



# Place-based Innovation Ecosystems: Different routes to success? *A comparative analysis of five case studies*

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# Motivation

- *Investigate territorial conditions on PIE, in particular non-tangible assets and proximity effects*
- *Understand key enablers of successful innovation ecosystems, despite differences in*
  - **origins and varying starting conditions**
  - **4H implementation levels**
  - **interrelation with RIS3**

# Methodology

## *Methodology*

- Comparative analysis of five PIES w/diverse orchestrator types (local govt., univ., RTO, large company, CSOs)
- Cases: Espoo (Finland), Barcelona (Spain), Gothenburg (Sweden), Ljubljana (Slovenia), Boston (USA)

## *Methods*

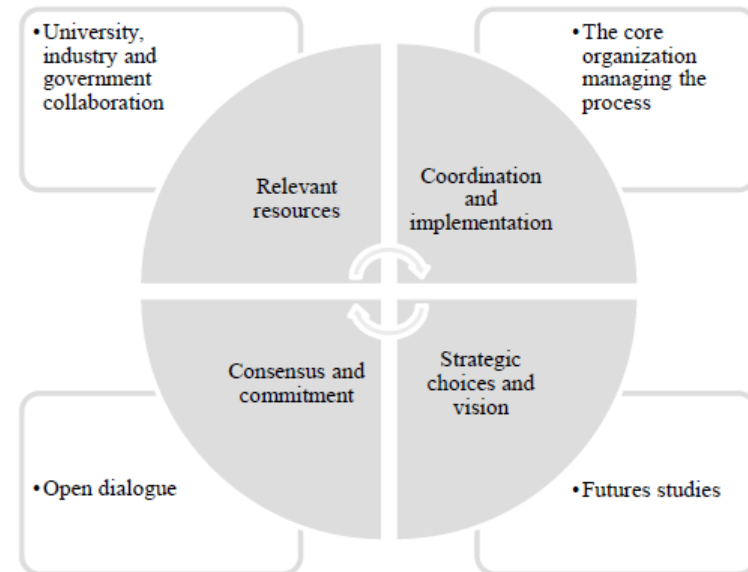
- Definition of a conceptual framework
- Local mapping of ecosystem orchestrators and key actors
- Structured interviews with selected stakeholders

## *Theoretical Background*

- Triple / Quadruple helix concepts
- Smart Specialisation and Entrepreneurial Discovery Process
- Innovation models (open innovation, absorptive capacity, international chain-link, system integration, etc.)

# Conceptual framework

- *Entrepreneurial Discovery Process (Foray, 2015)*
- *Integrated approach (Oksanen and Hautamäki, 2014)*
- *Entrepreneurial innovation & Context relevance (Autio et al., 2014)*
- *Case-specific:*
  - + Entrepreneurial universities
  - + Digital social innovation (DSI)
  - + Research & Technology Orgs (RTOs)
  - + Business-driven innovation
  - + Urban-driven innovation

