

Open Innovation for Entrepreneurs in Central European Region

Robert Freund, Christos Chatzopoulos,
Alexander Tsigkas, Zoran Anisic

MASS CUSTOMIZATION AND OPEN INNOVATION MC-OI NETWORK

Robert
Freund

MAIBIS eG, Mannheim Institute of
Business Intelligence and
Security, Germany
info@robertfreund.de



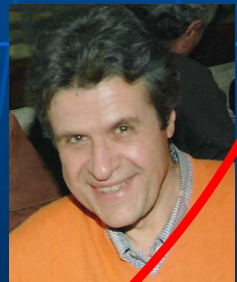
Christos
Chatzopoulos

School of Engineering, Production
Engineering & Management,
Xanthi, Hellenic Republic
cchatzop@gmail.com



Alexander
Tsigkas

School of Engineering, Production
Engineering & Management,
Xanthi, Hellenic Republic
ATsigkas@leonardo-group.com



Zoran
Anisic

Faculty of Technical Sciences,
Novi Sad, Serbia,
azoran@vts.su.ac.yu





Innovation plays a key role in business success. One of the main reasons cited for exit of firms is the inability of firms to innovate.

Main findings of a survey (Schrör 2008:1) on the “**Factors of Business Success**” (carried out by 15 Member States BG, CZ, DK, EE, FR, IT, LV, LT, LU, AT, PT, RO, SI, SK and SE) are:

- Product innovation is the most common type of innovation among successful entrepreneurs.
