



# Systems Innovation Climate Toolkit





# Overview

This Systems Innovation Toolkit is designed as an open-source set of modules that can be used for enabling a systems change initiative in the context of addressing climate change adaptation and transformation. The toolkit is designed for a lab team, hub, or initiate aimed at create an ecosystem for systemic change around climate change.

The building blocks of this toolkit are the canvases. Each canvas deals with one key aspect of systems innovation; the canvas will help you think through and develop a response to a key question you will need an answer to. For example who are the actors in the system? Or where are the places I should intervene? These building blocks can be accessed and used as individual modules or they can be strung together to form a process depending on the time horizon of the initiative.

The tool kit contains both ideas and the templates needed, you should start with introducing the ideas briefly using the graphics and then move on to the canvas so they understand best the ideas behind it.



# **Ideas & Graphics**

# How do l use it



# **Workshop Canvases**

# Method

After giving an overview to what systems innovation means in the context of addressing climate change, the toolkit is structure into four main sections outlined on the next page - this is our method at Si for doing systems innovation. We start with reframing the challenge using systems thinking, we map the factors effecting the challenge, we work to build an ecosystem for change, and finally develop of a platform to support the growth and scaling of the new ecosystem. You can use the full process and set of tools or find the specific sections that are relevant for you.

Rethinking the challenge as systemic to create new insights and narrative. *(Slide - 20)* 



# **Toolkit Modules**

Modules combine to form an integrated process for change

#### Building

Develop a platform that will support the new ecosystem to learn, create value & scale. *(Slide - 53)* 





# Mapping

Mapping the system to better understand it and identifying places to intervene. (Slide - 38)



## Connecting

Identify, connect and developing the new innovations to enable the transition. (Slide - 71)

# Systems Innovation

Systems innovation is a new systems-based approach to enabling change within complex organizations. It is a holistic approach that looks at the underlying dynamics and systemic conditions of an issue, working with the innate evolutionary potential of complex adaptive systems to enable transformative change in their structure, behavior, and functional capabilities.



# Where to Start

A good place to start telling the story about systems innovation is with the rise of complexity in our world and the new kinds of complex challenges this has created for societies around the world. We call these very complex systemic issues "wicked problems". As we illustrate in the following sharable graphics climate change is best understood as a wicked challenge given to it complex, open-ended and systemic nature.

There is growing awareness that these systems are not simple, nor even complicated, but in fact fundamentally complex and thus require a different approach - they demand a more holistic, networked, emergent, and evolutionary approach. Such systemic phenomena require in turn a whole new toolkit of approaches if we are to have any real impact in shaping the world we live in.

# **Climate Change a Wicked Problem**





#### Perspectives

There are multiple conflicting opinions on the nature of the challenge



# **No Solutions**

There are no fixed solutions, no wright or wrong, only better or worse approaches



. . . . . . . . .

Do not fit within traditional categories or silos but cross multiple departments and functions



Many factors, social, economic, technical, environmental



# Why Climate Change Is a Wicked Challenge



## Interconnected

Every wicked challenge is connected and interdependent with many other systems



No fixed end point, problem and solution constantly evolving with new dynamics emerge over time



# A New Approach

Such systemic challenges as climate change require in turn a whole new toolkit of approaches if we are to have any real impact in shaping the world we live in. While simple problems are the product of one part of a system not working complex challenges are a product of the very way the systems is organization. Thus they require us to shift our approach to responding to them from chaining parts to changing systems.

# **Parts Change**

Change in parts, products and services without change in the underlying systems







The difference between innovation and systems Innovation







New way of looking at the system



New way of coordinating the parts to a system





New way of solving a specific problem



New product or service brought to market



# **Innovation For Climate Change**

A holistic approach to innovation is what is needed when dealing with systemic challenge that require transformation rather than incremental change





# Incremental Innovation

More fuel efficient cars



# Disruptive innovation

Electric cars



# **Transformative** innovation

A city designed for cycling



Innovation-as-usual" – typically siloed and focused on "supplying" the market with technology-led solutions – is not delivering a 1.5-degree world. We need a new model of innovation to tackle climate change... one that is designed to generate options in the face of uncertainty and diversity, and to test for integrated and exponential solutions to address the complex, multi-faceted nature of the changes we need to make.... Using systems innovation as a key tool, our aim is to catalyze change in whole cities, regions, industries, and value chains by 2035... Systems change not climate change - Climate-KIC (2019)



# A New Approach

Systems Innovation recognizes that linear approaches to addressing wicked problems and making change happen in complex systems does not work well. This we aim for a different kind of change, a nonlinear approach. These kind of wicked challenges can not be successfully addressed by one part of the system and requires the activation of a wide set of actors across the system in a more decentralized way systems innovation is an ecosystem approach to addressing issues.

