HORIZONS **FORESIGHT** METHOD

Module

4

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THE HORIZONS FORESIGHT METHOD

You are here in the Horizons Foresight Method

FRAMING

- Identify the issue or problem of interest
- Consider the larger system(s) shaping the issue
- Prepare a simple domain diagram of what is ”in” or “out” as a guide Allow it to evolve over the study

ASSUMPTIONS

- Identify “current assumptions” buried in public dialogue and policy documents
- Identify key trends people assume are true
- Summarize key assumptions as a description of the expected future

SCANNING

- Scan for weak signals of potentially disruptive changes
- Conduct interviews and facilitate dialogue to understand the system and develop insights

SYSTEM MAPPING

- Identify key elements or nodes in the system
- Describe key relationships
- Use a system map to identify where change could occur and direct further scanning for weak signals as needed

CHANGE DRIVERS

- Use insights from scanning to identify change drivers shaping the system
- Do cascade diagrams to see 2nd to 5th order consequences

SCENARIOS

- Develop scenarios to explore a range of futures
- Identify potential challenges and discontinuities
- Test robustness of current assumptions and strategies

RESULTS

- Explore policy challenges and opportunities
- Identify credible assumptions and robust strategies
- Identify key uncertainties, surprises and emerging issues
- Better understand how the system or issue could evolve

LEARNING OBJECTIVES

- Understand systems thinking and the use of system mapping in the foresight process
- Learn when, how and why system maps are used as part of the broader Horizons Foresight Method

SYSTEMS

- A system is a set of parts that interact to form a complex whole.
- Systems thinking focuses on analyzing how individual parts of the system interact with other parts to produce significant impacts on the system as a whole.
- Systems thinking is one of the foundational skills in scanning and foresight.

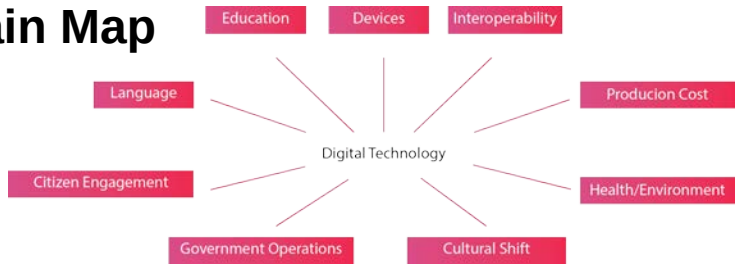
WHAT IS A SYSTEM MAP?

- Visual representation of the components of a system and their interrelationships.
- Allows a group to share their mental models (their simplification of reality).
- Allows a group to develop and test a shared analysis of how a system. may behave or evolve under different assumptions.

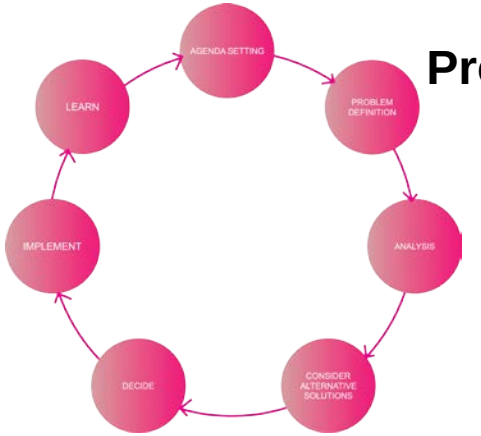
VISUALIZING SYSTEMS

There are many ways to visualize systems:

