Evaluating Impact Innovation

IIPP MPA Student Placement for Vinnova

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OUR TEAM

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CONTEXT

A NEW PARADIGM IN INNOVATION POLICY

NBC News (2023).

- Transformative (TIP) and missions-oriented innovation policy (MOIP) is increasingly applied in practice (Schot & Steinmeuller, 2018; Mazzucato, 2018).

- While the concepts are well established, practices and examples of implementation and evaluation are far from developed. (Ghosh et al., 2021)

- Governments are faced with grand challenges, and these types of policies are one of the few options available to support new ways of working.

- Theory and practice are in a co-evolving process.
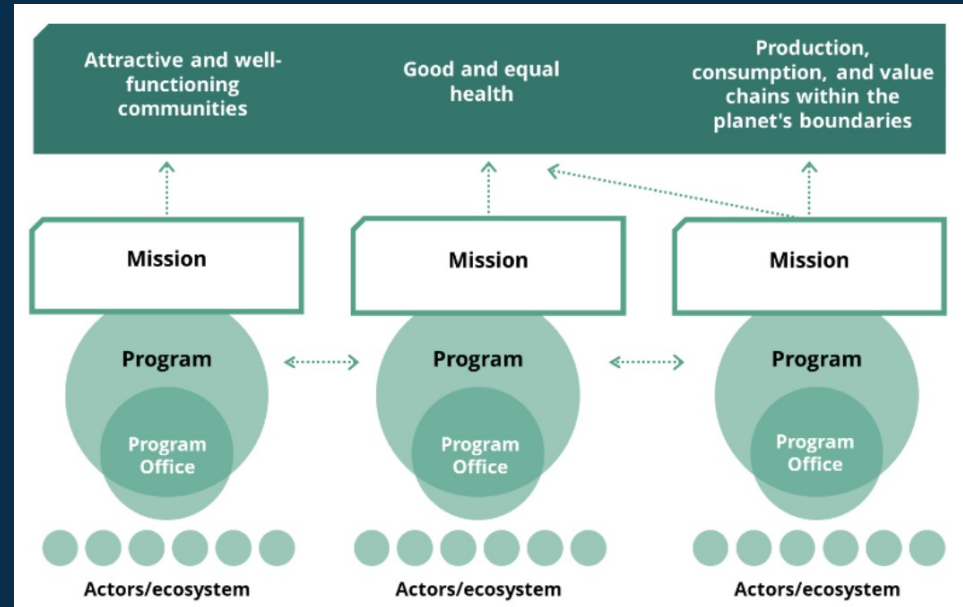
IMPACT INNOVATION

Impact Innovation (2023)

- A third generation Strategic Innovation Programme across three collaborating agencies.

- The objective is to accelerate the transition towards sustainability for global competitiveness and societal benefits.

- Bottom-up creation of 5 missions in 3 areas:

  - Production, consumption and value chains within planetary boundaries

  - Attractive, well-functioning communities

  - Good and equal health

IMPACT INNOVATION

- Programme offices (POs) play a leading and mobilizing role around the mission.

- The POs are expected to be active for at least 10 years.

- Only up to 50% of the PO funding can come from the three agencies.

- Five POs will be established in 2024. A second round will form additional POs and missions in 2027.

Vinnova (2023)

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CHALLENGE

An external analysis of the draft Impact Innovations evaluation plan

The challenge around evaluation

- Transformational change is a long-term process loaded with uncertainty and missions themselves are not static policies but expected to develop over time.

- The complex nature and interactions of system dynamics and the various levels at which systems change occurs requires multiple levels of analysis and undermines the value of traditional quantitative KPIs (Wittman et al, 2021).

There is a shift in the aim of evaluation towards a more formative approach that can support implementation through an emphasis on capacity building and learning

Wittman et al, 2021

The opportunity

How can the evaluation team innovate on the draft Impact Innovation evaluation plan, drawing on the latest insights and practices in dynamic Monitoring, Evaluation and Learning (MEL)?

Scope of our project

Theory of Change

Impact Innovation Reports

Call for research proposals

Formative evaluation (5 years)

Summative evaluation (10 years)

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RESEARCH

Research Questions

1. How do we measure and report on change in complex systems?

2. What capabilities, tools and approaches are useful for MEL if the goal is to continuously learn, adapt and accelerate efforts to transform complex systems?

3. How do we design and implement accountability frameworks, metrics or practices that allow for learning, flexibility and adaptation among the programme offices?

