Evaluation Methods and Strategic Choices - Lessons Learned in Finland

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01:45 PM - 03:15 PM, Madison B
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Tekes — the Finnish Funding Agency for Innovation

My presentation

- 1. Brief description of Tekes
- 2. Evaluation in Tekes
- 3. Challenges in evaluation
- 4. Learnings

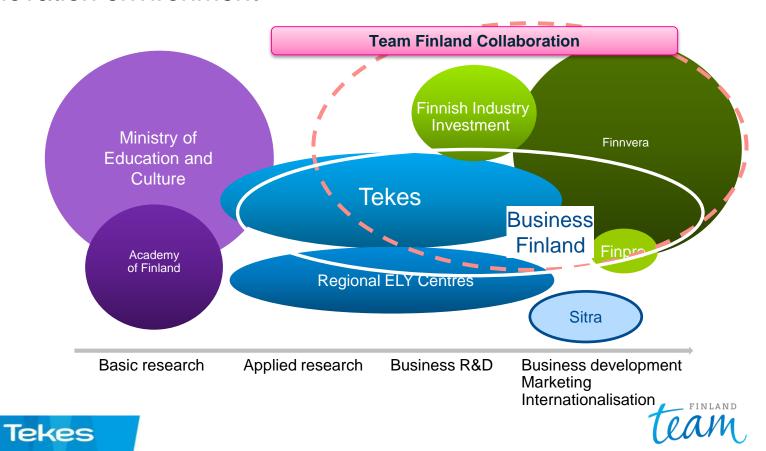


Role of Tekes



- Tekes is the most important publicly funded expert organisation for financing research, development and innovation in Finland.
- Tekes boosts wide-ranging innovation activities in research communities, industry and service sectors.
- Tekes promotes a broad-based view on innovation: besides funding technological breakthroughs, Tekes emphasises the significance of service-related, design, business, and social innovations.

Public funding actors in the Finnish innovation environment



Evaluation in Tekes



Critical Points in Evaluation Management and Results

Utilization and decision making (deliverables, critique, success cases, recommendations)

Lessons learned and possibilities to expand them

Evaluation as learning process

Intervention logic (time lags of impacts, communication)

Backbone = "I know what I am doing!" How to manage evaluations and impact analyses as a commissioner?

Strategy, leadership, knowledge and evaluation capacity

> Evaluation type and scope (intermediate, ex-post, continuous, foresight, developmental, impact)

Publicity & media relations
(e.g. surprising critique, accountability)

Reach & Context, key factors behind understanding the pathway from activity to impact.

Who is principal? The intended users? (e.g ministry, board of directors, tax payers)

How to choose methodology?

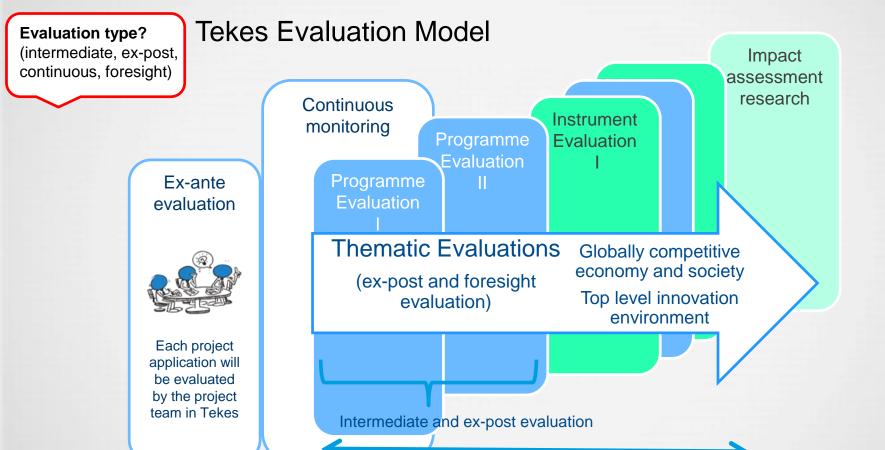
The terms of reference (incl. procurement)

Management

Results

Evaluation as learning process





Continuous evaluation



Reach & Context, key factors behind understanding the pathway from activity to impact

Tekes Impact Assessment Model 2017

Globally competitive business and industry

Top-level innovation environment

Impact on society

9. The impacts of Tekes funded innovation activity will eventually have a positive effect on the wellbeina of citizens and the environment.

