Prototyping Overview

What is Prototyping?

Prototyping, as an approach, is rapidly growing within the field of systems change, with an increasing number of methods being developed by organizations and change practitioners around the world. This short introduction to prototyping provides an overview of how *The Outside* approaches prototyping within the context of systems change and equity.

Beginning in the fields of engineering, design thinking, and technology, prototyping has now spread to the field of social innovation where people are experimenting to address complex social and environmental challenges. At *The Outside*, we see prototyping as a "fast, low-cost, low-risk, learning-rich approach to surfacing ideas and testing promising responses to tough challenges" within social systems.¹ Author Eric Ries describes prototypes as "the smallest amount of work necessary to start the process of learning" through testing, and we agree.² We start small and granular while keeping in mind the bigger pattern within our system that we are working to shift. The purpose of prototyping is two-fold. First, it is a way of learning more about how a system is working in practice and second, it tests to learn what changes can work to shift stuck patterns, followed by increasingly scaling the interventions. The role of prototype teams is to test out ideas in small and practical ways, and to learn what works (and what doesn't!) without overcommitting resources and time.

Systems Change

Social systems are a pattern of networked relationships creating interconnected wholes. Families, communities, organizations, cities, nations, universities, corporations are all examples of social systems. Working from a systems perspective emphasizes the relationships between people, behaviours, policies, departments, sectors or organizations. The behaviour of complex systems is emergent and unpredictable, involving many little-understood relationships,³ so when we talk about *systemic patterns* we are looking to shift or change, we are referring to patterns of behaviour that reflect deeply rooted structural systems that are difficult to untangle. If we think of the image of an iceberg, what's visible to us above the water

³ McConnell Foundation. (2020). Systems Change.



¹ Cabaj, M. (2018). A framework for evaluating prototypes. Tamarack Community Institute.

² Ries, E. (2011). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Books.

are behaviours of the systems. What is still invisible to us is what contributes to the manifestation of these behaviours, which lie deep beneath the water out of sight. To create the conditions for systems change, we must focus on addressing these underlying patterns. These patterns, because they are deeply embedded in the system, often take a tremendous amount of investigation and experimentation to understand and then shift, which is why prototyping is a nimble, less resource and time intensive method to help us get there.

The Purpose of Prototyping in Systems Change

Prototyping does not replace more traditional pilot projects or programs but precedes them instead. The shift from prototype to pilot happens when we become relatively certain that the intervention we have made is working and we know why it is working. Most prototypes can be considered *iterative* or *evolutionary*, where the purpose is to build on learning what works along the way, with the intention to scale up into a pilot or policy. Some prototypes can be considered *probing*, where the whole purpose of the prototype is to test ideas in order to understand how a stuck pattern or pain point plays out within a system that the team/ organization is trying to change. With probing prototypes, once the experiment is over, the prototype is discarded.

Most systems change prototypes can be characterized as *slow* or *complex*, meaning that it's important to remember alongside the process of testing a new idea often requires changes in the capacity or culture of the system in order to succeed. Mindset and behaviour changes take time, and successful prototypes will build in this aspect into their design.

At *The Outside*, our approach centers around *diversity, equity and inclusion* in all efforts towards systems change, and very practically in the prototyping process. In order to transform social systems, addressing unequal power, influence, and resources is essential, although often neglected in social innovation⁴.

⁴ Struthers, M. (2018). <u>At Odds or an Opportunity? The Philant</u>