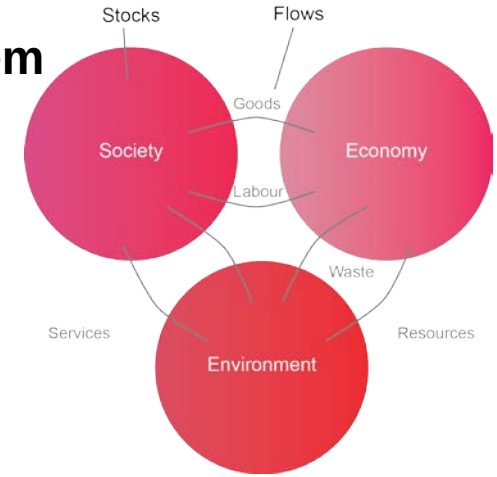
Domain Map



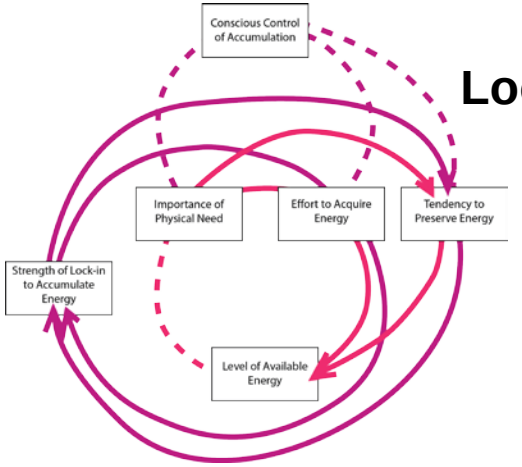
Process Map



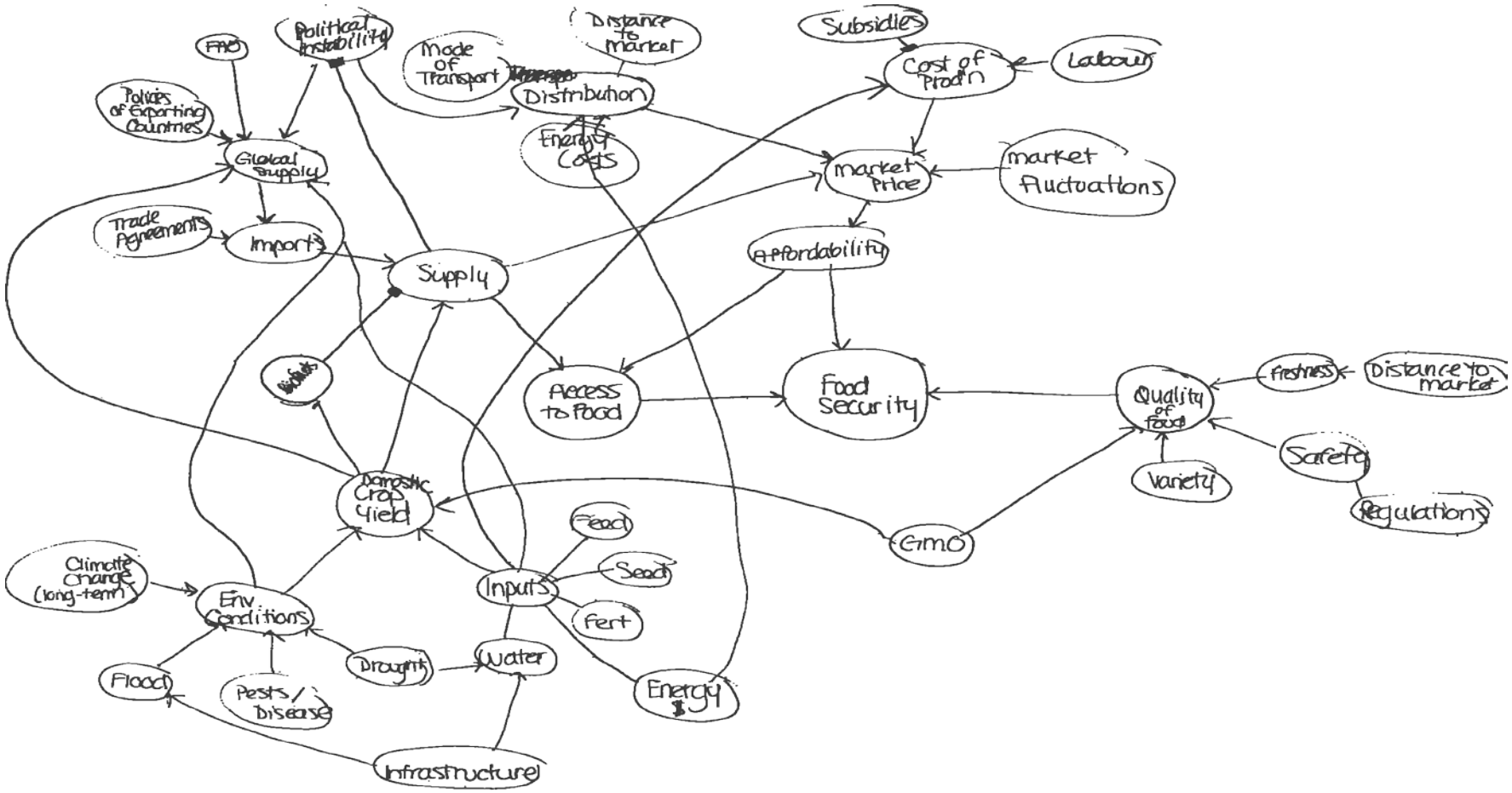
Structural System Map



Causal Loop Diagram



EXAMPLE: A SYSTEM MAP IN PRACTICE



VISUALIZING THE SYSTEM AT DIFFERENT STEPS IN THE HORIZONS FORESIGHT METHOD

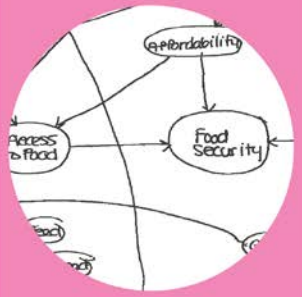
Mental model in our minds

Domain Map

Capture the essence
What's in, what's out

System Map

Focus on what is changing that matters
Elements in the map are key structures that are changing



