Key Lessons from Prototyping Local Food Waste Policy: A Design-centric Policy Development Toolkit for Policy Makers from the Circular Food Innovation Lab

Introduction

The policy cycle model generally includes five stages: agenda-setting, policy formulation, decision-making, policy implementation and policy evaluation where policy makers propose policies to decision makers, and then once approved, policies are then implemented by public administrators (Araral, Fritzen, Howlett, Ramesh & Wu 2012). This can result in a top-down policy development process where the policy makers are not necessarily also those who implement policies.

From 2025-2026, the Circular Food Innovation Lab explored an alternative approach to policy development through a process called Prototyping Local Policy and Guidelines. Traditionally, design is brought into the policy process during implementation. However, the prototyping policy approach advocates for design to be integrated throughout.

Prototypes are representations that are used to understand, learn and refine design ideas. Prototyping policy is a way to bring experimentation and iteration into traditional policy making, moving policy development from a linear progression of steps to a discursive process (Hagan et al 2021; Noguiera and Schmidt 2022). Prototyping policy can contribute to a wider range of solutions being considered for multi-faceted challenges as well as lead to more successful policy implementation once policies are developed and adopted.

The following are key learnings for prototyping policy that government entities may find useful to consider during agenda-setting and policy formulation. While the Circular Food Innovation Lab focused on reimagining the food system to address wasted food, these learnings can be applied in other settings that call for social change.

Agenda-setting

Traditional policy making begins with policy makers identifying and analyzing the problem. A prototyping policy approach invites stakeholders to participate in issue identification through collective systems mapping and desire-based values-setting.

Systems mapping

By including stakeholders as part of systems mapping, more people who may not necessarily be fully steeped in the policy problem at hand or have experience with policy development mechanisms can better understand the current landscape and identify potential risks (Hagan et al 2021). Systems mapping can also serve to highlight Indigenous knowledge and practices as foundational knowledge.

> Food System Mapping Tool
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> Mapping the existing food system together helps stakeholders identify current characteristics of a system, potential challenges, leverage points and opportunities for systems change (Nogueira and Schmidt 2022)

> Scan of Policy Landscape
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> Creating an overlay of municipal, regional district, provincial and federal laws, acts, policies and guidelines recognizes the interconnectedness of different food-related policies and levels the playing field for all stakeholders

Desire-based design

Desire-based design advocates for processes that center desire as an alternative to 'damage-centered' or 'needs-based' research (Leitão 2022). Desire-based design centers agency, establishes core values, and helps policy makers break out of paradigms - potentially triggering transformational change (Leitão 2020).

> Values setting and Desire-Based Design
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> Allowing stakeholders to identify values that they want centered in their desired food system lays the groundwork for iterative policy formulation and transformational change

Policy formulation

After scoping the problem, policy makers traditionally then identify and analyze different policy options. With the prototyping policy approach, systems mapping and desire-based values setting sets the stage for

generating and exploring different policy opportunities in collaboration with stakeholders.

Speculative design
Speculative design embraces pluriversality, a framework that allows "a world where many worlds fit" (Escobar 2018). Speculative design prompts exploration of a suite of options, helping stakeholders ideate and gain perspectives on how new policy could impact a range of stakeholders.

Speculative Scenarios and Implementation Deck
Imagining policies by asking 'what if?' or 'how might we?' encourages stakeholders to ask not what policies are or are not or working but what could work and what would the potential consequences be (Nogueira and Schmidt 2022).

Refinement through Cultural Probes
Following speculative design exercises, diving into details about what specific resources, supports, and incentives could bring policies to life can help stakeholders 'test out' different policies (Hagan 2021)

Conclusion

By bringing external stakeholders and policy makers together throughout the early stages of policy development, prototyping policies allows for an open-ended exploration of policies, breaking current paradigms and designing a pathway towards a more desirable system. Utilizing design tools throughout such as visual representations can provide baseline education and facilitate diverse interactions among stakeholders. By incorporating design early on in the policy making process, prototyping policy offers a framework that can lead to more creative, effective policy development and implementation.

References

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