

Benchmarking as a Tool for Cluster Analysis

Cluster Excellence Makes the Difference.

Why Cluster Analysis?

Clusters are complex and dynamic structures that are subject to continuous change. Strong clusters can promote economic growth through leveraging the innovation and business potential of a region. New employment opportunities, new products and services, new companies, new R&D activities and new patents can be the result of activities within a cluster. A professional cluster management organization can contribute to such a development through projects and services that tap the cluster's potential.

In this context Cluster Excellence, in particular the excellence of cluster management organizations, has become a guiding principle for both cluster managers and cluster policy makers. This is, for example, reflected in the European Cluster Excellence Initiative (ECEI, www.cluster-excellence.eu) and by the recommendations of the European Cluster Policy Group (www.proinno-europe.eu/ecpg).

Whether a cluster is excellent depends on three dimensions, whose dynamics have to be understood by cluster managers, cluster participants and policy makers if they want to utilize the full potential of a cluster. The development of excellent clusters depends on favorable framework conditions such as infrastructure or regulation, the composition of and interaction between cluster participants and the quality of the cluster management organization.

The analysis of the three dimensions is therefore crucial for the development of strategies that cultivate the cluster's competitiveness on the global market.



Three dimensions of a cluster

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In contrast to evaluations and economic impact assessments benchmarking is an efficient and effective way to identify the potential of a cluster and to develop strategic recommendations for its further development within a short time frame.

Benchmarking is a comparative analysis of structures, processes, products and services. It compares an entity to peers in the same field of activity and/or to best practices from entities in other areas. The objective of benchmarking is to learn from better performing peers or other entities in order to improve own structures, processes, products and services.

Benchmarking for cluster analysis is based on a personal interview with the manager of a cluster management organization. Conducted by an impartial ESCA benchmarking expert the interview (which takes about three hours) captures data on the different dimensions of the cluster. The data is compared to a portfolio of more than 160 clusters from different European countries. The results of the analysis will draw a detailed picture of the cluster in comparison to its peers in terms of the structure of the cluster, cluster management and cluster governance, financing, services provided by the cluster management organization and achievements of the cluster management organizations. Based on the findings recommendations for further action are made.



The efficiency and effectiveness of benchmarking as a tool for cluster analysis was recently proved by the pan-European project "NPGExcellence – Cluster Excellence in the Nordic Countries, Germany and Poland" (www.clusterexcellence.org).

More than 160 clusters and 16 cluster programs were benchmarked in the context of the project that was realized by ESCA experts.

New insights into the characteristics of clusters and their needs for development support have provided cluster managers, cluster members and policy makers with a better understanding of how the potential of a cluster can be tapped.

The Process of Cluster Benchmarking

The benchmarking follows a standardized process as described in the figure below. The benchmarking interview is conducted by an ESCA expert at the premises of the cluster management organization. The interview guideline consists of a set of 40 questions that cover the different dimensions of a cluster. The benchmarking report includes a graphical comparison of the cluster with peer clusters and an evaluation of the cluster's potential and recommendations for improvement. The entire process is implemented in close collaboration with the client. The report can be elaborated within a month once the benchmarking interview has been conducted.

Collected data and any reports produced are treated with absolute confidentiality and will not be made available to any other third party.



Benchmarking Certificate to Prove Excellence – A Step towards Being Labeled as an Outstanding Cluster Management Organization

Cluster management organizations that are benchmarked demonstrate their interest in striving for excellence. As evidence of this interest they receive a benchmarking certificate. They are entitled to use this certificate for public relation purposes for a period of 2 years after which it has to be renewed by a follow-up benchmarking.

By this benchmarking certificate the Bronze Label of the European Cluster Excellence Initiative (ECEI) is awarded as a first step towards international recognition of cluster management excellence. Being in line with the ECEI quality criteria for cluster management the ESCA benchmarking helps to identify room for improvement and thus supports cluster management organizations in their efforts to qualify for the ECEI Silver, Gold or Platinum Label, which are currently under preparation.