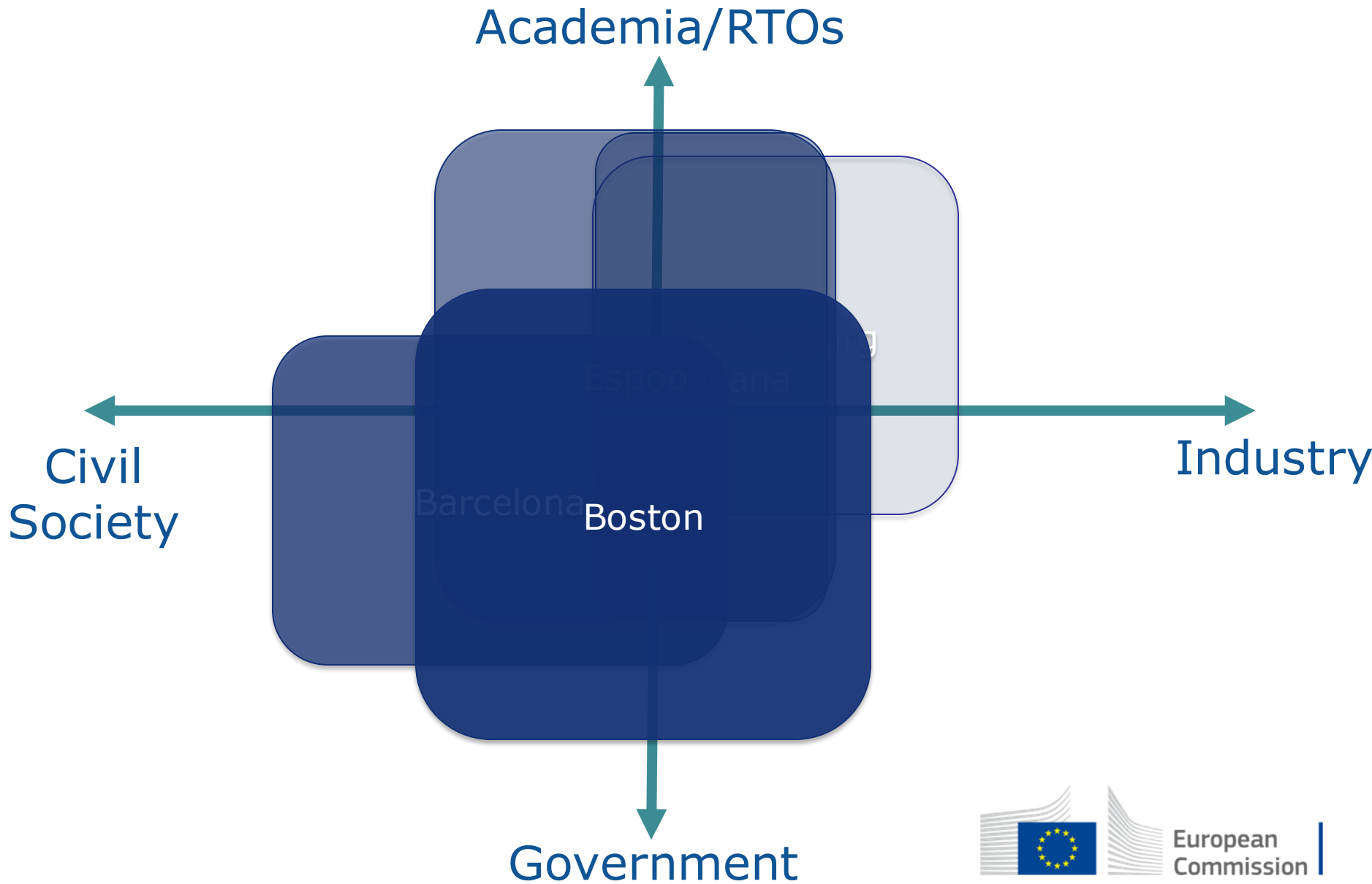


*Model for building innovation ecosystems.*  
(Oksanen and Hautamäki, 2014)

# Case Studies: 4H Landscape

	Gothenburg	Ljubljana	Espoo	Barcelona	Boston
Academia /RTOs	RTO	RTO	Entrepreneurial University	Universities	Universities
Industry	Large	StartUps	Large, SMEs, Startups	DSI Startups	Large, SMEs, Startups
Government	Local Regional	Regional National	Local Regional National	Regional Local	Local
Civil Society	Consumers	Young Entrepreneurs	Entrepreneurial students	DSI spaces, prosumers	Community spaces

# Case Study: 4H Drivers



# Large Industry-driven PIE

- *high capacity of attracting talent, funding and other companies to the region*
- *dense relationship between the actors in terms of joint research and development projects*
- *state-of-the-art R&D infrastructure (laboratories, test beds, reality / living labs, etc.)*
- *internationally linked PIE*
- *existence of industry-specific clusters*
- *trust culture between the stakeholders enabling for risk sharing projects*
- *co-evolution and co-specialization patterns*

# RTO-driven PIE

- *focus on the creation of innovative start-ups*
- *tension between co-operation and competition*
- *citizens' involvement still in its infancy*
- *coordination of the ecosystem is largely in the hands of the government*
- *vibrant start-up ecosystem developed on its own*
- *progressively integrated into the broader RDI system thanks to TPL and other innovation intermediaries*



# Entrepreneurial University-driven PIE

- *highly-skilled human capital*
- *excellent research infrastructure*
- *reforms of public programmes and law*
- *efficient multi-level governance system*
- *firm political commitment of all administrations*
- *long-standing and trustful collaborative culture amongst the actors*
- *shared strategic vision on open innovation*
- *well-functioning entrepreneurial education that meets bottom-up and top-down requirements*
- *strong orchestrator*





















# Digital Social Innovation-driven PIE

- *local culture of active citizenship, collaboration and 'open innovation'*
- *diversified mix of 4H actors involved (DSI centres driven by non-profits, firms and universities, plus the administrations feeding the model's cohesion)*
- *the existence of networks of different cross-cutting nature*
- *the establishment of programmes to promote social innovation projects*
- *a commitment by the regional and local administrations*

# Urban planning-driven PIE

- *Mature PIE, based upon a long-standing collaboration between top high-education institutions and entrepreneurial actors*
- *Strong commitment by the local and state (Massachusetts) authorities*
- *No single orchestrator, but the municipal leadership and a reduced number of influential key actors have a strong influence on fostering innovation, business creation and urban development*
- *civic-led spaces enabling grassroots collaboration and cooperation*

# Critical System Elements

	Gothenburg	Ljubljana	Espoo	Barcelona	Boston
Openness					
Integrative Leadership					
Balance (top-down / bottom-up)					
Entrepreneurial, risk-taking culture					