Scenarios

System elements are the lenses in the scenarios

LINK BETWEEN SCANNING AND SYSTEM MAPPING

What are you doing in scanning?	Type of system mapping
Discovering, sensing	Initial domain map
Increasing your understanding of the system and what is changing, making sense of changes	Strategic labeling of domain diagram
Focusing on understanding weak signals of change shaping elements, examining relationships	Initial system map
Deciding on what aspects of the system really matter for the study	Final system map

SOME GUIDELINES FOR SYSTEM MAPPING

- Generalize—lose the detail while maintaining the essence.
- Find the right level of generalization. Most elements in the system should be at the same level of generalization.
- It is often useful to focus on structures, processes or functions.
- Think strategically—what needs to be illuminated?
- Be ready to revise the map as a greater understanding of what matters in the system is developed.

LIMITATIONS OF SYSTEM MAPS

- Reality is far more complex than any system map. Be aware of the limits of simplification.
- It is virtually impossible to map all the elements and relationships in a system.
- System maps are used to roughly reflect reality, not replace it. In the Horizons Foresight Method, system maps are used as scaffolding to focus and facilitate imagining and dialogue.

CONCLUSION: UNDERSTANDING SYSTEM DYNAMICS

- A collection of things is a system if any one element can affect the performance of the whole.
- A system's structure generates its behaviour.
- Small differences in initial conditions can create dramatically different and unexpected outcomes.
- Recognize the impact of time delays.

SYSTEM MAPPING TOOLS AND RESOURCES

- Online system mapping tools:
  - Insightmaker: https://insightmaker.com/
  - Visio: http://visio.microsoft.com/en-us/preview/default.aspx
  - Simple Mind: http://www.simpleapps.eu/simplemind/desktop
- Paper and pen!

REFERENCES

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- A Systems Primer http://www.threesigma.com/print_primer.htm
- Donelle Meadows Foundation http://www.donellameadows.org/systems-thinking-resources/
- Peter Bishop: On Systems Thinking http://houstonfutures.org/OurWork/FacultyProjects/systemsthinking.pdf
- Visualizing Systems http://systems.open.ac.uk/materials/T552/

