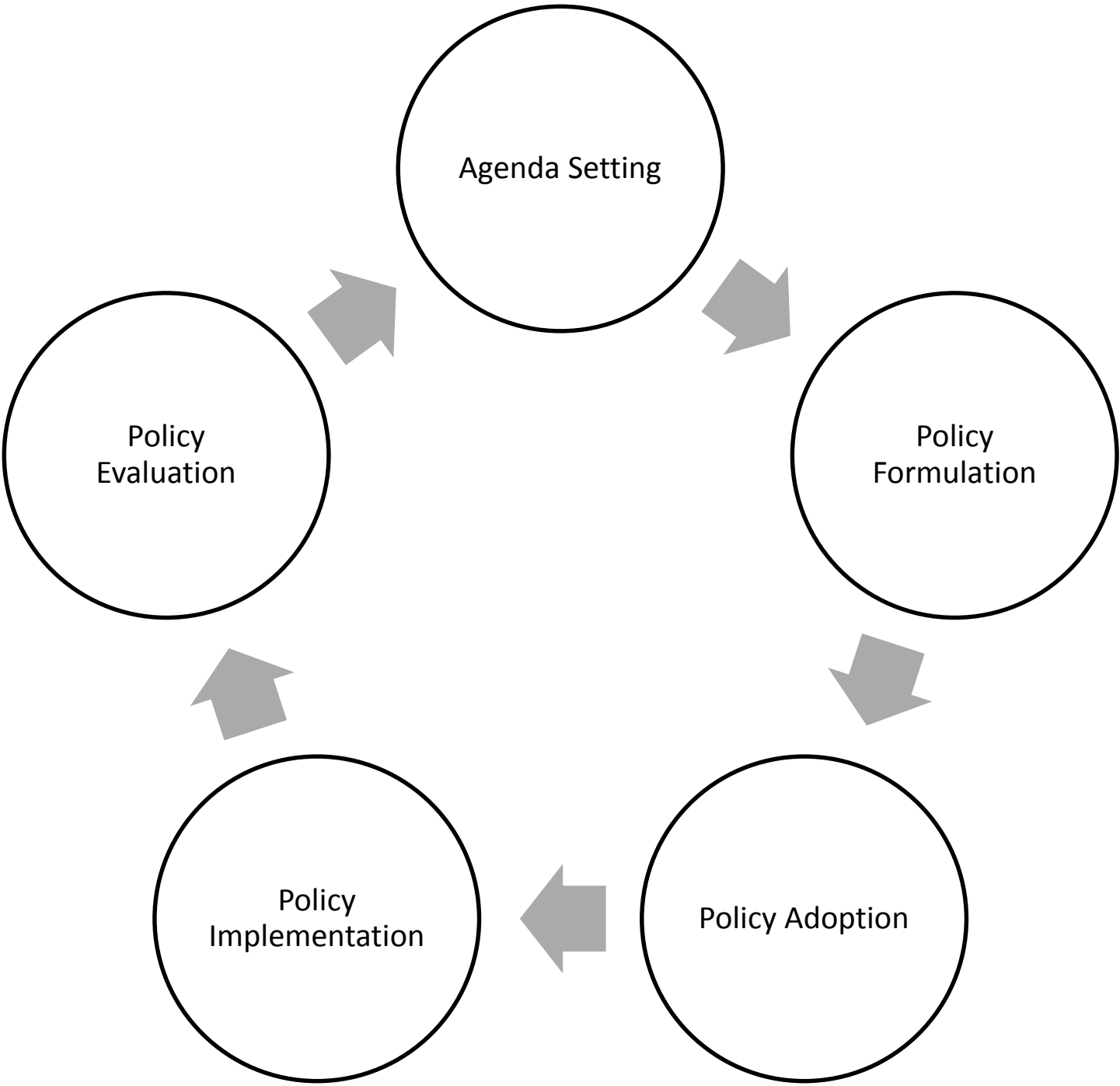


Wicked Problems and Weak Signals

The Centre for Public Sector Excellence

PSC/ANZSOG Leadership Seminar

21 April 2016



Agenda Setting

Policy Formulation

Policy Adoption

Policy Implementation

Policy Evaluation

Wicked Problems

- A **wicked problem** is a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize.

Different kinds of problems

Problem

- Clear problem definition
- Single organisation
- Usually an existing solution
- Regular leadership

Crisis

- Clear problem definition
- Urgently needs a new solution
- Directive leadership

Wicked Problem

- Unclear problem definition
- Multi-stakeholder
- Needs innovation and learning
- Adaptive leadership

Weak Signals

- **Weak Signals** are past or current developments/issues with ambiguous interpretations of their origin, meaning and/or implications. They are unclear observables warning us about the probability of future events.

The pace of automation has increased. Machines now possess capabilities previously thought to be uniquely human, such as understanding speech and recognising complex patterns.

Whereas the previous wave of automation hit manufacturing jobs, the next wave will affect higher-end service jobs – such as those in accounting, finance, sales, marketing, and legal services.

