



# 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**

BAK S3A: A project by



work in progress

## Contents

- Smart Specialisation Strategies  
Why is it so difficult to implement them?
- S3 2.0: ADSS
- Proposal of a new process
- Conclusions

## 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.

## 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?

## The logic of ...

### ... 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!**

## The logic of ...

### ... 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!**



### Contents






- Smart Specialisation Strategies  
Why is it so difficult to implement them?
- S3 2.0: ADSS
- Proposal of a new process
- Conclusions

## 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, ...)

## Strategic decisions on Priority Areas (fictional)

### Sectoral endowments

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



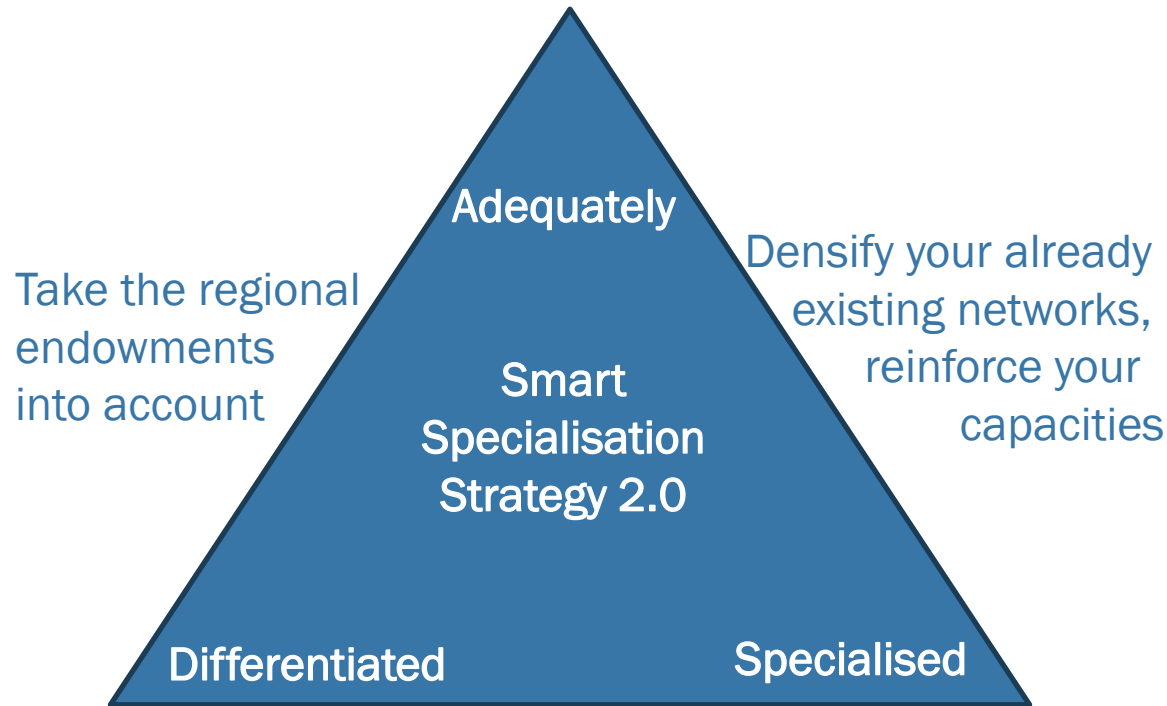
## Challenges in the dual problem of “differentiation” and “specialization”