4. What are the key challenges for the agencies and programme offices in adopting these MEL approaches and tools?

Two methods of research

Research

Literature Review

- Internal Documents
- Academic Literature
- Case Studies

Semi-Structured Interviews

- Impact Innovation Staff
- MEL Practitioners
- Academic Experts

Literature Review

Understand and draw connections between:

- Evaluation and Learning in complex systems

- Impact Measurement and Indicator Selection

- Theory of Change for complex systems

Semi-Structured Interviews

Gained Insight from:

- Impact Innovation Staff – 6

- MEL Practitioners – 3

- Academic Experts – 1

Insight Synthesis

Interview insights

Literature insights

Case insights

Design

Higher Learnings

Questions for us as researchers

Who is involved in evaluation

Multiple layered stakeholders in evaluation

MEL needs to involve all stakeholders

Different levels of involvement at different stages

Programme offices have ownership and drive MEL

Programme offices should ultimately have ownership. MEL plan should not be too top down

How might we support coordination from agencies to POs down to project teams?

Cross-agency effort so need to include and address all 8 agencies

Build up a **shared methodology** for Impact Innovation over time and programme offices

Challenges

How do we design evaluation approaches for larger, more complex systems innovation?

How might we design the organisational infrastructure to support missions work?

Ensure learning leads to transformation

GAP #5: Support for programme offices in doing MEL

Purpose/role of MEL in Impact Innovation

Learning is the key aim

Learning and reflexivity as key aim for MEL, facilitated by ToC and IR and other activities

Accountability for impact not to be forgotten

Evaluation should help jointly achieve future funding decisions

MEL in Impact Innovation needs to account for the systems innovation context

Systems innovation will be seriously hindered unless there is systems thinking capacity in the POs and projects

Systems thinking is foundational to this work, but evaluation plan is currently missing this.

GAP #1: Lack of systems thinking emphasis

Things to consider

We should highlight these 4 aims and these to consider when doing MEL

We should outline the challenges associated with MEL - particular progress / impact tracking

Incorporate this into presentation when setting out challenge

Highlight Vinnova as the main driver the work of the programme offices will also be related to community uptake/should be dynamic

Formative evaluation

Dialogue spaces/Mini-publics

Have open dialogue space to facilitate learning in the liminal space

Accountability should avoid restraining learning activities, can find way to co-exist?

CEREMONIES!!

How to facilitate learning

Design ritual or rhythm for iterating ToCs every 2 years

How can Vinnova dynamically support POs with MEL over the course of the programmes?

Vinnova could provide more than just funding, such as analytical or learning support

Always design for POs to have agency, doing so is essentially capacity building

Need to help build capacity and skills in programme offices

GAP #3 There is a lack of diversity in perspectives for deep learning

GAP #4 There is no framework or ceremonies for learning from the ToC to the IRs

Learning agendas are best to be made explicit

But there is a gap of rituals or processes to support the bi-annual expected updating of ToCs

Develop self-assessment tools for iterating ToC based on learnings and insights (from Transformative ToC)

GAP #2 There's a lack of qualitative and actionable data for learning (rather than measuring impact/progress towards desired change)

There are leading and lagging indicators

Forward looking indicators as well as backward indicators

Look beyond quantitative indicators to more qualitative ones

Indicator design and agreement process dynamic over time

Indicators should be dynamic as their relevance might change over time

Vinnova have done a comprehensive analysis for the IR but all indicators are quantitative

"Evidence" can be a broad range of data and knowledge

Indicators not just quantitative but qualitative (more open/interpretation)

Ensure collaboration in designing indicators, not just publishing

GAP #7 The evaluation plan is rather static, but missions MEL need to be constantly experimenting as well as adapting to stages of Impact Innovation as the focus shifts (e.g. from learning to accountability).

Thinking about how you might measure change in ToC should feed into IR and general learning

Impact Innovation Reports

Design section on impact report to track trends around key impact indicators

ToC

ToC Approach should leverage concepts and tools from systems thinking

Transformative ToC could be a valuable framework to maximise learning among participants

Meadows leverage points / ESG water of systems change for ToC development

What systems change frameworks e.g. Meadows when developing ToCs?

