S3 implementation and the "correct" level of granularity
Framework and methodology

Martin Eichler, BAK Economics Chief Economist
Prof. Dominique Foray, École polytechnique fédérale de Lausanne

2018 SMARTER Conference on Smart Specialisation and Territorial Development
Sevilla, September 26th, 2018
S3 Implementation

Contents

- Smart Specialisation Strategies
  Why is it so difficult to implement them?

- S3 2.0: ADSS

- Proposal of a new process

- Conclusions
S3 Implementation

**A definition of Smart Specialisation Strategy (S3)?**

- **Smart Specialisation Strategy**
  A process aiming at transforming structures through the development and support of *transformative activities*.

- **Smart Specialisation Strategy**
  A process of transformation pursuing both goals of *differentiation* and *specialization*.

- **Smart Specialisation Strategy**
  A policy which is neither totally *top down* nor pure *bottom up*. It is rather an intermediate process aiming to enhance *entrepreneurial initiatives* and coordination within a framework structured by the government.
S3 Implementation

Properties of a Smart Specialisation Strategy

- Stakeholder involvement
- Evidence based
- Differentiated
- Specialisation
- Making choices

- Creating new combinations
- Aiming at a structural transformation
- Flexible

S3 differentiates itself from other Regional Innovation Policies by making distinct choices to be differentiated and specialized for the region!
Two key questions

- Why are Differentiation and Specialisation the key elements which makes an strategy and Smart Specialisation Strategy?

- Which are the critical factors to be successful with a strategy based on differentiation and specialisation?
Differentiation

- Regions differ ... 
- ... in their capacities and capabilities for innovation 
- ... in their specific opportunities to change and transform structures 
- ... in exposure to Global Megatrends and impact of General Purpose Technologies 
- A “one size fits all” is not a promising approach in regional innovation policy

➡ A regional innovation strategy makes things differently from your neighbor, it should be fairly unique amongst regions!
... Specialisation

- Geography and proximity matter
- Locational effects are at play
  (like agglomeration economics, economy of scale and scope, spillovers effects, ...)
- The activities have to be sufficiently numerous and closely related to achieve the necessary density

➤ For a regional Smart Specialisation Strategy **concentration** on a few critical domains is essential!
S3 Implementation

The logic of ...

... Differentiation...

and

... Specialisation ...

They build a dual problem that is often poorly addressed!
S3 Implementation

Contents

- Smart Specialisation Strategies
  Why is it so difficult to implement them?

- S3 2.0: ADSS

- Proposal of a new process

- Conclusions
S3 Implementation

Stylized “typical” process to develop a S3

1. Build the evidence base

2. Develop the strategy
   (= make decisions about Priority Areas)

3. Develop and implement an action plan
   (= projects, measures, …)
Sectoral endowments

- ICT and KETs
- Engineering / Advanced technologies
- Life Sciences
- Maritime industries
- Tourism
S3 Implementation

Challenges in the dual problem of “differentiation” and “specialization”

- **Observation**
  
  Priority Areas for S3 are often chosen too broad

- Evidence gaps
- Knowledge gaps
- Organisational gaps
S3 Implementation

**Smart Specialisation 2.0: ADSS**

- Take the regional endowments into account
- Densify your already existing networks, reinforce your capacities

**Smart Specialisation Strategy 2.0**

- Differentiated
- Adequately
- Specialised
S3 Implementation

Contents

- Smart Specialisation Strategies
  Why is it so difficult to implement them?

- S3 2.0: ADSS

- Proposal of a new process

- Conclusions
S3 Implementation

Proposal for a stylized process to develop a S3

1. Identify the region
2. Define strategic aims in strategic domains
3. Develop roadmaps to transformation in PA
4. Action plan
5. Monitoring and adoption

Priority Areas
Transformation Roadmap
Define “Strategic Aims” as ...

- ... pre-define fields for an S3
- ... coordination device to support the collective process
- ... common to the understanding of all stakeholders
- ... result of reliable quantitatively evidence
- ... key topics for the region to be transformed

The Priority Areas don’t need to be

- Differentiated and Specialized,
- but they should be Adequate
A stylized process: Transformation roadmap

As next step, for each of the Priority Areas ...

... a Transformation Roadmap is developed

- The Transformation Roadmap provides the details how to achieve the transformational goals in the strategic aims building the Priority Areas
- The Transformation Roadmap will be much more detailed!

→ The Transformational Roadmap will provide the right granularity necessary to be Differentiated and Specialized
A stylized process: Transformation roadmap

- More detailed and specific analyses can be used
- Experts in the specific fields can be involved
- Specific entrepreneurial resources must be assessed
- The Entrepreneurial Discovery Process is part of the analysis
- ....

→ A more bottom up process on how to reach the goals is set into action
S3 Implementation

A stylized process: Further steps

- Action plan
  - ...
  - ...
- Monitoring and adoption
  - ...
  - ...

Needed and important! But not elaborated here due to time limitations.
Project mapping process

A tool proposed in building the Transformation Roadmaps

- Use existing or proposed projects to identify Transformation Roadmap within each of the Priority Areas

- To do so, a project mapping is useful

- Map projects according to relevant properties
S3 Implementation

Project mapping process
S3 Implementation

Project mapping process

Capacity vs. Opportunity

Martin Eichler (26.09.2018)
S3 Implementation

Project mapping process
S3 Implementation
Project mapping process

Improve opportunities

Build capacities

Discover potential for linkages

Capacity vs. Opportunity

Improve opportunities

Build capacities

Discover potential for linkages

bak-economics.com

Martin Eichler (26.09.2018)
S3 Implementation
Project mapping process

Transformation Roadmap 1

Transformation Roadmap 2
«Transformation Roadmaps» are only proposed ... 

... as long as there is no proof that

the transformation they trigger

will move the Priority Areas

in the direction of the Strategic Aims!
**Project mapping process**

- **Capacity**
  Are the resources needed in the project available?

- **Opportunity**
  How well are latest developments – technological, megatrends, new business models, ... - taken up in the project?

- **Relatedness**
  How many “points of contact” has the project with other projects in the map?

- **Support of transformation**
  How large is the potential of the project to initialize the aspired transformative push?
Smart Specialisation Strategies

- “Differentiation” and “Specialisation” make the difference
- “This dual problem is often poorly addressed
- Consequence: Wrong level of granularity of Priority Areas
- “Adequately” is a strong prerequisite

S3 2.0: ADSS

- Adequately Differentiated Specialised Strategy
- Helps to structure the strategy development

Proposal of a process: Two separated steps

- First step: Strategic Aims with transformation targets build Priority Areas
- Second step: Identifying Transformation Roadmap (for each Priority Area)
- A “project mapping” can support the process
## S3 Implementation

### Summery and conclusions

<table>
<thead>
<tr>
<th>Actions</th>
<th>Granularity</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of a few Priority Areas with a direction of change</td>
<td>Sector level, but with a transformation direction Regions can have identical choices</td>
<td>Public-private dialog, Top-down properties, Evidence-based</td>
</tr>
<tr>
<td>Transformational Roadmap through project mapping</td>
<td>Reach the right level of granularity – neither a sector nor an individual project; achieve Differentiation and Specialisation.</td>
<td>Bottom up discoveries: Entrepreneurial Discovery Process, Project mapping</td>
</tr>
<tr>
<td>Action Plan</td>
<td>Differentiation continues (on policy instruments level now); Specialisation and density are part of action plan</td>
<td>Strong EDP, flexibility needed due to discovery, surprises, failures</td>
</tr>
</tbody>
</table>
Thank you very much for your attention!