- Observation

Priority Areas for S3 are often chosen too broad

- Evidence gaps
- Knowledge gaps
- Organisational gaps

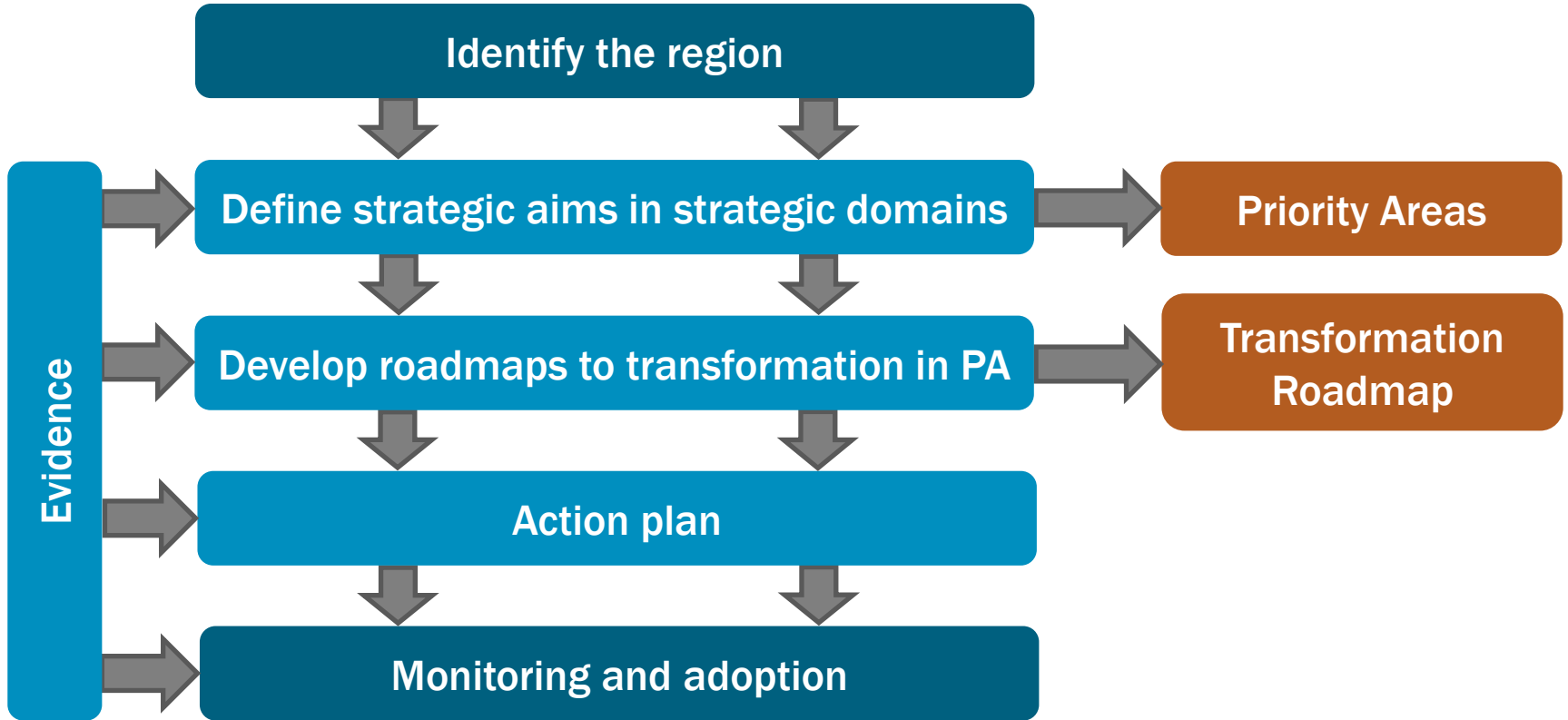
## Smart Specialisation 2.0: ADSS



## Contents

- Smart Specialisation Strategies  
Why is it so difficult to implement them?
- S3 2.0: ADSS
- Proposal of a new process
- Conclusions