The aim is to shift the dynamic in the system from many organization trying to each solve the challenge through their own program and projects resulting in a siloed and fractured response to one where actors are working synergistically around the challenge to realized the emergence of the kind of capacity really need to shift the dynamic.

# **Moving From Silos to Ecosystems**





# **Recommend Canvas**

To get started helping people think about systems innovation and the different dimensions to a systems innovation initiative we can use the Si Canvas. It looks at four key dimensions: systems thinking to reframe the challenge systemically; mapping to identify the key factors and potential leverage points; connecting to bring the right actors together around the challenge; building to look at the different aspect required to develop a platform that can support the ecosystem. This canvas is purely for ideation sessions. For a more comprehensive and extensive framework please see the Si Toolkit



Rethinking the challenge as systemic to create new insights and narrative

## **Building**

Develop a platform that will support the new ecosystem to learn, create value & scale.











## Mapping

Mapping the system and identifying places to intervene

## Process

Modules combine to form an integrated process for change

# Connecting

Identify, connect and developing the new innovations to enable the transition

Why do you think we need systems thinking in our change initiative?





#### Mapping

Why do you think we need to map the system and to think about leverage points?





Why do we need to think about the transition and how to bring old and new actors together?

This is the ideation phase, we want to try and change our thinking and way of looking at the system so that we can start to see new possibilities. This requires us first to become aware of our current ways of thinking and then shift them to a more holistic view with which to see things differently and start to create new ways of organizing.





# What is systems thinking?

Systems thinking is a paradigm or world view, meaning that it is a way of looking at the world. This paradigm is characterized as being holistic, meaning that we try to understand and interpret phenomena with respect to the whole that they form part of. This is in contrast to a more traditional paradigm called reductionism which is focused on understanding the parts of a system and optimizing those parts.

If we wish to achieve some kind of systems-level innovation this is going to come from a different kind of thinking, but more than this a different kind of awareness. There is nothing more true than "the same old thinking, the same old results." It follows that the same old reductionist analytical thinking focussed on parts will surely result in the same old kind of changes to parts without systemic changes.

# Why Systems Thinking



# System Awareness

Systems thinking is, in its most generalized sense, a way of seeing the world. Before anything, it places great emphasis on the question of how do we see the world; asking us to start by being reflexive about our ways of knowing and seeing; a strong emphasis on self-awareness, awareness of one's own way of looking at the world and the way that others look at the world.

At the heart of systems thinking is a recognition of our subjectivity. That how the world appears to us is not merely in some objective form, but in fact, our conceptual system structures, defines, and interprets every impression we receive. Our worldview shapes our every endeavor - whether in science, management, design or everyday life - it shapes what we do and the world we create around us. It is precisely because of this, systems thinking would posit, that we need to first understand the nature and makeup of the paradigm that we are using.

## **Conceptual Models**

Our paradigm shapes our conceptual models

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#### **The World We Create**

Our actions create the world we live in which feeds back to shape our thinking again

# What We See

Our conceptual models shape everything that we see

# What We Do

How we see the world determines how we act in it





#### Whole

# Shift the Paradigm

Parts



# **Holistic Thinking**

Synthesizes parts to understand them with reference to the broader systems they form part of.

#### Is good for...

Understanding the "why" Understanding context Improving systems coordination Transformational Change

# **Analytical Thinking**

Reduces down to create an account of the whole with reference to the combination of more basic building blocks.

#### Is good for...

Understanding the "how" Understanding internal workings Increasing efficiency of parts incremental improvements

Systems thinking is about moving away from a self-centered view of the world towards an view of our self as part of multiple complex adaptive systems through an appreciation for multiple perspectives.



# **Ego-system Thinking**



**Eco-system Thinking** 

# Iceberg Model

The iceberg model is a model used in systems thinking to illustrate the various levels of abstraction to a situation or organization; from the observable events to underlying patterns that generate these, to the supporting structure and ultimately the mental models used by an organization. Just like with an iceberg, a large percentage of what is going on in our world is hidden from view and the Iceberg Model tries to make this explicit by depicting it as a series of layers that sit beneath the everyday observable phenomena.







