

## **STRATEGIC DECISION MAKING WITHIN THE CLUSTER IN THE CONTEXT OF ORGANISATIONAL ENTREPRENEURSHIP**

**Boguslaw Bembenek**

*Rzeszow University of Technology, Faculty of Management, Poland,  
bogdanb@prz.edu.pl*

**Marzena Jankowska-Mihulowicz**

*Rzeszow University of Technology, Faculty of Management, Poland,  
mjanko@prz.edu.pl*

**Teresa Piecuch**

*Rzeszow University of Technology, Faculty of Management, Poland,  
tpiecuch@prz.edu.pl*

### **ABSTRACT**

*The article characterises the essence of strategic management within a cluster, treated as a more or less formalised organisation created as a result of mutual interactions of various partners from the sector of business, science, and public administration to implement certain goals. It was emphasised that this type of management constitutes the information and decision-making process, whose aim is to solve the key problems in the activity of a cluster, its survival and development with particular regard to strategic potential and impact of external environment. The need for professional gaining and processing information was indicated so as the knowledge resources have become the basis for accurate (good) decisions making. Regarding the complex nature of the decision making process, the study indicates the need for strategic thinking performed by managers and leaders of the cluster, determined by flexibility, creativity and intuition, playing a very important role in the process of developing organisational entrepreneurship in these kinds of structures. The consideration, whose outline has been presented in the article, was made on the basis of theoretical studies.*

**Keywords:** *cluster, decision, entrepreneurship, information, knowledge, management*

### **1. INTRODUCTION**

A significant challenge for clusters is active identification and taking advantages of opportunities dynamically arising in a turbulent environment. This challenge can be met through efficient cluster management. This ability is reflected mainly in the way of decisions making (deciding). Entrepreneurial cluster management, constituting a complex system of mutually connected actions and decisions orientated towards objectives' achievement, including integration and coordination of using the present and the future resources within the cluster structure, and towards the development of intra- and interorganisational cooperation, determines the efficiency of cluster activities, its development and competitiveness.

Assuming that contemporary cluster management constitutes a sequence of decision-making and creation of conditions for efficient decision realisation, it was agreed that the main objective of the article will be to determine the role of decision-making in the process of cluster development. Moreover, the aim of the paper is to describe the decision process specificity in the context of organisational entrepreneurship, since it leads to a conscious choice of direction and manner of activity, increasing the probability of beneficial results and diminishing the risk of possible loss. It is very important as organisational entrepreneurship is

an integral part of clusters' nature and it is manifested in creativity, going boldly beyond the conventional schemes of thinking, flexibility, continuous involvement in newer and newer areas of activity of management personnel as well as individual members of an organisation.

## **2. THE NATURE OF STRATEGIC MANAGEMENT IN THE CLUSTER**

In the literature on economics and management it is indicated that the cluster is such a flexible concept that it is difficult to find its universal definition. Many definitions prove that the cluster is geographic concentration of highly specialized, competing, collaborating and interdependent companies and institutions (universities, R&D units, standards agencies, trade associations, financial institutions) which are connected by a system of market and non-market links (Kuah, 2002, p. 207). E.J. Feser (1998, p. 26) claims that economic clusters are not just related and supporting industries, but rather related and supporting institutions that are more competitive by virtue of their relationships. Clusters are characterized by an advanced and specialized infrastructure, intense formal and informal contacts, exchange of business information, knowledge, know-how, technical expertise, tend to develop a set of idiosyncratic norms, institutions, personal networks, and trust (Europe Innova, 2008, p. 11-12). Research shows that: knowledge spillover is an important mechanism within area of clusters, organizations of this type emerge spontaneously and they require an abundance of new firms – either new ventures or new entrants, firms – to secure development (Andriani et al, 2005, p. 17). The advantages of the cluster are also (Das and Das, 2011, p. 162-163; Uyarra and Ramlogan 2012, p. 5-8):

- cluster creates a healthy co-relation between the firms, central with state government, local institution/organization, international organization and other educational institutions etc;
- clusters give opportunities to its members for work and grow – which attracts the new customer and public investment by providing high quality products and services, which benefits all area business;
- firms in clusters grow faster than average (if clustered with others in their own sub-sector of the industry);
- cluster provides an opportunity to the firm for innovation development (in their products and production, decision making process, management etc.);
- cluster provides an identity to the clustered firms and actors in the society and related market – which strengthens the bargaining power of the firms with the suppliers and buyers;
- cluster helps the faster growth of regional economics through maximum utilization of local resources such as human resources;
- cluster enables small individual firms to specialize in specific tasks, gives access to special skills, services and inputs;
- local co-operation, both individual firms and cluster institution can strengthen the ability of clustered actors to compete in the markets by sharing costs through engaging in joint tasks such as shared marketing and distribution;
- in cluster, the agglomeration benefit raises the efficiency of the small firms and makes it possible to access the markets through a division of labour;
- the knowledge spillover in cluster make feasible to small firms to acquire new know-how, new products and new production techniques that could not be obtained through markets.