- Product innovation is also the most common type of innovation in industry; marketing innovation was most common in trade.
- Experience in management and in the economic sector play a positive role in innovation.
- Younger entrepreneurs seem to be more innovative and feel more optimistic about the future of their business than older ones.
- Enterprises that are active in product innovation tend to have higher growth in the number of employees than other enterprises.

But today the question is not, why innovation is important. The focus instead lies on **how to innovate** and how to manage the innovation process.

According to the European Commission (2004: 23-24) we have innovation derived from:

- science (technology push),
- market needs (market pull),
- linkages between actors in markets,
- technological networks and
- social networks.

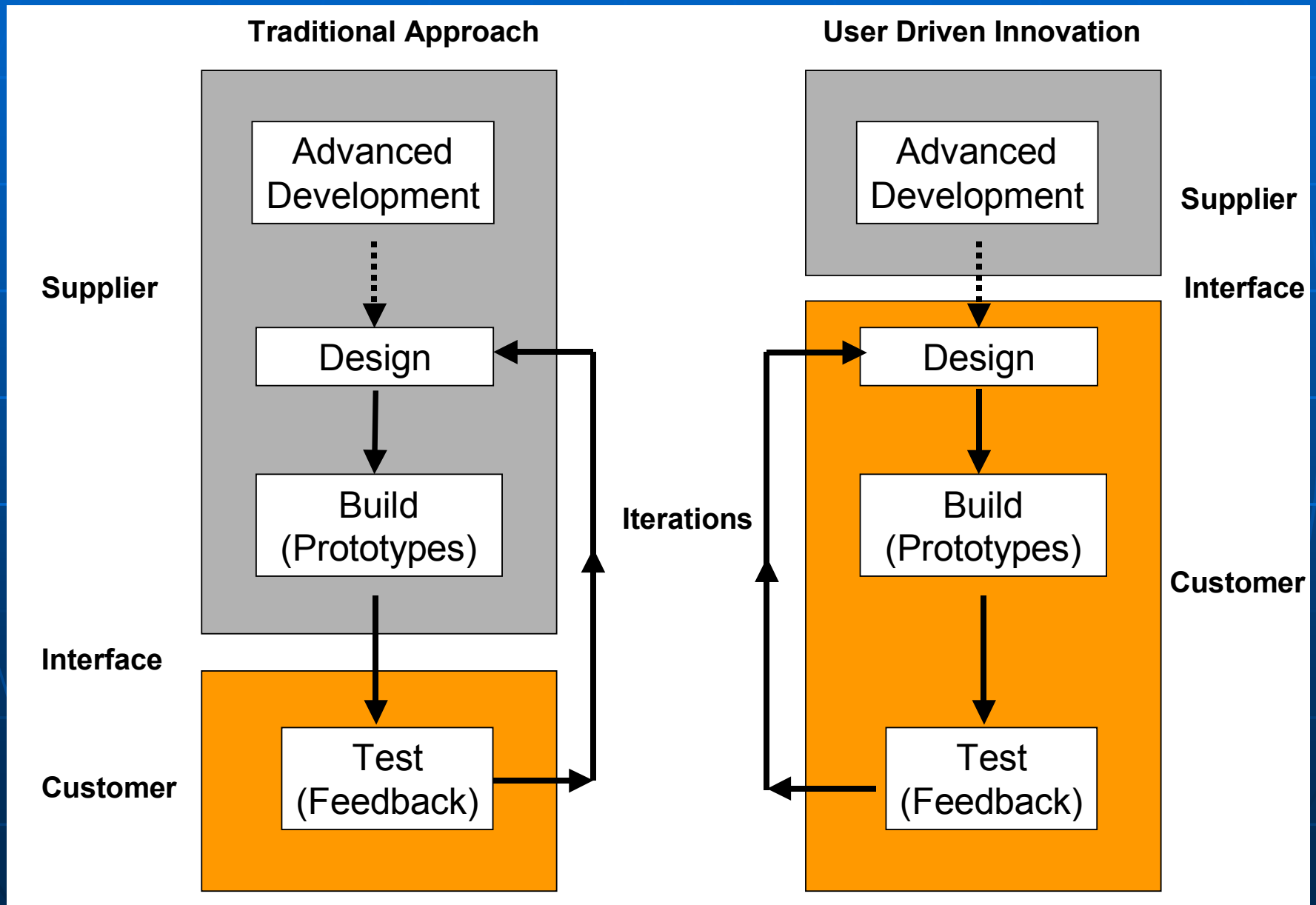
The ability of firms to innovate depends on their networks with other firms and actors. Massey et al (1992) have identified **five differences** between the linear and the interactive model of innovation:

1. There is not just one process of innovation from research to commercialization;
2. Basic research is not the only initiator stage.
3. Research results are used in one form or another, at all stages of the innovation process.
4. The relationship between basic research and commercialization is too complex to be understood as a straight-line relationship. There are feedback loops at all stages.
5. The linear model reduces the contribution of the people involved in innovation, to only the first stages, while the interactive model makes it clear that innovation can take place in all stages and by different professions involved.

“In the old model of *closed innovation*, firms relied on the assumption that innovation processes need to be controlled by the company – it was based on self-reliance.

- **Open Innovation** was first proposed by Chesbrough who defines Open Innovation as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.
- **Open Innovation** is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology”

Closed Innovation and Open Innovation

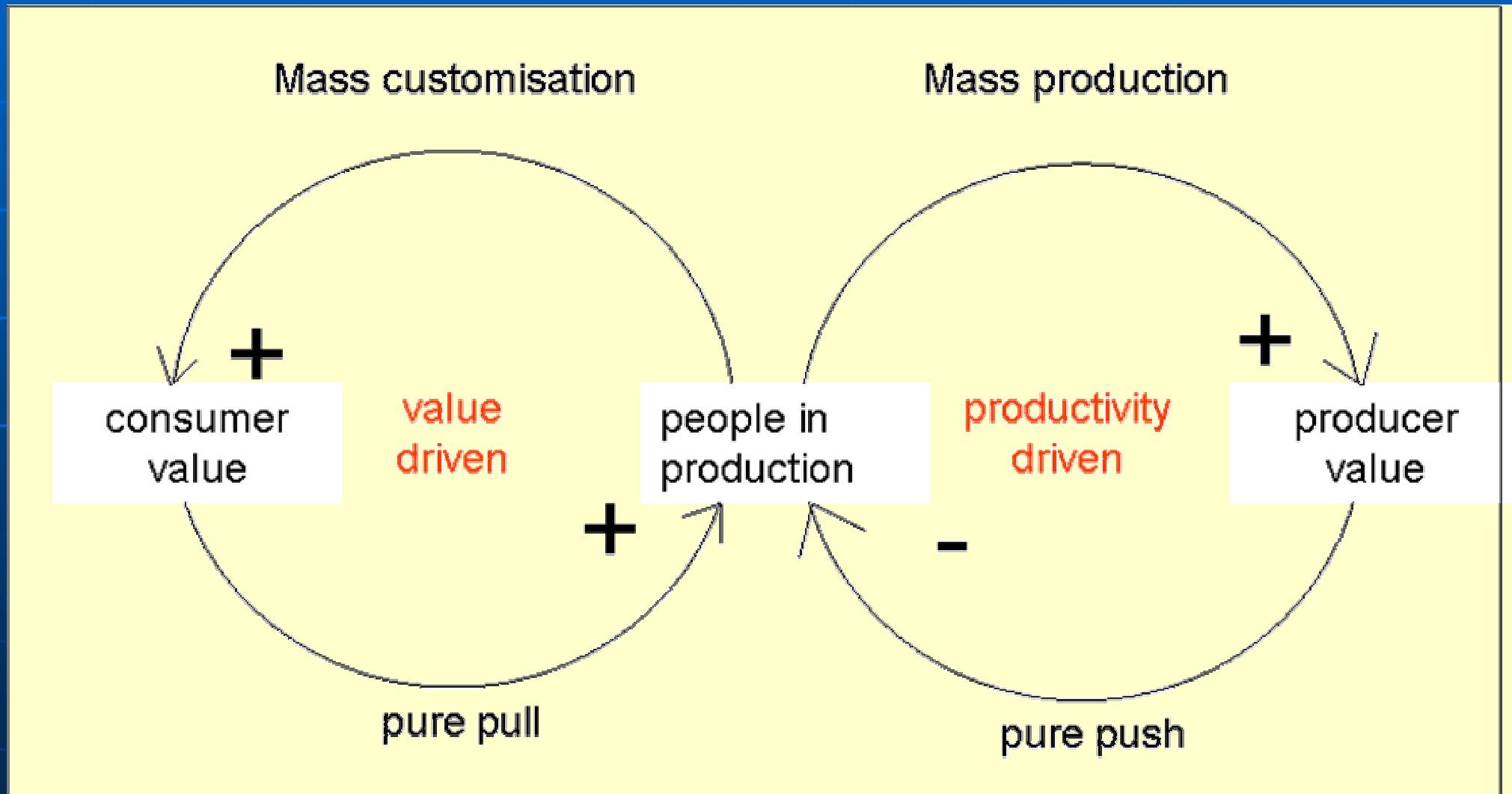


- The Open Innovation works from external ideas and knowledge in conjunction with the internal research and development activities. This bidirectional relationship offers new ways to create value.
- The existence of many smart people outside a company is not a regrettable problem for the prosperity of the company. It indicates also an opportunity for the company.
- It becomes a value creation engine, value according to the customers, so it is essential for a company to learn from its customers.

- Successful open innovation also depends on the open character of the **business model**.
- During the last 15 years, many companies have the tension to recruit in their services other companies, which are responsible for the consultancy sector in the frontiers.
- This trend is necessary for the growth of the company's economy, because of the research and development activities that every enterprise looking for.
- That new way of evolution, giving access to scientists, experts, etc, into the company for the purpose of improvement, is a kind of Open Innovation.)
- Science, technology and innovation policies can no longer be designed solely in a national context.
- Alliances and open innovation systems might facilitate the diffusion of knowledge over firms and within firms much better, adding to the chances of recombining mature and emergent knowledge

- Closed Innovation is tightly related to Mass production, while **Open Innovation** is strongly related to the **Mass Customization**, the production system in the future.
- Although innovation has traditionally been driven by companies, in the future innovation will enjoy more democracy.
- **Mass customization** will allow more and more people to use technology for combining consumer needs with technology to achieve a new quality of self-fulfillment.
- This production system will be characterized through the interaction of two competitive feedback loops
- Although these loops are competing against each other, in reality they refer to **two different world views** in economical and technological terms

