

Monitoring and Evaluation of Clusters

Beatrice Negeli-Ganz

3rd International Clustering Conference



Istanbul, 4th December
2008



Content

- * Pöchhacker Innovation Consulting – work experience in the field of clusters and RDT**
- * The Upper Austrian Innovation and Cluster Policy in brief**
- * Clusters and their impact on Innovation Policy**
- * Economic performance of Upper Austria**
- * Monitoring and evaluation of cluster initiatives**
- * Monitoring indicators for cluster initiatives – a broad selection**
- * Key facts for successful monitoring and evaluation of cluster initiatives**

Work experience in the field of Clusters and RDT from 2000 to 2008



- ✳ 2000: **Probing of Upper Austrian industry segments** regarding existing strengths in order to further develop the cluster politics in the region (esp. logistics, textil, and health)
- ✳ 2001: **Feasibility study for the setup of Clusters** in the field of **Medical Engineering** and **Gerontotechnology**
- ✳ 2001 – 2003: Setup and administration of the Upper Austrian **Health Cluster**, **TMG**
- ✳ 2004 – 2007: Project manager for the **EC project CLOE** (“Clusters Linked Over Europe“), **TMG**
- ✳ 2005: Compilation of a **Cluster Management Guide** within the project CLOE, **TMG**
- ✳ 2005 – 2007: Development of **indicator based** benchmarking tools in order to **analyse** the regional **innovation performance**, **TMG**
- ✳ 2008: Forcing of cluster cooperation projects, **Tiroler Zukunftsstiftung**, **PIC**
- ✳ 2008: Evaluation of the **timber cluster** Salzburg, **Government of Salzburg**, **PIC**
- ✳ 2008: Expert monitoring of the kick-off workshop for the **Bavarian Cluster Offensive/ Phase II**, **Bavarian Ministry of Economic Affairs**, **PIC**



Pöchlhammer Innovation Consulting - OUR OFFER

We offer consultancy and monitoring to the **public authorities** as **full demand service providers** for research & development, technology and innovation (**RDTI**), based on our long term experience and expertise in the following fields:

Development of Innovation Programmes

Strengthening of Research Activities

Development of Human Resources

Promotion of Knowledge Intensive Services (KIS)

