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Critical Success Factors in Cluster Initiatives Management
(Kluczowe czynniki sukcesu w zarządzaniu inicjatywami
klastrowymi)

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Abstract

The cluster excellence and the ways of achieving it have become the main questions of scholars and practitioners in recent years. Despite the on-going debate there are still only a few studies that investigate cluster initiatives (CI) performance and management phenomena, identify the success factors underlying cluster initiatives management success and compare their influence. The existing studies also do not provide cross-geographic comparisons or involve cluster initiatives of various specializations and stages of development. This dissertation aims to fill this gap and addresses the following questions:

- 1) How can a success of cluster initiatives performance be defined? Which cluster initiatives objectives have to be accomplished? What is meant by cluster initiatives management success?
- 2) How can cluster initiatives management success be achieved? What factors are critical for stimulating and maintaining cooperation among cluster initiative's members? What are the Critical Success Factors (CSFs) of cluster initiatives management?

- 3) Which success factors influence the success of cluster initiative management in different stages of cluster initiative maturity? Do CSFs of cluster initiatives management change through cluster development lifecycle stages?
- 4) Are Critical Success Factors of cluster initiative management common across sectors/CI specializations or are they industry-specific? Does cluster specialization influence the prioritization of success factors of cluster initiative management?
- 5) Does the geographic location influence the prioritization of Critical Success Factors of cluster initiatives management? Are the same factors critical for Polish and other European cluster initiatives?

The main objective of the dissertation is to identify Critical Success Factors of cluster initiatives management effectiveness, and to define the optimal model of cluster initiatives management.

The study uses the a multicriteria decision making technique (AHP) - to prioritize the CSFs of cluster management identified in the literature and verify their presence and importance throughout the clusters evolutionary stages, specializations and geographic locations. The AHP method, even though broadly used for identification of CSFs, had not been explored, as yet, for evaluation of cluster initiatives management priorities.

The AHP based interviews were conducted among European cluster managers representing **19 cluster initiatives located in 10 countries** (Austria, Denmark, France, Germany, Hungary, Luxembourg, Poland Slovenia, Sweden, Switzerland). The selected cluster initiatives operated in various industry sectors and represented different development stages. The list of interviewed experts included top cluster experts - the winners and nominees of Cluster Manager of the Year Award¹ and representatives of

¹ The Cluster Manager of the Year Award is granted by the European Commission and European Cluster Observatory. The Award provides an opportunity for European Cluster managers to showcase their excellence and for the European Union to promote the excellence of European cluster initiatives.

This study's interviews involved the following winners and nominees of:

- 1st edition - Cluster manager 2006, Dusan Busen from Automotive Cluster of Slovenia
- 2nd edition - Cluster manager of 2008, Christoph Beer from ICT Cluster Bern, Switzerland
- 4th edition - Cluster manager of 2012, Micael Gustafsson from Cluster 55, Sweden
- 5th edition - Cluster manager of 2014 nominee - Patrick Cocquet from Cap Digital, France

cluster initiatives holding Bronze, Silver or Gold Labels of the European Cluster Excellence Initiative².

The experts assigned the highest importance to the following 4 factors: 'Assuring sustainability of financing', 'Development of CI mission, vision, strategy and operational action plan', 'Integration building partnerships inside the CI, creation of interpersonal links, social networks, trust' and 'Development of cluster's critical mass and management of partners' complementarities and interdependencies'. Their joint importance for cluster initiative management success reached 40%, while the remaining 60% was distributed among 16 other factors. These priorities confirm the V. Pareto's principle in which 20% of invested input is responsible for 80% of the results obtained. The research findings indicated that about half of the CSFs tend to be equally and stably important throughout the cluster evolution; whereas the importance of the other half of CSFs tends to be rather stage-specific. They also revealed that the CSFs prioritization differs in relation to cluster initiatives specialization, but the general priorities ranking is not influenced by CI geographic location.

The research results allowed to achieve study's objectives and positively verify the hypotheses of this dissertation.

The dissertation is composed of 4 chapters, containing: a literature review, a methodology, a research overview and discussion section presenting main findings and conclusions. Chapter 1 - literature review - describes the cluster concept, cluster historical evolution and builds an understanding of cluster initiatives and other interrelated phenomena. It also describes the existing cluster initiatives in Poland and in Europe. The second chapter examines the definition of cluster initiatives success and effectiveness, studies cluster initiative management phenomena and presents the existing management models. It also describes the overview of Critical Success Factors of cluster and cluster initiatives management success identified in the literature. Chapter 3 presents research methodology overview, describes the Analytic Hierarchy Process method, research sample, interview structure and data collection process. The fourth chapter presents the

² Cluster Management Excellence award granted to cluster initiatives by the European Secretariat for Cluster Analysis

research results of CSFs prioritization for all the studied cluster initiatives, different development stages, various industry specializations and geographic locations. The concluding chapter synthesizes the research results, compares them with other previously conducted studies, answers research questions, raises important contributions of this work and proposes areas for future research.

The results of this study support more effective management and better organisation of cluster development processes. They are specifically tailored for entrepreneurs, willing to initiate or establish cluster initiatives, as well as managers, responsible for CIs day-to-day operations and other CI stakeholders. They can also be utilized in political area, as guidelines for policy makers in redesigning policies of cluster initiatives support as well as monitoring and evaluation processes, so that they are based on identified CSFs.

Including cluster managers of multiple cluster initiatives specializations, stages of maturity and European locations allowed to gather very interesting findings not presented, as yet, in the existing literature.

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