Causal loop diagrams

Need to adapt ToC framework to account for annual expected updating of ToCs

Integrating participatory systems mapping and ToC to account for complexity/systems innovation

Participatory Systems Mapping/ToC Provides a proven and powerful leverage mapping with the ToC

Important to map out current system before creating theory of change

GAP #6 Lack of systems perspective in ToC and MEL

Key insights

COMPLEXITY AND CHANGE

Traditional theories of change are not well-suited to complex systems

DIVERSITY OF DATA

Actionable data need to dynamically mix quantitative and qualitative approaches.

POLICY LEARNING

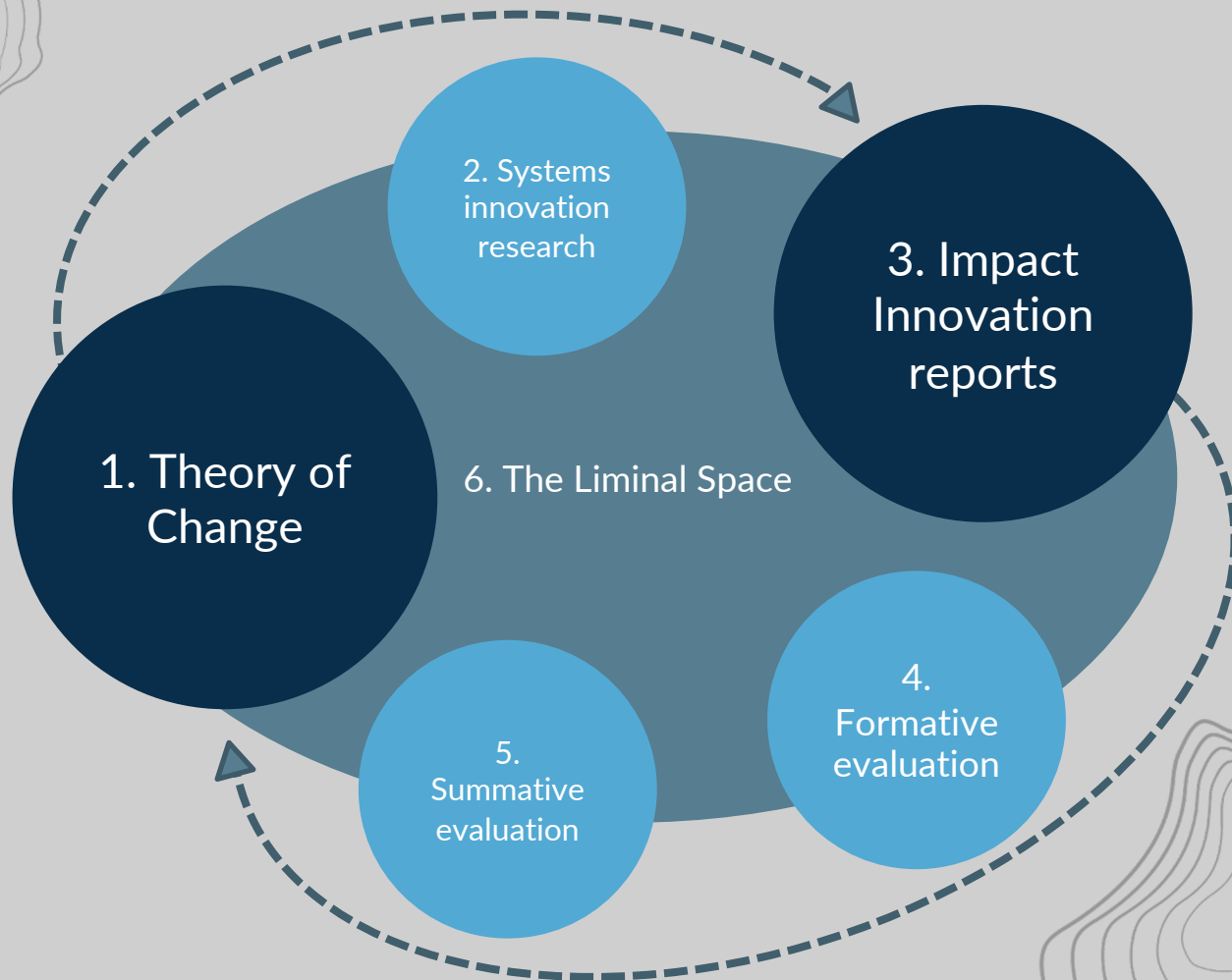Evaluation is transformative when fostering deep learning