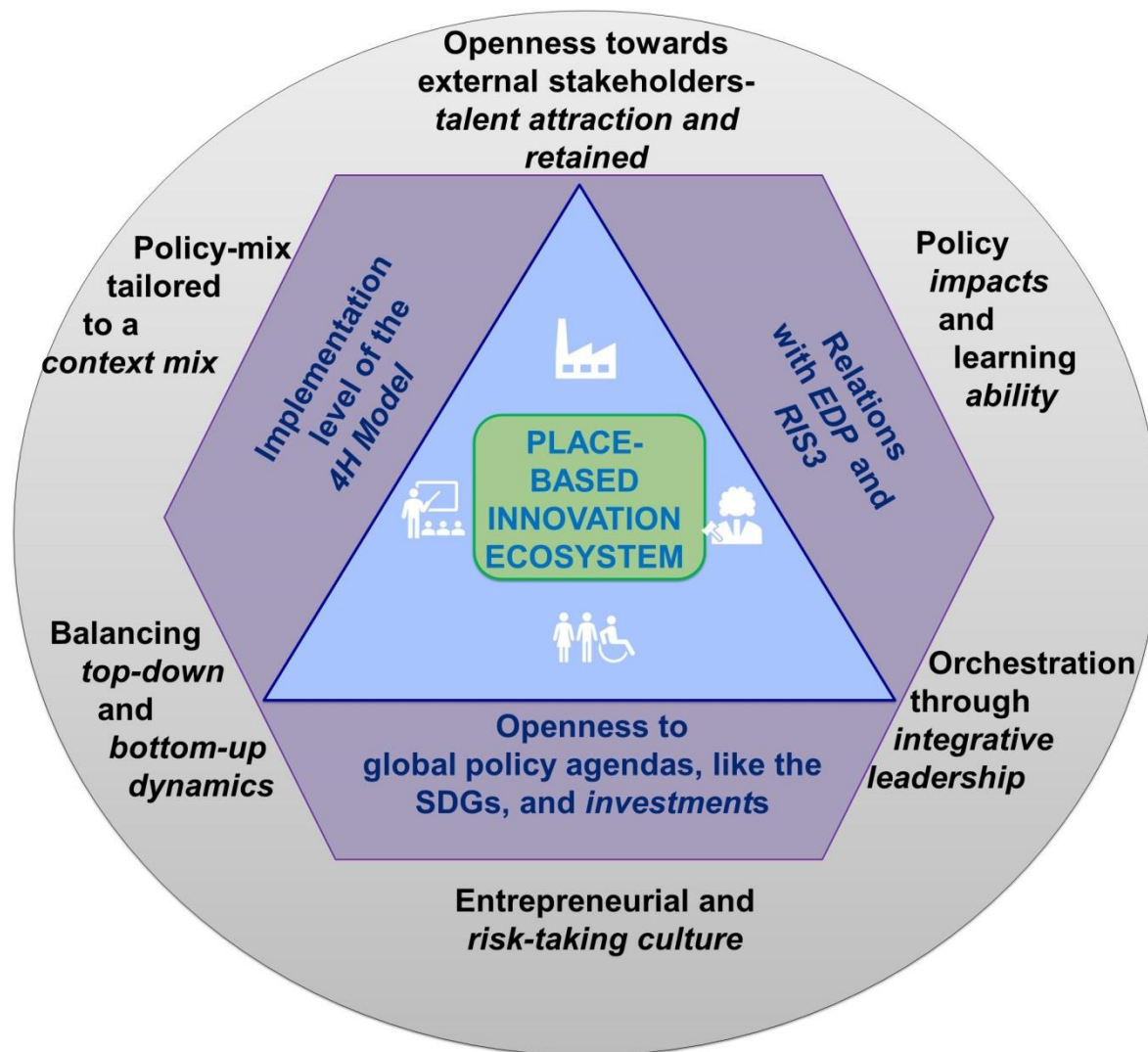
# Policy-enabling Factors

- *From "co-existence" over "co-evolution" to "co-specialisation"*
  - **an innovation ecosystem is more competitive when there is a high interlink of different actors**
- *Value Networks able to assume collective risks*
  - **density and quality of the network relationships**
  - **trust between stakeholders**
- *Towards a professionalised orchestration*
  - **Key role where spontaneous spill-overs on a local scale are less likely due to a lack of proper supportive local governance**

# Conclusions

- *Each case study represents a particular type and complex innovation ecosystem at different levels of 4H collaboration*
- *Orchestrators are essential in innovation ecosystems as enablers across the actors through integrative leadership*
- *Successful Innovation ecosystems do:*
  - **Attract and retain talents**
  - **Have an entrepreneurial and risk-taking culture**
  - **Have a state-of-the-art R&I infrastructure**
  - **Show complementary system stakeholders**
  - **Are internationally oriented**

# Case Analysis Model





**Thank you!**

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