



Marie Skłodowska- Curie RISE
MAPS-LED
Multidisciplinary Approach to Plan Smart Specialisation Strategies
for Local Economic Development



Smart Specialization Strategy: exploiting the regional – urban nexus

Towards a spatially-led assessment methodology

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SOBE

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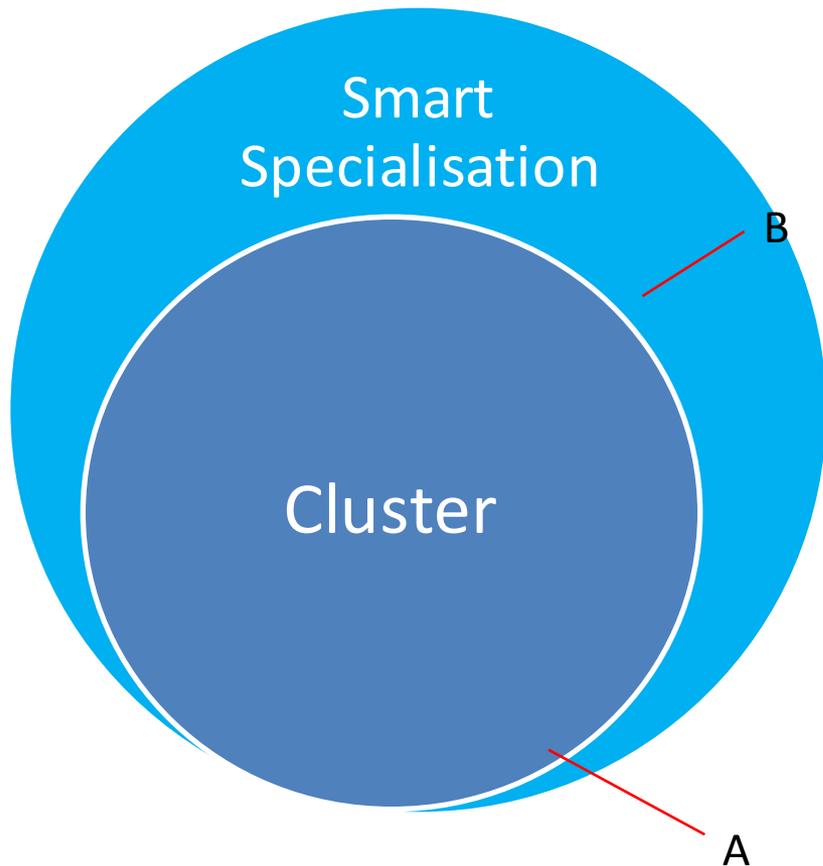
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The context

- Smart specialization is an innovative policy concept which emphasizes the principle of prioritisation in a *vertical* logic – to favour some technologies, fields, population of firms - *non – neutral*
- 5 principles:
 - Granularity (the level: not too high)
 - Entrepreneurial discovery (entrepreneurs -in the broadest sense- discover and produce information about new activities)
 - Priorities will not be supported forever
 - S3 is an inclusive strategy
 - Experimental nature (risk taking needed)

EC (2013) The goals of Smart Specialisation, Joint Research Centre, Dominique Foray and Xabier Goenaga



'Clusters & cluster policies are for many regions likely to be among the key building blocks in developing and implementing S3.'

(DG Research European Commission, 2013)

But what upgrades a simple cluster to a smart specialisation?

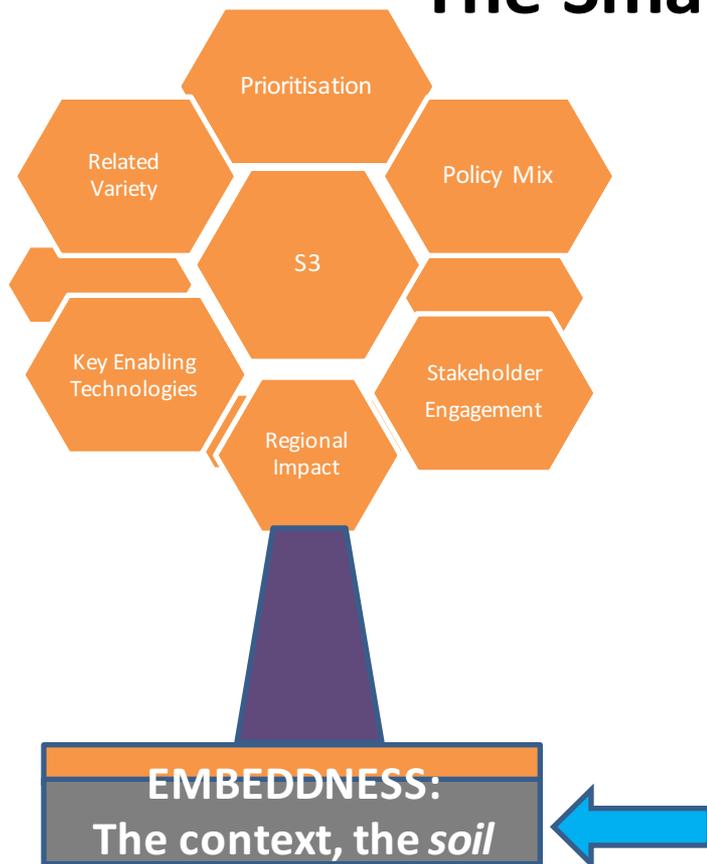
Is 'embeddedness' a factor in taking A to B?

