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# MLE on Evaluation of Business R&D Grant Schemes under the Horizon 2020 Policy Support Facility.

Learning experience and reflections

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# What is this MLE about?

- *Hearing how different countries are dealing with evaluation of R&D public policies*
- *Pointing out topics of common interest to be addressed*
- *Getting the input from experts*
- *Sharing national approaches*
- *Discovering common aspects and differences among countries*
- *Learning on application of methodologies*
- *Building networks*

# Big data/Norway

## *Data linking, new data sources and new analytical methods*

### ***Why is this issue relevant for evaluation of R&D public policy?***

- Data is the raw material for any evaluation
- The amount of available datasets in the public administration has been progressively increasing: administrative data, surveys...
- But, traditional data sources have proved to be insufficient for answering evaluation questions
- Focus has moved to alternative data and initiatives to merge existing databases
- This approach entails challenges in terms of methodology and administrative or legal barriers

# Big data/Norway

## Stakeholders' perspective

- Researchers
- Policy makers (Ministry)
- Agency

## Big data for policy making

- In other areas (Panda, Telnor)
- In R&D (REITER project, OECD; Dataset on Norewegian R&D Grants Innovation system )

## Main messages

- ***Data linking** is a key element for evaluation of public policies, but it requires coordination among units, agencies, ministries: Norway is a very good example (448 support schemes; 16 agencies)*
- ***Confidentiality** is an issue of special concern: merging administrative data and surveys from Statistic Offices*
- *How to exploit **sleeping data sources**: qualitative info in reports, websites. New methodologies (text-minning; web scraping).*
- *Quantitative data, even if they are big, need to be complemented with **qualitative info**.*
- *Big data could be expensive data: **added value** for policy and public welfare must be proved*

# Behavioural change (BC)/Sweden

*Towards a better understanding of innovation journeys of beneficiaries of R&D and innovation grants*

## ***Why is this issue relevant for evaluation of R&D public policy?***

- Evaluation is traditionally focused on input and output additionality, behavior is usually addressed as a secondary issue.
- This approach has been proved to be insufficient: Does the public intervention change the behavior of population in a persistent way?
- BC is difficult to define and measure: a common framework would make easier to evaluate it.
- Context is always a key element in evaluation, but regarding BC is even more relevant: we evaluate a programme within a concrete context, where people take decisions.
- Sharing practical cases is the right way to learn about behavioral additionality.

# Behavioural change (BC)/Sweden

## Swedish approach

- Vinnovas' SME portfolio of programmes
- Vinnova and Almi: growth in SME
- Swedish Incubator Programme

## OCDE input

- OCDE taxonomy on behaviour additionality: fostering international initiatives

## Main messages

- *BC is **defined by objectives** of the program*
- *Effects of R&D policies in behaviour are highly dependent on **other aspects**: business excellence*
- ***Reference framework**: direct effects, spillover effects and system effects*
- *Increasing role of "**soft measures**" in R&D instruments portfolio: BC is crucial*
- ***Methodologies**: qualitative approaches (case studies; analysis of open questions), network analysis.*

# Mixed methods/UK

## *Combining Mixed Approaches to Evaluations*

### ***Why is this issue relevant for evaluation of R&D public policy?***

- Traditionally, quantitative methods have been seen as more robust than qualitative approaches: *What is the effect of a program?*
- Complex econometric technics have been developed but still they are highly dependent on extensive micro data and long-time series
- Big data and merging of data sets are useful tools, but usually confidentiality rules prevent evaluators from using them
- Different evaluation questions (how and why a program generate change) require different methods
- As much as mixed methods are used in evaluation of public programs best practices will be shared and common methodologies will be applied

# Mixed methods/UK

## UK approach

### Institutions involved in evaluation

- Innovate UK, UKRI
- Economics Research Center
- What Works Centers (WWC)
- Innovation Growth Lab

### Evaluation of specific programmes

- Catapults: Digital; High Value Manufacturing
- Bio-medical Catalyst
- Evaluation of the Smart programme (SMEs)
- Evaluation of R&D tax credits

### Main messages

- *Common frameworks for evaluation are welcome, but they should be taken as a reference, not as fixed guidelines (Catapult evaluation framework, IUK, WWC guide)*
- *Limitations of quantitative approaches: control group, spillovers, time to market*
- *Looking at the process: linking “WHAT” with “HOW” and “WHY” (logic model, evaluation based on the theory, systemic approach, agent based modelling)*
- *From attribution analysis to contribution analysis: “...mutually re-enforcing factors required to generate outcomes”*
- *Triangulation of quantitative and qualitative results: learning from evaluations*
- *Building capacity in public administration: WWC workshops*



# Conclusions

Big data

Behavioural  
change

Mixed  
methods

- ✓ **Highly related issues**
- ✓ **Addressing evaluation challenges from new approaches**
- ✓ **By sharing experiences we are building a common framework for further steps**