This means that in future, the skills required in high-end jobs will be those abilities that machines lack – asking the right questions, solving unexpected problems, and programming machines.

% of Existing Jobs Likely to be Displaced by Computers by 2030

(National Research Council, 2008)



“By one estimate, one lawyer is now as productive as 500 used to be. You might not lay off 500 lawyers, but the next time you might hire a few people and some software to read documents.”

– Prof. Andrew McAfee, MIT

An Emerging Strategic Issue in “Future of Work”

1. IDEATION

- **Objective:** To brainstorm weak signals.
- Take 5 mins on your own to think about what are some weak signals you observe.
- Write one idea per post-it.
- **Hint:** Weak signals should be something you are a little unsure about

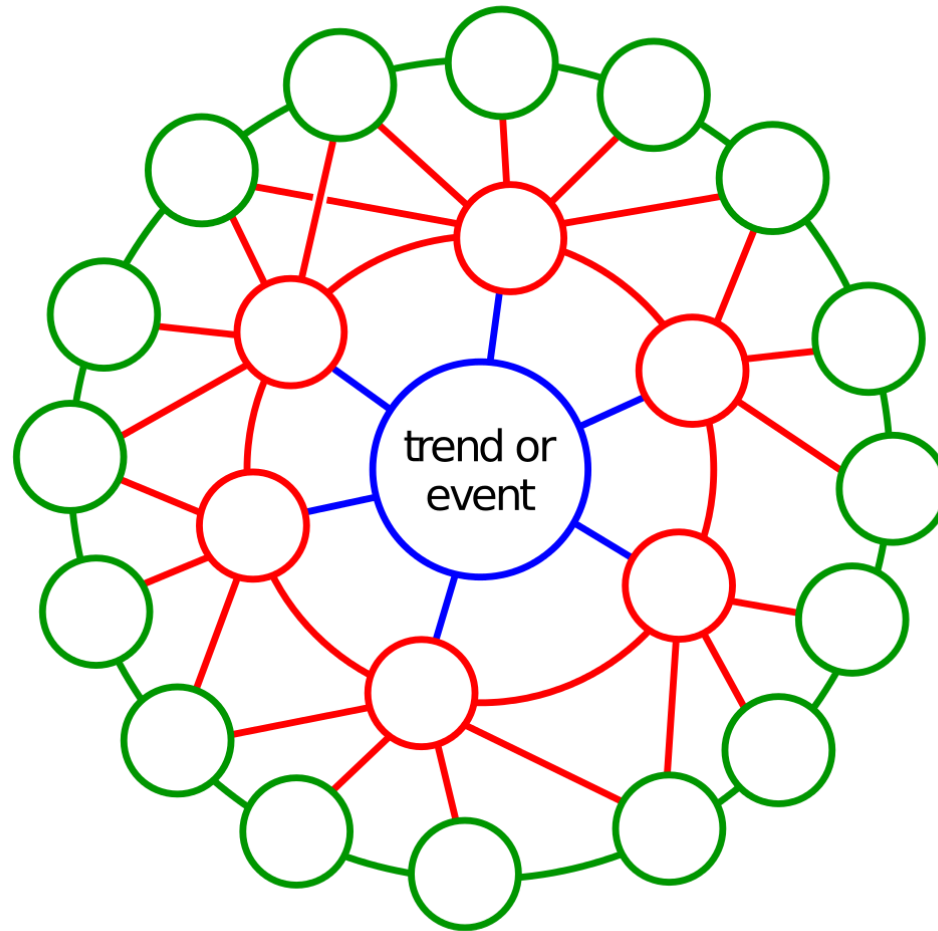
1. IDEATION

- **Objective:** To brainstorm weak signals.
- Take 10 mins to share your ideas with your group.
- **Hint:** Cluster similar ideas together.

1. IDEATION

- **Objective:** To brainstorm weak signals.
- Take 5 mins to sort the issues by impact and likelihood.
- **Hint:** “Institutional Surprise”. Which high impact issues might your organisation not be prepared for?

Futures Wheel



2. IMPLICATIONS

- **Objective:** To understand the possible implications from the weak signals.
- Pick 2 weak signals. (High impact/high likelihood; High impact/low likelihood.)
- Take 15 mins to map out them first and second order impacts.
- **Hint:** Do you have more clarity about which issues might cause “institutional surprise”?

2. IMPLICATIONS

- **Objective:** To understand the possible implications from the weak signals.
- Take 10 mins to share your findings with the next group.
- **Hint:** How are other perspectives on the issue different from your own?

Next steps

- **Reduce the uncertainty** – Is there research on this issue? How might it apply to your organisation?
- **Conduct a test** – Is there a way to test your hypotheses about the future? Can you design small experiments to test your hypotheses?
- **Find allies** – Who else might be concerned about this issue? Who else might be impacted?

“The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.”

F. Scott Fitzgerald

Thank you

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