# **Recommended Canvas**

The main canvases we can use to help participant start to think systemically about the challenge is that of the iceberg canvas or alternatively the eco-system thinking canvases.

The iceberg canvas is designed to help you start to think about and map out the different levels of abstraction to the system you are dealing with - from the observable events to underlying patterns that generate these, to the supporting structure and ultimately the mental models used by an organization.

We first map the existing system on these different levels and then progress to identify possible new models, structures, patterns, and events that we would wish to see in the future system.





# **Iceberg Model**

The observable actions and phenomena



Describe trends over time

How the parts are interrelated to influence the patterns

The mental models that support everything else in the system

# How it Works

This canvas follows a process where we go down the different levels of the iceberg, outlining the current system on its different levels. We then trace back up again to give an outline of the desired future system we would like to bring into being.

# **Current System**

We start by giving an outline to the current system

## **Emerging System**

We then outline the aspects of the new system

## **Current System**

# **Iceberg Canvas**

#### **Current Events**

Events are the individual activities or facts about the state of things in the system. Write in the box below the events and associated variables in the system.

#### **Current Patterns**

Patterns are the changes in variables that occur over a period of time. They are the trends that we perceive taking place over time. List the patterns you see in the system.

#### **Current Structures**

What are the rules, norms, policies, guidelines, power structures, distribution of resources, or informal ways of work that have been institutionalized? Post up all your ideas.

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**Current Models** 

What are the key mental models expressed through beliefs, attitudes, morals, expectations, values or culture which allow current structures to continue? Post all your ideas up.

# **Emerging System**

#### **Future Events**

What new events would we hope to emerge from the new underlying patterns and structures we have outlined above? Post up any ideas on this.

#### **Future Patterns**

What new patterns may emerge from the new structures and mental models? Post up any ideas you may have.

#### **Future Structures**

What new structures would emerge from those new mental models and values? Post all your ideas.

#### **Future Models**

Post up your ideas for the new mental models and values that might be needed to shift the paradigm.

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# **Alternative Canvas**

The "ecosystem thinking canvas" is designed as a template for running a workshop or lab session to help members shift their thinking from "ego-system" to "eco-system" thinking. The aim is for us to try and reveal participants' underlying paradigm and mental models that form a self-centred view of the world. This can then form the basis for exploring how they may see through different perspectives to become more aware of the system as a whole, independent of their place in it. The aim is to extend our level of thinking and awareness beyond the parts to the whole systems-level.





# **Ego-system Thinking**

What is "ego-system thinking" in the context you find yourself in? E.g. an actor in the financial system seeing the system as simply a means to making money for themselves. Use the prompt in each corner to help you in building up a full perspective.





# **Eco-system Thinking**

In the system you are dealing with what does it look like to see oneself as just one part of an overall complex adaptive system interdependent with all the other parts. Use the prompts in each corner to help you in building up a full perspective.



# Additional Canvases



#### **Context Mapping**

This canvas will help you explore the set of ideas around a given issue



#### Elephant

This canvas helps members to see a system through different perspectives



## **Reflexive Thinking**

Firstly think reflexively how our thinking creates the system and outcomes



## **Iceberg Model**

Start to understand the system on its different levels



## **Systems Thinking**

Start thinking holistically about the system



#### Emergence

Think about how the parts interrelate to create emergence


In any systems change initiative we are going to have to understand the specific system we are dealing with. This will require an inquiry into the system and how it works. An overall view of the system's elements and interrelationships can be gained by making an inquiry into the systems workings. Thus systems enquiry and mapping will be part of virtually all systems innovation initiative and this is the second key aspect we need to in corporate and learn how to do effectively. Once we have this understanding we can then ideate on places to intervene to enable change - the "leverage points."

## Systems Mapping

## What is System Mapping?

Systems mapping is a type of modeling that is designed to reveal the underlying interrelationships and structure of a complex system. System maps are powerful visualization tools that can help change agents describe and diagnose the current state of a given system; understand how system structure creates the observable outcomes; create a shared vision of the system; gain consensus about the problems and identify opportunities.

System mapping is about gaining an empirical understanding of what is before we engage in envisioning what could be or what we would like to be. However, systems maps should not be seen as deliverables or endpoints, rather they are tools of exploration, stepping stones on our path to understanding the system dynamics that underly complex issues.



