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Knowledge Transfer and Management in Networked Open Innovation Environments: Innovation Management from the Viewpoint of a Company

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User Participation in Innovation

-globalisation, democratisation of knowledge and extensive utilisation of developed ICTs enables users to demonstrate increased power and influence over the content of available products and services

-paradigm shift for the business sector widely acknowledged

-autonomous activities of single organizations cannot produce those radical, cross-disciplinary and architectural innovations required to respond to customer > networked approach thus become important

Innovation Networks

-innovation networks with other companies, the academia and public organizations are emerging; at best even processes to gather user input

-still only few companies can capitalize on the user generated data

-systemic way to assess the economic and organizational value of open source development and external intellectual assets in their operating environment still waits to be developed

-challenge further emphasized by enormous quantities and lack of structure of the data

-need for sustainable mechanisms, concepts and models for knowledge management and transfer, as well as for the classification and synthesis of various data inputs is recognized

Conceptual Framework for Knowledge Transfer, Classification and Management Models from Different Viewpoints

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-framework proposed based on recent EC funded projects regarding innovation (Collaboration@Rural, Target, COLLABS)

-conceptual framework for knowledge transfer, classification and management in collaborative open innovation environments

-framework explores the knowledge transfer and management models from various viewpoints

-focuses on:

1) knowledge categories and management
2) bridging knowledge and innovation
3) partners and phases of innovation in networked open innovation environments

1) Knowledge Categories and Management:
Samuelson's Public Goods Theory Applied in the Context of Knowledge

-Samuelson's theory re-discovered e.g. by Lanzara & Morner (2005)
-different types of knowledge > different ways to manage its creation, storage and transfer

-access and reusability / access and control

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1) Knowledge Categories and Management:
Samuelson's Public Goods Theory Applied:
-managing creation, storage and transfer

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	Excludable	Non-excludable
Rivalrous (cannot be reused)	PRIVATE GOODS - - - - - Knowledge encapsulated in corporate products and services, tacit knowledge (companies have access and control over this type of knowledge)	COMMON GOODS - - - - - Non-reusable open access knowledge (companies have access but no control over this type of knowledge)
Non-rivalrous (can be reused)	CLUB GOODS - - - - - Re-usable expert knowledge, e.g. collaborative open innovation networks (companies have access but often only limited control over this type of knowledge)	PUBLIC GOODS - - - - - Re-usable open access knowledge (companies have access but no control over this type of knowledge; they may, however, want to push for certain knowledge to be used widely)

2) Bridging Knowledge and Innovation

-company's value increasingly determined by intangible knowledge assets and future potential as opposite to past performance

-organizational ability to manage and create value and innovations of knowledge and information at it's disposal becomes increasingly important

-applying Marchland, Kettinger and Rollins Information orientation model to study the effectiveness of usage of user generated data in product and service innovations

Information behaviours and values (IBV),
Information management practices (IMP) and
Information technology practices (ITP)

-our focus on Information management practices (IMP) i.e. a company's ability to sense, collect, organize, process, and maintain information effectively over its' life cycle

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2) Bridging Knowledge and Innovation: Information Management Practices

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1. Learning organizations: putting together the processes, structures and behavioural routines which together institutionalise the process of knowledge generation, sharing and capture

2. Organization designs that enable high levels of creativity but also take into account task focus

3. Creative climate: a positive approach to creative ideas, supported by relevant reward systems which recognize and value creativity

4. The role of key individuals who by virtue of their position, knowledge, experience or enthusiasm contribute energy and direction to the innovation process