Cluster analysis is economic growth oriented.
S3 is economic development.

'Embeddedness' is a social construct.

If yes, what are the implications for S3 research methods, assessment and evaluation?

The Smart Specialisation Tree



Are successful clusters something that can be bought through investment?

Can you buy a cluster? Can you buy an S3?

Clusters can be transient.

But the S3 tree needs rich soil as context.

What are the environmental, supply chain, demographic and socio-economic factors in the soil that make the tree take root and grow in one place, but not in another?

"I think.... the answer lies in the soil."

'Beyond our Ken' BBC Radio Show 1958-64

The absence of a spatially-led approach

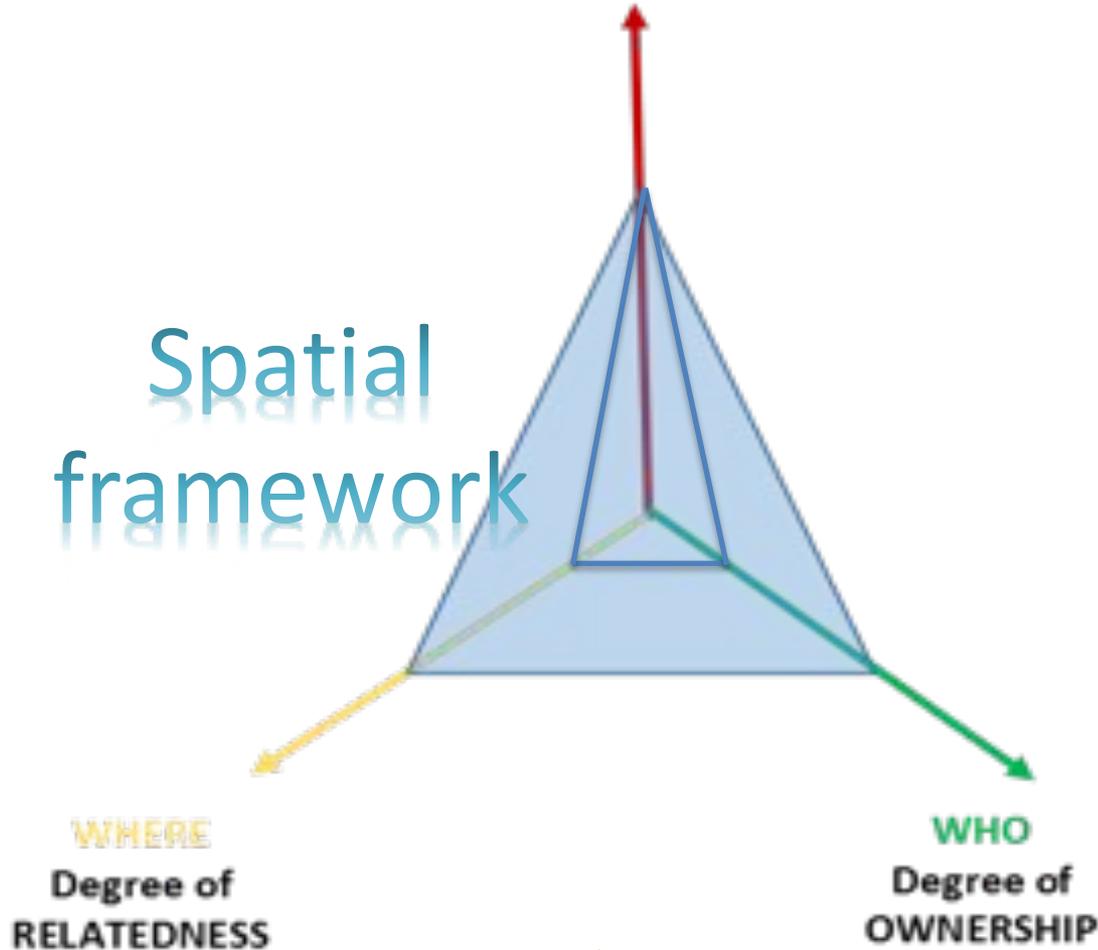


Cultural consistency

- Dynamic identity of the place
- Interventions aligned with the cultural heritage in the broader sense

