand in hand with the decisions of the presidents of the board or managers of the entities included in the cluster. They have greater freedom, despite the fact that functioning in a cluster is related to a greater or lesser degree limitation of complete freedom of action. Those limitations are not as extensive as in the case of capital groups and holdings, which meant that the clusters in the analyzed sample did not achieve such good management results as holding companies and capital groups.

Conclusions

The aim of this article was to define conscious and organized change management (G1), to define the concepts of operational efficiency and results of operations of network organizations (G2), and to identify network organizations utilizing knowledge of change management in a conscious and organized manner (G3).

On the basis of the completed research, it was concluded that conscious and organized management of change (G1) allowed for a better control over the entire company and its development, because it manifested as conscious and organized thinking about the future, which could have brought positive results later on. Conscious and organized change management is also an element of building sustainable value within the organization, which is extremely important in the era of globalization, growth and vigorous competitiveness.

The basic manifestation of efficient operation (functioning) is effectiveness, also interpreted as results of operation (G2). Efficiency is the basic condition for effectiveness, which means the ability to choose the correct goals and achieve results. As a result of an effective action, the main goal does not always have to be achieved, because it is sufficient that intermediate goals are achieved, which results in facilitation of or bringing closer the achievement of the established main goal. A person is aware of the important goals of their activity, has knowledge about the criterion for performance evaluation in specific circumstances, and thus they are able to choose the correct basic form of efficiency, and rank the effects of their actions according to their value. The decisions taken on such a basis will aim at improving the operations. Every change for the better is an improvement, and thus efficient operation leads to better results.

Analyzing the goals from the Development Strategies allowed the authors to conclude that both capital groups and holdings are network organizations using knowledge in the area of change management consciously and in an organized manner (G3). From planning to the goal completion stage, the examined entities were able to manage their resources in such a way as to achieve their goals. This may indicate that the changes undertaken and assumptions made led to the achievement of goals and implementation of the plans in the large majority of cases. Capital groups and holding companies, unlike clusters, are more centralized and dependent on the main shareholder, which in turn can significantly facilitate management, including change management, and explain the success of these entities.

References

[1] Osbert-Pociecha G., The ability to changes as the driving force of the organization’s flexibility [in Polish: Zdolność do zmian jako siła sprawcza elastyczności organizacji], Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław, 2011.


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