



Aalto University
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How does smart specialisation foster entrepreneurship in bioeconomy sector: comparison of three Finnish regions

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Background

- This research is part of ONLINE-S3 project
 - Funded by Horizon 2020 in 2016-2018
 - Members in 8 EU countries and 12 organisations
 - Developed an e-policy platform with online tools and guidance for national and regional authorities to plan, implement and monitor their research and innovation strategies for smart specialisation (RIS3)
 - <http://www.onlines3.eu/>

Bioeconomy includes

- Following sectors are included in this research:
 - Biobased fertilizers
 - Bioenergy
 - Biomaterials
 - Food sector
 - Remediation of polluted soils
 - Water sector

Overlap with cleantech and circular economy

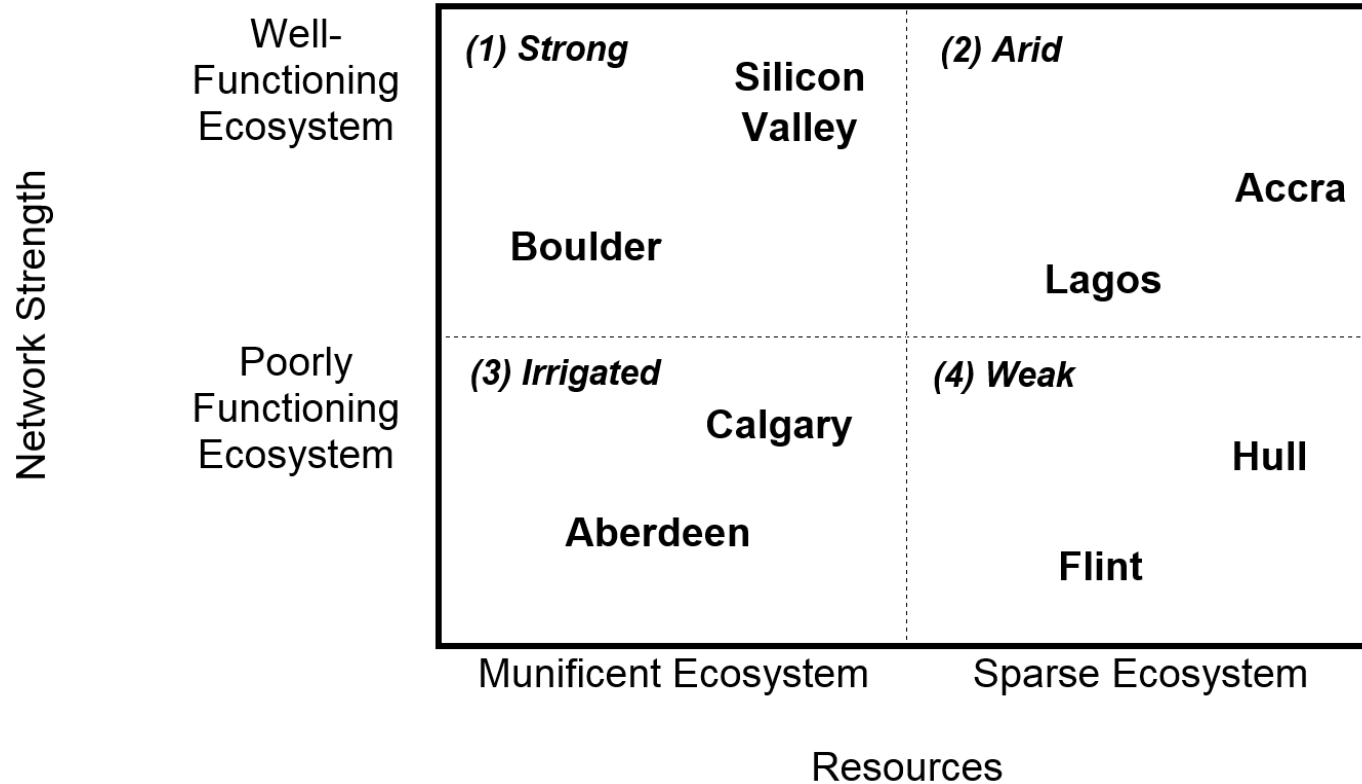
Theory

- Entrepreneurs are affected by policies, markets and infrastructures (Thornton 1999)
- Need for policy and governance to support regional development and creation of innovations (Kolehmainen et al. 2015)
- Regional innovation systems, entrepreneurial ecosystems and clusters (Autio et al. 2018; Spigel & Harrison 2017)