In the article it was assumed that clusters constitutes an example of an modern flexible form, an entrepreneurial economic organisation, which, as a complex whole, is able to fulfil its aims due to cooperation with the key stakeholders, not only internal but also external ones.

Managing this organisation refers directly to the management activity, which concentrates on establishing goals and contributing to their successful achievement, undertaken by authorities adequate for a particular organisational and legal form, including the leader and the manager of a cluster. Cluster management can be defined as an organisation and coordination of the activities of a cluster in accordance with certain strategy, in order to achieve clearly defined objectives. This complex, non-linear process includes the following cycles (Schretlen, Dervojeda, Jansen and Schaffmeister, 2011, p. 8):

- define – vision, mission, objectives, development strategy, key performance indicators, key uncertainties;
- design – actions, communication platform, monitoring and evaluation systems, agreements with stakeholders,
- implement – actions as designed (e.g. networking, providing information and knowledge, lobbying, collaboration, education, cluster promotion);
- monitor implementation (i.e. collect and record knowledge on key performance indicators, review progress, identify problems in planning and implementation);
- evaluate the results (i.e. determine the scope and purpose of the evaluation, identify key evaluation questions, facilitate the evaluation process, analyse the results);
- revise objectives and uncertainties, prepare a report for stakeholders.

The manner of cluster management is dependent on a number of determinants, among others: the stage of development, territorial scope, type of activity, dynamics of the development, basis of activity, technological advancement, competitive position, the manner of creating innovative processes, characteristics and the structure of connections between the network constituents. Clustering practice proves that it is not easy to manage a cluster comprising various entities with different outlooks, expectations, resources. The cluster management's main objective is to ensure the networking at three different levels, corresponding to three specific tasks related to the systemic networking process (Cavigliasso and Pamminger, 2012, p. 11):

- the primary task is the networking between the different stakeholders in cluster,
- the second task is the networking between the cluster and the external stakeholders,
- the third task is the networking inside each stakeholders group (project groups).

Managing a cluster structure in the conditions of a turbulent environment necessitates strategic approach among others towards the choice of most profitable development strategy, its implementation and control. In this case it is crucial to implement the assumption of the strategic management concept. D.J. Ketchen and L.C. Giunipero (2004, p. 52) suggested that strategic management can be distinguished from other organisational sciences by its emphasis on identifying, explaining, and predicting the determinants of organisational performance. Strategic management as an example of a process related to: defining of the goals, mission, vision, shared values, environmental analysis, formulation, evaluation, implementation and control of strategies, defines how organisations develop sustainable competitive advantages resulting in the creation of new value (Kraus and Kauranen, 2009, p. 39). In general, strategic management includes three steps: establishment of strategic goals, strategic planning, and strategy implementation and evaluation. This type of management aims at leading, driving and helping people, these inside the organisation and these outside it (also involved in its development), to focus on the organisation's identity and image, question its worth in a new environment, and fix its longer term growth, while using its present capacity and fostering its »potential« for stable development (Tabatoni, Davies and Barblan, p. 5). S. Ranson and J. Stewart (1994, p. 189) argued that the distinctive purpose of strategic management is to protect the capacity of an organisation to respond to the change and to redirect day-by-day routines in the light of strategic choices. J. Harrison (2010, p. 4) believes that strategic

management is a complex process through which organisations analyse and learn from their internal and external environments, establish strategic direction, create strategies that are intended to help to achieve the established goals, and execute those goals, all in an effort to satisfy key organisational stakeholders.