Spatial framework

WHAT
 Degree of
CULTURAL RESONANCE



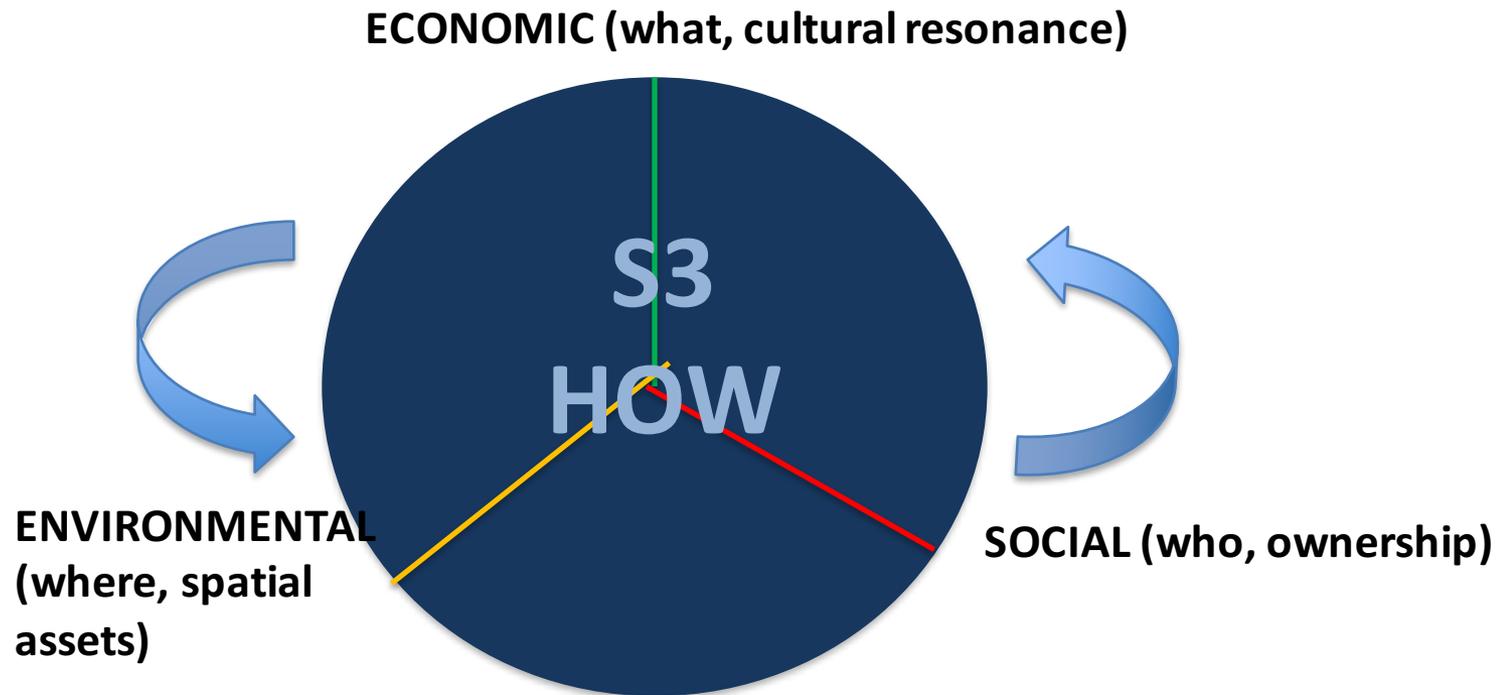
Space

- Localisation
- Density
- Accessibility

Governance

- Stakeholders mapping
- Ladder of participation

Conceptual Framework for a comprehensive S3 assessment

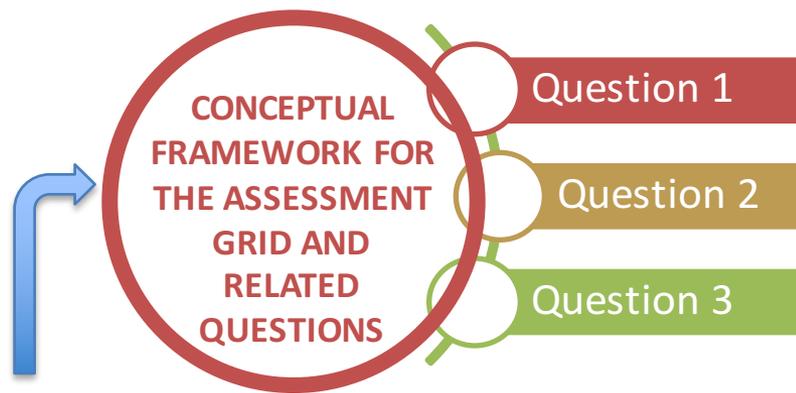


Categories	Criteria	Indic.	Proxy	Value
Cultural resonance	Consistency of the policy initiatives			
	Cultural heritage underpinned in the actions			
Relatedness	Density, proximity			
	Walkability			
	Services accessibility			
Ownership	Degree of participation (Arnstein)			
	Satisfactory stakeholders mapping			