Cooperation in Clusters and Networks

The Upper Austrian Innovation and Cluster Policy



- * Consequent proactive measures to strengthen innovation since 1998



1998-2003: Strategic Programme „Upper Austria 2000+“

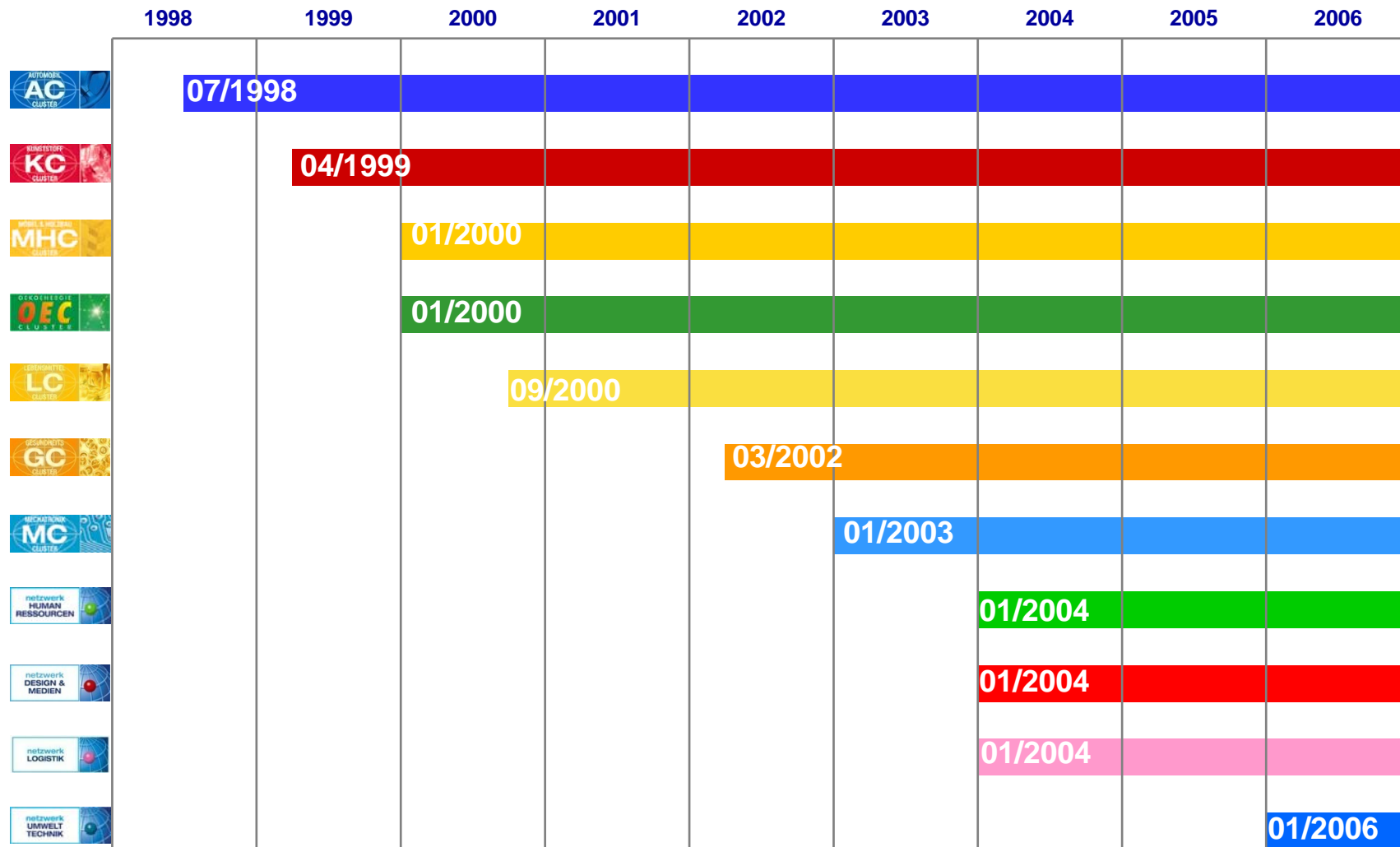
- * Setup of cooperation research structures
- * Establishment of cluster initiatives
- * Education & establishment of university of applied sciences



