# Creativity and innovation in the Upper Rhine region Concepts, activities and projects

#### **Emmanuel Muller**

Bureau d'Economie Théorique et Appliquée (BETA), Université de Strasbourg Fraunhofer-Institut für System- und Innovationsforschung (ISI) Karlsruhe

#### Andrea Zenker

Fraunhofer-Institut für System- und Innovationsforschung (ISI) Karlsruhe

PAMINA Developers' Club 27. Plenary Meeting

Baden-Baden April 12, 2011

> Burg d'éconor théoric et appliqu (Bl uwe:





Creativity and creative industries in the PAMINA region - Introduction, definition, projects -

# Structure

- 1. Short presentation of the French-German **evoREG initiative** and its members: **Fraunhofer ISI** and **BETA** at the Université de Strasbourg
- 2. Innovation, creativity and creative industries: Concepts and definitions
- 3. Ideaslab: Ideas for a creativity lab in Strasbourg short presentation of a project on behalf of the Alsatian Innovation Agency ARI
- Knowledge Angels: Creative persons in knowledge-intensive business services (KIBS) – Selected results of a study in Baden-Württemberg and Alsace
- 5. Summary and outlook







# Short presentation evoREG, Fraunhofer ISI, BETA

#### The French-German evoREG initiative evo <sub>REG</sub> Francais | Deutsch | Contact | Imprint | Prin Emmanuel Muller and Andrea Zenker talking about the future of KIBS research (Conference hold at the University of Padua) 18.03.2011 Emmanuel Muller and Andrea Zenker from the evoREG team give a presentation on the future of KIBS research as guest speakers of the conference entitled Exploring Knowledge Intensive Business Services - Entrepreneurships, Business Models and Knowledge Management Strategies organized by the University of Padua (Italy). Project Downloads Team Members Objectives The evoREG initiative is the result of a common reflection of the Région Alsace (DREST: Direction Recherche, Enseignement Supérieur et Transfert de Technologie), of the Fraunhofer-Institut für Conference System- und Innovationsforschung (ISI), Karlsruhe and of the Bureau d'Economie Théorique et Exploring Knowledge Appliquée (BETA), Strasbourg. More precisely, this reflection expresses the willingness of the regional Intensive Business authorities to reinforce the governance capacity of the Upper Rhine Area in the field of innovation-Services based development policies. This should be achieved by taking advantage of ISI and BETA March 18th - 19th 2011 complementary competencies. University of Padua evoREG is supported by the European Union in the frame of the Upper Rhine INTERREG IV programme Fraunhofer

www.evoREG.eu

- Result of common reflection of Région Alsace, Fraunhofer Institute Systems and Innovation Research ISI, Karlsruhe and Bureau d'Economie Théorique et Appliquée (BETA), Université de Strasbourg
- Think-tank aiming at strengthening the innovation policy governance capacity of the **Upper Rhine Area**
- Supported by Région Alsace and co-funded by European Union (INTERREG IV)







#### Short presentation evoREG, Fraunhofer ISI, BETA 1

# The Fraunhofer Institute for Systems and Innovation Research ISI

#### Mission

- Innovation analyses and recommendations Origin of innovation
  - Main actors in innovation processes
  - Benefits and promotion of innovation
- Evaluation of economic, social, political potentials and limits of technical innovations
- Support for decision-makers in industry, science and politics

# **Key figures**

- About 290 research projects annually in 6 competence centers
- About 180 employees (120 scientists)
- Budget 2009: Approx. € 19 million







# 1 Short presentation evoREG, Fraunhofer ISI, BETA

# The Bureau d'Economie Théorique et Appliquée (BETA), Université de Strasbourg

#### **Mission**

- Innovation research
  - Economic theory of innovation and creativity
  - National and regional systems of innovation
  - Science policy studies
  - Policy evaluation applied to large public programs (typically at European level)
  - Management of innovative and creative projects

# Key facts

- Joint laboratory with CNRS since 1985
- About 120 scientists (approx. 40 professors and associated professors, more than 50 PhD students)