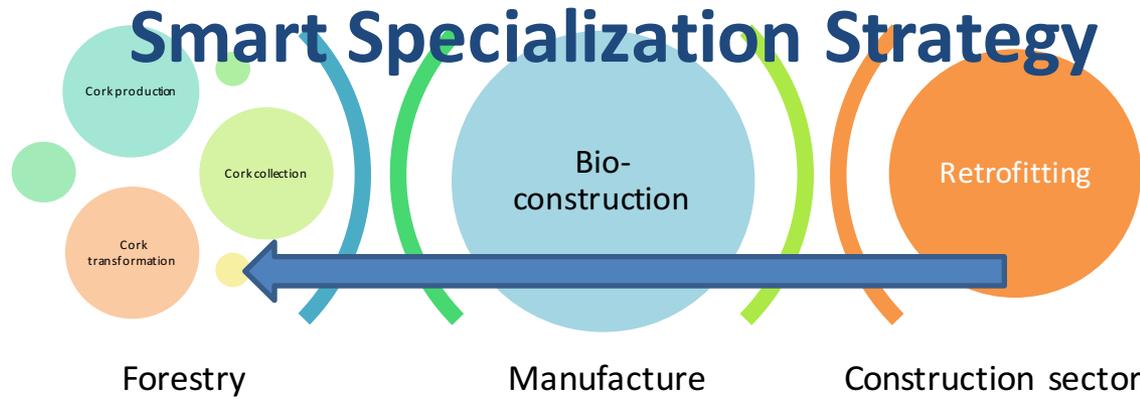
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Smart Specialization Strategy

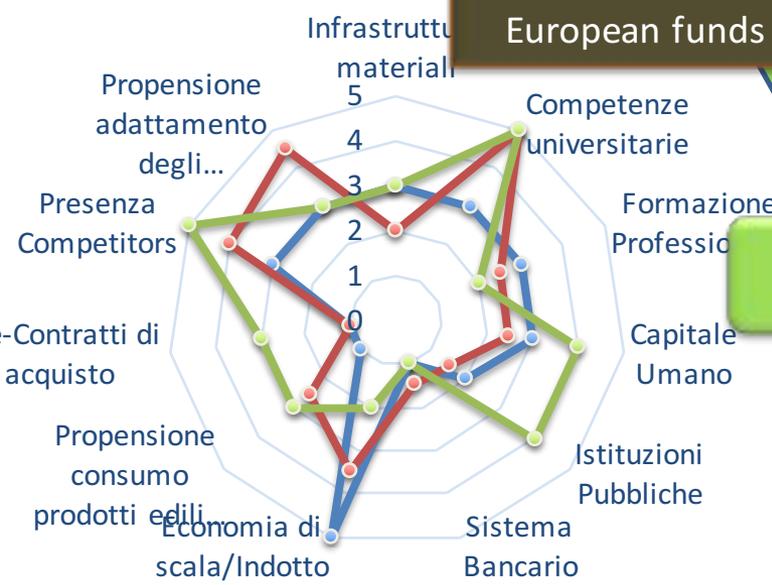
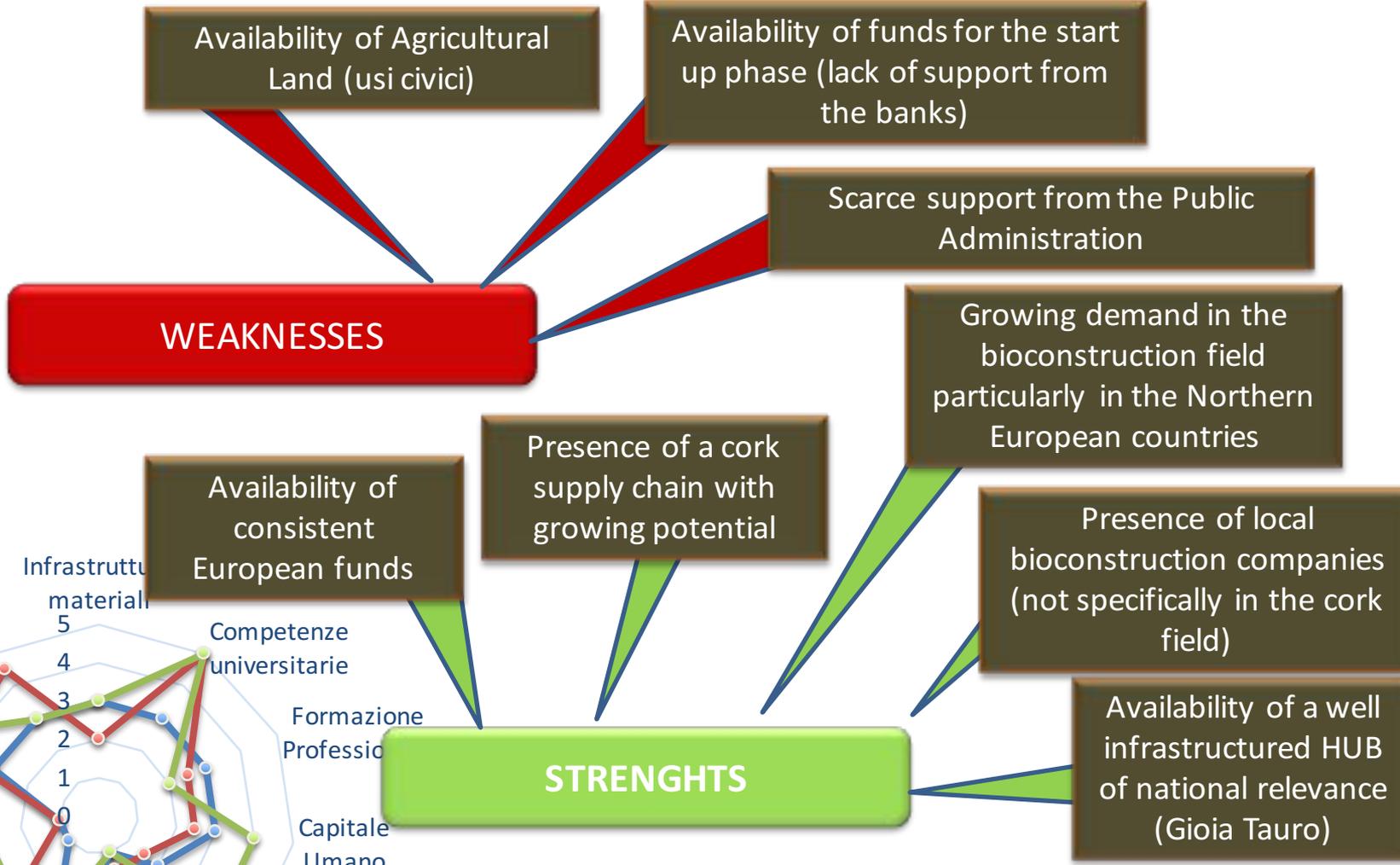


