

DEVELOPING AND USING A DECISION SUPPORT SYSTEM FOR MITIGATION PLANNING

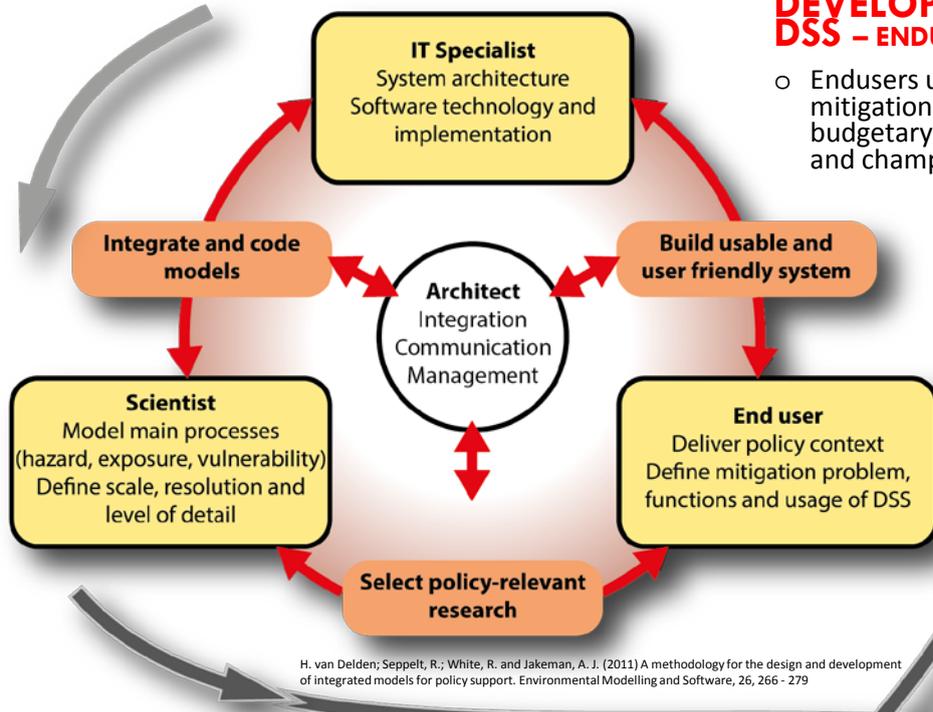


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DEVELOPING A MITIGATION PLANNING DSS – ENDUSER ENGAGEMENT IS CRITICAL

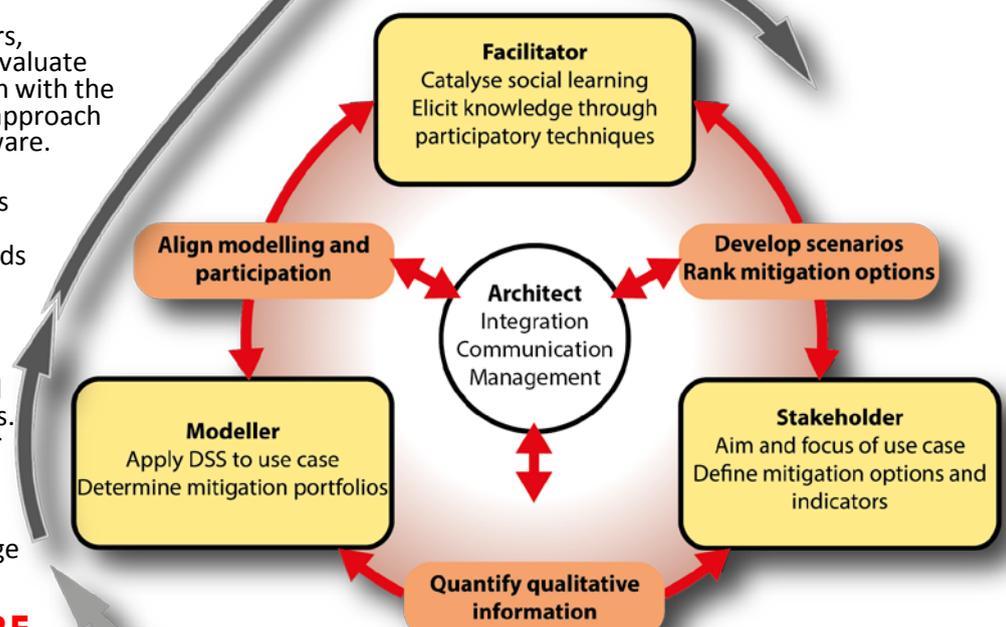
- Endusers understand regional characteristics of hazards, feasible mitigation options, political context and constraints (e.g. budgetary). Therefore, they steer policy-relevant development, and champion DSS use within their organisations.
- Scientists are concerned with scale, resolution and process details; ensuring modelling is appropriate and calibration is robust. They also understand the literature extensively, and can provide advice on policy relevant themes, mitigation options and constraints outside the experience of endusers.
- Three key aspects to balance in development are: The needs of end-users, scientific/expert advice/knowledge, and the availability of resources (human, financial, models and data)



H. van Delden; Seppelt, R.; White, R. and Jakeman, A. J. (2011) A methodology for the design and development of integrated models for policy support. Environmental Modelling and Software, 26, 266 - 279

USE - MOST SUCCESSFUL WHEN DEEPLY INTEGRATED WITHIN THE POLICY MAKING PROCESS

- Social learning occurs when stakeholders, modellers and facilitators explore and evaluate policy options through group interaction with the DSS — adding value over the common approach where reports are delivered using software.
- We advocate an approach that develops rich narratives of possible future conditions through participatory methods and modelling, and then assesses the impact of potential mitigation options under these conditions.
- *Stakeholders* provide the aim, focus and scope of the mitigation planning process. *Modellers* provide analytical support for assessing the impacts and performance of planning and policy options. The *facilitator* takes the lead in the engagement activities to elicit knowledge and catalyse social learning.



H. van Delden; Riddell, G. A.; Maier, H. R.; Hewitt, R. and Bregt, A. K. (2015) A methodology for linking exploratory storylines and quantitative modelling in support of scenario-based long-term integrated planning. Environmental Modelling and Software (Submitted)

DEVELOPMENT AND USE ARE INTERCONNECTED

- Use considered in development ensures the DSS is able to support relevant use questions.
- Using a DSS reveals shortcomings and limitations that direct further development and fine-tuning.