2 Innovation, creativity and creative industries: Concepts and definitions

# Innovation

"An **innovation** is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method inbusiness practices, workplace organisation or external relations." (OSLO Manual, Guidelines for collecting and interpreting innovation data, 3<sup>rd</sup> edition, OECD/ Eurostat 2005, p. 46)

# Creativity

"The ability to produce work that is both *novel* (i.e. original, unexpected) and *appropriate* (i.e. useful, adaptive concerning task constraints)" (Sternberg and Lubart 1999, p. 3)

# **Creative industries**

Broad spectrum of definitions, e.g. :

"Three-sector-model" (Söndermann 2007, cf. notably the Fraunhofer ISI study on the creative park Karlsruhe on behalf of the City of Karlsruhe) to selected sub-segments of the private sector such as the music industry, advertising, books, software and games industry, broadcasting industries, performing arts, etc.







Ideaslab: Ideas for a creativity lab in Strasbourg -3 short presentation of a project on behalf of the Alsatian Innovation Agency ARI

# What is an Ideaslab?

- Place(s) (virtual or not) to create new ideas as base for innovation
- New modes of interaction: (i) integration of science, industry and society, (ii) new forums to meet and discuss, (iii) new ways to anticipate technological trajectories
- Mission: Interlinking a broadened range of actors, common activities, "free space" for articulating creativity

# Possible missions of an Ideaslab in Strasbourg

- Exchange of ideas and experience, detection of opportunities
- Animation: New working methods, new projects, integration of needs
- Anticipation: New societal or technological trends
- Vision: Participative and integrative approach science & society







3 Ideaslab: Ideas for a creativity lab in Strasbourg – short presentation of a project on behalf of the Alsatian Innovation Agency ARI

# Methodology

- Broad participation of regional actors in preparation and design
- International case studies
  Citilab Cornella (Barcelona)
  Social Media Experience and Design Lab (Siegen)
  Société des Arts Technologiques (Montreal)
  MINATEC Grenoble



- Comparative profiles according to key aspects
- Development of key aspects for the Strasbourg Lab to be considered

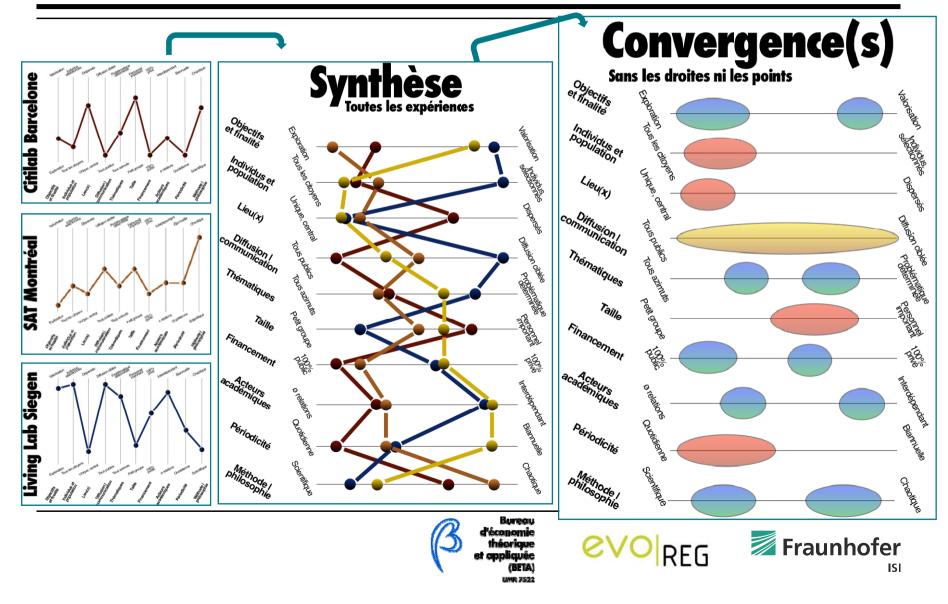








3 Ideaslab: Ideas for a creativity lab in Strasbourg – short presentation of a project on behalf of the Alsatian Innovation Agency ARI