Source: Porter (1990)





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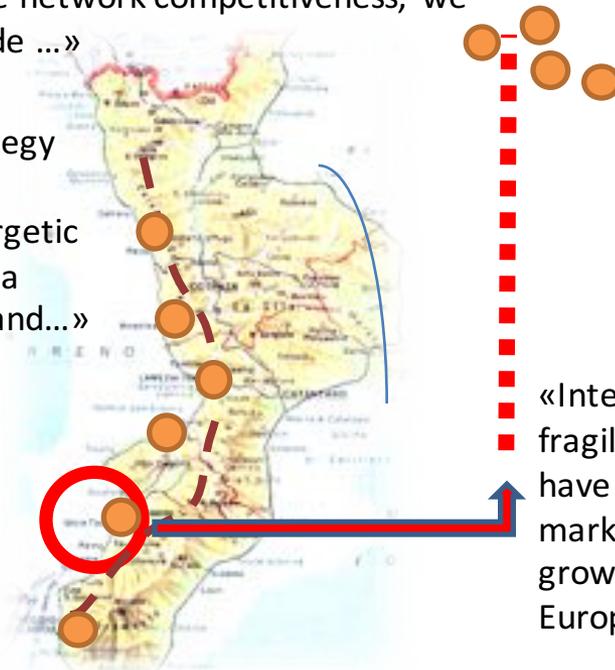


«Availability of cork in the same place of production allows companies in the bioconstruction supply chain to gain competitiveness...»

«Significant divide exists between the Tirrenian and Ionic sides with respect to the infrastructure network competitiveness, we should prioritize the Tirrenian side ...»

«The Green District strategy could be supported by a Jessica program for energetic rerofting, thus eliciting a structured internal demand...»