## Why Systems Mapping



#### **Holistic View**

Maps help us to view the system as a whole



#### **Analysis of Structure**

By mapping linkages maps help to reveal the underlying structure



#### **Shared Perspective**

By creating a shared visual diagram maps help to build shared understanding



#### **Course of Action**

Shared understanding reveals points of intervention and consensus on action



#### **Integrated View**

Systems mapping helps to integrate our disparate perspectives of a system and move away for a fractured & siloed view

crisis"



## What are leverage points?

The idea of leverage points was introduced by Donella Meadows in a paper where she proposed a scale of places to intervene in a system that would result in varying degrees of change within the overall organization. She started with the insight that there are levers or places within a complex system where a "small shift in one thing can produce big changes in everything."

This is an approach to changing complex organizations that involve working with its innate evolutionary potential for change; approaches that aim to make small, but intelligent and well-gauged interventions to influence flows within a system and thus its future development. To look at the different levels to an intervention point we can use the iceberg model.

The iceberg model is a model used in systems thinking to illustrate the various levels of abstraction to a situation or organization; from the observable events to underlying patterns that generate these, to the supporting structure and ultimately the mental models used by an organization. Just like with an iceberg, a large percentage of what is going on in our world is hidden from view and the Iceberg Model tries to make this explicit by depicting it as a series of layers that sit beneath the everyday observable phenomena

## Leverage Points



## **Networked Approach**

Many of today's most complex challenges can be better thought of as the emergent outcomes of a complex adaptive system; patterns that are continuously re-created through the ongoing decisions, actions and reactions among numerous players embedded within multiple networks. This perspective has huge advantage as it lets us start to work with this complexity.

Instead of our traditional linear approaches that are constantly pushing against complexity - by creating boundaries and focusing on small sections of these networks - systems acupuncture reveals an approach that harnesses and utilizes complexity to our advantage.



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The main canvas we can use to help map the system and ideas on leverage points is the mapping leverage points canvas

This canvas is designed to help us map out the set of factors surrounding a given issue and to try to find leverage points in the system that may shift the dynamic. We first define what the challenge is, then map out the key elements affecting it and how they are interrelated. Around each of these factors we then look for different places to intervene on different levels of the iceberg, event, pattern, structural, model levels.

Our aim here is not to create a solution but to ideate, possible intervention points around the given challenge that, if acted upon in a coordinated fashion, could possibly shift the system to a new dynamic.



## **Recommend Canvas**







Posting Now have members post up their ideas as to what they think are relevant factors or actors affecting this system in the appropriate area. On the inner circle are the immediate factors the outer sector the more general factors support these. Once they are done read over what they have added. Look at one area at a time to see what the system/issue looks like from that perspective, e.g. look at social factors first, then economic, technological, etc.



## Connections

Now have members draw lines between different factors to illustrate the connections between them. You can also have them add plusses or minuses to the links depending whether there is a positive correlation or negative correlation between the factors. For example, a greater rabbit population may lead to fewer carrots in your garden this year.

## **Leverage Points**

Now to add intervention points to the map we want to look at each area and think about how we may intervene to shift the dynamic from creating the issue to contributing to resolving/ dissolving the issue. We will have participants post up their ideas for each factor they previously identified. To make it a leverage point it must be systemic, i.e. an intervention that affects the factor on either the structural or mental model levels. For this we can use the iceberg model to illustrate the different levels of participants. We will finally create different color stickies for each level of the iceberg so that we can see - once the participants have posted up their ideas - where they are, what they are and what level they may affect the system on. We also want to look at the linkages between factors and ask how we may intervene in the connections.



## Discussion

Now step back to look at the bigger picture to see what is revealed. What are the insights you can derive? What is the story we can tell about the system and its dynamics? Where are the places we want to move forward on intervening around, developing and growing.



## Connecting

Now that we have an understanding of the system we wish to change and how we may influence it, it is time to think about how we bring together the relevant actors from the old system and the new to enable a transition. To do this we need to now develop an ecosystem map to understand who are these actors and where are they placed in the system



## The Nature of Transitions

With complex systems we never really get to redesign some new system, system change is really about enabling transitions within an organization. A transition is a process or a period of change from one condition to another. Transitions are pervasive in nature, many different types of systems undergo rapid change before emerging in a new form or state of semi- stability on the other side. Children become adults, seeds become plants, a town becomes a metropolis, but the classic example of a transition is the metamorphosis of a caterpillar into a butterfly.





