Evaluation of Smart Specialization Strategy: Methodological Issues

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Presentation outline

1. Do we really need an S3 evaluation? What questions should an S3 evaluation answer?

2. How should we evaluate?

3. The relationship between monitoring and evaluation

4. Timescale for evaluation
Do we really need an S3 evaluation? What questions should an S3 evaluation answer?

- In complex problems, where there is uncertainty about programme impacts and even about the channels of impact, evaluation has an important role as a policy instrument in itself, one that helps deal with uncertainty and complexity.

- This is relevant to new innovation policy such as S3, in which it is accepted that government cannot operate innovation policy levers in predictable ways, that instead policy makers need to construct policy interventions as a system of discovery through collaborative and experimental engagement with the private sector.
Do we really need an S3 evaluation? What questions should an S3 evaluation answer?

- Central to smart specialisation approaches is the notion of an “experimental state” which uses evaluation as a policy tool in developing modern industrial and innovation policy.

- In the “experimental state”, evaluation should not be an overhead that is resented by policy makers; rather it is a tool for eliciting information about what works and a way of refining and improving policy in a world where ignorance and complexity is the norm.
Do we really need an S3 evaluation? What questions should an S3 evaluation answer?

- Evaluation can play a role in policy development which is very much in line with modern industrial and innovation policy thinking.

- It needs to be recognised that time lags may make it difficult to track the variables of ultimate interest in the short term and there will be a need to find proxies which can give useful information. An iterative approach can be used, with periodic evaluations to improve knowledge of policy impacts and fine-tune programmes.

- Evaluation is not just about policy impact, process evaluation and the learning and development role of evaluation are important as well.
How should we evaluate?

- **Mainstream evaluation** is not suitable for judging the effectiveness of complex innovation policies and for considering the non-linear and multi-directional nature of relationships between the initiative and its outcomes.

- Mainstream evaluation lacks the systemic properties that are relevant for the evaluation of smart specialization strategies.

- In the face of complexity, or when outcomes are uncertain, consider the approach of **Developmental Evaluation** (DE) (Patton, 2011).
# How should we evaluate?

## Traditional vs developmental evaluations

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Traditional evaluations</th>
<th>Developmental evaluations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Render definitive judgment of success or failure</td>
<td>Provide feedback, generate learnings, support changes in direction</td>
<td></td>
</tr>
<tr>
<td>Success measure</td>
<td>Measure success against predetermined goals</td>
<td>Develop new measures and monitoring mechanisms as goals emerge and evolve</td>
</tr>
<tr>
<td>Independence</td>
<td>Position the evaluator outside to assure independence and objectivity</td>
<td>Position evaluation as internal, team function integrated into action and ongoing interpretive processes</td>
</tr>
<tr>
<td>Design</td>
<td>Design the evaluation based on linear cause-and-effect logic models</td>
<td>Design the evaluation to capture system dynamics, interdependencies, models and emergent interconnections</td>
</tr>
<tr>
<td>Learning</td>
<td>Aim to produce generalizable findings across time and space</td>
<td>Aim to produce context-specific understanding that inform ongoing innovation</td>
</tr>
</tbody>
</table>
**How should we evaluate?**

**Two-way classification of policy evaluation challenge**

<table>
<thead>
<tr>
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<th>Single measure</th>
<th>Package of measures</th>
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<tbody>
<tr>
<td>Standard/well understood</td>
<td>Simple-just do it better, use rigorous counterfactual, control groups, state-of-the-art estimation techniques</td>
<td>Complicated- apply single measure techniques to components where possible, take account of interactions and multiple treatments and influences</td>
</tr>
<tr>
<td>Uncertain/complex</td>
<td>Complex – use experimental methods, test/learn/adapt</td>
<td>Complex and complicated. Counterfactuals may not be possible. Apply single measures techniques to components, take account of interactions and systemic effects, use qualitative measures and more informal methods of learning by doing</td>
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*Source: White (2013)*
**How should we evaluate?**

- **DE** focuses on **understanding an innovation in context**, and explores how both the **innovation** and its **context** evolve and **interact over time**.

- Well-executed **DE** uses an **inclusive, participatory approach** that helps build relationships and increase learning capacity while boosting performance.

- **DE** is an **adaptive, context-specific approach**. As such, there is **no prescribed methodology**: the “right” method is determined by need and context.
The relationship between monitoring and evaluation

**Monitoring** => understanding what is happening:

- **Implementation**: is it being implemented as expected? If not, which can be the corrective actions?

- **Specialization areas identification**: collect all the relevant information useful for confirming or re-focusing the selected areas

- **S3 Governance structure**: the decision making structure and the involvement of all the relevant stakeholders
The relationship between monitoring and evaluation

What monitoring cannot do:

× Express a judgement about what is working and what not

× Evaluation of the policy mix deployment

× Analysis of structural changes produced by the strategy
# The relationship between monitoring and evaluation

<table>
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<tr>
<th>Monitoring</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>□ Information: short list of indicators, updated information very specific; data easily to interpret</td>
<td>□ More structured information set: multiple sources of data; a qualitative-quantitative mix of information</td>
</tr>
<tr>
<td>□ Timeliness: ensuring high responsiveness to new information</td>
<td>□ Understanding the cause effect relationship</td>
</tr>
<tr>
<td>□ Actors: ex-ante selection of stakeholders to be involved ensuring representativeness; S3 beneficiaries</td>
<td>□ A plurality of approaches varying according to the specific policy and to the addressed problem</td>
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</table>
Policy-makers seek an approach that delivers results during the planning and execution of a programme and helps them react to new information and emerging results.

Source: Gamble (2008)
Central to Developmental Evaluation is the notion that evaluator and policymaker are part of a team seeking to understand the impact of policy in real time and adapt it in a complex and changing environment.

It is thus particularly well matched to the modern conception of innovation policy where policy makers engage in an iterative process of dialogue with business and others, and there is a combination of top-down and bottom-up approaches.
The use of evaluation in the policy cycle could be improved if good processes are put in place for feedback from evaluators to policy makers, both during the programme and at its conclusion.

During the programme, evaluation can be part of a process of iterative and experimental policy development.

But, no matter how good the quality of the underlying evaluation, its value will only be realised if there are effective channels for communication and influencing to increase the likelihood that the results are used.
Thank you for your attention!

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Main challenges in evaluating Smart Specialisation Strategies

Situations in which this …

turns out to be this …

Source: Patton (2014)