Systemic Design

Alberta CoLab Info Sheet

Overview

Systemic design is one of the two primary methodologies Alberta CoLab uses in its work - the other is Strategic Foresight. When combined, we believe that these business-as-unusual approaches are a powerful toolkit that can enhance the relevance, adaptative capacity, and innovativeness of people, services, organizations, and systems.

What is Systemic Design?

Systemic design is the combined result of the unique historical trajectories of systems thinking and design thinking.

- **Systems Thinking**: an approach that focuses on how different things interact to form a whole, as well as how the whole links with the wider context.
- **Design Thinking**: an approach that starts with an understanding of human needs and motivations to define, frame, and solve problems. It is about creating delightful and quality products, services, experiences, or systems that work for those who use them by getting to the root of why a particular need exists.

As a framework for working with complexity, we can think of Systemic Design as having three mutually reinforcing levles: it is a set of **methods** (tools), a **methodology** of how to arrange those tools to usefully engage with complexity, and a **mindset** for how to approach those complex challenges (Ryan 2014). At CoLab, we believe that **mindset** is the most important layer: the values and habits the systemic designer brings to their work will guide their methodological choices and influence their abilties to work with and guide others in collaborative processes.

When to Use Systemic Design?

Systemic Design is best suited for complex challenges - also known as messes.

Complex challenges have the following traits:

- **LOW** level of **agreement** on problem definition
- **LOW** level of **certainty** of what to do about it
- **HIGH** degree of **unpredictability**
- **HIGH** number & **diversity** of stakeholders

Not all challenges are complex - thankfully! The world is full of **puzzles** and **problems**, and needs puzzle-doers and problem-solvers. Many important problems organizations face are routine or technical challenges, where stakeholers share common values, there is shared understanding of the topic, and deep subject matter expertise is required. There are also many instances where best practices exist, but are not implemented.


The Value of Systemic Design

Systemic Design starts where best practices end. It helps diverse groups to co-create tangible improvements to a situation by helping them to visualize complexity from multiple perspectives, create shared frames of reference, surface core assumptions, and find opportunities in complexity by reframing the mess. By undertaking this work at the fuzzy front end of a project, Systemic Design generates robust options for decision makers and helps to bridge policy/implementation gaps.
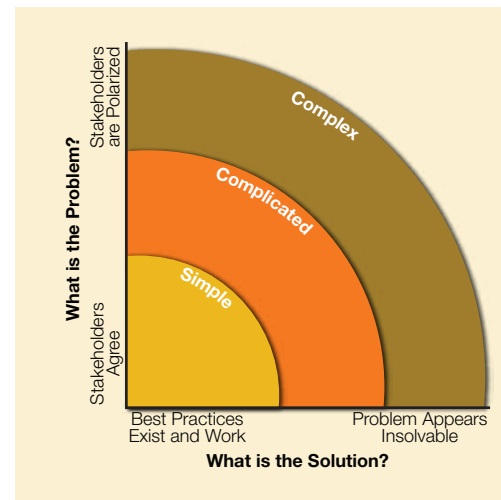
Puzzle

A Rubik's Cube is tough, but there is a single, agreed-upon solution.

Complicated Problem

It's tricky to send a rabbit to the moon, but there is shared wisdom and rules to follow.

Complex Mess

Raising a litter of bunnies is hard! Each bunny is different and they don't come with instructions.

Systemic Design in Practice

Systemic Design involves six main **activities**: inquiring, framing, formulating, generating, facilitating, and reflecting. While there is a logical flow to these activities, they are nonlinear and iterative: a group may begin a systemic design process with any activity, and may move through and return to different activities.

- **Inquiring**: Research, ethnography, interviews, learning journeys - these are all examples of inquiry. Generally, inquiry involves any activity that enables people engaged in a systemic design process to reach outside themselves and their existing knowledge base in order gain new learnings or perspectives. Inquiry is about understanding context. It is by expanding one's frame of reference that one becomes open to reframing.

- **Framing**: The work a group does to create shared understanding of the challenge space they are working in is called framing. In systemic design, a shared frame is integral to a group moving forward together. Framing does not mean consensus or agreement about every aspect of the challenge - or that there is one correct frame. It means that there is shared understanding of it, in all its diversity and complexity. Framing is a necessary pre-condition to reframing: seeing a situation from a new perspective.

- **Formulating**: This activity shifts a group from understanding what is and was (the current and legacy systems) - to imagining what should be (the desired future state). This is not a linear process of extrapolating the present forward. Rather, formulating involves identifying what is important about the desired future - the values on which it should be based. These are not just based on the group's values, but also on those of people involved in the challenge space, including stakeholders or end-users. Formulating involves coming up with ideas for how to bring those values to life. When formulating, groups engage in ideation and creating - increasingly making their ideas tangible through practices like drawing or building.

- **Generating**: Taking ideas and prototypes out into the world for testing is the primary action in the generating phase. This is vital for the group to learn, receive feedback on their ideas, and iterate - to make changes to improve their ideas.

- **Facilitating**: Systemic design processes benefit from effective facilitation to help the group move between the activities, support divergent or oppositional group dynamics, and visualize the process. Design facilitation differs from traditional facilitation in that the role of the facilitation is often more provocateur than neutral arbiter. Generally speaking, there is less adherence to a formalized agenda, and more focus on creating a space for emergence and exploring new possibilities.

- **Reflecting**: Reflective practice is conscious thinking about one's actions and reactions - about what happened and why, and what was learned. The purpose of reflecting is to reach a higher level of understanding. It is referred to as a practice, because that is what it requires in order to do it well. Reflection is integral throughout the systemic design process because it is necessary for learning. This is true at multiple levels - it is necessary for each individual to reflect on their own journey and for the group to reflect on thier work together. In a systemic design process, reflection enables framing, formulating, and generating. It is also vital work for the design facilitators as they reflect on their work with each other as a delivery team and on the participants' work.
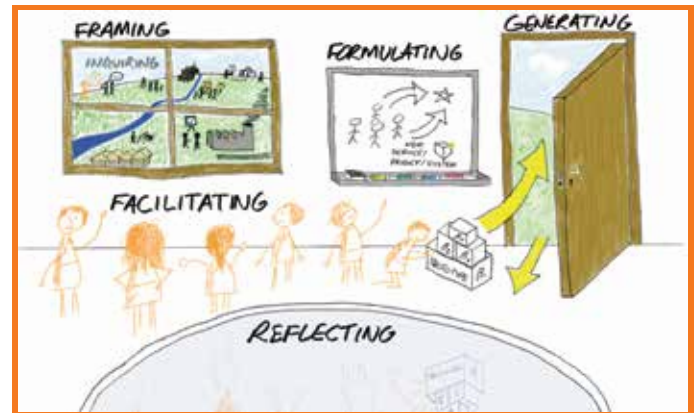
Loofragenada

At Alberta CoLab, we have organized our systemic design and foresight methods using Look – Frame – Generate – Adapt. These activity streams combine in a fluid and dynamic mix, providing the scaffolding for a methodology. They also combine to form a really fun word: **loofragenada**! For more information on our methods, check out our website. There, you'll find more information on CoLab, copies of different resource sheets like this one, links to some of our favourite resources, and downloadable versions of our methods and field guides. You'll also find information on how to participate in our training courses and communities of practice. Check it out!