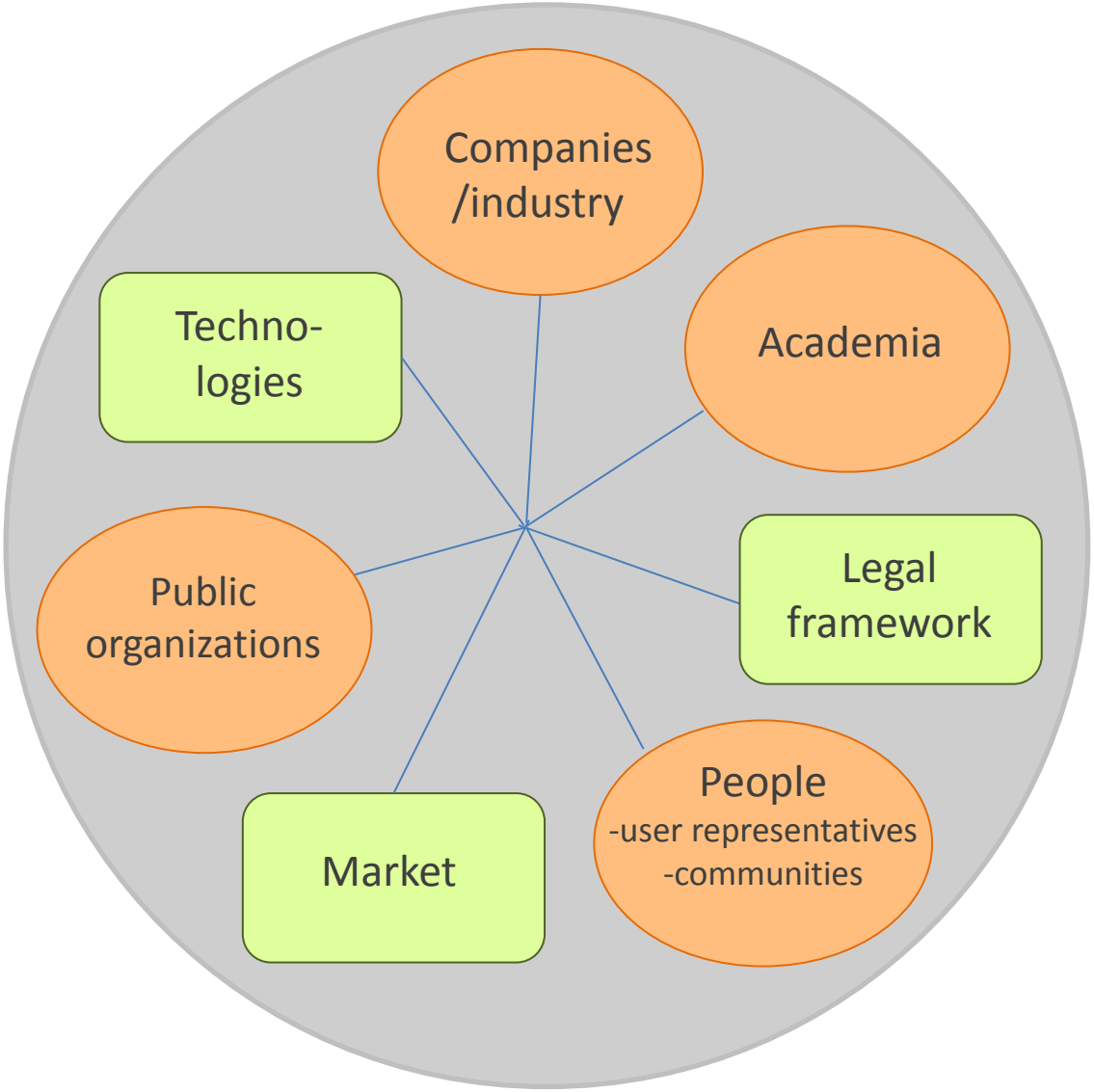
5. Effective team working, team selection and development to ensure high performance

6. Extensive communication within and between levels and with the 'outside world' as well as internally

7. High involvement in innovation: enabling participation in the innovation process.

8. User focus: an orientation internally and externally towards the demands and requirements of users as a driver for product, service and process improvement

3) Partners and Phases of Innovation in Networked, Open Innovation Environments: Partners and Factors