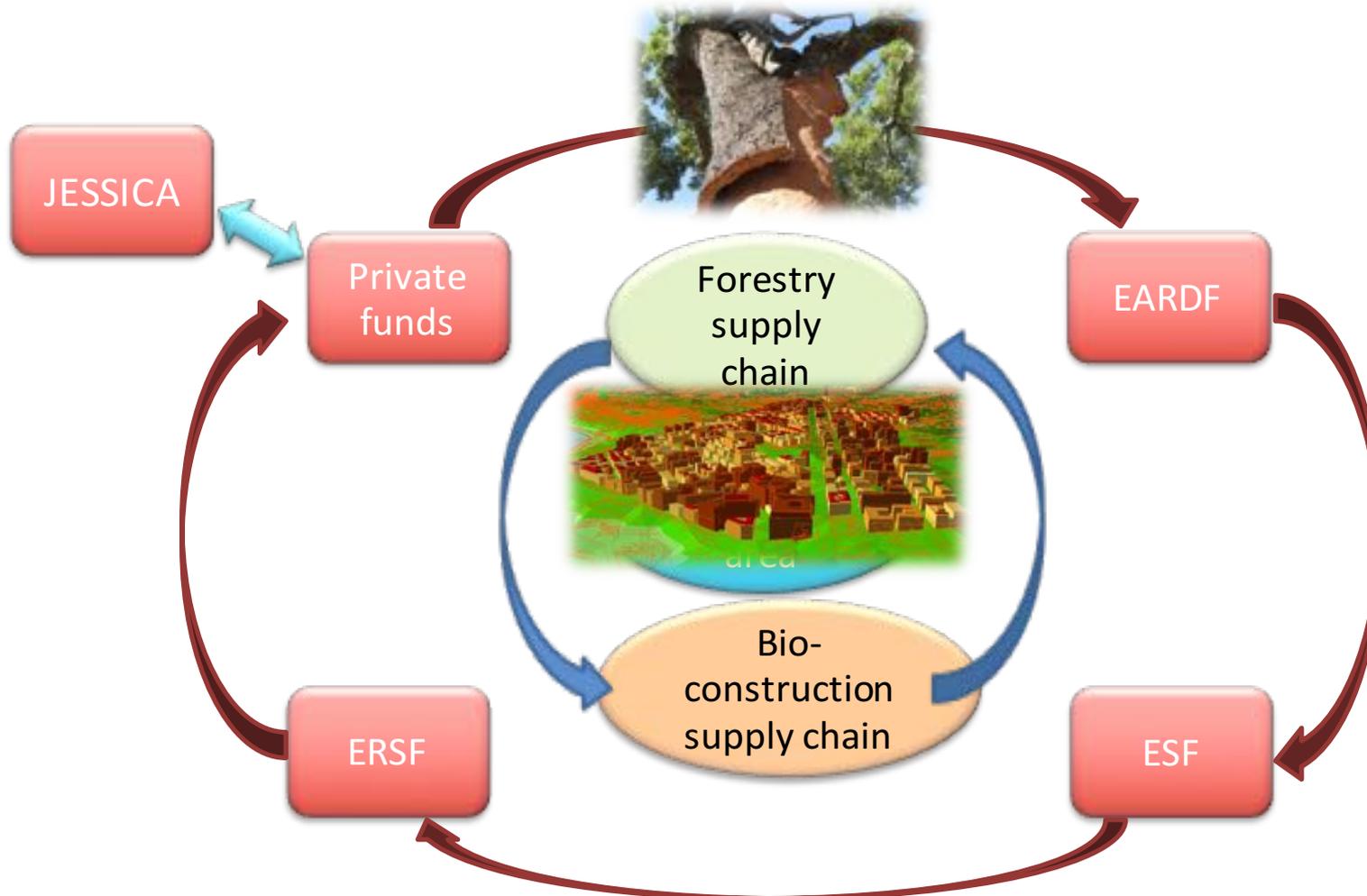
«The Gioia Tauro port is a HUB of national relevance. Furthermore, it has 80 abandoned factories in the hinterland ready to be converted and easy to managed safely through a combination of private and public actions...»



Barreca L. (2010) Struttura e necromassa dei boschi in sughera

«Internal demand is still fragile, in first instance we have to target external markets characterized by growing demand like Northern Europe...»

SPATIALLY-LED FRAMEWORK FOR EMERGING S3





THE REGIONAL URBAN NEXUS

Innovation Districts

- Our open, innovative economy increasingly craves proximity and extols integration, which allow knowledge to be transferred easily between, within, and across clusters, firms, workers, and supporting institutions.
- The vanguard of these megatrends is largely found not at the city of metropolitan scale (...) but in smaller enclaves, what are increasingly being called innovation districts.

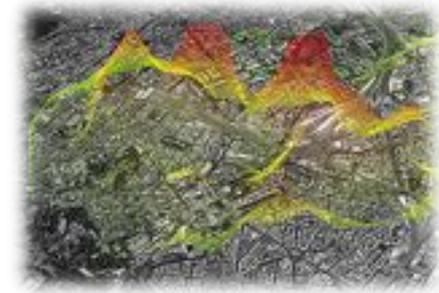
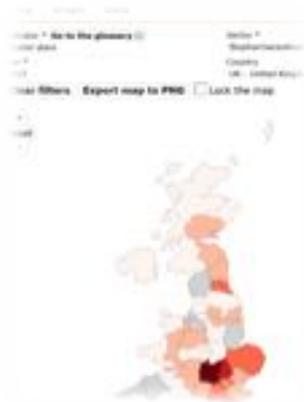
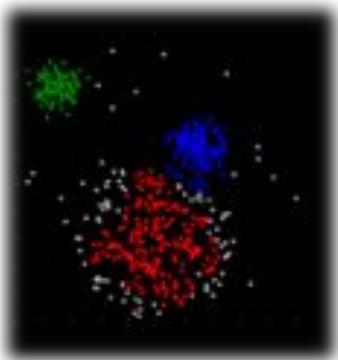
Katz, B., Bradley, J. (2013) The Metropolitan Revolution : How Cities and Metros Are Fixing Our Broken Politics and Fragile Economy. Washington, D.C. : Brookings Institution Press

1. CONSISTENCY OF DATA WITH THE NATURE OF S3

DISCOVERY...
GRANULARITY...
OPENESS TO CHANGE...
INCLUSIVENESS...

