Over the last 10 years there has been an increasing narrative around the need to take a system-based approach to tackling wicked social problems. With this has come a growing interest about how to design initiatives with ambitions for system change.

Evaluators are frequently included as members of design teams, not just to design the monitoring and evaluation frameworks for new initiatives but also to support the conceptualisation of the initiative through the use of a theory of change. In the early stages of a design, a theory of change is often used to start to map out the bones of the design, which is refined as hunches are tested and the model tightened through the design process.

Yet people have argued that theory of change is unhelpful for system change initiatives. Some have proposed alternatives, such as using effectiveness principles (Patton, 2018), or system maps. Rather than throw the baby out with the bathwater, here we explore how theory of change might be adapted for system change endeavours. In particular we describe a few different approaches that we find helpful for system change including what we call “global theory of change” as well as nested theories of action for prototypes/pilots.

What do we mean by theory of change?

People use the term ‘theory of change’ in different ways, and there is no agreed approach. A great resource can be found here. In this think piece, we are referring to creating a visual map to show all the things (preconditions) that need to be in place to achieve desired end-outcomes. We think it’s useful when trying to map system change endeavours to distinguish between theory of change and theory of action.

Theory of change is about the preconditions that need to be in place to achieve the desired change (regardless of who might invest in trying to bring this about or how you might do it). Theory of action is our theory of how we might nudge the system to change, and unlock the problems that are holding the system in its current (non-optimal) state. Together the theory of change with the theory of action form the logic for the initiative.

What do we mean by system change endeavours?

System change endeavours are not programs; instead they are often clusters of programs, agencies or actors or networks working together with the ambition of solving a wicked problem in a transdisciplinary manner. They often work across sectors. Collective impact and place-based approaches often fit into this category.

Why it’s tricky to map the theory of change of system change endeavours

The characteristics of system approaches that make theory of change challenging:

- **The actual cause and effect** is more complex, has more parts, more actors, more interactions. People can get overwhelmed with trying to map it out.
• **More emergent.** System change endeavours tend to be a lot more emergent in nature; that means our understanding of how change occurs changes as we learn, and with it the theory of change and our ideas about action also needs to change.

• **People often get confused about what is being done, and why.** Because it’s more complex and prone to change, theory of change is often harder to articulate. This makes it harder to understand and harder to communicate.

• **The boundaries of system change initiatives are harder** to pin down and less stable, as the scope tends to change and pivot as more is learned.

*Some principles that apply to all theory of change development*

**Iterative.** A theory of change map is never right, and it is never finished – it is just a thinking tool to help you place your hunches, theory and ideas about how the system might be influenced. It’s a set of moving hypotheses to test!

**Scales and levels.** Theory of change for system change initiatives can and should focus on different scales, phases and actors. It helps to map it a few different ways to get clear on different aspects. One size does not fit all.

3 different scales and types of theory of change we find helpful

**Global theory of change**

One type of theory of change is what we call “global theory of change”. We use it as a starting point for the other types of theory of change. It’s great to use at the start of a design project. It is an un-prioritised map of everything we think needs to change to achieve the desired high-level outcomes. It does not focus on what we might do (activities and outputs); instead it’s all about what needs to happen to achieve desired societal outcomes, regardless of who does what or what money you have to invest. It often draws on scholarly theory, and we think it should draw on systems theory too.

Example: A design challenge to improve employment outcomes for First Nations people across a country. We start with a big map to depict everything that we think needs to be in place to bring this about. It is not about what we are going to do at this stage. We draw on literature, on our field insights, and on our hunches. There might be a few versions, and it will never be finished. (See figure 1)
This approach is useful in the design phase to keep a big picture view on the system we are trying to influence. It provides the bigger map of all of the pre-conditions required (as far as we know) to achieve the desired end-outcomes. This helps teams to consider:

- The scope and extent of the change needed
- The extent of what is known to achieve change for a given issue and possibly place
- The interdependencies within the theory of change
- The opportunities for influencing/intervening in a system

Focus more on boundaries. Systems thinking places a heavy emphasis on boundaries. Iterative theory of change can be an excellent way to work with boundaries. Global theory of change can help decide on the boundaries of the system you are wishing to change. This can help you to make a judgment of where to draw the boundary, what to include and what to leave out. Boundary setting often begins at the higher level of outcomes – about population-level change or the desired state of the environment. List important “dependency assumptions” – where your results are depended on things happening that are beyond this system. This helps set the boundaries, and these may need to be revisited if the assumptions prove incorrect.

Interactions. A systems-orientated theory of change should pay a lot of attention to the interactions and flows between different parts of the systems. Think in terms of what is necessary (but not necessarily sufficient) to achieve the change. Things are rarely sufficient on their own. Use architypes of theories of change to inform your pre-conditions about what is needed to create change.

Keep it big and loose. Map the whole – it’s OK to lump things together where it makes sense. Keep changing it and refining it as you understand the system more. You can use this “big loose” map to maintain a systems view of the little pieces you are working on.
Nested theories of action for specific prototypes of interventions

Nested theories of action can be done at different levels, and from different perspectives. They can and should fit somewhere. Collapsible and expandable, drill in and drill out.

Once you have a global theory of change you can use it to identify the leverage points where “you” might intervene in the broader system, you can map each out separately to understand the more detailed theory of change for each intervention idea/prototype.

Example: Later in the design process our co-design work reveals insights about key opportunities and challenges to getting better employment outcomes. We locate these points on the global theory of change and develop mini-theories of action for each idea – which become prototypes to test. We have a theory of action for each prototype. In this example we had 15 prototypes. One example prototype was a refined approach to case management where things that were holding people back from working were able to be addressed – such as getting a driving license and working with the community on barriers. (See figure 2)

Figure 2. First iteration nested Theory of Action for one of the Global Theory of Change outcomes

Think piece: Agile theory of change for system change endeavours
Tranche across time

Theory of change doesn’t do chronology well. Some of the cause and effect links can happen quickly and some take a lot longer. Because of this, rather than force the global theory of change to deal with time-frames, instead we find it helpful to develop a simple tranche model that shows roughly what is expected in different phases. A classic example of a multi-phase model would be one developed for a collective impact initiative, with the early years, middle years, and late years. This allows us to focus in on phase specific action and evaluation.

Example: if you are designing a program that has long term ambitions, it can really help to cast the outcomes across time. Theory of change doesn’t always do this well. For a 9 year initiative, batch the outcomes into 3 phases, early, middle and final years, and have a plan for enacting each phase.

Figure 3. How outcomes might map overtime on a Collective Impact initiative

Think piece: Agile theory of change for system change endeavours

**So why bother with theory of change when designing system endeavours?**

By using these different types and approaches to theory of change you can:

- Continually scope boundaries throughout your design
- Maintain a system perspective (if done well) whilst helping to maintain a line of sight to outcomes
- Get clear on your narrative for why your initiative and its proposed interventions
- Map the territory of possible influence of your initiative on the system

In this article we have presented just three ways in which theory of change can be usefully included in your design toolkit. There are many more ways!