EXPERIMENTAL EVALUATION

Evaluation practice must be designed to be adaptive
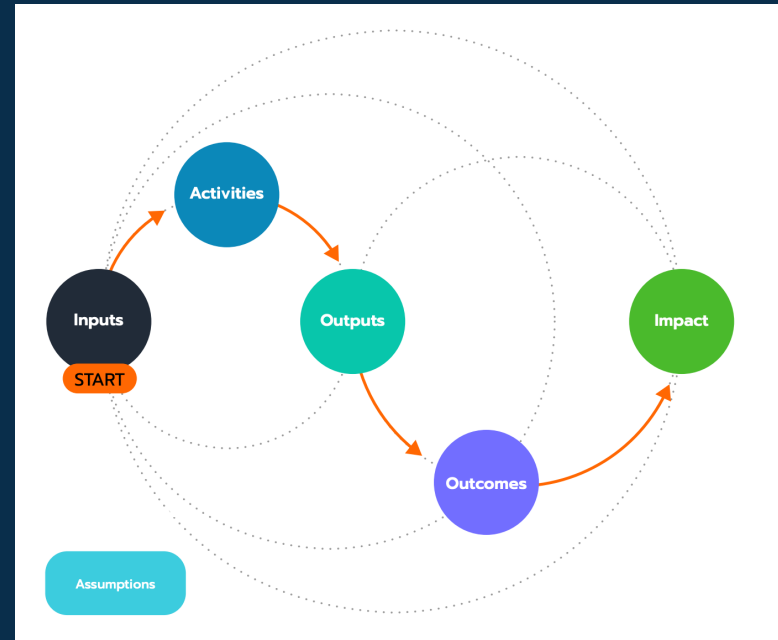
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RECOMMENDATIONS

Theory of Change

1. Incorporate systems thinking into the Theory of Change development process

Limitations of traditional Theory of Change approaches

Traditional Theory of Change approaches can over-simplify complex systems change through reduction of interactions to a linear cause-effect relationship (Ofek, 2017; Patton, 2010).

Gap in evaluation plan

Systems thinking is absent from the proposed process of developing theories of change in the evaluation plan.

Theory of change (MOTION Handbook: Developing a Transformative Theory of Change)

1. Incorporate systems thinking into the Theory of Change development process

Wilkinson et al (2020) have developed a clear, accessible process that integrates systems mapping with the theory of change to create a more holistic, complexity-appropriate, systems-based theory of change.
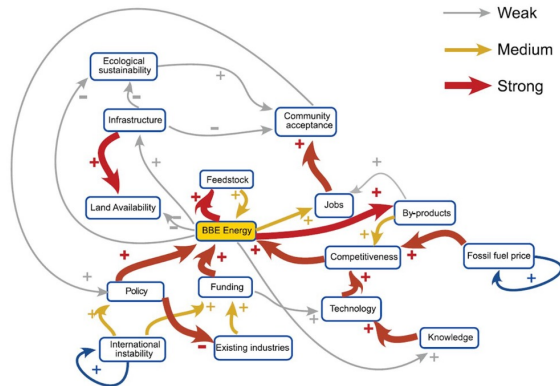
Figure 1. A system map focussed on energy production from bio-based economy in the Humber region (reprinted from (Penn et al. 2013).
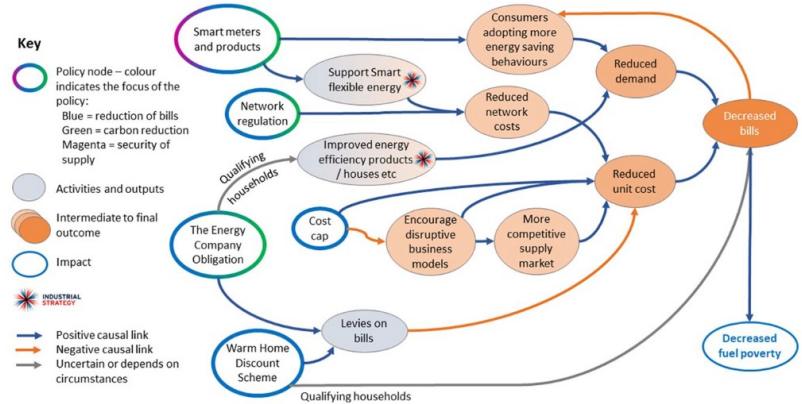
Figure 4. The first outline ToC.

