

Catalysing Transformation: The Imperative of Informational Infrastructures in Mission-Driven Innovation Policies

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Think missions. Think transformative change. Like architects of change, mission-oriented innovation policies reshape institutions and practices, tackling grand challenges. Informational infrastructures act as the invisible highways, connecting stakeholders and resources, driving and enabling transformative change.

Missions for impact

Significance for Finland

The development of a comprehensive framework for mission-oriented innovation policies presents Finland with a unique opportunity to address pressing economic, environmental, and societal challenges. Through addressing the elements contained in the framework presented in this policy brief, Finland can strategically allocate resources, streamline processes, determine outcomes, and lead impacts, thereby maximising the impacts of its missions. Of particular significance is the role played by information infrastructures, facilitating collaboration and knowledge sharing among diverse stakeholders. Through proactive engagement with the policy recommendations outlined in this policy brief, Finland can drive transformative change in ways that position it as a leader in innovation, whilst underscoring its commitment to shaping a sustainable and inclusive future.

Maximising missions impact for business growth and societal well-being

Significance for business

Mission-oriented innovation offers numerous benefits to business, fostering innovation-driven growth and facilitating partnerships for tackling complex societal challenges. By adopting a mission-driven transformations mindset, businesses demonstrate commitment to developing new products and services in ways that systematically address pressing economic, environmental, and societal needs. Additionally, missions promote the creation of collaborative ecosystems where businesses can thrive through partnerships with diverse stakeholders, leveraging their capabilities and resources to drive transformative change. The emphasis on excellence and experimental platforms within the innovation environment encourages businesses to adopt innovative approaches and technologies, further enhancing their competitiveness and scalability in international markets. Overall, the framework presented in this policy brief provides a roadmap for influencing business behaviour through drawing attention to the dimensions of strategic resource allocation, process coordination, outcome measurement, and interdisciplinary collaboration. These dimensions ultimately contribute to maximising the impact of mission-oriented innovation policies on business growth and societal well-being.

Targeting the creation of sustainable informational infrastructures

Role of Business Finland

Business Finland plays a key role in advancing mission-oriented innovation through funding and supporting activities aimed at addressing complex societal challenges. As a national innovation agency, Business Finland's mandate is essential due to its ability to provide resources, set the direction (including funding and monitoring criteria) and facilitate

collaboration among diverse stakeholders, including companies, R&D experts, and civil society actors. In addition to funding innovation ecosystems, Business Finland's involvement can also target the creation of sustainable informational infrastructures that serve as the backbone of mission-oriented initiatives, facilitating the efficient flow of data, knowledge, dialogue and insights necessary for driving transformative change.

Accelerating mission impact through informational infrastructures

Results and impacts

Informational infrastructures, in the context of mission-oriented innovation policies, are the digital and organisational frameworks that enable the efficient flow of data, knowledge and strategic insights, and create a forum for societal dialogue. They encompass a spectrum of tools and systems, practices and functions from digital platforms and data analytics to collaborative networks and communication channels. These infrastructures are the lifeblood of missions, serving as the conduits through which diverse stakeholders, resources, and knowledge interact and drive transformative change. In this context, developing a comprehensive framework to evaluate and accelerate the impact of informational infrastructures as a means of promoting mission-oriented innovation policies is crucial. The framework presented in this policy

brief explores in detail nine key dimensions, which were identified based on scientific literature review and interviews with key stakeholders (mission leads, policy and foresight experts, academic funding agencies, think tanks and companies) that are actively engaged with mission-oriented activities funded by Business Finland. Each dimension presents unique challenges and opportunities for policymakers and other stakeholders - including researchers and companies.

Dimensions of mission impact

Realism, a critical view of the current state, international view

A comprehensive framework is needed to set the targets for missions, accelerate mission impacts, and continuously evaluate the missions themselves. These aspects are mutually supportive and should therefore also be handled together. The table below presents the most central mission impact dimensions, i.e. key building blocks of a comprehensive framework to accelerate the impact of mission-oriented innovation.

DIMENSIONS	SIGNIFICANCE
Resource management	<i>Developing a comprehensive resource allocation strategy, ensuring a sufficient budget, human capital, organisational capacity and infrastructure support for mission-oriented innovation policy.</i>
Process coordination	<i>Establishing mechanisms for interagency collaboration to facilitate coordinated processes, regulatory changes, and institutional adaptations.</i>
Outcome measurement	<i>Implementing a robust outcome measurement system to track changes and assess the broader impact of mission-oriented innovation policy. This requires setting comprehensive targets as well as identifying mechanisms to accelerate impacts.</i>
Impact evaluation	<i>Creating an impact evaluation framework that comprehensively evaluates socio-technical changes resulting from the policy. In addition and from an impact leadership and developmental evaluation perspective, it is important to utilise impact-related information for systemic steering and management of missions.</i>

Directionality alignment	<i>Promoting a shared vision and directionality through stakeholder engagement and transparent communication. This requires a shared process of agenda setting, sense-making and policy alignment.</i>
Network diversification	<i>Encouraging collaboration, knowledge sharing, and participation of diverse stakeholders through incentives and support mechanisms.</i>
Intermediary engagement	<i>Fostering partnerships with intermediaries, emphasising their role in resource mobilisation and implementation.</i>
Interdisciplinary collaboration	<i>Facilitating interdisciplinary and cross-sectoral collaboration by creating platforms for dialogue, shared research, and project development.</i>
Cross-domain and cross-level coordination	<i>Developing a strategy for cross-domain and cross-level policy coordination, emphasising the importance of effective collaboration. Prioritising an anticipatory approach, comprehending potential societal impacts spanning institutional and policy domain boundaries, and engaging stakeholders beyond mere information provisioning to foster collaboration and consensus.</i>

Foresight point of view and proposals for action

The following policy recommendations promote the necessary information infrastructures for accelerating mission-oriented innovation impacts. They cover all nine dimensions from the previous table. They advocate for resource allocation, streamlined processes, comprehensive metrics, and comprehensive assessment methods. Emphasising stakeholder engagement, transparency, and policy flexibility ensures alignment and network diversification. Additionally, the policy recommendations promote collaborative platforms, interdisciplinary collaboration, and cross-domain coordination mechanisms.