- Knowledge Angels: Creative persons in knowledge-4 intensive business services (KIBS) - Selected results of a study in Baden-Württemberg and Alsace
- **Starting-point:** Innovation in knowledge-intensive business services (KIBS), i.e. service firms for whom knowledge is core asset (consulting, research, technical and engineering services)
- Assumption: Creativity is the fundamental factor leading to competitive advantage in KIBS
- **Research question**: How does knowledge emerge, how is it generated within **KIBS?**
- Focus of the analysis: Creative individuals in KIBS, i.e. persons suspected to play pertinent role for innovativeness of their firm

**Knowledge Angels** Key persons in KIBS' innovation activities, knowledge "catalysts"







Knowledge Angels: Creative persons in knowledge-4 intensive business services (KIBS) - Selected results of a study in Baden-Württemberg and Alsace

# Assumption

Knowledge angels are specific individuals, who: typically act as consultants (but not necessarily exclusively); may have the talent to "sense" things before they happen; make a difference in the way knowledge is created, organized and flowing

# Methodology and analysis

Explorative qualitative research design along 5 key dimensions

Professional and personal background Knowledge access and interaction Problem-solving and vision Business location and environment Corporate frame, enterprise culture

50 in-depth personal interviews in 5 countries: Germany (Baden-Württemberg), France (Alsace, Île-de-France), China (Beijing and Shanghai), Canada (Montreal), Spain (Catalonia)







4 Knowledge Angels: Creative persons in knowledgeintensive business services (KIBS) – Selected results of a study in Baden-Württemberg and Alsace

# Main results France/ Germany

- Hypothesis of creative key persons confirmed
- Solid working experience, professional trajectories: accumulation of knowledge and contacts
- Often (mainly in Alsace) experience in founding own business
- Frequent self perception as knowledge broker (Germany) or idea giver (France)
- Main characteristics of knowledge angels:

Internal and external knowledge intermediaries

Personal capabilities and specific personality traits -> Development of visions

Specific working positions, freedom, capability "to bring the right people together"

Problem-solving through participative approach

Self-motivation, autodidactic learning capabilities, ambition, flexibility, communication skills







Knowledge Angels: Creative persons in knowledge-4 intensive business services (KIBS) - Selected results of a study in Baden-Württemberg and Alsace

Type of angel Characteristics	Business angels	Knowledge angels
Core resources	Money and business experience (and to a lesser extent ideas)	Ideas and visions (and to a lesser extent business experience)
Strongest motivation	"Fun factor" and financial interest (and a willingness to support younger entrepreneurs)	Quest for freedom and self- realization (and a willingness to support co-workers)
Knowledge support	Supporting already existing knowledge creation processes and situations	Initiating new knowledge creation processes and situations







4 Knowledge Angels: Creative persons in knowledgeintensive business services (KIBS) – Selected results of a study in Baden-Württemberg and Alsace

# **Regional perspective**

- Knowledge angels identified in each of the investigated countries
- Specific characteristics influenced by cultural context
- Satisfied with their location. Locational decision often due to educational and personal trajectories of founder, partly to markets and networks
- Interviewees in France and Germany state their success and creativity could also have been generated elsewhere
- High importance of qualification and skills of employees







# 5 Summary and outlook

#### The analyses showed

- High and increasing importance of knowledge and creativity for innovation and competitiveness
- Different aspects of creativity: Individual level, level of economic and innovative relations, sectoral level
- Further focus on creativity increases innovative potentials of firms and economies

# **On-going and future projects (BETA and Fraunhofer ISI)**

- Accompanying studies for the CluE (transborder creative industries cluster Upper Rhine) project
- EvaRIO : methodological development devoted to the measurement of the impact of research infrastructures on regional creativity
- Happynomics, innovation and creativity







# Thank you for your attention!

Emmanuel.Muller@isi.fraunhofer.de Andrea.Zenker@isi.fraunhofer.de