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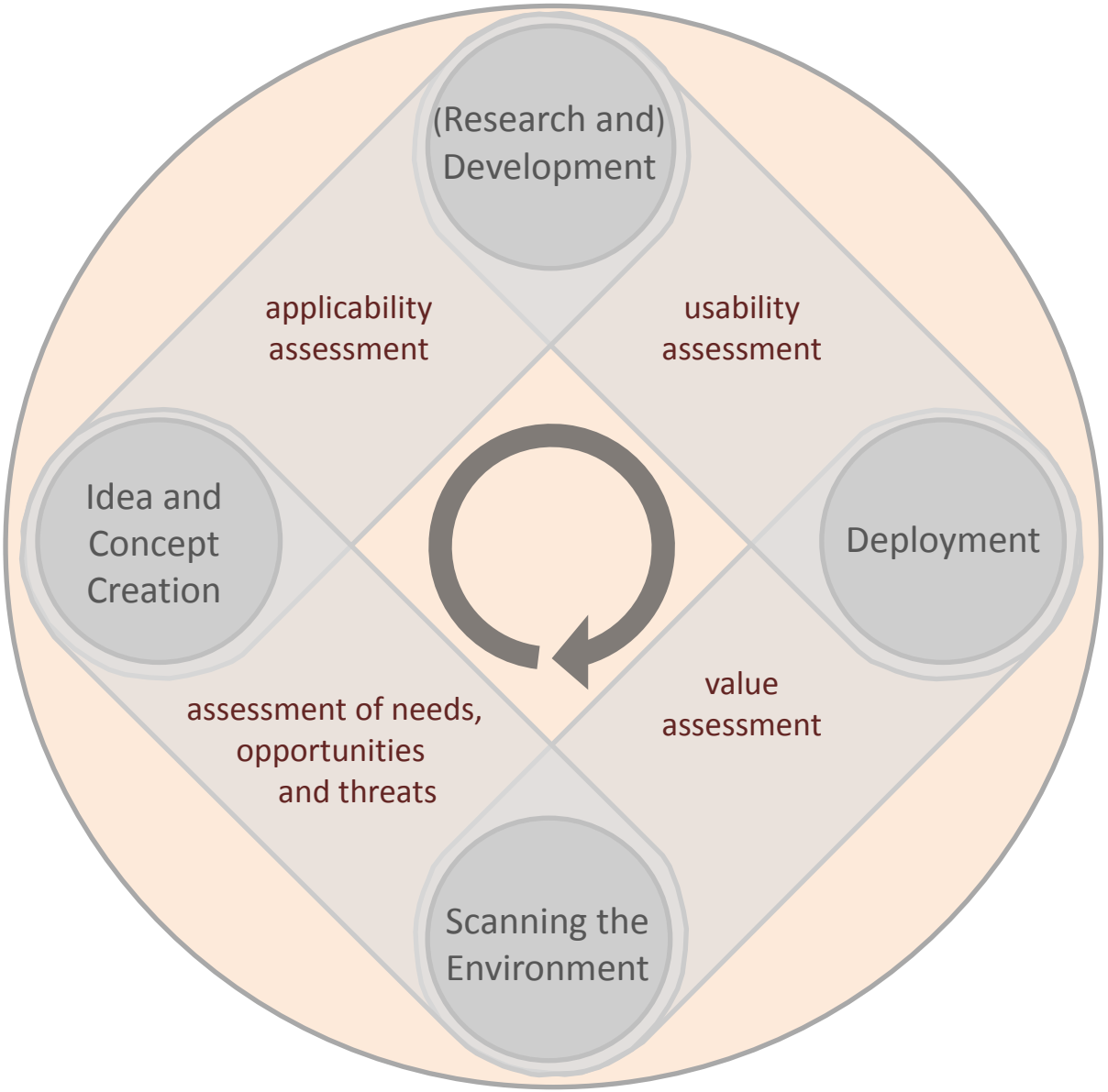
3) Partners and Phases of Innovation in Networked, Open Innovation Environments: Cyclic Model