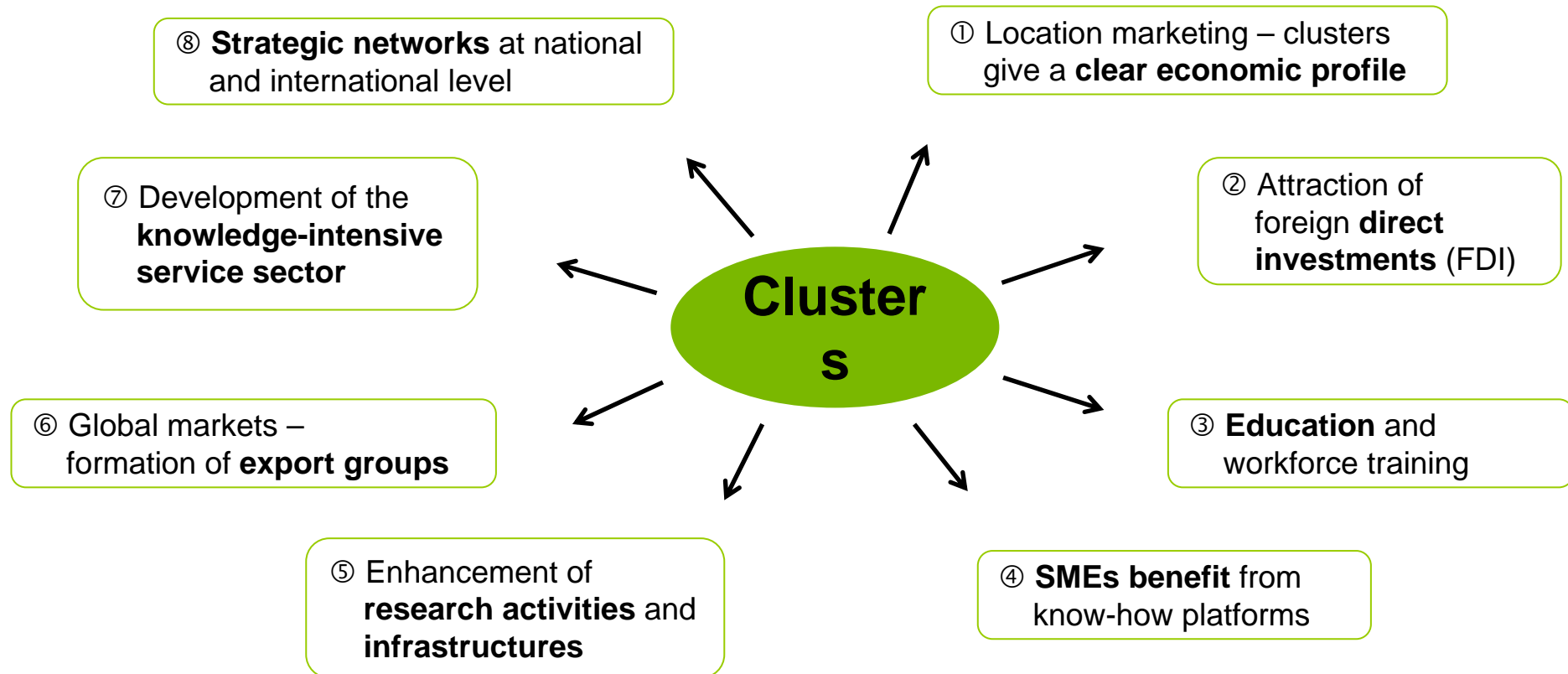
2005-2010: Strategic Programme „Innovative Upper Austria 2010“

- * R&D
- * Professional Qualifications
- * Networks
- * Economic and technology location Upper Austria
- * EU networking

Development of Cluster Initiatives and Networks in Upper Austria



Clusters and their impact on innovation policy






Upper Austria - the most dynamic industrial region of Austria



- * Highest economic **growth** in Austria
- * Lowest **unemployment rate**
- * Strong development in **research & innovation**

Monitoring the economic performance of Upper Austria*

Economic performance	<ul style="list-style-type: none"> • Regional real GDP growth 2007: 3.4% ¹ • 27.7% of all Austrian exports 2007² • Upper Austrian's export rate 2007: 54.5% • Cumulated growth of real gross value added in assets production 1996 - 2007: 49.6%³ 	
Labour market	<ul style="list-style-type: none"> • Highest level of employment 2007: 589.958 / 17.7% of Austria⁴ • Highest level of cumulated employment growth 1998 - 2007: + 71.610 employees • Lowest unemployment rate 2007: 3.6%⁵ 	
R&D activities	<ul style="list-style-type: none"> • R&D rate: 2.55% (prosp. f. 2007) • R&D expenditures 2006: € 965 bn. • R&D company expenditures 2006: € 777 bn. (81 % of total Upper Austria) • Cooperative R&D in Upper Austria: highly dynamic development 	
<ul style="list-style-type: none"> • Granted patents at the Austrian Patent Office: 275 (26,5 % of Austria) 		

Reference: 1 Statistik OÖ (prosp. f. 2007)

2 Inhouse Statistik WKO

3 WIFO

4 Hauptverband der Österreichischen Sozialversicherungsträger - annual average 2007

5 AMS, annual average 2007

Monitoring and Evaluation of cluster initiatives



- * ... is a **basic requirement** for successful **management & strategic development**
- * ... requires an **efficient** monitoring an **evaluation framework in advance**
- * ... needs **measurable indicators** reflecting **strategic goals** in terms of
 - cluster activities
 - cluster resources
 - cluster financing