## Proposal for a stylized process to develop a S3



## A stylized process: Rational for Strategic Aims

- 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

## A stylized process: Further steps

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

Needed and important!  
But not elaborated here  
due to time limitations

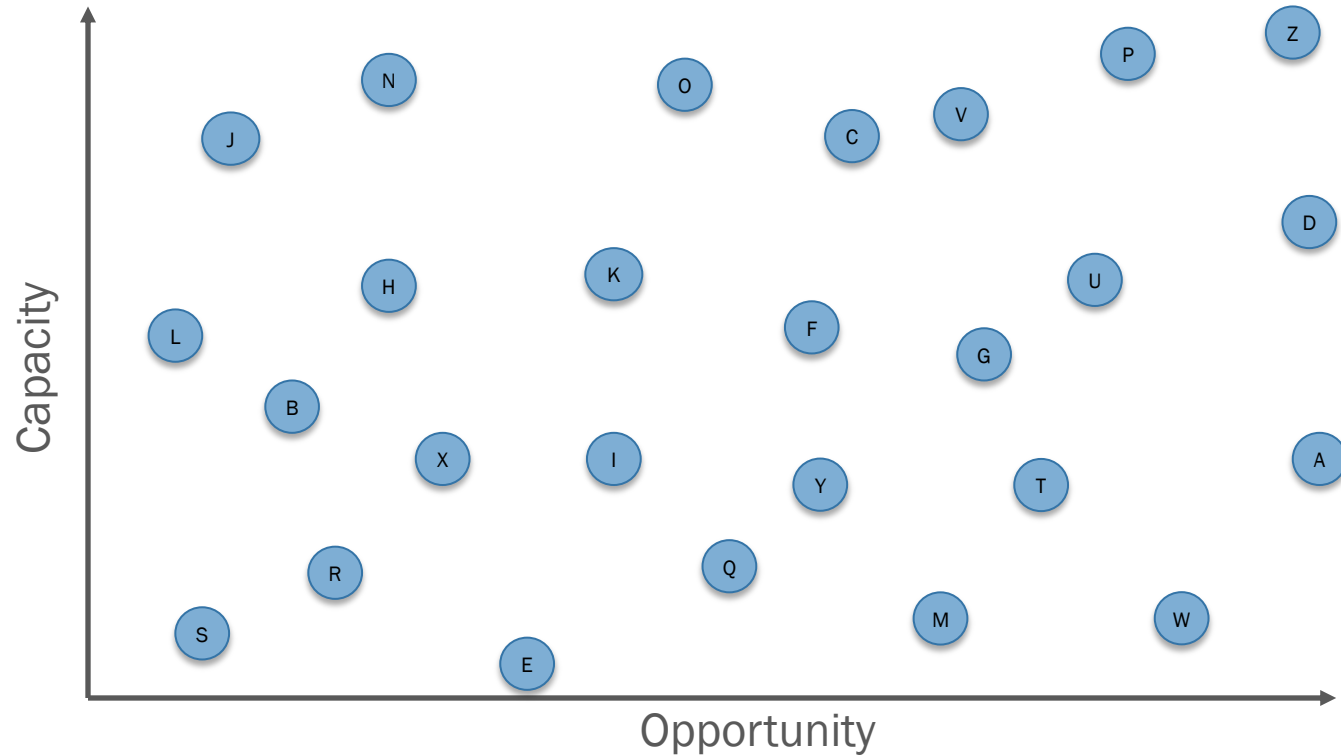
## Project mapping process

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

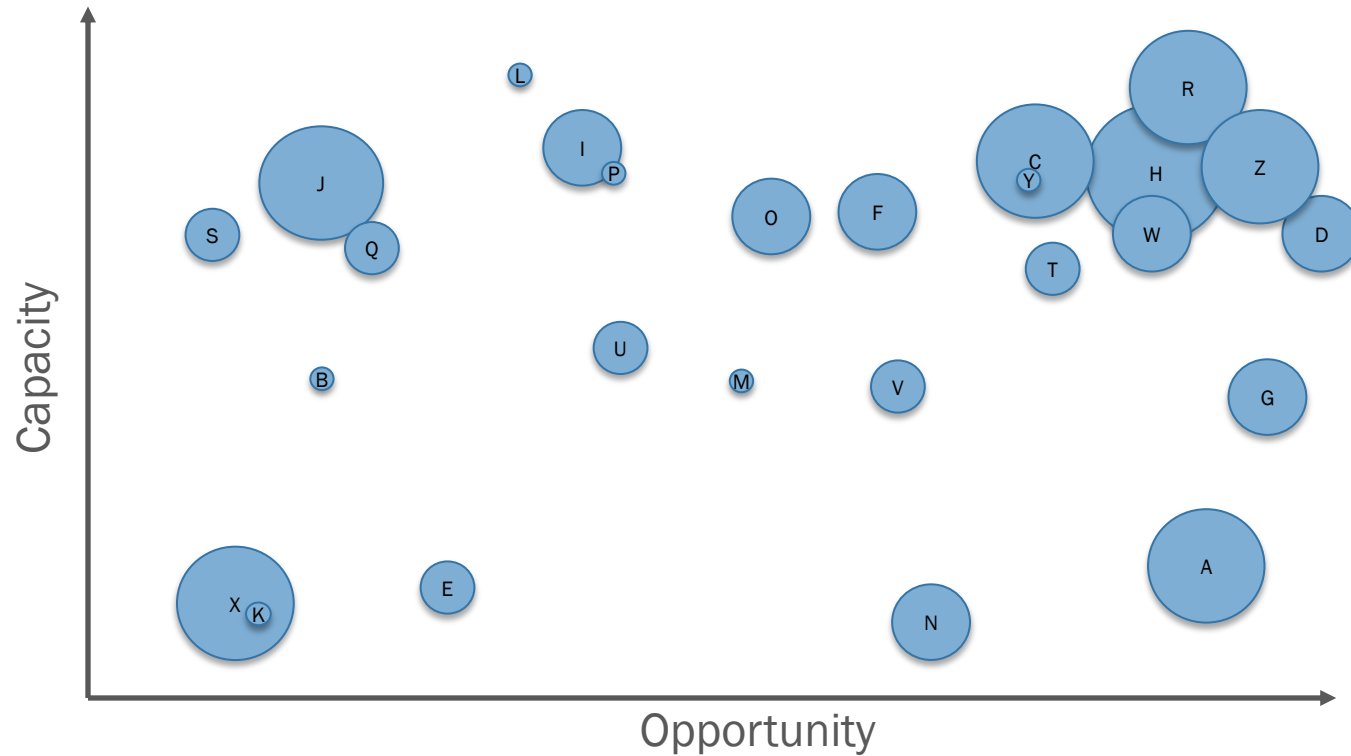
## S3 Implementation

### Project mapping process



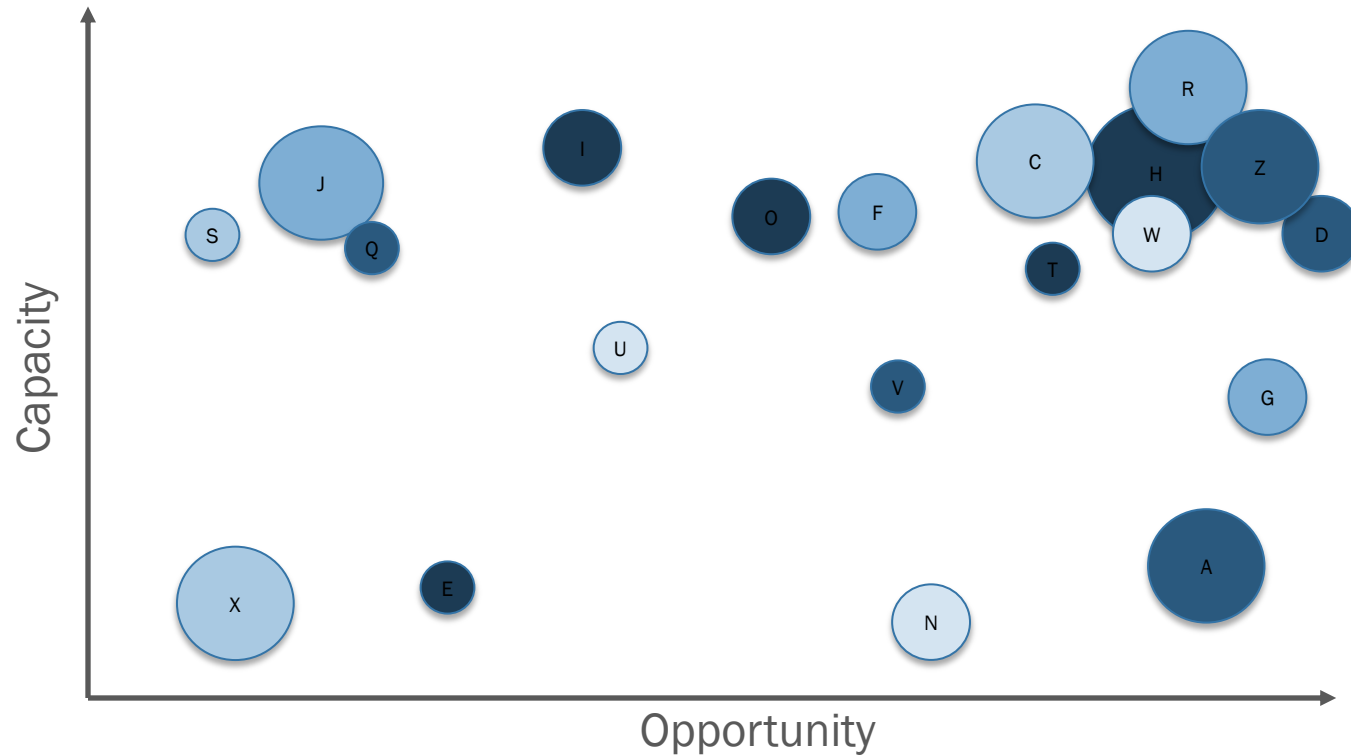
## S3 Implementation

### Project mapping process

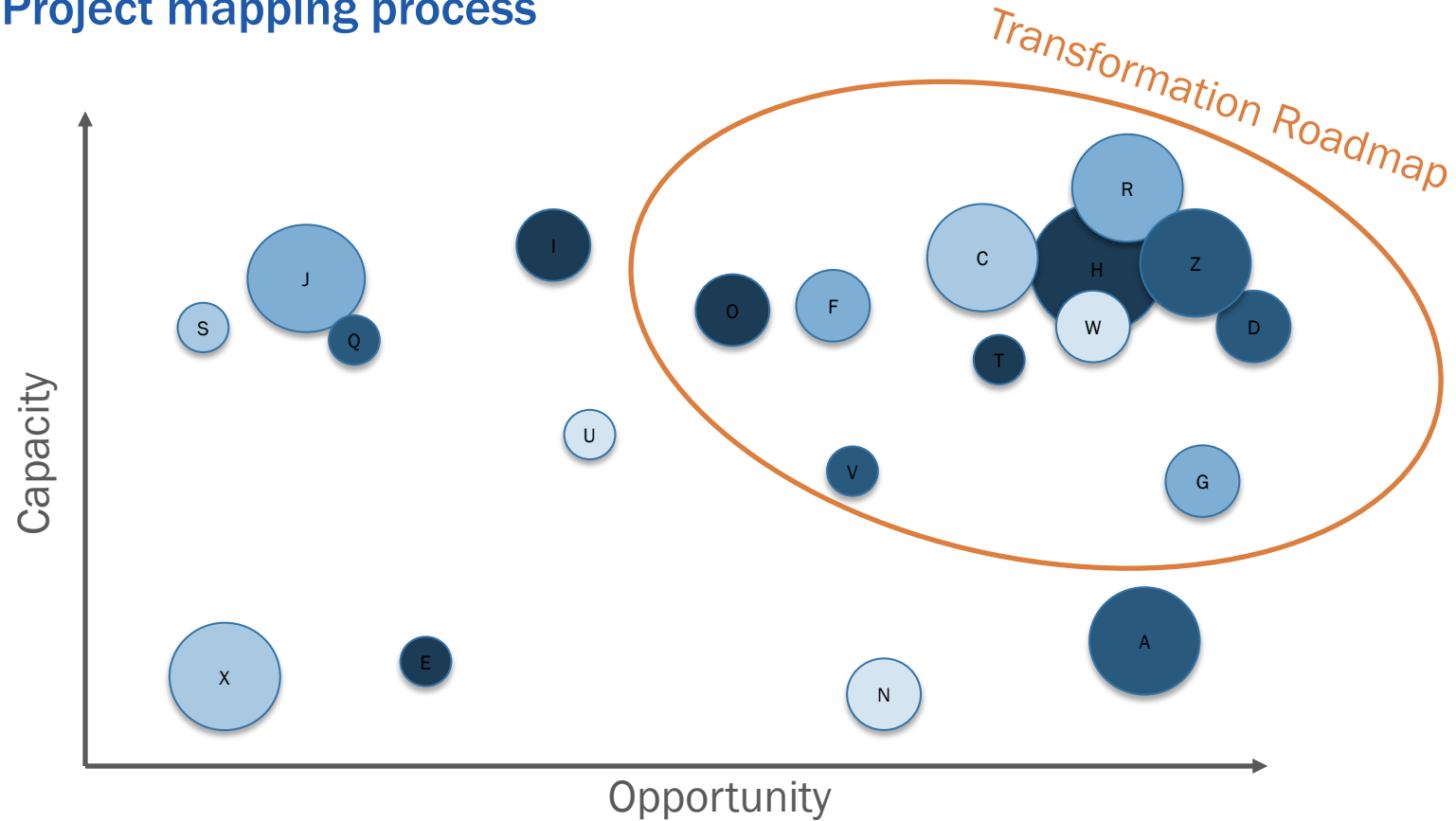