(Wilkinson et al, 2022)

1. Incorporate systems thinking into the Theory of Change development process

The mapping of assumptions in the theory of change can also serve as the basis for the creation of a learning agenda (UNDP Strategic Innovation, 2023).
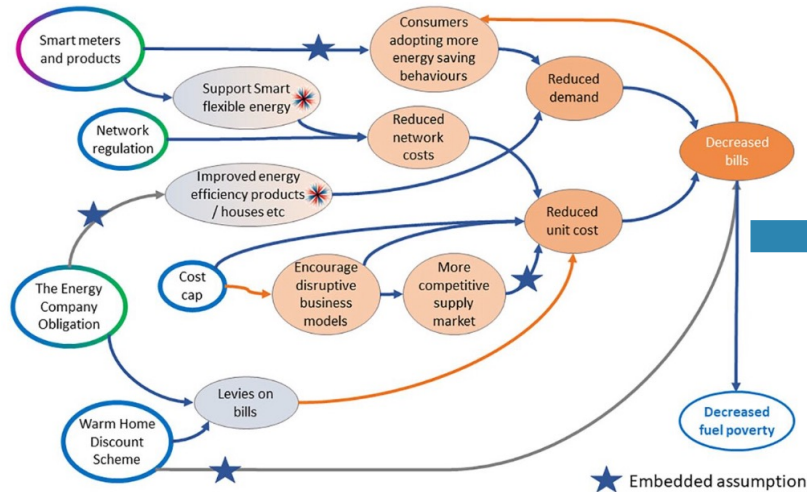
Figure 6. Identifying where assumptions are embedded in the ToC.

(Wilkinson et al, 2022)

(Itad's learning framework (2023), modelled on Luminate's learning framework)

2. Create learning infrastructure for updating Theories of Change
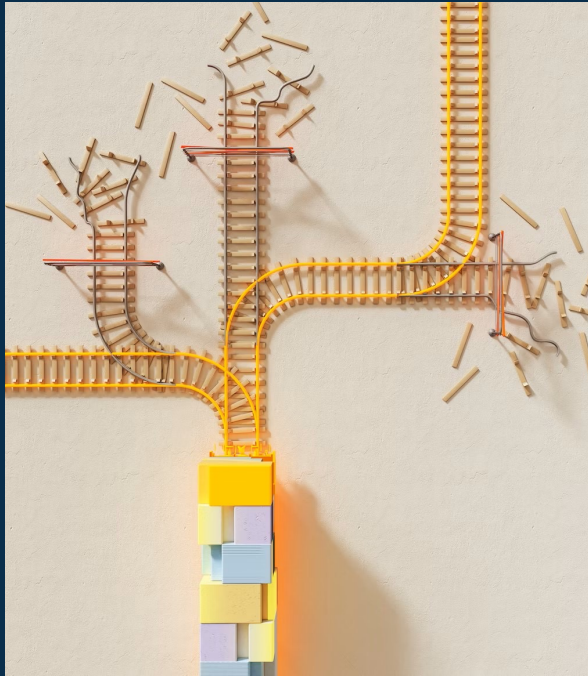
Rendering by Khyati Trehan.

Identified gaps

Missing support for POs to update theories of change and lacking diversity of perspectives in shaping ToC.

Proposal

The Impact Innovation Accelerator provides learning infrastructure for programme offices involving a diverse set of stakeholders when updating the ToC.

Rationale

Updating the ToC is a moment with potential to become a transformative practice of evaluation in a diverse and well-facilitated dialogue space (Aranguren et al., 2017).

