Plan Workings™
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Abstract
Plan Workings™ express graphically the content of ‘action proposals’ (e.g. public or private plans, policies, and strategies), helping to clarify and visualise the concerns, objectives, action, and outcomes as well as the relations between them. Simulation of proposed actions provides insights into efficiency.

1 Professional value

The Strategy Maps™ of Systems Planning™ express graphically the content of action proposals (e.g. plans, policies, strategies) with special care about the relations between concerns, objectives, action, and outcomes. This special care gives coherence to the action proposals, and turns them verifiable and adjustable through review and revision undertakings, respectively.

Once expressed as formal plans (e.g. in a DCD format with explicit ‘XYZ’ mark-up), action proposals may be simulated as scenarios in order to obtain forecasts of likely outcomes — e.g. qualitatively within the DCD (Figure 4) or quantitatively with the help of a numerical stock-and-flow diagram (Figure 5) — to provide insights into efficiency (Perdicoúlis, 2014c).

2 Workflow

Figure 1 The work to be carried out over four (4) hours; a number of ‘loop’ iterations may be necessary to achieve a satisfactory plan
3 Programme

**Introduction (1H)**
- The decision model (Figure 3)
- Plans: conception, expression, formality
- The problem in an ‘XYZ’ form (Figure 4)

**Work Session (4H)**
- Work in groups (2–4 people)
- Interactive assistance

**Presentation, Discussion, and Conclusion (1H)**
- Shared experiences
- Applicability issues

4 Technical notes

**Methods**
- Explicative causal thinking — $\text{ECT}_{[M]}$ (Figure ??)
- Diagrammatic causal analysis — $\text{DCA}_{[M]}$ (Figure 2)
- Decision model analysis — $\text{DMA}_{[M]}$ (Figure 3)
- XYZ problem definition — $\text{XPD}_{[M]}$ (Figure 4)
- Qualitative simulation — $\text{QSM}_{[M]}$ (Figure 4)
- Quantitative simulation — $\text{SFD}$ (Figure 5)

**Techniques**
- Text mark-up — $\text{TMU}_{[T]}$
- Descriptive causal diagrams — $\text{DCD}_{[T]}$ (Figure 4)

**Audience**
- Planners, strategists, policy-makers (private/ public sector)
- Plan reviewers (e.g. assessment committees, shareholders)
- Problem-owners; stakeholders (e.g. competitive/ collaborative)
- System Dynamics methodologists (e.g. towards problem/ plan formality)

**Competences**
- Identify and get to know the elements of plans (or strategies, or policies)
- Identify and get to know causal relationships between these elements
- Distinguish between ‘physical’ and ‘logical’ causality
- Think of the limits or boundaries/ scope of the plan
- Think of stakeholders and their positions regarding the plan
- Question the communication of a plan (e.g. volumes of text, concise diagram)
- Formalise the planning problem on stock-and-flow diagrams (SFD)
- Express the policy scenarios as a formal action plan

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* $a$ v. Perdicoulis, 2014b
* $b$ v. Perdicoulis, 2014a
* $c$ Required to some extent; to be reinforced in the workshop
5 Protocols

![Diagram of DCA process]

**Figure 2** General information flow of DCA — configuration for existing plans; simulation and observations typically concern structure and function (Perdicoúlis, 2014b)

![Diagram of Decision Model Analysis (DMA)]

**Figure 3** Decision Model Analysis (DMA) — systems learning model
Figure 4  Generic Descriptive Causal Diagram (DCD); XYZ problem definition (XPD)
Figure 5  Typical information flow (IFD) between different types of diagrams in cooperation between Systems Planning™ and System Dynamics (SDS, website)
6 Materials and preparation

Case-study/ Work material  Participants should bring their own ‘problems’ in (human) memory or appropriate documentation (e.g. text, diagrams, charts). Numerical simulations (e.g. in System Dynamics) require a fully working model (e.g. SFD).

Software  Systems Planning diagramming can be carried out manually, with pencil and paper. Optionally, participants are welcome to use their own diagramming software, such as Graphviz, LibreOffice Draw, OmniGraffle, or Visio. System Dynamics software options can be found at the SDS (website).

References and further reading

System Dynamics Society (website) https://www.systemdynamics.org

1 v. starter file (Perdicoûlis, 2011b)
2 v. stencil (Perdicoûlis, 2011c)