What is a ‘Wicked Problem’ for IS?

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Overview

- A pragmatic approach to the concept of wicked problems
- Comparing Design Science Research (DSR) and traditional approaches
- Designing when the prescriptive aspect of a research problem is less mature than its descriptive or normative dimensions
- Designing when causal factors impacting upon the problem variable are difficult to identify and/or isolate with traditional empirical approaches
- Designing when mediating influences and interactions between causal factors impacting upon the problem variable are difficult to identify and/or isolate with traditional empirical approaches
- Conclusions and future research
A pragmatic approach to the concept of wicked problems

- Decades of discussion on wicked problems vs. tame problems
  - Used to demonstrate complexity of real-world problems
  - Used to argue for design-oriented approaches

- This study explores the second, i.e. wicked problems are defined as the ‘research problems for which a DSR approach is suitable’
Comparing DSR and traditional empirical approaches
Guideline #1

- Designing when the prescriptive aspect of a research problem is less mature than its descriptive or normative dimensions

E.g. Adipat et al. 2011
Guideline #2

- Designing when causal factors impacting upon the problem variable are difficult to identify and/or isolate with traditional empirical approaches

E.g. Markus et al. 2002
Guideline #3

- Designing when mediating influences and interactions between causal factors impacting upon the problem variable are difficult to identify and/or isolate with traditional empirical approaches.

E.g. Adomavicius et al. 2011
Conclusions and future research

Contributions
- Distinction clarified between DSR and traditional empirical approaches
- Three types of ‘wicked problem’ identified for IS researchers for which DSR is suitable

Future research
- Opportunity for empirical investigation of which of these characteristics of research problems regularly influence the adoption of DSR approaches in practice
- Opportunity for empirical investigation of other characteristics of research problems that influence the adoption of DSR approaches in practice