The post-industrial production system



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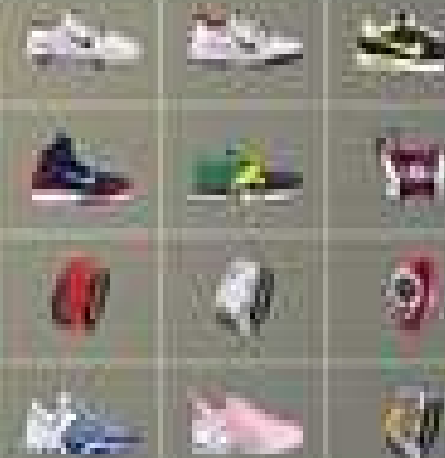
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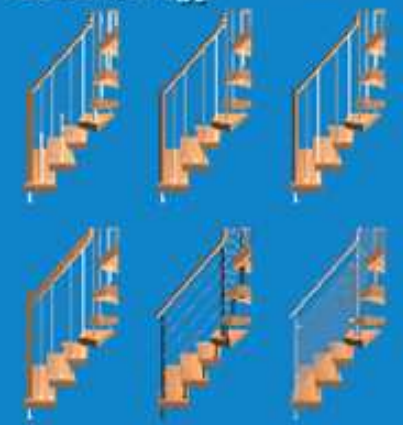
Ambiente



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Bolzenvariante



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Mass Customization Concepts and Projects in Architecture



Figure 1: The new expressive architecture of Frank Gehry, SHoP Architects and Bernhard Franken.

- The third wave of mass customization is happening now: It is driven by companies like Ponoko, Zazzle, Spreadshirt, Lulu, Shapeways, and many others, which offer design, manufacturing, and retail capacity to everyone.
- So in this third stage, people are not just customizing to fulfill their own needs, but to create (micro) niche markets and serve them efficiently.



Shop

"We've handpicked you some of our favorites..."



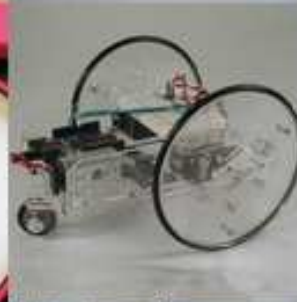
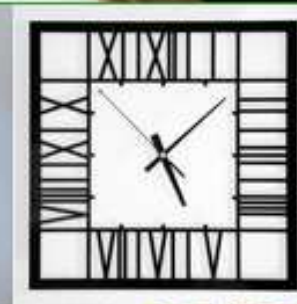
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Open Living Labs

- Entrepreneurs in central European region can benefit from this trend and develop their own open innovation success story.
- A “Living Lab” is about experimentation and co-creation with real users in real life environments, where users together with researchers, firms and public institutions look together for new solutions, new products, new services or new business models.
- “Living Labs” are also about societal involvement, about promoting innovation in a societal basis, involving academia, SMEs, public institutions and large companies in an Open Innovation process that because happens in real environments has an immediate impact.