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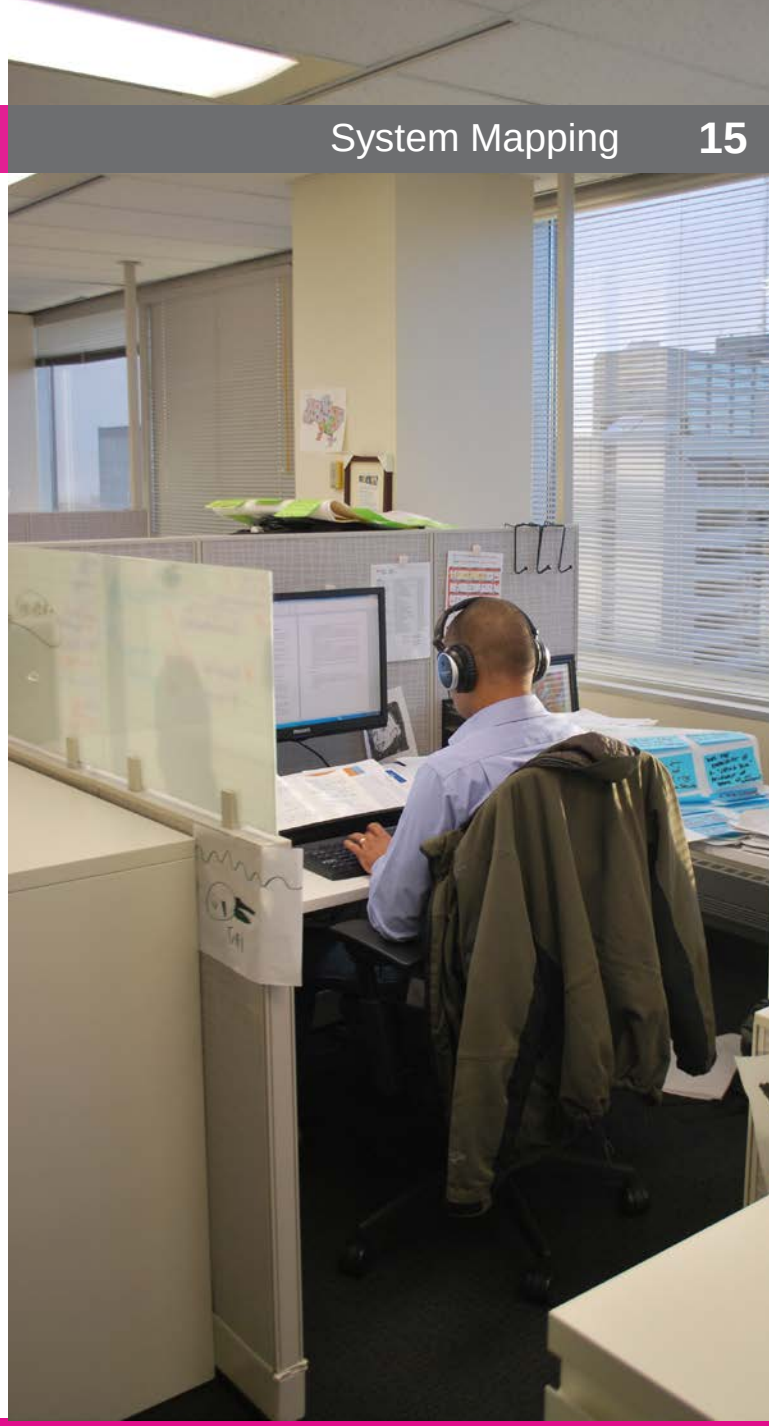
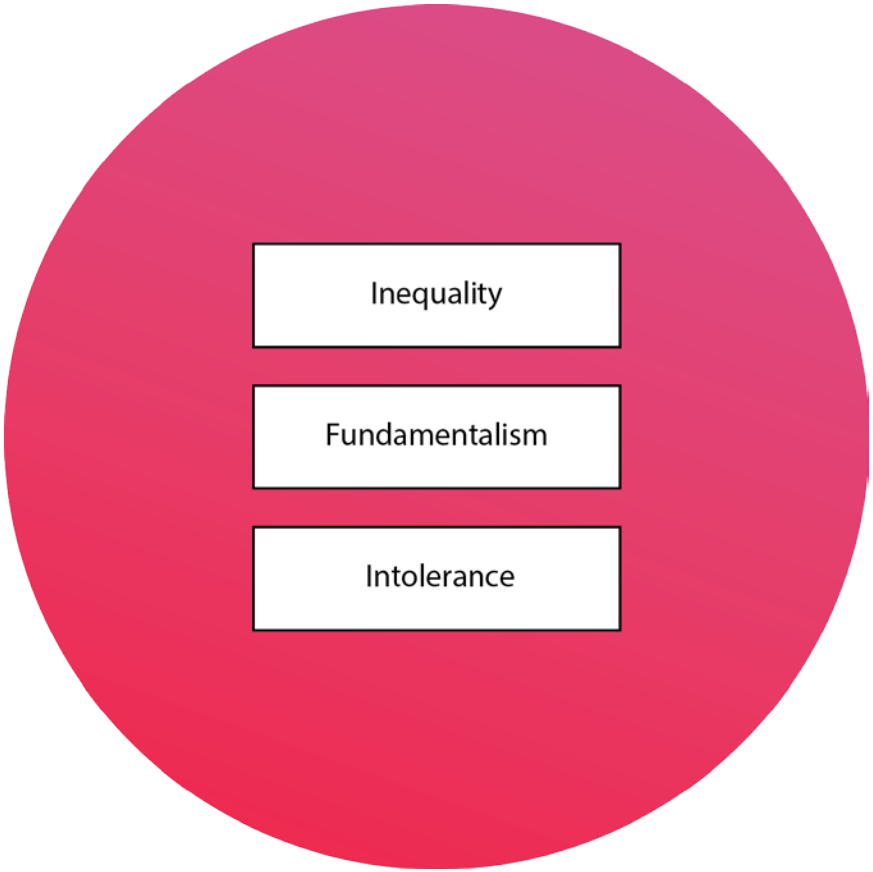


APPENDIX 1: INSIGHTFUL LABELLING OF GROUPINGS



Reductionist label:

Social issues

or

Insightful label:

Social system stability

When labelling groupings and system elements ask: what are some of the unique features that define or shape this system and make it different from other similar systems? What are some of the key characteristics or dynamics that matter? What is the change?