Industrial Forum 2007

Co-Creative Innovation
In Service-product development
&
Solutions for creation and managing collaborative clusters

3rd - 4th December 2007

Conference Centre Jolly Hotel Leonardo Da Vinci
Via Dei Gracchi, 324 - Rome

Roberto Santoro President
Professional Association, with a legal personality recognised by the Italian Government (filed in the “Registro Ufficiale delle Organizzazioni non-profit”)

International constituency. More than 500 members, mostly throughout Europe (ICT, Engineering Management, Legal…)

Mission: to share and develop the Body of Knowledge of the emerging discipline of “Collaborative Enterprising - Concurrent Innovation” as well as to act as catalyst for its industrial adoption

Status for European Commission project under FP7 Non Profit Research Organization
## initiatives in EU programmes 2007-2008

| **INNOFIT** (Support Action) Regions of Knowledge- Mobilising/mentoring European Regional Space/Sat Nav clusters  
Contract to start early 2008 |
|---|
| **COIN (Integrated Project) Objective**  
ICT in support of the networked enterprise  
Starting Jan 2008 |
| **CO-LLABS** CIP-ICT-PSP Thematic Network  
Living Labs as a potential thematic network for policy  
Proposal submitted in September 2007 |
| **FP7 – next ICT and NMP Calls** |
| **NMP-2008- open 30/11/2007 – Theme 4 -3.1-1**  
Transformation strategies for SMEs in turbulent global market environment  
**submission 6/03/2008** |
| **ICT Call 3 to be open december 2007**  
Planned funding for Living Labs as research infrastructure  
Estimated submission april 2008 |
ESoCE NET KBS Metamorphosis

Social

2007

2004

1994

Business

Knowledge
3-4 December 2007 Workshop Program
Co-Creative Innovation in CNOs and LLABs

3° Dec, Monday workshops
- Collaborative Framework for CNOs (governance business model and ICT)
- Creative innovation (ideation, connection and evaluation space)
- Synergies in the ENOLL for Innovation - Frascati LLAB approach

3° Dec, Monday plenary: Current Practice and VISION 2020

3° Dec, Monday workshops
- Collaborative Framework for CNOs (governance business model and ICT)
- Creative innovation (ideation, connection and evaluation space)
- Synergies in the ENOLL for Innovation - Frascati LLAB approach

4° Dec, Tuesday workshops
- Multipliers training: Design and set up of CNOs

WWW.ESOCE.NET
Rsantoro@esoce.net
Visions

Since 2002:
SkyDome into the future of Collaborative Enterprise

A Roadmap towards Collaborative Enterprise & PSO Engineering

ESoCNET

Concurrent Enterprise Network of Excellence
www.ESoCNET.org
www.esocnet.org
Best in class corporations are currently perceiving that they are approaching a limit of their innovation potential within current organizational structures. Technology is not solving societal issues.

A copernican revolution is required where the individuals breaks out of the company borders and a network of knowledge worker peers (professional community) become the center of the organizational constellation. Citizens mobilize to influence technology.

The breakthrough concept is to create an entanglement between the network of individuals and the organizations, unleashing the power of collective intelligence in an open innovation environment.

The Living Lab is an “ICT enabled open innovation functional region” empowering the citizens and the professionals of the region, in their real life social settings, to perceive, create and validating innovations solving pressing societal issues in an open collaboration with Industry, Academy and Public Institutions.

WHY

WHAT

HOW

WHERE
Concurrent Innovation

Product Process Organization and “i”

The Concurrent Innovation is proposed as a systematic approach for managing innovation cycles, from the generation of new ideas to the large deployment of new products/services, activating the full potential of the collective intelligence of collaborating individuals in a societal context.
<table>
<thead>
<tr>
<th>Paradigm</th>
<th>Key features</th>
<th>Scope</th>
<th>Strategic objectives</th>
<th>Models, practices and tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concurrent Engineering</td>
<td>• Cooperation</td>
<td>Product lifecycle</td>
<td>Product Focus</td>
<td>Product/service Model</td>
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<tr>
<td></td>
<td>• Shared Knowledge</td>
<td></td>
<td>Increase efficiency (time, cost) of the product/service development process for</td>
<td>Intra-organizational and co-located teams</td>
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<td></td>
<td>• Problem Structuring</td>
<td></td>
<td>competitiveness</td>
<td>Multidisciplinary integration of technical disciplines</td>
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<td>Extended Enterprise</td>
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<td>Sub-Contract based IPR transfer</td>
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<td>Integrated (centralized) ICT systems</td>
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<tr>
<td>Concurrent Entering</td>
<td>• Collaboration</td>
<td>Market opportunity lifecycle</td>
<td>Organization Focus</td>
<td>Organization Network Model</td>
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<tr>
<td>Virtual Enterprise Networks</td>
<td>• Shared risk</td>
<td></td>
<td>Increase organization effectiveness in the competitive environment for business</td>
<td>Inter-organizational and distributed teams</td>
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<tr>
<td></td>
<td>• Problem definition</td>
<td></td>
<td>sustainability</td>
<td>Multidisciplinary integration of technical, organizational and business disciplines</td>
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<td>Agreement based IPR distribution among organizations</td>
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<td>Service-based distributed ICT system</td>
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<tr>
<td>Concurrent Innovation</td>
<td>• Co-creation</td>
<td>Social innovation lifecycle</td>
<td>Human focus</td>
<td>Social Network Model</td>
</tr>
<tr>
<td>Open Social Networks</td>
<td>• Shared intent</td>
<td></td>
<td>Increase creativity through realization of collective intelligence</td>
<td>Dispersed teams (time, space and organizationally)</td>
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<tr>
<td></td>
<td>• Problem identification</td>
<td></td>
<td></td>
<td>Multidisciplinary integration extended also to social and cognitive sciences</td>
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<td>Tracking-based IPR allocation among individuals – creative commons</td>
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<td>ICT system supporting Ambient Innovation</td>
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</tbody>
</table>
The evolution of new product service development