Data must be:

1. Prompt
2. Easily to be recasted
3. Locally based
4. Capturing societal assets

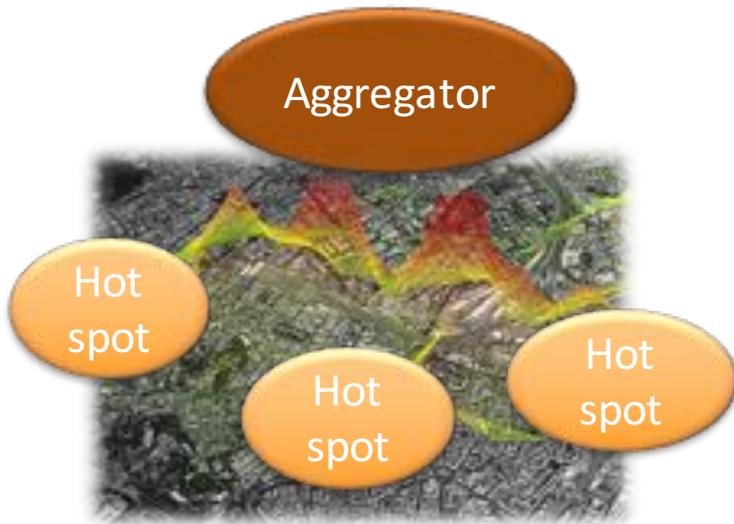


2. URBAN DESIGN AS *COGNITIVE INFRASTRUCTURE*



IF INTERACTION SPURS INNOVATION, IT IS POSSIBLE TO ASSESS THE PERFORMANCE OF S3 SUPPORTIVE PLACES THROUGH THE RATIONALE OF PUBLIC SPACES

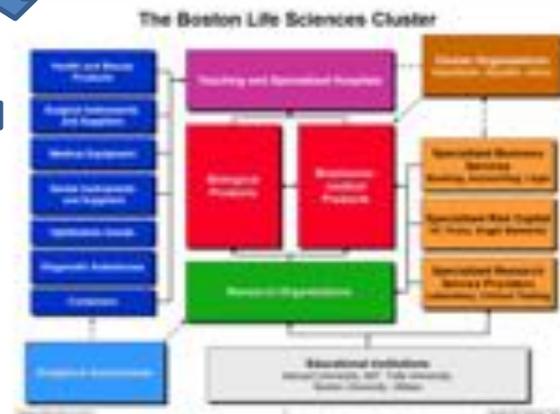
What spatial pattern is more supportive of innovation?
What public spaces and facilities support innovation?
Can we quantify the contribution?
How shall we design S3 areas?



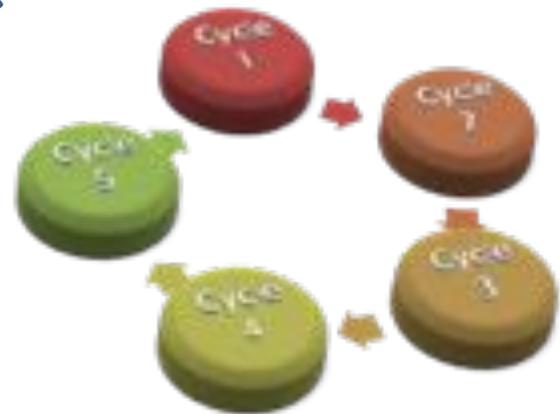
3. SPACE AS GUIDANCE FOR DISCOVERY HOLISTIC SOLUTIONS



TRADITIONAL CLUSTER (LINEAR)



