



Faculty of Design

2018

## Smart specialization in non-metro canadian regions

Mastroeni, Michele

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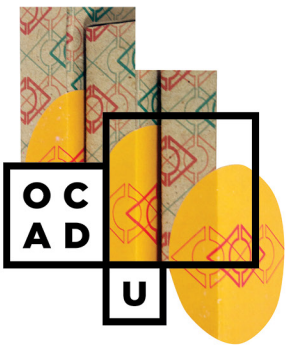
# Smart Specialization and Innovation in Canada's Non-Metropolitan Regions

OCAD University

October, 2018

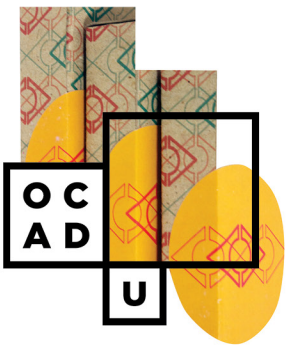
Presentation by: Michele Mastroeni





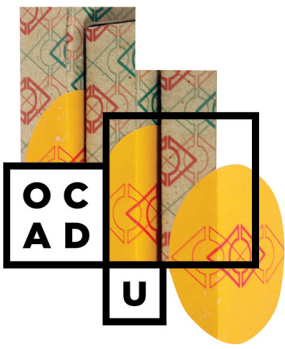
## Purpose:

- To propose a governance framework for innovation-based regional development
- Focus is on non-metropolitan communities



## More specifically

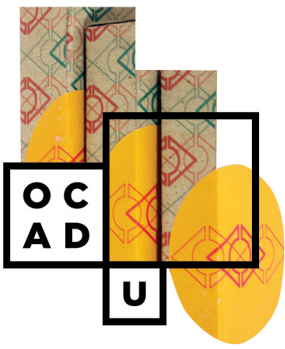
- Describe a practical “how” for non-metro regional strategy
- Create regionally/contextually appropriate strategies (not cut and paste)
- Co-generated strategy



# Definitions

- Innovation: broadly speaking new products, services or processes – first in world or first in region.
- Region: a formally defined geographic space with some level of governance attached to it.
- Non-metro def. by CRRF: pop. < 100K, and outside commuting zone of metro centres.

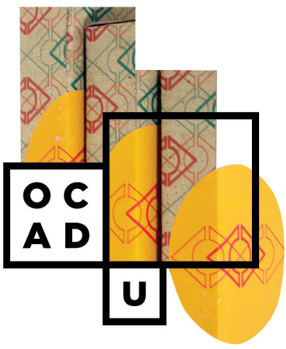




# Smart Specialization

- The creation and use of a large research and innovation area; unrestricted knowledge exchange between regions.
- Specialization are determined by local entrepreneurs.
- R&D leaders focus on General Purpose Technologies, but “followers” should search for GPT applications.
- Government policy has a role in supporting entrepreneurial action, and the regional environment

**An example of “policy running away from theory”**



## Built-in Limitations

- Inability to deal with complexity and uncertainty.
- Implicit assumption that private sector entrepreneurs will be present or able.
- Potential to encourage too much specialization.
- Need to strengthen networks of knowledge exchange between stakeholders within a region, and across regions.



## About Me

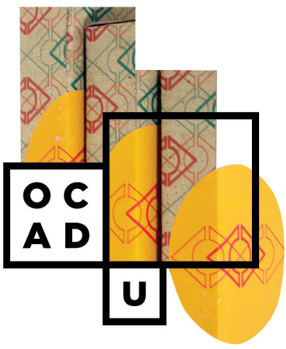
- PhD in Political Science, University of Toronto
- Research in Innovation Systems and Policy, and how to improve system dynamics
- Have mostly focused on policy around Regional Innovation Systems



# As a Policy Person: “Build your own innovation cluster” recipe

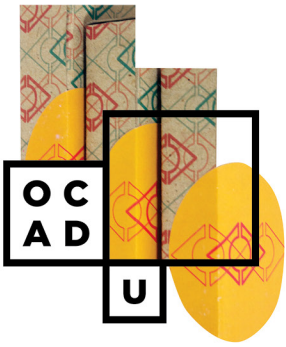


*Source: (Sölvell, 2008)*



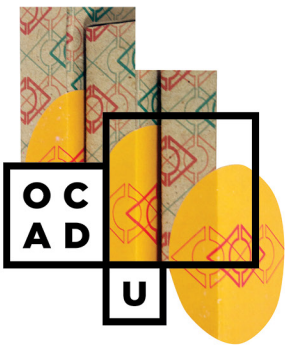
# Reasons for the Framework

- Importance of innovation in Canadian and Int'l policy circles
- Relative lack of attention received by industries based in non-metro communities
- Possibility that Smart Specialization as developed by EC and OECD can be applied to Canada



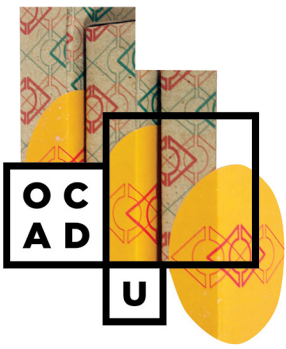
# Bias in Policy to Develop Innovation Systems

- Policymakers many times look for the “new”
- Favour independent firms as successes rather than the mix (focus on trees, miss the forest).
- Focus on the *urban*.



