

Quantitative Evaluation of Living Lab Value

Integrating Tangible and Intangible Indicators

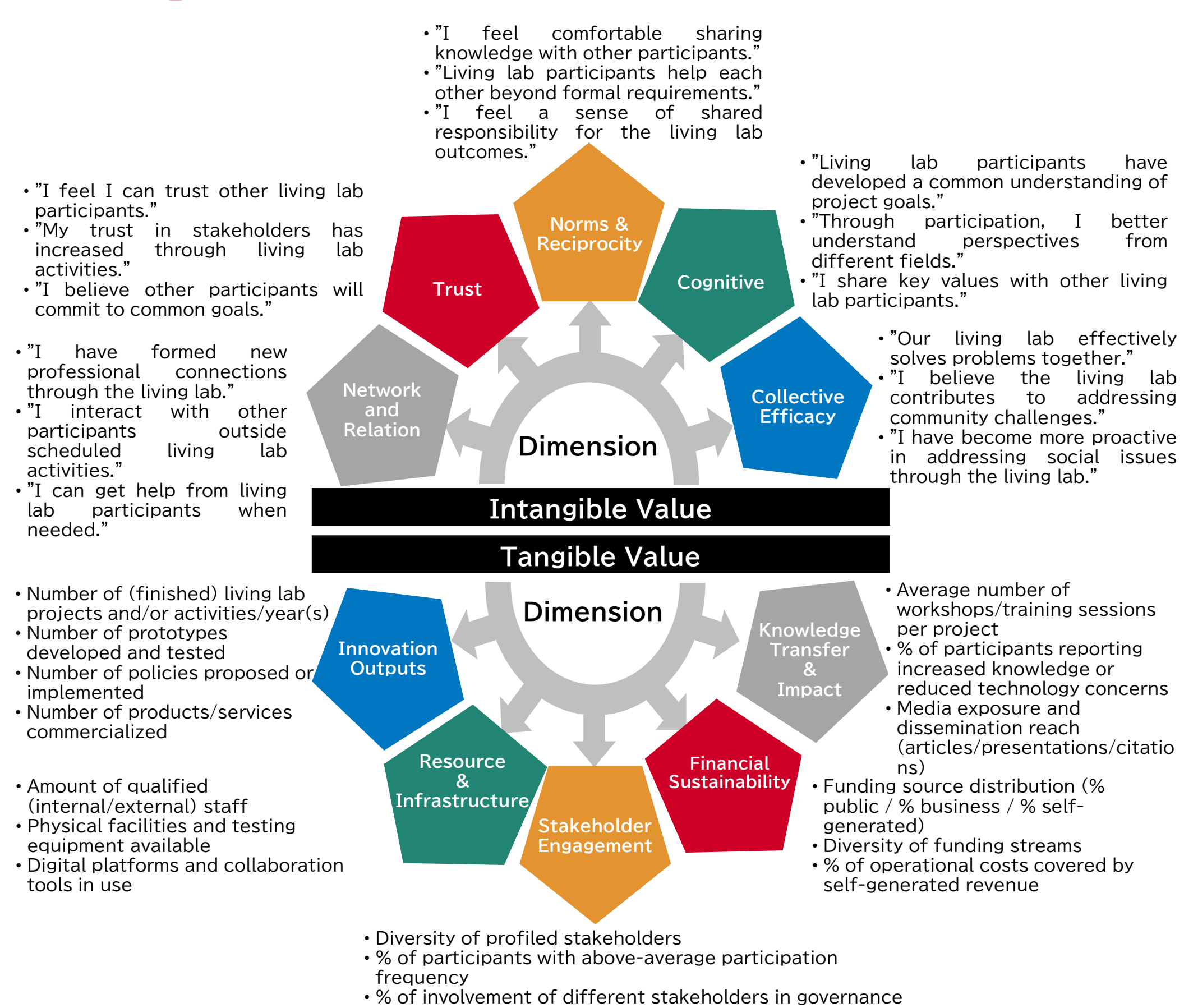
- ▶ Living Labs are growing worldwide as user-centered, open-innovation ecosystems.
- ▶ Current evaluations focus on visible outputs, overlooking intangible assets such as social capital.
- ▶ Living Labs success depends on invisible values (Social Capital) that enable collaboration.
- ▶ How can we measure invisible value?

Why Focus on Social Capital?

- Living Lab: A multi-stakeholder innovation platform based on the Quadruple Helix model.
- "Features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995).
- Social capital emerges as critical, serving as both enabler and outcome of successful living lab operations (Bartelt et al., 2020).
- Social capital acts as the "glue" that holds the living lab innovation ecosystem together.



Proposed Framework: Towards a More Holistic Evaluation



- A significant step forward, introducing evidence-based KPIs to the complex challenge of living lab evaluation.
- Key dimensions include: Network/Relational, Trust, Norms & Reciprocity, Cognitive, and Collective Efficacy Dimension.
- Adopts validated quantitative methods for measuring social capital, drawing from established academic frameworks and practical guides (Nahapiet & Ghoshal, 1998; Onyx & Bullen, 2000; Wasko & Faraj, 2005; Perras & Normandin, 2019).

Figure 1. Conceptual Framework for Living Lab Value Measurement: Metrics for Tangible and Intangible Dimensions

Expected Contributions & Implications

- For Living Lab Managers:
 - Quantitatively identify the strengths and weaknesses of their lab's operations.
 - Enable data-driven decision-making for resource allocation and strategic adjustments.
- For Policymakers & Funding Bodies:
 - Provide an evidence-based method to assess the holistic societal and economic value of living labs.
 - Support informed decisions on funding and policy for living lab development.