Strategic management in a cluster is a set of managerial decisions and actions that determines the efficiency and long-run performance of this organisation (Wheelen and Hunger, 2012, p. 5). Strategic management process should aim to unleash the benefits for the cluster – better results through better decisions, identification of more opportunities, consideration of more factors, improved coordination and communication, strong motivation, and provision of a means of coping with the pressures for change for the cluster (Pirtea, Nicolescu and Botoc, 2009, p. 956). Managing a cluster in a strategic way a manager and a leader of the cluster should make decisions that are coherent with the development strategy, and which take into consideration internal and external conditions of cluster activity, mission, commonly accepted values. What is also crucial is orientation to improvement, comprehensive perception and solution of the appearing problems. Strategic management as a tool of development control enables reactive and proactive opposition to the negative external stimuli, providing the cluster with relatively stable conditions for further activity and development. This type of management increases the probability of the success within the scope of translating the assumptions of the development strategy into concrete actions of the partners in a cluster. It also develops the ability to affectively and quickly identify and connect necessary resources and activities within the strategy realisation. It has to be however remembered that strategic management process as well as the strategy formulation is not the aim itself. They only constitute certain tools that serve more effective realisation of the common objectives. The success of implementing the concept of strategic management in a cluster depends mainly on the professionalism and the involvement of the cluster manager and the leader. What is significant for this purpose is strategic thinking, interdisciplinary knowledge, adequate competences, experience, intuition, creativity. It has to be emphasised that efficient cluster management is impossible without entrepreneurial basis and entrepreneurial activities of the managing entity as well as entrepreneurs associated in the network.

### **3. THE IMPORTANCE OF STRATEGIC DECISIONS IN THE CLUSTER**

Not only the complexity of cluster structures but also the complexity of their environment cause strategic decision making to be realised in the conditions of high risk or uncertainty. This process is connected with a number of factors and conditioning for problems, as well as lack of knowledge of available alternatives, results, cause-and-effect relationships and their probability (Gänswein, 2011, p. 19). Decisive situation in the above mentioned case is defined as unmarked, fuzzy. On one hand managers make strategic decisions in the conditions of informative chaos and informative smog, i.e. in situations of excessive stimuli, numerous potential choices, cognitive overload and stress. On the other hand, however, they have to make decisions in a situation of a substantial information gap, thus a large discrepancy between the resource of useful information that is possessed and that is desired. Information available to a manager is cross-sectional, collective (of wide scope), mainly qualitative, incomplete, not quite accurate. It assumes an explicit and unreliable forms (gossips, rumours, vague signals); it is unprogrammable (e.g. comes from informal sources) and frequently contradictory. The cost of acquiring and processing information is therefore very high. Information, knowledge, experience and so far used methods do not appear sufficient to a decision-maker. Solving strategic problems, which are to a considerable extent new, complex, dynamic, ambiguous (difficult to define) and non-algorithmic, requires from the decision-

makers great inventiveness. All the mentioned factors cause a large decisive gap while strategic decisions making.

It can be stated that strategic decisions making in clusters is a process even more complicated than in a classically understood organisation. It results directly from the following features of the cluster:

- in the cluster there are numerous nerve centres; its leader creates a vision, a manager is responsible for the strategy realisation. Additionally, each entity constituting a cluster has its own management and strategies, and it aims at making the cluster strategy conducive to its development. Different positions and functions of the decision-makers in such a type of a structure cause different perception of the scale, time perspective, risk, object, scope, or significance of strategic problems. It hampers reaching a common ground by the entities involved in the cluster structures,
- variety of kinds, aims and strategies (business models) of organisations creating clusters cause the increase in the quantity of inconsistent areas of interests. Hence, strategic decisions are a result of tenders, values confrontation, game of power, political influences, agreements, compromises, negotiations, mediations. Therefore in a cluster in different relationships, periods of time and decisive areas, competition, co-competition (cooperation) or cooperation,
- clusters associate economic and noneconomic organisations, in which there are groups of stakeholders of various organisational cultures. Their blending in a cluster cause the necessity of taking into account in the management the social and cultural aspects, such as: age, sex, professional group, position, education, creativity, qualifications and experience of members. Taking into consideration such a diversity to a considerable extent complicates strategic decision-making process.

All above mentioned features of the cluster undoubtedly cause the increase in complexity of its managing processes. Paradoxically, they can also constitute conditions conducive to accurate strategic decision making in a cluster. Hence, they can stimulate the growth of organisational entrepreneurship of its all members. Accurate strategic decisions in a cluster can be therefore treated as a cause as well as a result of entrepreneurship of an organisation for the following reasons:

- numerous nerve centers in a cluster enable avoiding coercive leadership, that is strong centralisation of power. In order to properly represent the interests of many different entities, a cluster manager should be prepared to subject themselves to criticism, and to be open to the need for correcting the strategic decisions, postulated by Stanovich (2010, p. 155): ‘This is a good thing. Principles of rational thought are not set in stone, never to be changed. In fact, the best decision-making strategies will be those that are self-correcting. This we might call the insight of metarationality-that all reasoning principles, even those concerned with rationality itself, must be subject to critique’ (Stanovich, 2010, p. 143). Making metadecisions (conditioning other decisions) requires metarational approach,
- generally clusters are open structures, which enables other entities to join them on a voluntary basis – by choice, on the basis of interests similarity, aiming to achieve the scale and the synergy effects, and also the added value. Despite the differences, all organisations creating a cluster are seeking their own advantages, according to properly understood egoism. The variety of kinds, aims and strategies (business models) of organisations creating clusters enables them to obtain simultaneity. This denotes the ability of using divisional strategy consisting in simultaneous realisation of many tasks of different aims. It results in the increase in flexibility and adaptability of

activity, synthetic (multithreaded, generalising, intuitive, visionary) approach to problems solution, high ambiguity tolerance; all these is a distinct sign of entrepreneurial orientation of a cluster structure.

- clusters require the diversity management defined also as the cultural diversity management, management of multiculturalism, intercultural management. The major assumptions of this concept concern building consciousness and acceptance of social and demographical differences in an organisation and using them to its advantage (Roberson, 2004, p. 4). Accurate strategic decisions making in a multicultural organisation requires the manager of a cluster to move mentally between extreme cognitive approaches. It consists in ensuring coexistence (complementarity) of organisation's features such as: pro-transactivity, pro-partnership, collectivism and individualism, femininity and masculinity, long-term orientation and global approach.
- it is also worth aiming at "metaculture" (cultural cooperation) or cultural heterarchy (cultural coexistence), and besides: acceptance of uncertainty, performing a synthesis, ensuring internal locus of control and short power distance in the organisation. It is also necessary to maintain consciousness of the existence of intercultural differences, and will and ability to use them in managing, taking into consideration the principles of: reflexivity, empathy, community and cooperation, tolerance, constant adaptation and activity promptness.

Strategic decision making in a cluster in the above mentioned way increases the probability that each member of a cluster can realise their own mission easier while being a member of a cluster than while outside a cluster. Hence, it is more probable that each participant who wants to remain in a cluster will endeavour to be useful to cluster partners and its environment.

#### **4. STRATEGIC DIMENSION OF ORGANISATIONAL ENTREPRENEURSHIP IN THE CLUSTER**

Organisational entrepreneurship is a notion drawing attention to the significance of entrepreneurial spirit in already existing, mature organisations of diverse character and various sizes. It is identified with intrapreneurship, interpreneurship, or corporate entrepreneurship. Owing to organisational entrepreneurship, enterprises (organisations) are inclined 'to take a risk and to experiment; [...] to independent activity and innovativeness; [...] to identify and take advantage of chances preempting competitors from doing that [...], to interorganisational changes aiming to enhance effectiveness of functioning and development in highly competitive environment' (Doh, 2000, p. 551). Adopting an entrepreneurial orientation by a given organisation increases its long-term development possibilities. For the organisation entrepreneurship is a specific power, intangible resource which is able to stimulate innovativeness, increases the speed of risk decision making and propensity to change. Organisational entrepreneurship is a driving force of every process that takes place in a given entity. It is highly desirable – simply necessary – in various economic and non-economic organisations regardless of their kind and size.

Organisational entrepreneurship understood as entrepreneurial ventures undertaken by entities within a cluster, should be coherent with its strategic objectives – various kinds of initiatives, strategic decisions realised inside the cluster, which translate into realisation (and possible change, assuming flexibility) of strategic aims. Entrepreneurial orientation regards every cluster member, every area of its activity. In the first instance, however, it should be reflected in the strategy orientated to innovations' implementation, taking advantage of opportunities, and taking into consideration untypical behaviours, unusual and creative approach to problem

solving. Only then will it constitute an incentive for entrepreneurial behaviours of cluster members – the condition, however, is the familiarity with the strategy, its acceptance and translation into aims and tasks on the operational level. Entrepreneurial-oriented strategy should also assume a certain dose of independence and responsibility for the results of the decisions and implemented activities.