Cluster Evaluation



- * **systematical** and **objective assessment** of impact and **achievement** of objectives



- * provide important **information** for the **political initiators** and **financers**
 - ➡ statements for legitimating the funding
 - ➡ information on allocations of (public) resources
- * **basis** for **strategic focusing** and **steering** of the cluster initiative

Cluster Monitoring



- * periodically, **regular** series of **observations**
- * show the **extent of compliance** or **degree of deviation** of predefined **objectives**
 - ➡ clarify if there is a need for appropriate action
- * important **basis** for an **evaluation**





Factors of success for cluster initiatives

- ➔ facilitate and accelerate innovations
- ➔ help to bring innovations to market maturity
- ➔ ensuring the long term economic success of companies involved

customers are satisfied

- * Who are the customers?
 - Participating actors e.g. companies, R&D-Organisations,...
- ➔ they provide an economic value added
 - * Satisfaction a of the funding organisation
 - efficient allocation of funding
 - Strengthening the regional competitiveness



Konstantin Gastmann / PIXELIO

Cluster Monitoring – what to observe?



1. **Activities**
2. **Cluster Resources**
3. **Financing**



Indicators for monitoring cluster activities - a broad selection (1/3)



* Information and communication

- number of company visits
- number of newsletter und mailings
- number of clicks on cluster homepage



➡ need for **database** about current and potential **cluster partners**

* Qualification

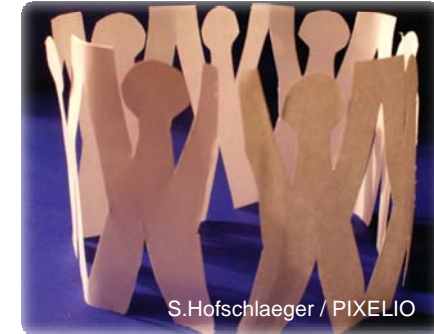
- number of events
- number of participants in these events
- number of domestic and foreign speakers
- analysis of feedback of the participants in these events

Indicators for monitoring cluster activities - a broad selection (2/3)



* Co-operation

- number of **co-operation projects** (draft, pipeline, running, finished)
- number of **companies and R&D institutions** participating in these co-operation projects
- total **project volume**, average project volume per project
- **thematic monitoring** of co-operation projects (R&D-, process- and qualification projects)
- through co-operation projects **achieved national, European and international funding**



Indicators for monitoring cluster activities - a broad selection (3/3)



* Marketing & PR

- number of cluster relevant **press reports**
- number of **articles** in **professional Journals**
- target oriented measures for professional journalists
- number of active participation on domestic and foreign trade fairs
- received delegations



* Internationalisation

- specific measures for **supporting** the **export ability** of the cluster partners
e.g. qualification for access to international markets
- number of involvements in EC projects



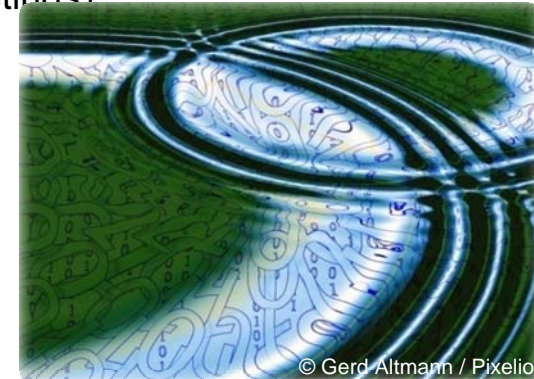
Indicators for monitoring cluster resources - a broad selection

* network capital & dynamics

- number of partner companies and development of this number
- share of domestic and foreign partner companies and development of this share
- share of SME and development of this share
- average R&D rate of partner companies measured by turnover and development of this rate
- Cumulative number of employees of partner companies and development of this number
- Cumulative turnover, R&D expenditures, exports and thier development
- Cluster advisory board - existing? Number of regular meetings?