Concurrent Engineering Activity-centered concurrency

Virtual Enterprising Organizational-centered concurrency

Concurrent Innovation Social Network-centered concurrency

Concurrency, entanglement & Intensity of Interaction

Complexity & Openness

Triggering factors
- Shrinking of product LC
- Product complexity
- Talents dispersion

Multi-disciplinary TEAM

Inter-company Integrated Development TEAM

Self-organized task team
Virtual Integrated Brain
Emerging entities and paradigm

Post Mass Production
Journal of Manufacturing Technology Management,
Volume 18 Issue 8 2007
Prof. Dr.-Ing. Hermann Kühnle
(Ref. ESoCE Net White Paper on CI)

Key strategic elements for socio-economic development

• Human potential and creativity deployment
  – collective intelligence
• Collaborative working freed of organizational constraint
  – “fluid” networked organization
• Innovation mechanism based on new societal interaction patterns
  – co-creative innovation
• Deployment of ICT potential
The KBS Virtual Community

Association of “individuals” (knowledge workers) identified by a specific knowledge scope with an explicit business orientation.

The PVC members’ interaction is optimized by the synergic use of ICT-mediated and face-to-face mechanisms.
Open Innovation
Functional Region Scenario

Regional Cluster Industry and Research Entities

Territory Social Settings

LL Collaborative Infrastructure

Living Lab Community

VPC
University

Company

Research Centre

LL client

New product/service Co-creation

Social Community

ESoCNET
Co-Creating Access and Inclusion
WikiCity Rome
Emerging Worlds

- ICE LLAB Your ICE TEAM FOR CONCURRENT INNOVATION
- Virtual-Real products and services in Virtual Living Labs
# Concurrent Innovation: VISION 2020

<table>
<thead>
<tr>
<th>Statement</th>
<th>Credibility</th>
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<tbody>
<tr>
<td>By 2020 most Knowledge workers and Citizens belong to Virtual Communities and most companies belong to Collaborative Networks</td>
<td>?</td>
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<tr>
<td>By 2020 most Product and services are co-created with a strong user led collective innovation approach (LivingLabbing)</td>
<td>?</td>
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<tr>
<td>By 2020 most virtual-real Product Services are co-created in Virtual worlds LLABS (VivingLabbing)</td>
<td>?</td>
</tr>
</tbody>
</table>

Assign a credibility statement:
- Probably (P)
- Uncertain (U)
- Not-likely (N)
Key enablers for the Vision 2020

Most business entities adopt human centric collaborative open innovation system:
extended Value systems for enterprise competitiveness, explicitly including the social dimension
Organizational settings in order to exploit multidiscipline contamination and unstructured knowledge
New Compensations schemes and Business Models allowing a free interplay among traditional business entities, collaborative networks, professionals communities and citizens’ organization

ICT systems enable ubiquitous, intelligent and emotional virtual interaction:
Ambient intelligence to allow ubiquitous interaction and e-inclusion of people
Realization of Collective Intelligence through augmented human interaction in virtual worlds
On demand collaborative spaces for peer-to-peer interaction

Policy and regulations. New social pact “flexibility for greater rewards”
Labor Law and Social Institutions accommodating for flexible arrangements to allow individuals to work at the same time for Companies and Professional Communities
IPR Law accommodates for recognition and protection of IPR collaboratively generated in “Open Innovation” systems
New legal forms (such as VEN Ltd., VPC Ltd., LL Ltd.) accommodates the specificities of the emerging collaborative networked organizations

Communities of Knowledge Workers and Citizens are recognized as Key drivers for Innovation