## What is Futuring?

To enable a transformation or transition we need to think about the future and what the new emerging system might look like, what are those "pockets of the future" in the present that are reflective of the future system we would like to bring into being.

Futuring is the use of a systematic process to think about the future; framing and forming possible scenarios for the future to gain insight into the best actions to take in the present. Futurists use what they see in the present as a view on to the future; they watch trends and try to envision what may happen, but they are also aware that the future does not yet exist and thus is something to be created through the stories we tell.

## **Climate Change & Futuring**

Climate change is a long term systemic challenge, thus we need to think not just about planning change but also about transformation and the emergence of new systems



5 - 10 years

10+ years

## Horizons





#### **Aspirational**

The "pockets of the future" that represent the future system we aspire to.

The dominant system at present. The institutions that currently run the system.

In the context of transformation there are three general types of actors that we want to identify in the ecosystem.



#### **Business as Usual**

#### **Disruptive Innovations**

Innovations that are driving change. These could be technological, social movements, environmental, etc.

## **Three Horizon Framework**

The three horizons framework is one model that tries to illustrate how these different driving force may play out over time to share the future system.

#### **Business as Usual**

Current innovations that are driving change. Technological, social, environment etc. changes that are disruptive.

#### **Disruptive innovation**

The dominant system at present. This is the widely accepted way things are currently done in the system.

#### H1 Aspirational

The desired future. The niche innovations that represent the world we would hope to create and live in



#### H2 Minus

H2 Plus

When the disruptive innovations are

harnessed towards bring into being the

aspirational system

The new innovations are used to keep going and make more efficient or faster the existing pattern.

## **Multi-Level Perspective**

Another model for helping us to think about how change happens on these different levels is the multi-level perspective(MLP) a prominent framework for describing transition processes in complex socio-technical systems. This is also a theory of change as it tries to describe how innovations can combine with macro-level change to disrupt the existing regime. The MLP again posits three levels on which processes interact and align to result in socio-technical system transformation; the macro-level called the landscape, the meso-level called the regime and micro-level called the niche.

### Landscape

Represents the overall environment within which the system exists.

#### **Old System**

Hospice, disrupt & dampen inert old structures.

### Regime

The persistent configurations that form the dominant pattern of organization

#### Niche

The margins that are home to new innovations, new models, communities.



#### **Horizon Scanning**

To understand the landscape shapers

#### **New Connections**

Disrupting existing connections while creating new ones

#### **System Gardening**

Identify and foster new patterns





## **Recommended Canvas**

For this section we want to map out the actors - both the incumbents and the new innovations - in the system and think about what activities we can do to connect the ecosystem and enable its development. On the next page you will find a canvas to help you do this with the following pages explaining how it works.

#### Change Ecosystems Template



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## Template

Start by creating a Miro board with the canvas on the previously page or print it out if doing an offline workshop.



## Posting

Now have everyone post their stickies on the board in the relevant place.





#### Incumbents

## Organizations

Now we will post the stickies on the board. Place those that are the incumbent larger existing organizations to the outside of the circle, place those that are the new innovations closer to the center.

## Activities

Now to think about how we will connect the actors in the ecosystem and build their capacity. In particular how will we connect the established organizations with the new innovations to enable a successful transition.





The job of the systems innovator is to develop collaborative ecosystems that align diverse actors in new synergistic ways. As such we have to develop some new space for bringing people together - creating a new network or platform for change. This will require a narrative as to what this is about and why people should join. We will need some organizational structure, a value model, some set of activities for the actors to work together and some technology platform to enable everything. In this section we work to define the different aspect of this platform that will enable our newly forming ecosystem to learn, create value and scale over time.

## Platform Design



## Overview

The job of the systems innovator is to develop collaborative ecosystems that align diverse actors in new synergistic ways. As such we have to develop some new space for bringing people together - creating a new network or platform for change. This will require a narrative as to what this is about and why people should join. We will need some organizational structure, a value model, some set of activities for the actors to work together and some technology platform to enable everything. In this section we work to define the different aspect of this platform that will enable our newly forming ecosystem to learn, create value and scale over time.

## What's a Platform

Open innovation platforms are the supporting infrastructure for enabling collaboration between a divers group of actors. They provide all the support services for a group of individuals and organizations to start to coordinate and work together in a systematic away around a shared challenge.