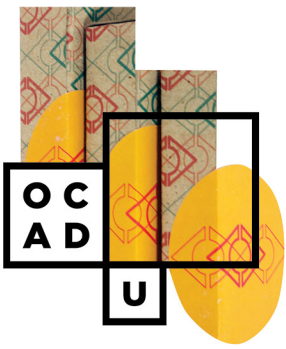
## Past Policy in Canada

- Federal and provincial governments have supported innovation through different policies
- Focus on clusters *de facto* favours cities, including latest call to develop super-clusters
- Continuing focus on new tech, and now on “Smart Cities”, implies a continuing urban bias
- We need to supplement this focus



# Canadian Non-Metro Needs

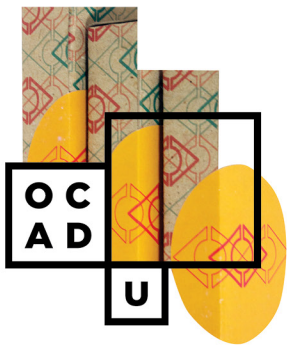
- Little agglomeration of (or proximity to) services and activities for economies of scale
- Lower levels of capital, and fewer entrepreneurs
- Openness to global market forces due to primary/resource sector prominence
- Few research intensive PSIs
- PSIs torn between local knowledge needs and int'l. reputational gain



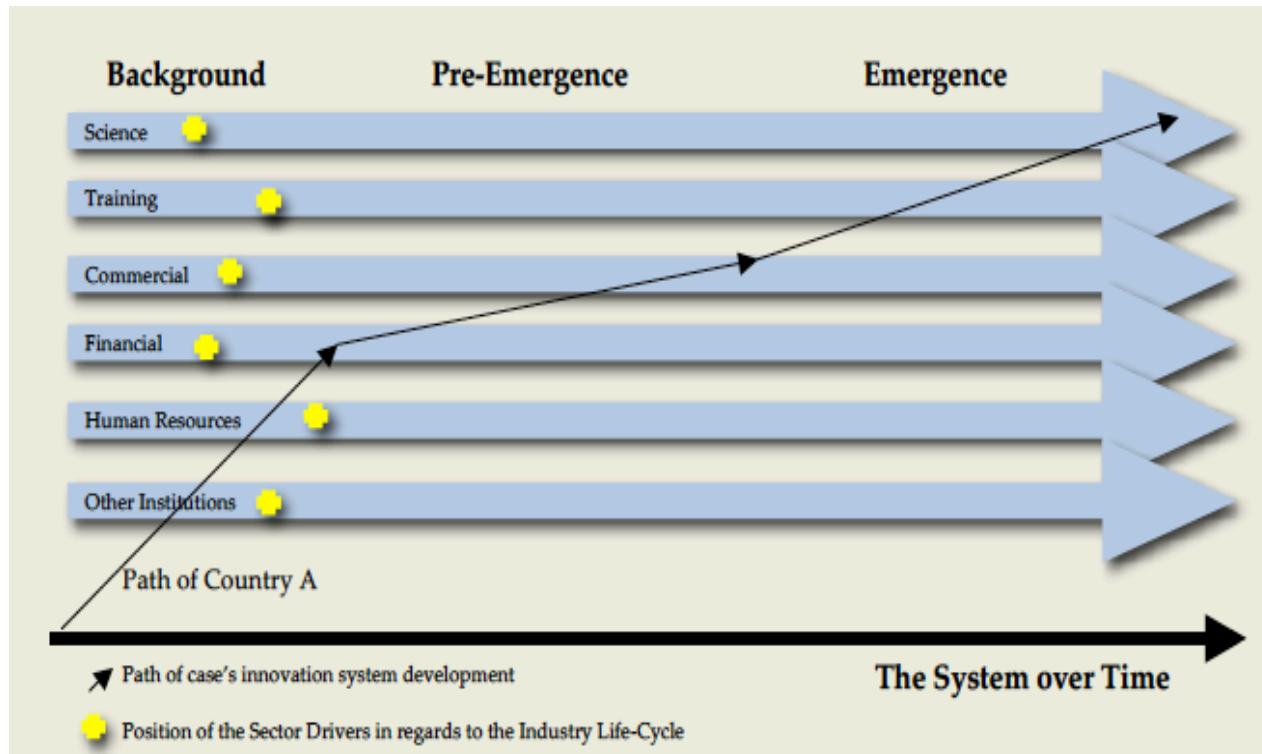
## **Corrections to SmSp and Suitability for Canadian Non-metro Regions**

- An evolutionary approach to deal with uncertainty
- Openness to entrepreneurialism from any source – private, public, non-profit, etc.
- Related Variety instead of narrow specialization
- Strong network building as part of process