2. Create learning infrastructure for updating Theories of Change

2. Explore "unplanned" learning, signals and emerging outcomes

4. Update Theory of Change

1. Review learning plan and assumptions

3. Update systems map

5. Update indicators for Impact Innovation reports
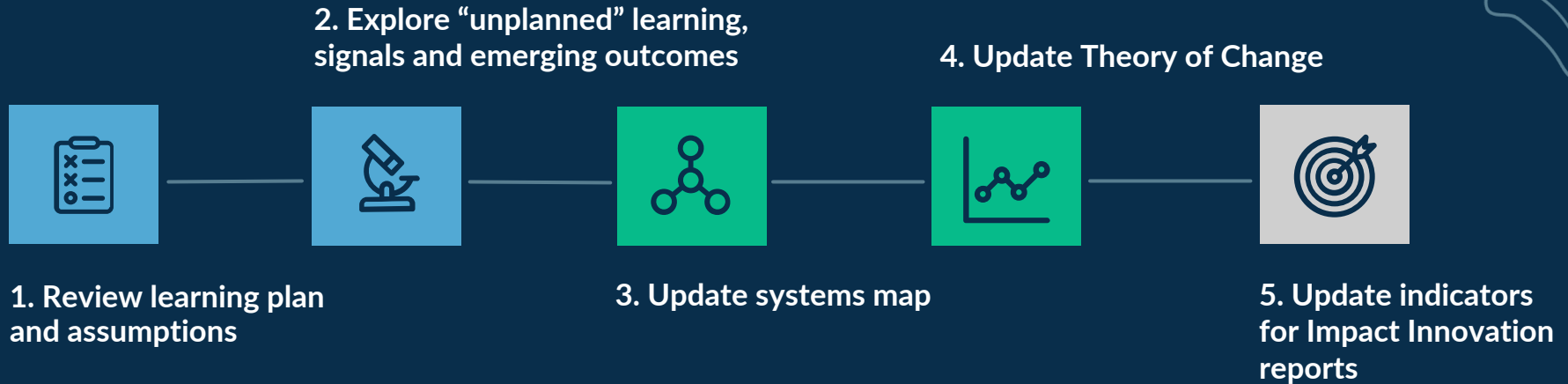
Relevant cases

Measuring the Mountain, Wales (Iredale & Cooke, 2020)

Regional competitiveness policy, Spain (Aranguren et al., 2017)

Impact Innovation Reports
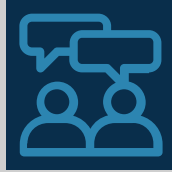
3. Qualitative Indicators

"Qualitative methods can provide a better approximation to impact assessment by providing a fined-grained, contextualized description of Transformative Outcomes through detailed narratives." *(Molas-Gallart et al., 2021)*

- Greater insight to current indicators

- Opens new lines of inquiry

- Ethnographic and Sensory data

Media Visibility

How is a new vision of the future being articulated?

How is public awareness of a need for change being raised?

How is change in regulation being lobbied for?
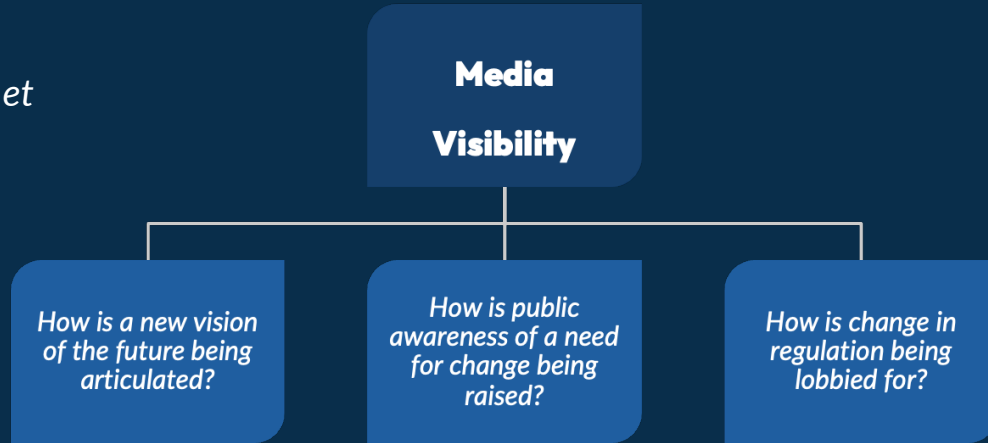
4. Customised Indicators

"The diverse fields that are likely to be addressed via MOIP make it difficult to develop generalized indicators that are both sufficiently specific and yet abstract enough to serve as a point of reference" *(Wittmann et al., 2021)*

- Create space for Programme Offices to design some indicators

- Updating Theories of Change and Systems Maps provides direction

- Include stakeholders to give alternate viewpoints

- Hivos provides a simple brainstorming tool

4. Customised Indicators

Hivos Indicator Development Exercise

Sign of Change	Relevance	Measurable	
Air quality	+ +	+ +	Good Indicator
Cars in area	+ +	+ –	To be discussed
Bikes bought this year	+ –	+ –	Questionable
Total miles driven	+ –	– –	Drop

(van Es et al., 2015)

5. Dynamic Indicators

The relevance of indicators changes over time, so their type and number should too.