OpenLivingLabs

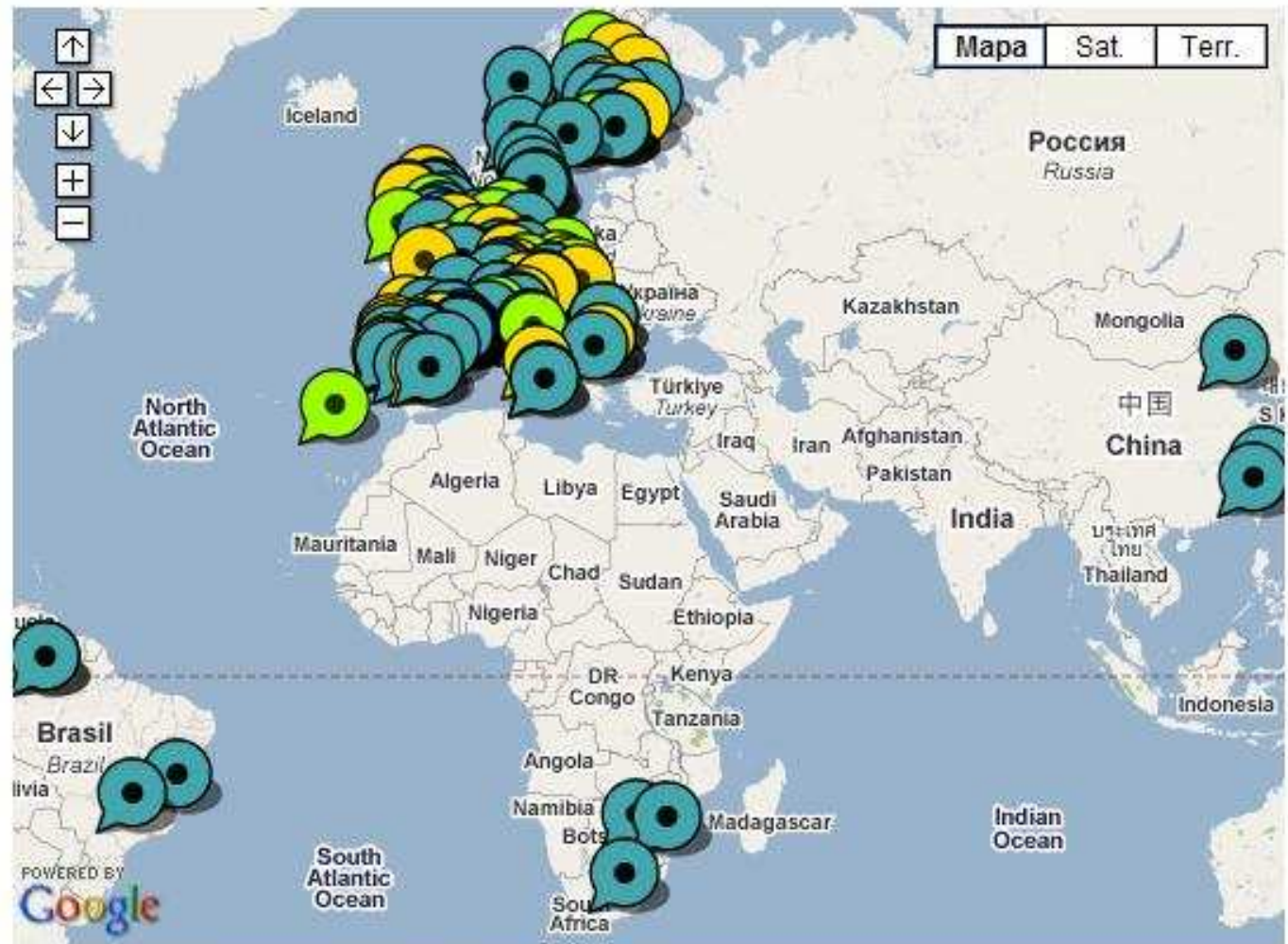
European Network of Living Labs - a first step towards a new Innovation System!

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What is a Living Lab?

- Continuous product and process innovations are prerequisites for sustainable competitiveness of both **nations and regions**.
- The fact that in Europe research, technology and innovation policies are no longer exclusively in the hands of national authorities and that the national initiatives are supplemented by **regional innovation policies or transnational programmes**, the activities of the EU reinforce the importance of the territorial dimension of research and innovation across Europe.
- The challenge facing the Union is to **unlock regional potential** *wherever it might be located* and to harness this to support economic growth at both a regional and European scale.
- This has implications for both the prosperity of the regions and for the overall competitiveness of the European economy.

The following European Commission's definition of regional innovation system as a basis for this work will be used: "*A regional innovation system involves a range of actors and resources interacting effectively with a view to stimulating innovation in the region*". Such a system should facilitate:

- Identification of the **infrastructures** available and the regional sources of knowledge and expertise;
- **Access to services** in relation to finance, exchange of experience, exploitation of knowledge (development agencies, chambers of commerce, foresight bodies, risk capital funds, etc.);
- Effective **transfers of competences and cooperation** between the different regional development actors."

According to OECD (2008) [14], a global national and regional open innovation system should support:

- Universities and public research organizations
- World-class clusters and networks
- Sharing intellectual property
- Investing in people and fostering cross-functionality and mobility and a “culture of innovation”
- Open innovation stresses the broad characteristics of innovation
- National R&D programmers need to be more open
- Building a strong knowledge base is necessary to develop next-generation innovation policies and best practices.

Von Hippel showed, how to start a national user-centred innovation program:

- Staff some professorships in top institutes to make leading specialists in user-centered innovation available.
- Set up a program to fund research and diffusion efforts in user-centered innovation.
- Professors and firms should set up a collaborative academics/industry Lab that develops tests and diffuses best practices in user-centered innovation.
- Adapt government innovation policies to support user-centered innovation.
- Support development of collaborative innovation tools and standard setting.
- Support users' rights to modify standard products.