

A Mathematical Model of Privacy Decisions: A Behavioral Economic Perspective

Challenge:

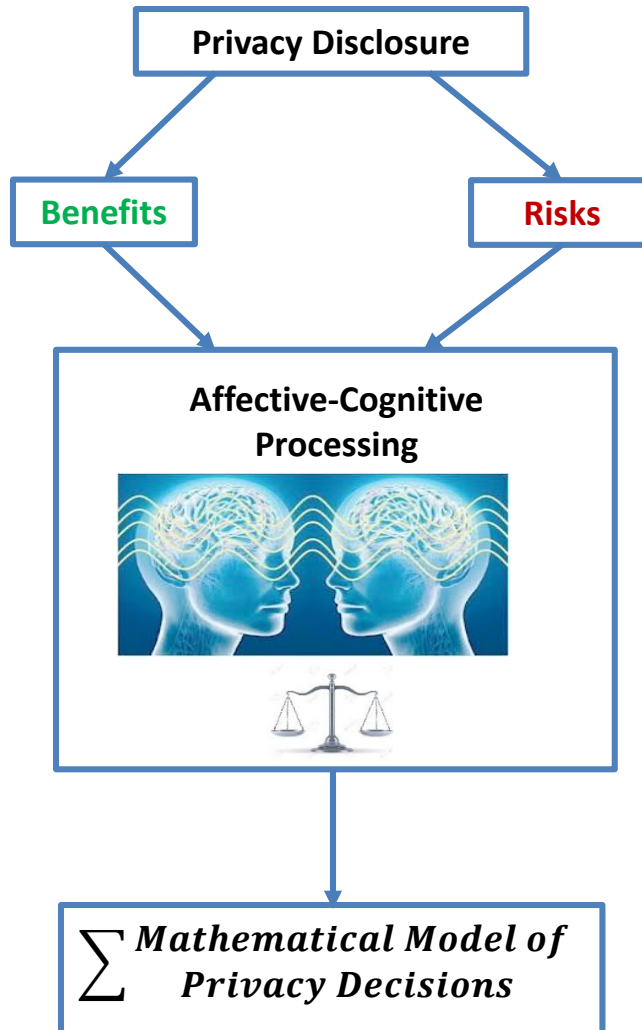
- People express concerns about privacy, but often act contrary to their stated intentions
- Need mathematical models that “realistically” describe privacy decisions

Solution:

- Develop affective-cognitive algorithms to model human experienced-utility in privacy decisions
- Test and evaluate the accuracy of algorithms

Team:

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Scientific Impact:

- Bridge information privacy, theoretical computer science, and behavioral and experimental economics
- Translate findings of the information systems and social science communities in privacy into mathematical theories of choice and decision making
- Break the ground for a new mathematical theory of privacy that can describe how people actually make privacy decisions versus how they are expected to make such decisions

Broader Impact:

- Translate application to real online environments and implementation in decision support tools
- Work with technology leaders to improve the design of privacy enhancing technologies
- Align the capabilities and opportunities of information systems with the concerns of citizens and policymakers