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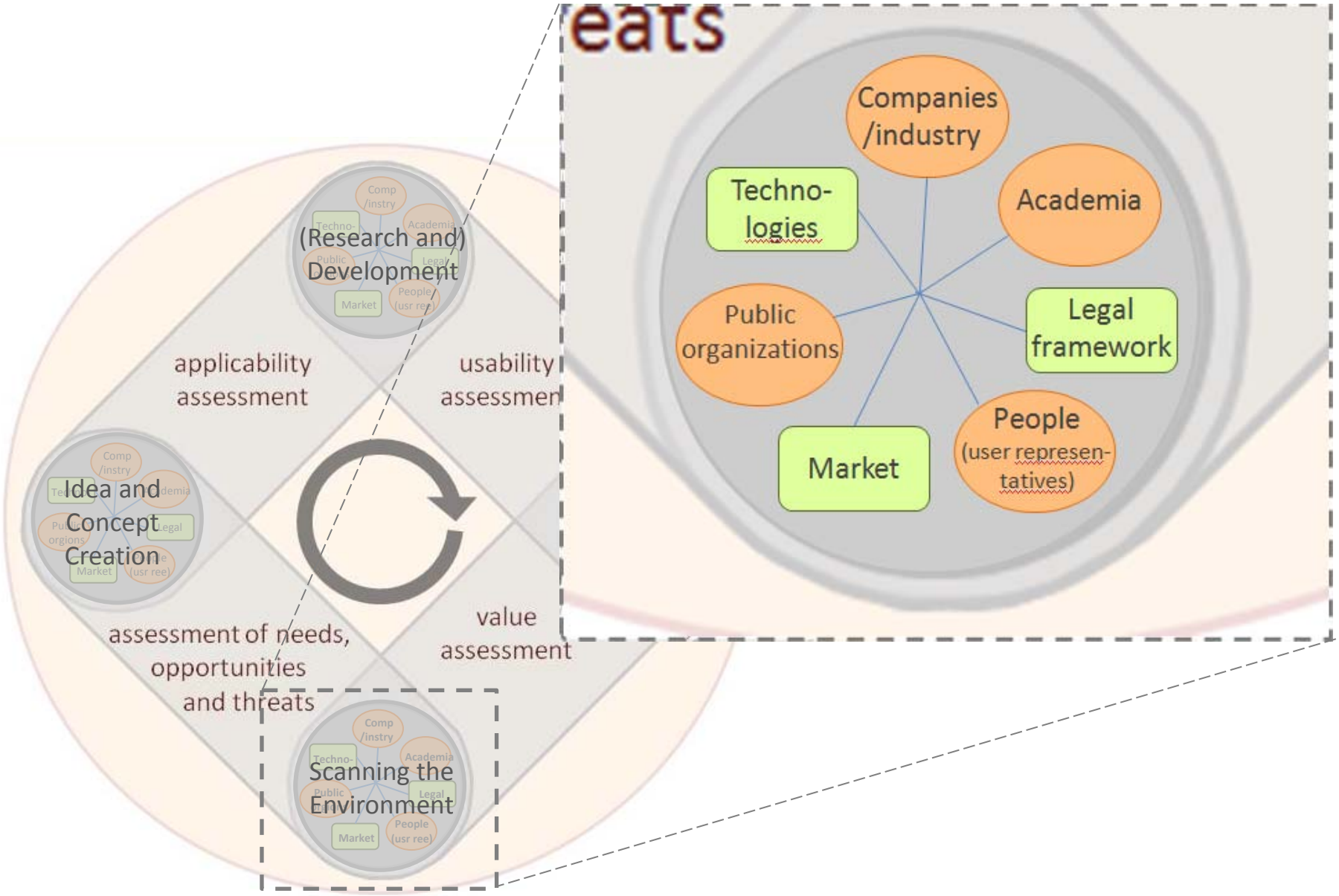
3) Partners and Phases of Innovation in Networked, Open Innovation Environments: Cyclic Model



Impact of Innovation – Impact Layers

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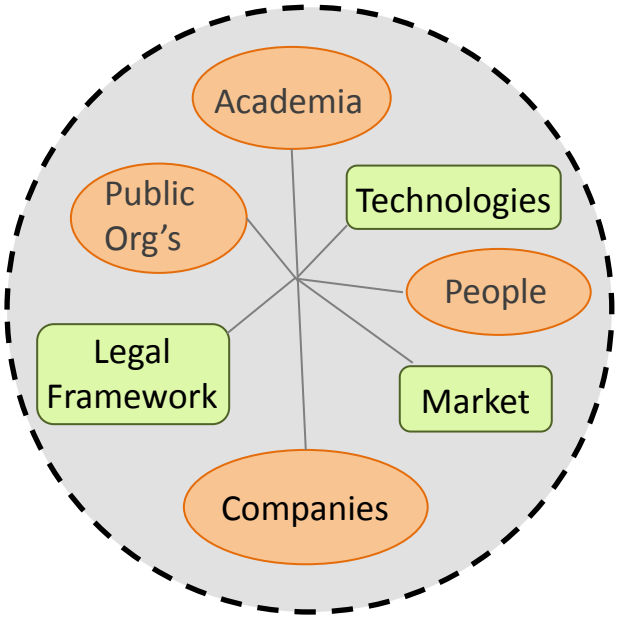
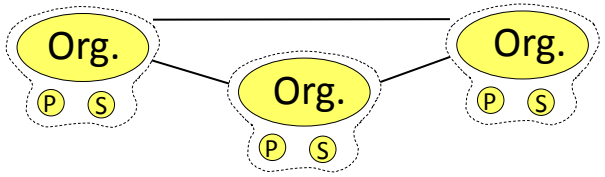
Systems