- Early focus should be **Learning**

- **Customised Impact** and **Accountability** become more relevant over time

- Reduces perverse incentives

- Avoids overwhelming programme offices early on
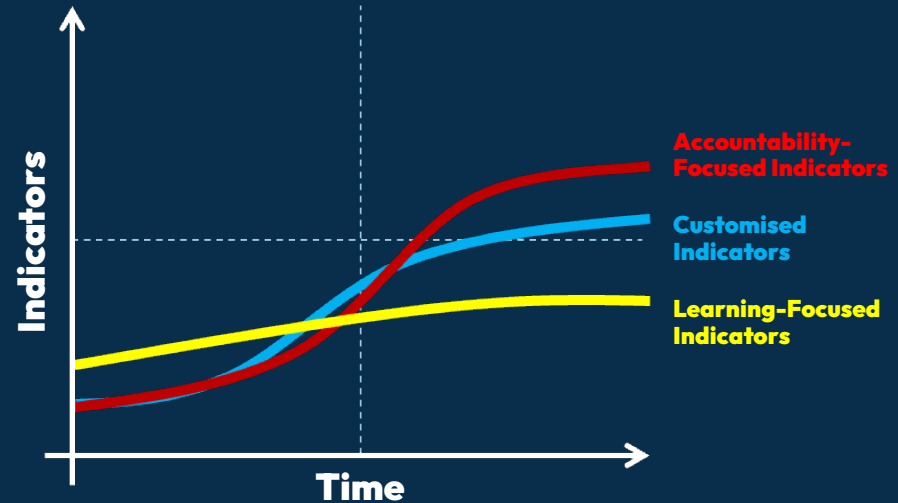
The Liminal Space

6. Continuous micro-narrative collection and analysis

Identified gaps

Data collected for reports risk not being granular and recent enough to provide actionable insights.

Proposal

Continuously collect and analyze stories from actors, POs, funding agencies and other stakeholders to better understand spill-over effects and emerging issues.

Rationale

Getting to the mission target is a complex process and requires continuous action and learning to nudge the system in the desired direction.

The Cynefin Company (n.d.)

6. Continuous micro-narrative collection and analysis

Create a **framework** with input tools (examples from SenseMaker)
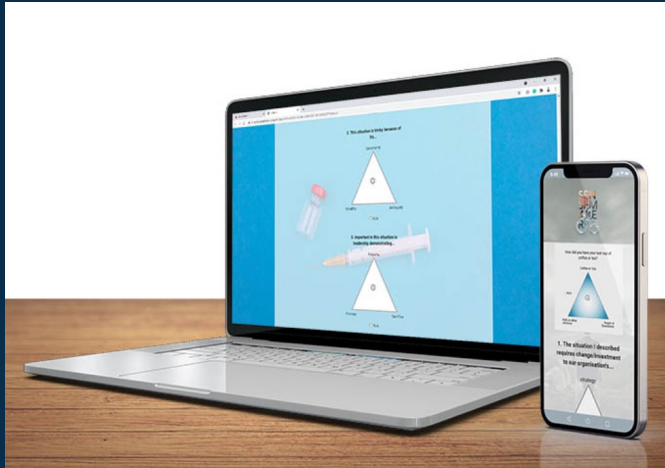
The Cynefin Company (n.d.)

Create a **dashboard** for data analysis and share with programme offices

Van Der Merwe et al. (2019)

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CONCLUSION

OUR RECOMMENDATIONS

1 Incorporate systems thinking into the Theory of Change development process

2 Create a learning infrastructure for updating the Theory of Change

3 Create more descriptive, qualitative indicators

4 Identify programme-specific indicators that signify progress along impact pathways defined by Theory of Change

5 Use more dynamic indicators that change as the programmes evolve

6 Capture continuous micro-narratives to provide actionable data

WHAT'S NEXT?

01

Listen to your feedback and refine our recommendations

02

Finalise our report which includes all of our research and recommendations in more detail

03

Hand over the report and wrap-up our placement with Jakob and Miriam

THANK YOU FOR LISTENING!

We would love to hear your feedback and answer any questions.