Entrepreneurship (and organisational entrepreneurship in a cluster in particular) and strategic aspect are closely interrelated, particularly in a cluster, which originally takes into consideration strategic orientation. Strategic management supports organisations with the process of creating and taking advantage of competitive advantages in a certain area of the market. Whereas entrepreneurship supports seeking competitive advantage can contribute to more active (more effective) activity within this scope. Entrepreneurship and strategy in a cluster must “go hand in hand with” each other; they should be interrelated – cluster management should manifest entrepreneurship while formulating cluster strategy, and the strategy itself should take into consideration entrepreneurial activities. It should be designed in a way that assumes seizing opportunities that appear in the environment (new sources, values), and subsequently translate them into the realities of a concrete component of a cluster network. This stimulates proper (orientated toward using these opportunities) behaviours. Moreover, entrepreneurship is conducive to the efficacy on the strategy level, and also flexibility, creativity, constant implementation of innovations, which contribute to higher level of cluster profitability (Kuratko and Audretsch, 2009, p. 1-17).

Organisational entrepreneurship is inseparably linked with strategic orientation of a given organisation. It is frequently described as strategic entrepreneurship. Since it is one of many key elements for the whole entity, where a very important role plays so-called strategic renewal understood as introduction of new undertakings, orientated to change of a fundamental relationship of an organisation with the market. These are significant changes within an organisation, of key character for its functioning, and strategic and structural dimension, which can become the source of competitive advantage. This leads to so-called revitalisation of major (strategic) system elements (for its renewal, refreshment, rebirth, revival, exchange of the old, useless, defective elements with different, better ones (Agawral and Helfat, 2009, p. 282), and also to the change of organisation’s management strategy and basic principles of its functioning towards entrepreneurial orientation. Due to strategic renewal there is possible a constant regeneration that enables redefining the domain of activity, and owing to that – revival of the activity, and even the reconstruction of the business model in the long-term. It has its very positive implications not only for the enterprises, but also for branches, and even whole regions and economies. According to Agarwal and Helfat (2009, p. 282), strategic renewal is strictly connected with the J. Schumpeter’s process of creative destruction. It results (mainly due to innovations) in creating new combinations of the means of production, and the machines and devices used so far are replaced by new, better ones (then a phenomenon of the so-called obsolescence occurs), and this in turn is comprised in the notion of strategic renewal. The significance of innovativeness in the process of strategic renewal of an organisation is emphasised by V. Sathe and D. Miller (Ferreira, 2002, p. 7). Owing to innovations the ability to compete and to take a risk is developed. Due to innovations it is possible to gain and maintain favourable competitive position in a given sector of the market. Moreover, competitive advantage based on innovations is far more permanent.

Concluding, it can be stated that strategic aspect (with particular regard to the process of strategic decision making) in a cluster as well as entrepreneurship are strictly interrelated. Strategic management and entrepreneurship are dynamic processes orientated towards effectiveness. Strategic decisions making contributes to building and using competitive advantage in the context of concrete conditions of environment. Entrepreneurship promotes seeking opportunities to gain permanent competitive advantage by means of innovativeness (Hitt, Ireland, Camp and Sexton, 2002, p. 1-16). Combination of innovative and entrepreneurial activities in such a specific structure as cluster is simply necessary. Usually, it means the orientation to finding new competitive space, and particularly to new ways of conducting activities contributing to the creation of the unknown effective business models and to discovering new areas of competition.

## **5. CONCLUSION**

In the article is was endeavoured to prove that strategic and entrepreneurial orientations of the cluster are inseparably interrelated. Strategic decisions are always connected with a great risk of suffering a loss, and regard key issues – survival, structure development, strengthening the market position, and the level of the profits. All these components cannot be achieved without entrepreneurship on the level of organisation as well as the members engaged in the cluster structure. Strategy originally shows the direction in which a given organisation wants to proceed, and determines the way of achieving this state. When in the process of realising a strategy entrepreneurial attitude is domineering, the abilities of a cluster within this scope can be far greater. Cluster is a network of simultaneously cooperating and competing with one another entities merging in order to achieve the effect of synergy, which results from cooperation of various stakeholders. It is a flexible, conducive to creative behaviours structure, in which entrepreneurship especially on the strategic (organisational) level is simply necessary. Clusters are originally concentrated on the fulfilment of their strategic aims. This enables them to adequately orientate their long-term activity, contributing to identification and creation of new areas of cooperation within a cluster and of a cluster integrated with the environment, and also to achievement of higher effectivity due to the transfer of knowledge, technologies and innovations. However, the success of strategic objectives' attainment in every case depends on the quality of decisions. This in turn depends on the correctness of the process of making them, including adequately designed system of managing information and knowledge in a cluster. Obviously, professionalism of the decision-makers in this regard is also meaningful. Decision making in a cluster is a more and more difficult and complex task since the complexity and the importance of the encountered problems, decisive situations are constantly growing. This create the need for constant improvement of the decisive process in a cluster, not only the preparation for decision making but also final deciding.