## S3 Implementation

### Project mapping process

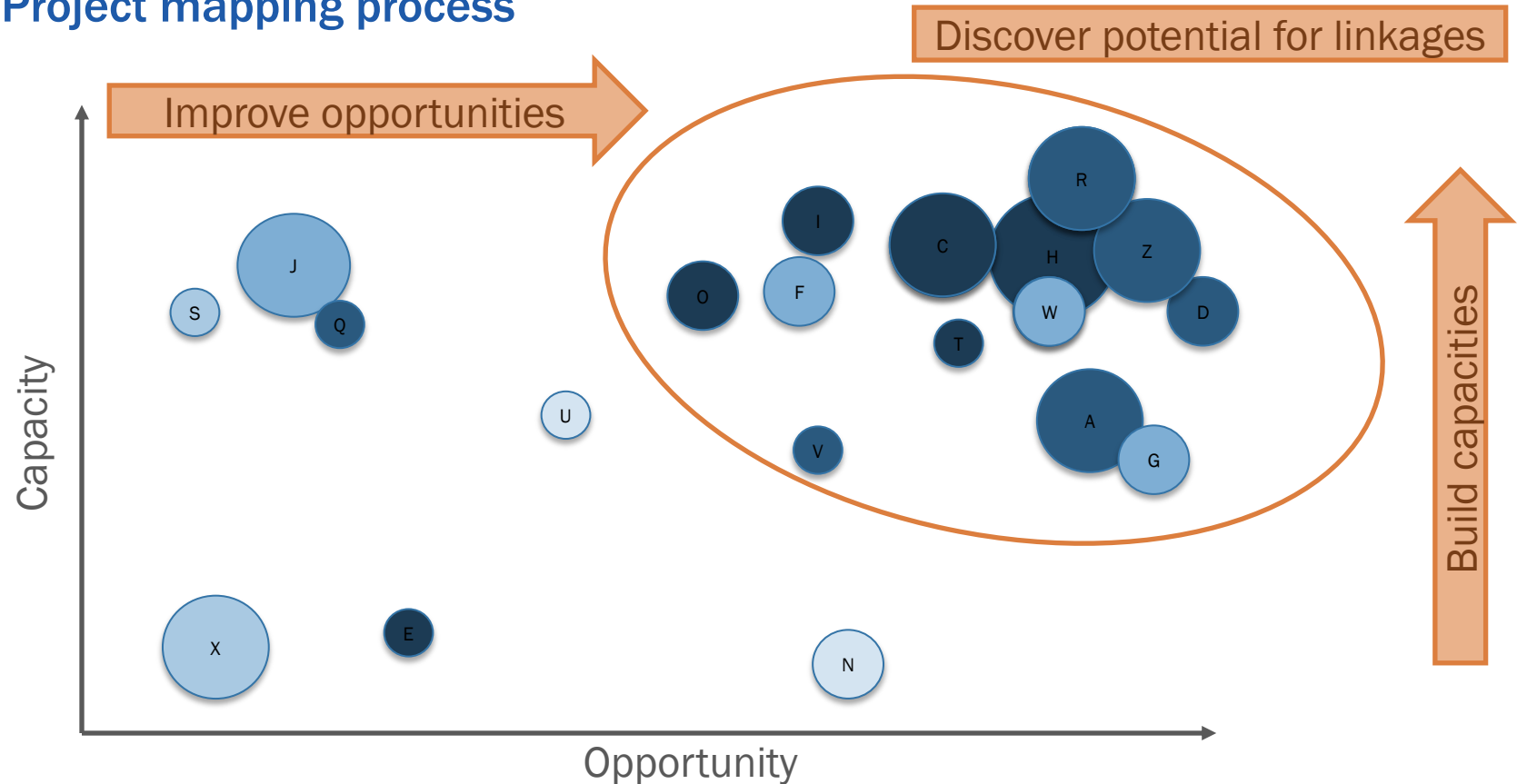


## S3 Implementation Project mapping process

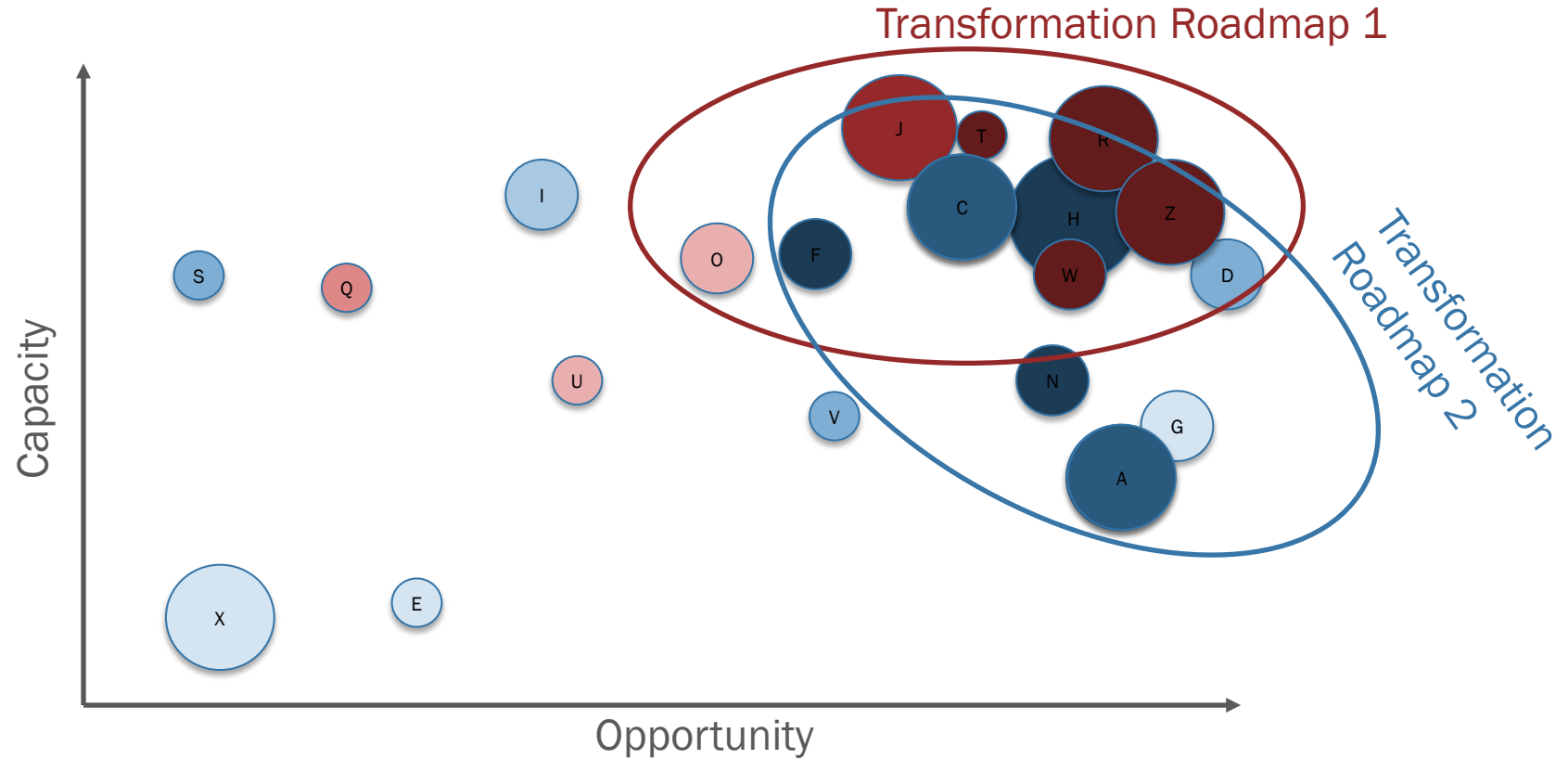




## S3 Implementation Project mapping process



## S3 Implementation Project mapping process



## Project mapping process

- «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?

## Summary and conclusions

- 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

## Summery and conclusions

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

# Thank you very much for your attention!



## Martin Eichler

BAK Economics AG  
Güterstrasse 82  
CH-4053 Basel  
T +41 61 279 97 00  
martin.eichler@bak-economics.com  
www.bak-economics.com



## Prof Dominique Foray

École polytechnique fédérale de Lausanne  
Economics and Management of Innovation  
Odyssea 1 01.1 Station 5  
CH-1015 Lausanne  
T +41 21 693 01 21  
dominique.foray@epfl.ch



## BAK Smart Specialisation Association

info@smartspecialisation.ch  
[www.smartspecialisation.ch](http://www.smartspecialisation.ch)