Resource management	
Budget allocation	<i>In targeting RDI resources, the government should allocate dedicated budgets for mission-oriented innovation policies, ensuring sufficient funding for initiatives, and programme funding should be aligned towards the shared policy objectives that stem from a mission. Systematic portfolio building which attracts and accelerates private RDI and international investments is required. Funding criteria should explicitly refer to and address mission orientation and focus.</i>
Human capital development	<i>There needs to be investment in a skilled workforce. Training, retraining and occupational development should ensure that the mission logic is widely understood also by the workforce. A skilled workforce can implement and support innovation activities. Green transition/twin transition is an excellent cases in point here, as in many parts of the workforce (e.g. in SMEs, that play a key role in twin transition) there is low understanding of or buy-in to these concepts.</i>
Infrastructure support	<i>Provide the necessary knowledge and information infrastructure to facilitate experimentation, knowledge sharing, and the scaling of innovative solutions.</i>

Process coordination	
Interagency collaboration	<i>Establish interagency coordination mechanisms, incentives and practices to facilitate the alignment of objectives and the sharing of resources and knowledge. Ideally this coordination would take place on the strategic level, but also amongst the teams and personnel in their day-to-day work. As with</i>

	<i>other forms of mutual understanding and strategy alignment, mobility schemes, shared projects and programmes can support the building of mutual appreciation and understanding of each other's roles in an ecosystem.</i>
Regulatory adaptation	<i>Encourage regulatory changes that support the mission's objectives, removing unnecessary obstacles to innovation.</i>
Institutional adaptation	<i>Promote adaptive institutional structures that can evolve with the changing needs of the mission.</i>

Outcome management	
Outcome metrics	<i>Develop both qualitative and quantitative outcome indicators, considering diverse outcomes. New indicators should account for added value across actors, companies, and society. Concrete, measurable metrics are necessary to demonstrate business and societal impacts. Linking impact evaluation to mission targets clarifies cooperation objectives and benefits for various actor groups.</i>
Evaluation framework	<i>Create a comprehensive evaluation framework that considers both short-term and long-term outcomes, relying on qualitative and quantitative data, as well as foresight and business intelligence.</i>
Transparency and focus	<i>Ensuring transparency in outcome measurement, as well as making data accessible to policymakers, researchers, and the wider society can be accompanied by communication strategies making missions better understood through concrete examples and impact narratives: a good story is almost always more convincing than a single graph or figure</i>

Impact evaluation	
Multi-dimensional assessment	<i>Develop a multi-dimensional evaluation framework that considers various aspects of socio-technical change. In addition, impact information should be proactive and continuously support development, management and decision-making in the context of the missions. Rather than aiming for results and quick gains, systematic and developmental oriented impact evaluation helps to set direction and analyse continuously if we are going in the right direction and at the right speed.</i>
Longitudinal studies	<i>Conduct longitudinal studies to track the evolution of impacts over time.</i>
Qualitative analysis	<i>Combine quantitative data with qualitative analysis to gain a deeper understanding of the impact.</i>

Directionality alignment	
Stakeholder engagement	<i>Engage a broader range of stakeholders in collaborative discussions to establish a shared vision and direction.</i>
Transparency	<i>Ensure transparency in the mission's objectives and progress to build trust and alignment among stakeholders.</i>

Policy flexibility	<i>Maintain flexibility to adapt to changing circumstances and emerging priorities while staying true to the mission's direction.</i>
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Network diversification	
Incentives for collaboration	<i>Provide incentives for collaboration and knowledge sharing among diverse stakeholders.</i>
Support mechanisms	<i>Offer support mechanisms for smaller and underrepresented actors, municipalities and citizens to participate in the mission. Scaling social innovations with the help of large companies can be a relevant example. Create platforms for the exchange of knowledge and best practices, fostering collaboration and consensus building for direction setting and co-developed implementation pathways.</i>

Intermediary engagement	
Partnership building	<i>Establish partnerships with intermediaries and promote their active involvement in mission activities.</i>
Resource mobilisation	<i>Recognise and support the role of intermediaries in mobilising resources and expertise.</i>
Clear roles and responsibilities	<i>Define clear roles and responsibilities for intermediaries, ensuring their contributions align with mission goals.</i>

Interdisciplinary collaboration	
Collaboration platforms	<i>Establish platforms and initiatives that encourage collaboration between experts from different fields.</i>
Research funding	<i>Allocate R&D&I funding specifically for interdisciplinary projects and initiatives, using evaluation criteria that are appropriate for interdisciplinary work.</i>
Stakeholder engagement	<i>Involve stakeholders from various sectors and backgrounds in mission design and execution.</i>

Cross-domain and cross-level coordination	
Interdisciplinary task forces	<i>Establish interdisciplinary task forces that bring together experts from different policy domains.</i>
Policy harmonisation	<i>Work to harmonise policies and regulations across different levels of governance to eliminate unnecessary barriers to innovation.</i>
Data sharing and collaboration platforms	<i>Develop data sharing and collaboration platforms that enable seamless coordination among stakeholders.</i>
Future-oriented Relational Capabilities	<i>Prioritise an anticipatory approach, comprehending potential societal impacts, spanning boundaries, and engaging beyond providing information to foster collaboration and consensus.</i>

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