



Research School for Operations
Management and Logistics

Beyond system dynamics modelling: Toward an integrated framework for structuring ill-defined problems

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Modelling and other approaches for identifying and structuring problems and policy analysis are widely used by management scholars. Among so-called 'problem structuring' methods are system dynamics (SD), critical systems heuristics, soft systems methodology, agent-based modeling, and cognitive mapping. Each of these methods draws on particular assumptions with regard to problem articulation and policy making. In the first part of this doctoral project, we design a framework for problem structuring methodology that draws on combining multiple methods - with a pivotal role of system dynamics modelling. This methodology serves to enhance and exploit the complementarity of multiple methods and decrease the weaknesses of each of these methods (when used alone). In the second part of this doctoral dissertation, an unstructured problem in the area of innovation and transition management will be studied and analyzed using the methodology developed in the first part. The empirical problem addressed in this part of the project is not specified yet.