CIRCULAR CLUSTER





Interviews

Scoping interviews

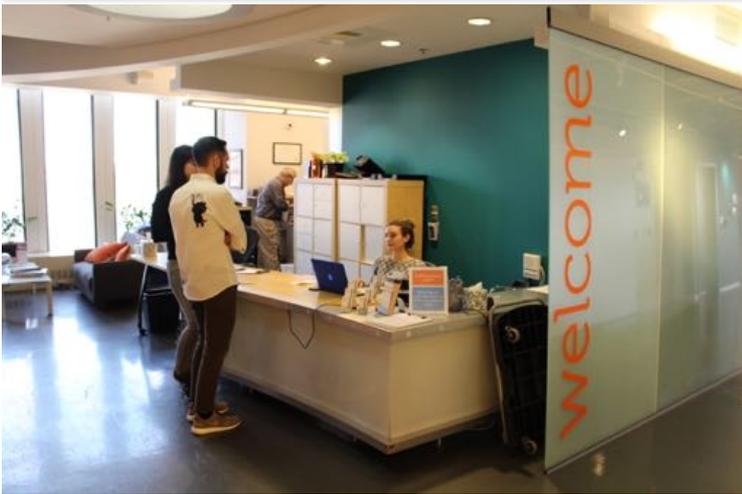
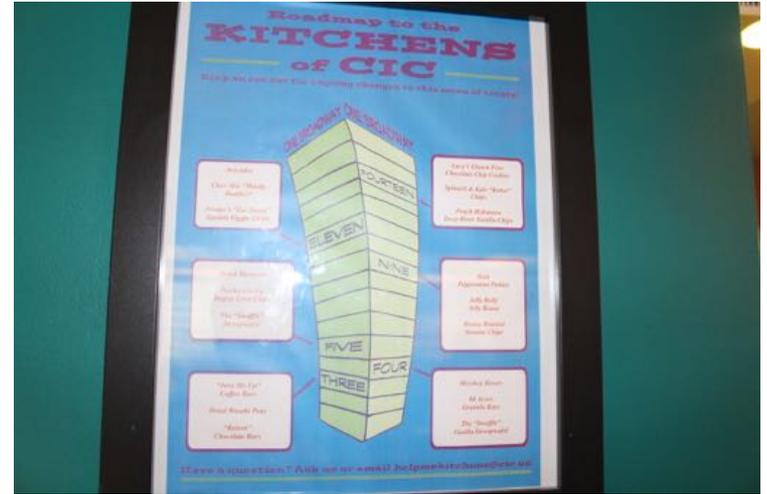
- Interview with Barry Bluestone, Dukakis Centre, Northeastern University Boston, 4th April 2016
- Interview with Bruce Katz, Brookings Institute, Washington D.C., 5th April 2016
- Interview with Erez Yoeli, Harvard, 7th April 2016
- Interview with Cem Oruc and Bethann S.Steiner, MassTech Collaborative. The innovation institute, 13th April 2016

Kendall Square case

- Interview with Iram Farooq, Cambridge Community Development Department, 11th April 2016
- Interview with Jennifer Conway, MIT Investment Management Company, 14th April 2016
- Interview with Sara Mruz, 15th April 2016
- Interview with Naomi Berlin, 15th April 2016
- Informal interviews at the Kendall Square Association, 15th April 2016



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Field work





Preliminary findings from the scoping interviews

Successful clusters require an appropriate ecosystem, encompassing:

- Transportation hub (international airport within 1 hour for CEO commuting)
- Good colleges (a few highly skilled workers can be “imported” but “average” skilled workers must be available High quality primary and secondary schools)
- *Atmosphere*

Presence of big companies in the field reduce the risk for startups

Presence of startups make the ecosystem attractive for big companies



Preliminary findings from the Kendall Square case study

Feature of successful innovation districts:

- *Cross-fertilization* (innovation is often spurred by cross-innovative urban spaces)
- *Spatial proximity* (density, accessibility, and richness in shared spaces that make good and cooperative actions *frequent and observable*)
- *Community diversity* (need for addressing gentrification)



Preliminary conclusions drawing from clusters to S3

- S3 implementation has to be complemented with spatial interventions in the built environment to create a *physical ecosystem* supportive of innovation, including:
 - Supportive spatial *ecosystem* including key infrastructures and services;
 - shared facilities facilitating cross-interaction and shared knowledge;
 - public services and facilities that allow preserving uniqueness of the place and inclusiveness;
 - spatial pattern supportive of a walkable and dense environment.



Next steps (1)

- A questionnaire to be delivered to companies included in the cluster case study will allow the research team to map the spatial factors potentially directly related to the cluster performance.

The preliminary findings from Kendall Square and the Mancunian Oxford Rd Corridor allowed to skim a list of key – factors, that were incorporated in the questionnaire.

- Following this mapping process, interviews conducted with the SuROI methodology will corroborate the linkages among spatial factors and innovation potential.

Next steps (2)

- The case studies will start by focussing on the key areas involved in the cluster development. Key questions to start the mapping process are:
 - What are the spatial nodes and the spatial connections among them?
 - Can we draw a spatial boundary for this cluster? How it is shaped?
- In order to assess the policy context for the clusters' success, interviews with key- stakeholders will be conducted, leading to evaluate the level of contribution of the most relevant policy initiatives having influenced the cluster success.



Next steps (3)

- Building on the spatial features of the cluster, we will then first map the spatial elements and related (social and ecosystem) services linked to the cluster successful performance, then apply the SuROI approach to quantify the benefits / spillovers from the proximity and relational assets.
- This would allow to overcome a major limit of the SuROI approach, originally meant to be applied to neighbourhood, by shifting towards a metropolitan- oriented perspective. However, the rationale of the *small* scale (the scale of interpersonal exchange, of the mutual knowledge, of the accessibility to the services...) will be preserved, by adopting a possibly jeopardized mapping methodology, focused on nodes and links that follows the clusters rationale.