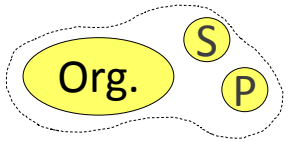
Networks

-public and/or private



Organizations

-public and/or private



Products & Services

Future Research Goal: Focus on Networks and Systems

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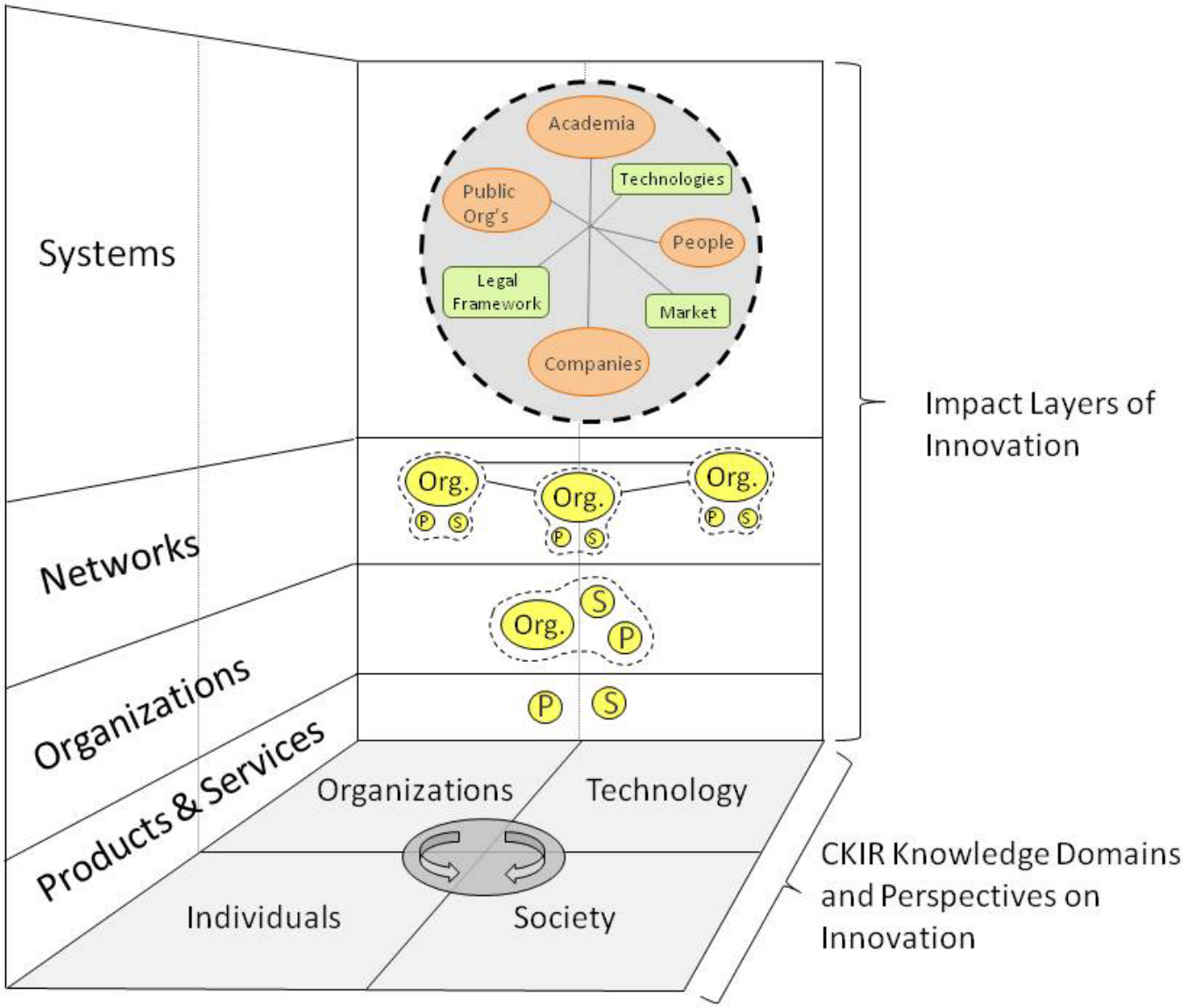

Future Research Goals: Why Network and System Layer?