## **Moving From Silos to Ecosystems**

Collaborating around a wicked challenge like climate change requires us to move away from a siloed approach to one of open innovation ecosystems that work through networks



## A New Approach

Systems Innovation recognizes that linear approaches to addressing wicked problems and making change happen in complex systems does not work well. This we aim for a different kind of change, a nonlinear approach. These kind of wicked challenges can not be successfully addressed by one part of the system and requires the activation of a wide set of actors across the system in a more decentralized way systems innovation is an ecosystem approach to addressing issues.

The aim is to shift the dynamic in the system from many organization trying to each solve the challenge through their own program and projects resulting in a siloed and fractured response to one where actors are working synergistically around the challenge to realized the emergence of the kind of capacity really need to shift the dynamic.
## The Evolution of Climate Innovation





#### **Closed Innovation**

Technical innovation pipeline inside of closed organizations aimed at producing new products

#### **Open Innovation**

Technical innovation open to external input and collaboration aimed at producing new products and services





#### **Innovation Ecosystems**

Capital and technology driven, startup focused, collaboration aimed at increasing economic competitiveness, jobs and GDP growth

#### **Systems Innovation**

Wholistic social and technical innovation, alignment across an ecosystem towards tackling wicked problems

#### Assessment

How to assess for systemslevel impact and invest in the development of ecosystems



#### Identity

How do we communicate about the ecosystem?



#### **Climate Innovation Platform**

The supporting infrastructure that will enable an ecosystem of actors to learn how to address the challenge of climate change





#### Value Model

What are the exchanges and value model?



#### **Playbooks**

What are the set of templates that outline the workings of the

#### Tech

What is the technology needed to support the ecosystem



## **Our approach to climate change Fixed Planning Based on the Past**



## What is really needed **Iterative Growth of New Systems**





For the ecosystem to be success it will need a value model, i.e. a model for the process through which it can systemically deliver value and generate revenues for those involved to be remunerated appropriately.

Ecosystem are about the value that is created by actors working together synergies. Thus we need to think about what that value is, how is it assess and covered into revenue that can be redistributed back to participants and ecosystems developers.

## Value Model



## Transactional Value Model

The exchange between organization and user of a product or service that delivers direct utility to the end-user in exchange for revenue to the producer.



## Ecosystems Value Model

Groups of actors following shared protocols for coordination to create positives synergies resulting in value to the whole which is returned to them through access to better infrastructure.

## Playbooks

The playbooks is set of template and guides that outlines the rules and procedures for how the ecosystem works. The play book makes sure the ecosystems is aligned and can encode the governance structures. Through the playbook knowledge and learnings about how to do things is shared.

The playbooks make the ecosystem scalable, because it has a repeatable set of processes and templates that can be replicated and adapted easily to new context. The playbook is key to avoiding redundancy and recreating the wheel in the system because now we can all share a best prices way of doing things that.







## Governance

What is the framework of decision making in the ecosystem

What are the rule and guide like for the ecosystem



## Policies

## Guides

The templates for how to do operations within the network



Our platform will need an identity as an overall narrative as to what the actors are doing an why it matters. To do that try answering these simple question about who you will be bringing together, what they will do and what they will be able to achieve by doing that







## Identity



To do this together...

So that we can achieve this together...



## **Recommend Canvas**

An innovation ecosystem is a network through which a set of diverse actors interact to enable constant innovation outcomes in a given region or domain. As ecosystem builders, we are working to enable the integration and positives synergies between members for them to become more productive as a whole community. This canvas is here to help you ideate on the overall development of such an ecosystem. It expands upon primary considerations such as; the purpose, the challenges, the actors, the value model, platform, assessments, etc. that are relevant for building such a community. The following pages contains the overall template and additional tools you may use.





Start by writing in the center box what is the purpose of this ecosystem, i.e. why are you creating it? Following on from this we want to give an account of the story we are going to tell about the ecosystem and its value.



#### **Factors**

Now in the circles marked "factors" post up all the factors affecting this dynamic, and the different challenges contributing to the overall wicked problem that we wish the ecosystem to address.



#### Actors

Now in the circles marked "actors" we want to post up the different actors group we might like to engage in our ecosystem.



#### Activities

Now to fill in the four activity type boxes: Informing - how will we rase awareness, keep people updated and informed? Learning - how will we enable learning? Networking - how will we enable people to connect? Cocreation - how will we enable collaborations in the ecosystem?



#### Platform

Finally we need to think about the technology platform we will use to organize and communicate. Along with this define how we assess the ecosystems development and the shared knowledge base and set of tools needed by members.



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# **C**reative Commons