

# Strategic Workforce Planning:

## How do companies implement and operate system dynamics models ?

Miriam N. Spano\*, Hubert Korzilius\*

\* Radboud University, Nijmegen, the Netherlands

### Rational

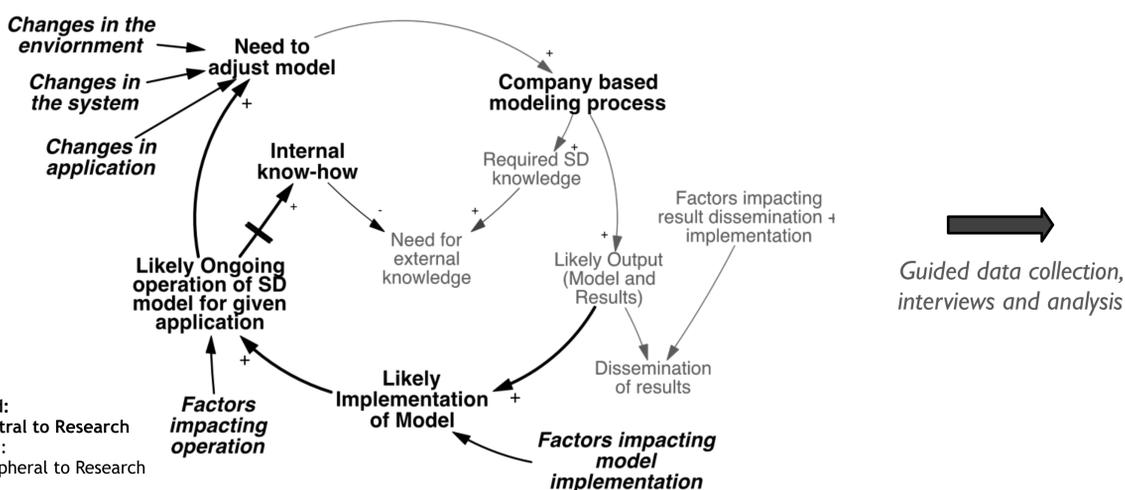
### Objective

- System Dynamics (SD) models can support strategic management processes and are suggested as ongoing planning tools, especially when combined with scenario planning
- Strategic workforce planning (SWP) is an urgent topic for companies facing an ageing society with suitable methods still being trialled
- SD has been shown to be a useful tool for SWP but there is no reported evidence of how companies implement SD models or operate them on an ongoing basis.

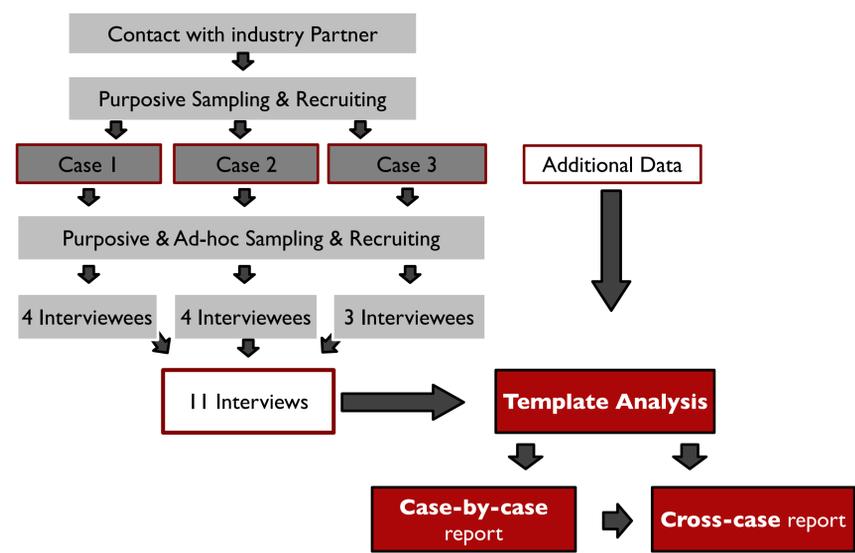
- Find companies (cases) that use SD for SWP
- Form an understanding of how companies implement and operate SD models to support their SWP
- Explore what factors impact on implementation and operation of SD models.

### Methods

This is a qualitative, explorative cross-case study supported by an industry partner.



**Figure 1: Concept model** based on a literature review that guided data collection and analysis. Please note: not all relationships could be substantiated in literature; to signify this, no polarities are attached to those arrows.



**Figure 2: Data collection and analysis process** resulting in both a case by case and a cross-case report.

### Results

**Implementation:**

**Tool vs. Process:** Tool (SD model) and process (SWP) are inseparable and follow Sterman's (2000) description of the modelling process

**Project Sequence:** Sequence and activities follow org. intervention and project mgt. theory (pilot, roll out, routine)

**Model Implementation:** Software needs to be purchased, checked, authorised and installed.

- ✓ **Successful implementation does not require SD specific knowledge**
- ✓ **'Selling' the method and building trust is central to a successful implementation.**

**Ongoing Use:**

**Ongoing Model Use:** Model needs adjustment which requires some SD expertise

**Organisational Anchoring:** Organisational structure, adjacent processes, model vs. process ownerships and data mgt. need consideration

**Routine Process:** SWP process design dictates model use.

- ✓ **HR staff conducts meaningful HR analytics by using SD models for their SWP and contributes to the strategy conversation.**

**Main Impact Factors:**

**Resources & Internal Visibility:** Capacity, budget, priorities and change, e.g. personnel, context or resources

**Data:** Access, availability, infrastructure and quality of data

**Human Factor:** Skills and ability, personality and interpersonal chemistry, choices and communication, language.

- ✓ **Impact factors varies depending on organisational context**
- ✓ **Context of model and process needs to be carefully assessed.**

### Conclusion

**Successful implementation and ongoing use of SD models as strategic planning tools is possible.**

- Requirements to use SD models on an ongoing basis:
- ✓ **Purposeful anchoring** within the organisation
  - ✓ **Data is addressed cohesively**
  - ✓ **Modelling expertise** is required but can be outsourced
  - ✓ **Teams with mixed skill set**
  - ✓ **Trust and confidence in the tool** as well as the process
  - ✓ **Awareness of impacting factors.**

### Future research

- Verify, extend and inter-relate the impact factors identified in this study
- Validate or challenge the process for implementing SD in an organisation
- Use existing definitions and concepts of the application area to avoid confusion, ensure transferability of insights and method dissemination.

### References

- See handout for more information