Tendency for regional clusters

Proximity is an important factor in intercompany learning, when these companies share a base of resources, institutions, cultural and social structures (Maskell & Malmberg 1999)

Classifications (Spigel & Harrison 2017)



Research questions

- Does smart specialisation support entrepreneurial discovery process, and if so, how?
- What models can be developed to foster regional entrepreneurship?
- What kind of differences are there between regions?

Research approach

- Case study, comparison of three Finnish regions
- 45 interviews, 61 hours of recordings, 715 page transcription
- Thematic analysis

Interview data (May – June 2018)

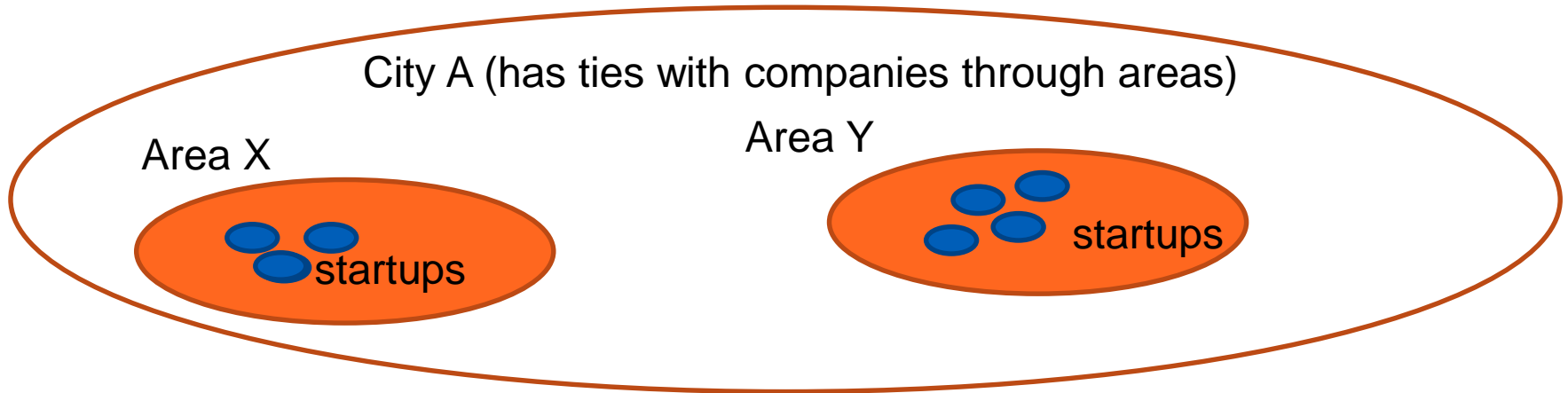
	Helsinki region	Tampere region	Lahti region	All areas
Companies	9	4	2	15
University professors	2	1	1	4
University dean	1			1
University innovation services	2	1		3
Other university staff	1		1	2
Research organisation staff	2			2
City officials	4	2	1	7
Water supply organisation		1		1
Waste management organisation			1	1
Regional development organisation		1	2	3
Funding agency	1			1
Sustainability organization or foundation	1	1		2
Regional council	1	1	1	3
Total	24	12	9	45

Results

	Tampere region	Lahti region	Helsinki region
Strategy	Creating completely new areas for companies	Strengthening networks of existing actors	Different organisations have their own clusters
Governance model	Focused	Dispersed	Both
Main actor	City	Multiple	Multiple