Tekes Venture Capital Ltd **Outcomes and direct impacts Indirect impacts** Selecting and targeting instrument 3. Tekes' funding and 6. Improvement of Project funding for 8. Impacts are spread 2. The right customer and instrument is know-how and the new services increase selected in Tekes funding process widely through operating methods, customers own R&D-(development path) Tekes funding networking and by contribute to the growth activity **Tekes services** Young Innovative of turnover, Selecting the innovative enterprises, Team Finland improvement in right instrument increasing productivity Other instruments productivity and 4. R&D inputs increase and economic growth employment growth of New instruments (e.g. the know-how and Start-ups Selectina customer companies networking of the right Marketing and Large companies and communication 7. The outcomes of customer customers Tekes' funding and steering and support expert services result in 1. Targeted funding is based on the initiatives of customers and to the chosen focus areas new competence and Market intelligence 5. Increased demand evaluation new innovations development activity Tekes' approaches and practices and Planning, focusing, focus areas marketing contributes to the development of Reporting, closure, Natural resources and resource efficience further discussions · Digitalism renewing business and operating environment industry Kickoff, funding, Positive external impacts · Wellbeing and health New business ecosystems Applying, evaluating, Market access







selecting



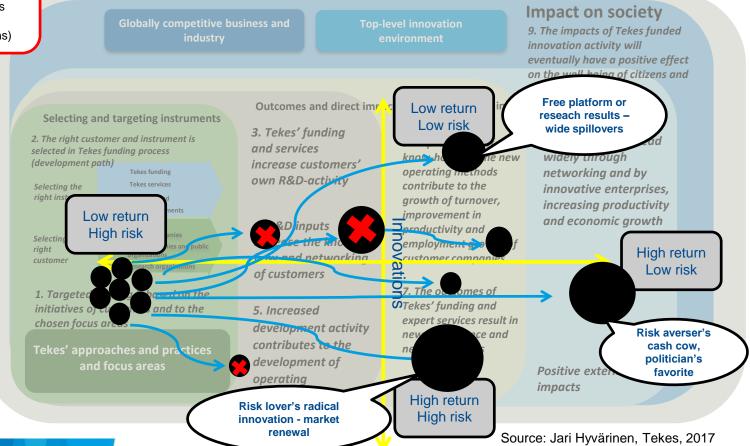
Challenges

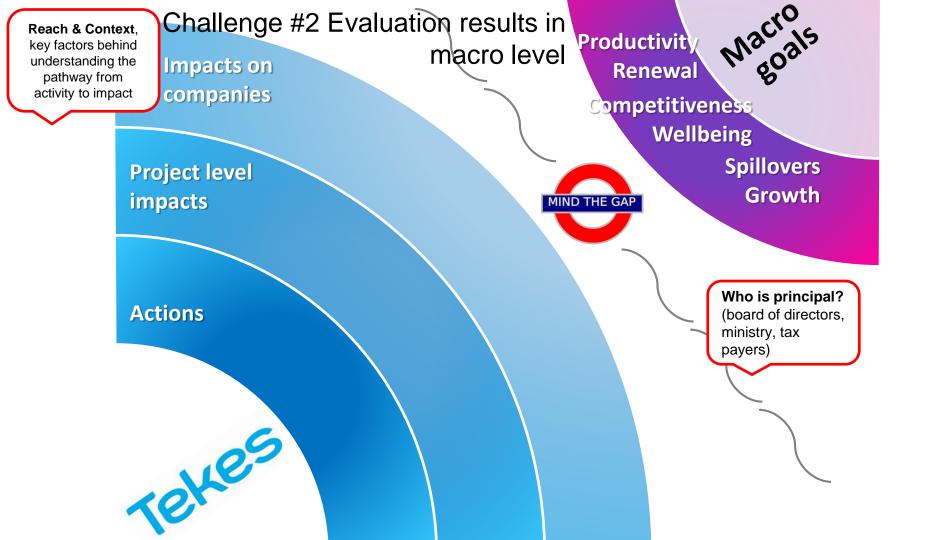


Communications, utilization and decision making (critique, success cases, recommendations)