References

Aranguren, M. J., Magro, E., & Wilson, J. R. (2017). Regional competitiveness policy evaluation as a transformative process: From theory to practice. *Environment and Planning C: Politics and Space*, *35*(4), 703–720. https://doi.org/10.1177/0263774X16662469

Ghosh, B., Kivimaa, P., Ramirez, M., Schot, J., & Torrens, J. (2021). Transformative outcomes: Assessing and reorienting experimentation with transformative innovation policy. *Science and Public Policy*, *48*(5), 739–756. https://doi.org/10.1093/scipol/scab045

Haddad, C. R., & Bergek, A. (2023). Towards an integrated framework for evaluating transformative innovation policy. *Research Policy*, *52*(2), 104676. https://doi.org/10.1016/j.respol.2022.104676

Haldrup, S. V. (2022, May 20). Rethinking monitoring and evaluation in complex systems—When learning is a result in itself. *UNDP Strategic Innovation*. https://medium.com/@undp.innovation/rethinking-monitoring-and-evaluation-in-complex-systems-when-learning-is-a-result-in-itself-3d1fc90d22fc

Haldrup, S. V. (2023, March 28). How to track and report on progress when working with complex problems. *UNDP Strategic Innovation*. https://medium.com/@undp.innovation/how-to-track-and-report-on-progress-when-working-with-complex-problems-28249a2bab87

Haldrup, S. V., & Tran, S. (2023, January 20). Innovative M&E from the Sandbox and beyond. *UNDP Strategic Innovation*. https://medium.com/@undp.innovation/innovative-m-e-from-the-sandbox-and-beyond-9234d0977796

Impact Innovation. (n.d.). *Establishment of Impact Innovation programs: Funding of Program Offices*.

Iredale, R., & Cooke, K. (2020). Understanding what matters in social care: Experiences of care and support services and being an unpaid carer in Wales. *Pontypridd: University of South Wales*.

Mazzucato, M. (2018). Mission-oriented innovation policies: Challenges and opportunities. *Industrial and Corporate Change*, *27*(5), 803–815. https://doi.org/10.1093/icc/dty034

Molas-Gallart, J., Boni, A., Giachi, S., & Schot, J. (2021). A formative approach to the evaluation of Transformative Innovation Policies. *Research Evaluation*, rvab016. https://doi.org/10.1093/reseval/rvab016

NBC News. (2023). *New York City has the worst air quality in the world as smoke from Canadian wildfires rolls in*. https://www.nbcnews.com/news/us-news/live-blog/unhealthy-air-quality-canada-wildfires-live-updates-rcna88092

Ofek, Y. (2017). An examination of evaluation users' preferences for program- and actor-oriented theories of change. *Evaluation*, *23*(2), 172–191. https://doi.org/10.1177/1356389017699544

Patton, M. Q. (2010). *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*. Guilford Press.

Schot, J., & Steinmueller, W. E. (2018). Three frames for innovation policy: R&D, systems of innovation and transformative change. *Research Policy*, *47*(9), 1554–1567. https://doi.org/10.1016/j.respol.2018.08.011

The Cynefin Company. (n.d.). *How to use SenseMaker®*. https://thecynefin.co/how-to-use-sensemaker/

Transformative Innovation Policy Consortium & Utrecht University Centre for Global Challenges. (2021). *MOTION Handbook: Developing a Transformative Theory of Change*. MOTION. https://www.tipconsortium.net/wp-content/uploads/2022/02/MOTION-Handbook-180222.pdf

Van Der Merwe, S. E., Biggs, R., Preiser, R., Cunningham, C., Snowden, D. J., O'Brien, K., Jenal, M., Vosloo, M., Blignaut, S., & Goh, Z. (2019). Making Sense of Complexity: Using SenseMaker as a Research Tool. *Systems*, *7*(2), 25. https://doi.org/10.3390/systems7020025

van Es, M., Guijt, I., & Vogel, I. (2015). *Hivos ToC Guidelines: Theory of Change Thinking in Practice*. Hivos. https://hivos.org/assets/2021/02/Hivos-ToC-guidelines-2015.pdf

Vinnova. (2023). *Impact Innovation was inaugurated – Sweden's major innovation investment for the 2030s*. https://www.vinnova.se/en/news/2023/03/impact-innovation-was-inaugurated--swedens-major-innovation-investment-for-the-2030s/

Wilkinson, H., Hills, D., Penn, A., & Barbrook-Johnson, P. (2021). Building a system-based Theory of Change using Participatory Systems Mapping. *Evaluation*, *27*(1), 80–101. https://doi.org/10.1177/1356389020980493

Wittmann, F., Hufnagl, M., Roth, F., Lindner, R., & Kroll, H. (2021). *A Framework for Formative Evaluation and Impact Assessment of Mission-oriented Innovation Policies—Final report of the Scientific Support Action to the German High-Tech Strategy 2025—Volume 2*. Fraunhofer ISI.