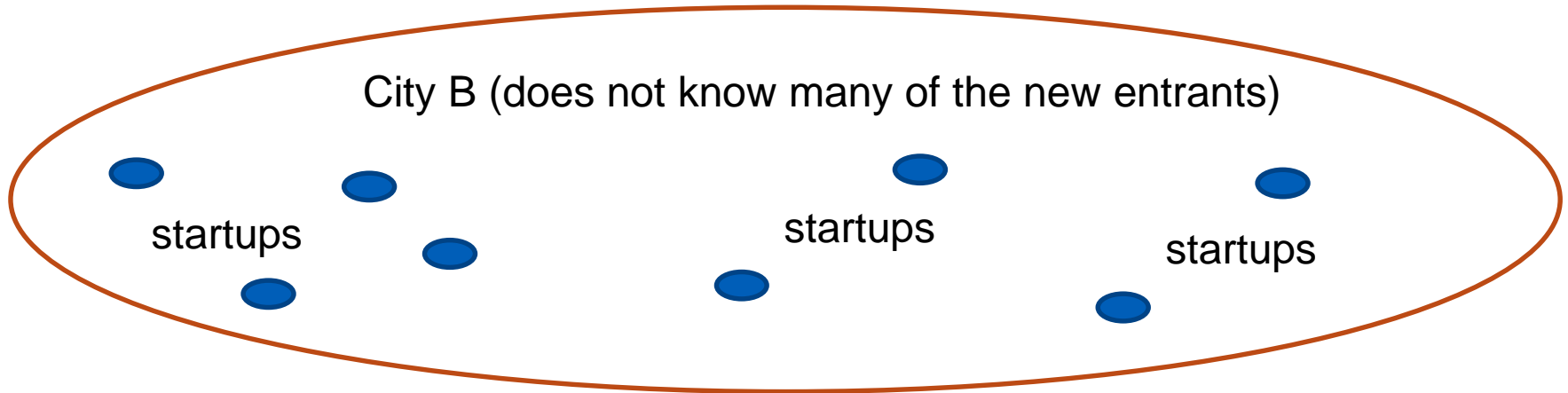
Advantages of focused model

- Increased collaboration between the new entrants
- Attempts to build a shared international network
- Shared material flows and learning



Advantages of dispersed model

- Emphasis for nation-wide network and contacts in other cities
- But more difficulties for disruptive technologies



The explanations for governance models include (1/3)

- **Local conventions**
- *”Family entrepreneurship tradition is strong here and it has been taken as an oath. We have maintained some traditional ways of doing things.” (Lahti region interviews)*
- *”This is a so-called test area, the idea is to test and do new things, ..., we try to change and find new ways to do things, better ways.” (Tampere region interviews)*
- *”There are quite hegemonic instances ((main actors)) who are present in the background here, and they have certain ways of doing things.” (Helsinki region interviews)*

The explanations for governance models include (2/3)

- **Prevailing interfirm and interorganisational relations**
- *“That is how contacts and networks work, so that, in order to be efficient, it would feel strange to start from zero every time, usually things work out when there is an established contact.”
(Helsinki region interviews)*
- Relations are an important factor in order to access funding, collaborate with universities, and gain knowledge, visibility and opportunities

The explanations for governance models include (3/3)

- **Differences in city planning**
- *”When plans are made for a certain area, and things are being decided, then many decisions are made and then it is not possible to change these afterwards.” (Tampere region interviews)*
- The development of a region takes time and is path-dependent, after buildings have been built it is difficult to make changes

Main actor roles

- Innovation platform for testing
 - Knowledge source
 - Network provider
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- These main actors were mainly organisations with a long-time presence in the area, such as a city (e.g. Tampere), universities (e.g. Aalto University) or waste management organisations (e.g. in Lahti)

City as a main actor – neutral, but lacks innovative thinking

- *“City can be an actor who asks these different actors to come to the same table, Because we are a neutral actor, even though some may consider the city as bureaucrats, no one considers the city would be favouring a particular actor, we have a neutrality ... , we can be a facilitator.” (Helsinki region interviews)*
- *”We as a city know how to build new neighbourhoods, we know how to plan that, we know how to build roads and construction companies know how to build real estate there. But that, how we can make it in a sustainable way for energy and nutrient cycle, that is what makes it difficult.” (Tampere region interviews)*

Conclusions – and implications

- We found two governance models to foster regional entrepreneurship: focused model, and dispersed model
- The positions taken in the regions differ and are path-dependent on the historical development of the region
- Neutral main actors are necessary to support entrepreneurial discovery by small companies with limited ties to local actors
- Could city have a greater and more active role in disruptive bioeconomy innovation facilitation and implementation?
- More studies are needed to investigate other sectors and the possible impact of sector-specific attributes for choosing a governance model