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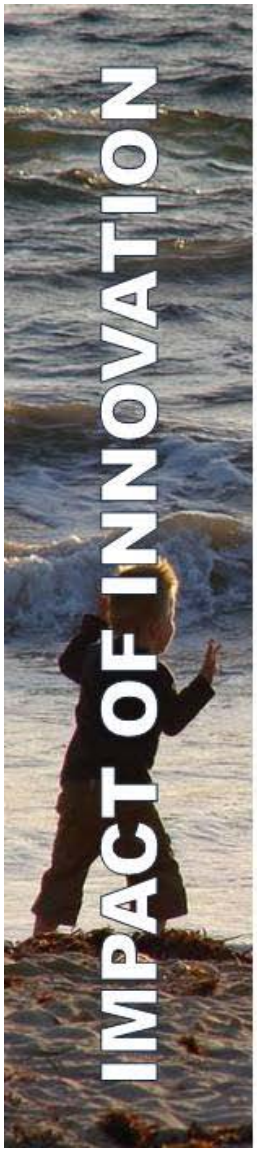

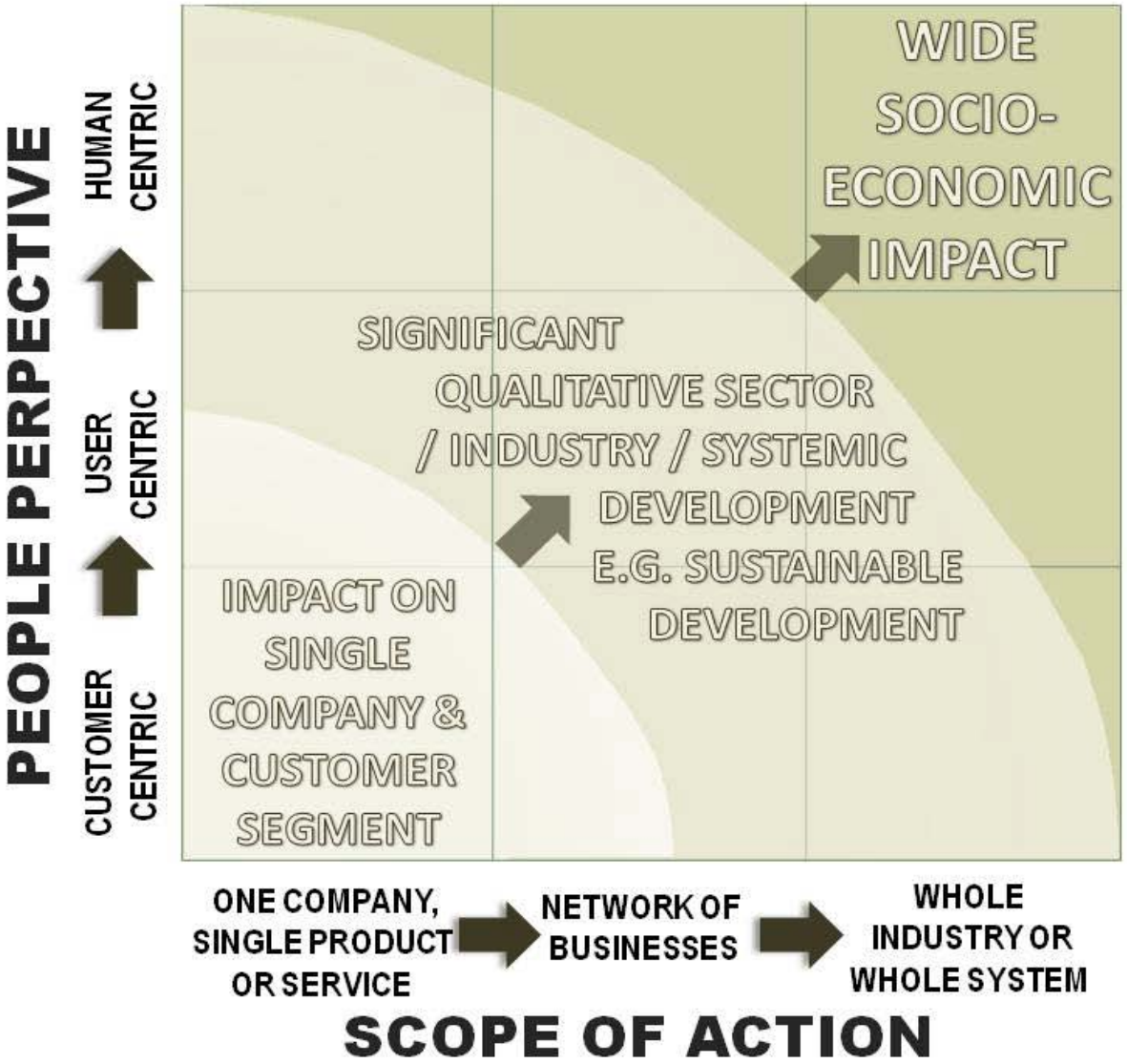

Future Research Goals: CKIR / Helsinki School of Economics

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