Tekes

Challenge #1: Tekes Impact Model and Risk-Return Scenario

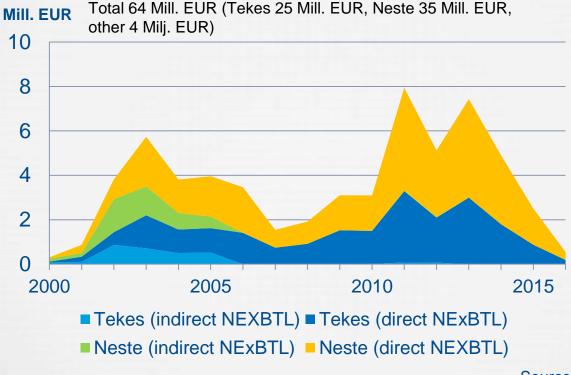




Communication: intervention logic & time lags of impacts

Challenge #3 Long time lags

Example: Biofuel NEXBTL and Tekes Funding



Neste Oil renewable fuels total turnover was 2 372 MEUR and profit 402 MEUR in 2015, Source: Neste Oil Annual Report 2015

Source: Tekes 2016



How to choose methodology? Goals vs. methods (survey, interviews, case studies,

econometrics)

Challenge #4: Evaluation Process at R&D Project Level and company behaviour

Ex-ante evaluation

- Evaluation of the project:
 - Asta client tool
 - •Eval project tool
 - Risks
 - Challenges
 - Goals
 - Novelty value
 - Co-operation
 - Exploitation of results
 - Commercialisation

Ex-post evaluation

- Final project reports
- 3 years after project reports:

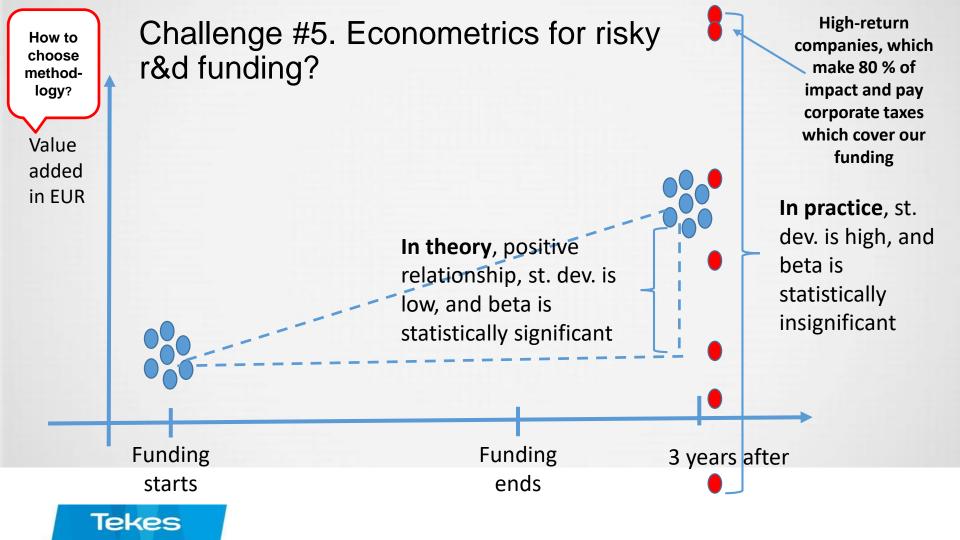
Project achievements:

- New project innovation
- · New service innovation
- New process innovation
- New social innovation
- New environmental innovation

Project results

 Patents, utilisation models, Trade marks, IPR:s (product protection), Licences, Spin-offs, New co-operation models Vs. Control group in a small country like Finland





Learnings



Critical Points in Evaluation Management and Results

Evaluation type?

(intermediate, ex-post, continuous, foresight)

"Ex-post evaluation comes too late, but how to get relevant information for continuous evaluation"

> Communications, utilization and decision making (critique, success cases, recommendations)

"Goals of R&D&I projects differ"

Reach & Context, key factors behind understanding the pathway from activity to impact

"Impact model & actions - projects - organizations - macro level"

Communication: intervention logic & time lags of impacts

"Time lags are mostly too short and impacts cannot be measured properly because capabilities move forward to new sources in the economy" Who is principal? (board of directors, ministry, tax payers)

"How to spread a message that this is relevant for tax payers?"

How to choose methodlogy?

"Evaluation needs variety of methods, not only econometrics or qualitative methods but analysis from multiple angles!



Finnish wellbeing relies on the economic growth created by innovations

Innovation activity is a key driver of economic growth and enables the funding of welfare services in the long term.

Thank you!

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Results of completed Tekes projects

R&D and innovation projects completed in 2016 generated

- 2,250 products, services or other innovations
- 1,000 patents or patent applications
- 680 academic thesis

Total 1,980 completed projects