As clusters are an important instrument of economic development and innovation policy the labeling of clusters and their management organizations becomes more and more important from the viewpoint of policy makers and program agencies. Promoted by the European Commission and many EU Member State governments the ECEI quality label system will be the main point of reference in this context in the future.



What Are the Benefits of Benchmarking?

... immediate feedback on the cluster's status

Benchmarking provides a cluster manager with an immediate feedback on the status of his or her cluster compared to peer clusters. The results demonstrate and document strengths and indicate potential for improvements. Benchmarking is a tool that can be easily integrated in the strategic management of the cluster.



... use the results to get support for your activities

The results of the benchmarking can be made available to many stakeholders whose support is needed by the cluster manager. A cluster manager can use them to demonstrate his or her achievements in front of the cluster board and to convince the board to support certain development activities. Results can also be used to demonstrate the performance of the cluster when applying for public funding. As a proof of performance they are also useful to attract new members such as companies, universities or research institutions to the cluster.

...benchmarking demonstrates the cluster manager's interest in excellence

Subjecting oneself to benchmarking demonstrates one's interest in competing with the best. This sends a clear signal to cluster stakeholders such as companies, universities and research institutions as well as potential members – and also to policy makers and program agencies. Reputation is everything when competing for new cluster members and resources.

...benchmarking provides policy makers and program agencies with valuable information about cluster performance

The results of benchmarking cannot only be used by cluster managers to demonstrate their achievements to policy makers and program agencies while competing for support. Also policy makers and program agencies benefit from cluster benchmarking as it provides valuable information for the development and implementation of public funding programs. The collaboration between policy makers, program agencies and cluster management organizations in the context of joint benchmarking projects such as the "NGPExcellence – Cluster Excellence in the Nordic Countries, Germany and Poland" provides both sides with information as basis for discussions about the improvement of policies and programs.

What Cluster Managers Say about Our Benchmarking

"The NPG Excellence Project gave us the opportunity to benchmark our cluster organisation with other excellent clusters in Europe. Although the Mechatronics Cluster was rated among the top 10 % of all surveyed cluster organisations, there is still room for improvement as analysed in detail in the final benchmarking report." *Christoph Matthias Reiss-Schmidt, Clusterland Oberösterreich GmbH (Austria)*

"Thank you for this comprehensive and valuable benchmark report. We have already distributed the report amongst our core members and our board, and have received valuable feedback on your recommendations that will influence our future strategy." Peter Black, Director, Offshore Center Danmark (Denmark)

"Thank you very much for the benchmarking report and the competent recommendations that we will put into action. It is really interesting to compare oneself with other clusters in a larger context." *Dr. Jürgen Bauer, Managing Director, Forestry and Wood Cluster Initiative (Germany)*

What Is ESCA?

ESCA is the European Secretariat for Cluster Analysis. Based in Berlin and hosted by the Institute for Innovation and Technology, a research organization affiliated with VDI/VDE Innovation + Technik GmbH, the secretariat supports in particular cluster managers and policy makers with advice on cluster development.

ESCA experts have developed a methodology for cluster benchmarking that has been widely acknowledged in Europe. Since 2007 they have benchmarked more than 250 cluster management organizations. Their latest project, which benchmarked clusters in seven European countries - "NPGExcellence – Cluster Excellence in the Nordic Countries, Germany and Poland" –, has set a new standard for cluster benchmarking in the European Union. Being also involved in the European Clusters Excellence Initiative (ECEI) ESCA experts contribute to the development of tools that support cluster managers on their way to excellence.

Based on their experiences these experts have decided to establish ESCA in order to provide cluster management organizations, policy makers and program agencies with clusterrelated analysis and advice as a one-stop shop.

To contribute to the further development of cluster management organizations and cluster policies and programs ESCA collaborates not only with many cluster management organizations across Europe, but also with the European Commission and government agencies from different European countries such as the German Federal Ministry of Economics and Technology and the Danish Ministry of Science, Technology and Innovation.

Contact

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