* Cluster team

- number of cluster employees
- qualification level of the cluster team
- labour fluctuation
- attendance on further education



Indicators for monitoring cluster financing – a broad selection



- * **rate of public and private funding of the cluster initiative**
- * **share of national und international funding**
- * **Composition of private funding**
 - volume of membership fee
 - sale of services revenue
 - sponsoring and other revenues



Key facts for a successful monitoring and evaluation of clusters

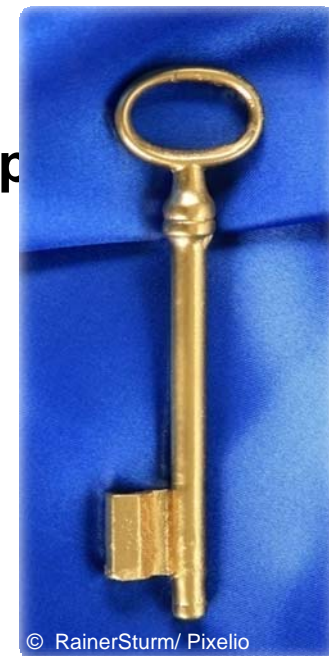


... keep in mind that monitoring indicators should

- * support the **effective compiling** of your **progress reports**
 - ➡ indicate the **benefits** for your **cluster partners**
 - ➡ indicate the **benefits** for **contracting authority**

- * **simple** & comparable

- * **time saving data collection**
 - ➡ provide fast & up-to-date information





Thank you for your attention!



Ing. **BEATRICE NEGELI-GANZ**

Senior Consultant

Pöchhacker Innovation Consulting

Mobil: +43 664 854 4651

beatrice.negeli-ganz@p-ic.at

www.p-ic.at

References Beatrice Negeli-Ganz



Ms. Negeli-Ganz, mechanical engineer, looks back at about **10 years** of intense work

experience in the field of **clusters** and **research, development & technology (RDT)**.

Since July 2008 she is working as a senior consultant for „**PÖCHHACKER Innovation Consulting Ltd**“ where she offers her acquired knowledge and competences in the field of RDT politics on a broad level to public institutions and agencies on a regional, national and international level.

Her core competences comprise the advancement of regional **research and innovation systems**, and the setup and strengthening as well as strategic advancement of **clusters and networks** on a regional, national and European level



- * The consultancy company GERLINDE PÖCHHACKER Innovation Consulting was **formed in March 2008**. It is based in Linz, Austria.
- * Its founder, Gerlinde Pöchhacker-Tröscher is working in **research & development, technology and innovation** for the past **15 years**. She was the general manager of TMG – the regional innovation agency of Upper Austria and is fluent in English, German and French. Her main expertise lies in:
 - ... Location and investors marketing, image campaigns
 - ... Set-up, management of clusters and networks
 - ... Regional strategic programmes – development and implementation
 - ... Management of research and innovation shares
 - ... Further development of innovation areas, esp. through national and European networking
 - ... Participation in national and European RDTI councils
- * Our consultants bring extensive experience to their assignments, all with backgrounds in research & development, technology and innovation.

FIELDS OF EXPERTISE



Performance Analysis	Development and Analysis of Indicator settings for the Performance of Economic areas and RDTI agencies, Theme specific Indicator settings, Trend analysis and Policy proposals
Strategy Development	Development of Single Strategies and Programmes, Design/Monitoring of cooperative Strategy developments, Strategic Enhancement in RDTI organizations
Implementation and Monitoring	Expert monitoring of the Implementation of RDTI Strategies and Programmes, Set-up of Implementation structures and organisations, Monitoring instruments for Contentual elements and for Finance
Communication	Communication strategies and Concepts for RDTI measures, Expert monitoring of research organizations' communication duties
Evaluation	Impact analysis, Evaluation of RDTI measures and programmes, Recommendations for further RDTI measures