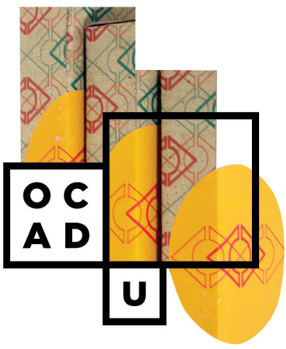




# A practical Framework



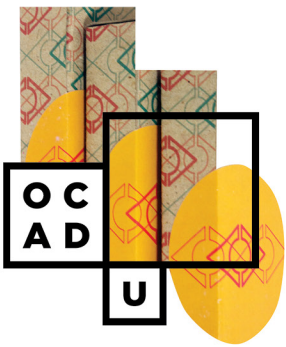
TARGET (2012). Policy Report: Promoting the Biotechnology Sector. Project report for Framework 7 Project.



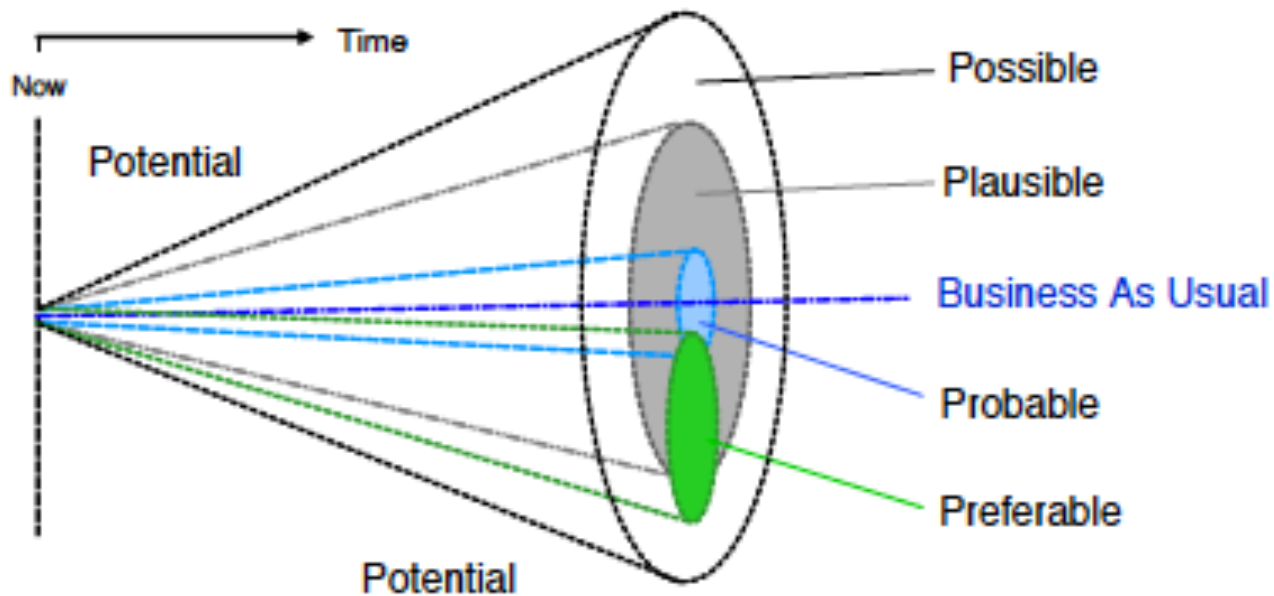
# A Practical Framework

| Example         | Chemistry | Genomics | Botany | Management |
|-----------------|-----------|----------|--------|------------|
| Agriculture     |           |          |        |            |
| Food Processing |           |          |        |            |
| Forestry        |           |          |        |            |
| Energy          |           |          |        |            |

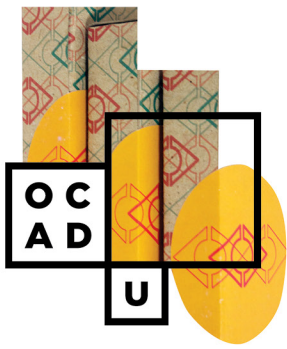
Cooke and Eriksson, 2011



# A Practical Framework

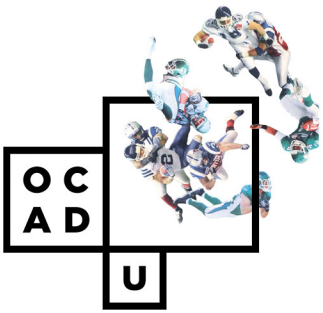


Futures Cone (Voros, 2013)



## Result?

- Creation of contextually specific and appropriate strategy
- Involve most if not all necessary stakeholders\*\*
- Identify areas of activity
- Identify path extension, branching, and building



# Thank you for joining me!

Any comments, questions or feedback?

Michele Mastroeni  
Graduate Program Director  
and Assistant Professor  
(416) 977 6000 x. 455  
[mmastroeni@faculty.ocadu.ca](mailto:mmastroeni@faculty.ocadu.ca)