Research Agenda: Revisiting Scenarios

Open Questions from our Scenarios
Concepts (social objectives)
What are we lacking across areas:
engineering; usability; economics,
law, policy

Be Inclusive, not driving consensus

Group Members

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Considered Scenarios

- Vehicle-to-vehicle communication
- License plate readers
- Emotional contagion study

Cross Cutting Issues

Thinking about design objectives

- Properties
- Threat models
- Harms and other ways to identify squishy things

Properties

- How to derive them?
 - Threat models
 - Concepts
 - Harms
 - Individual oriented, methods such as testing regret, other ways to identify squishy things

Concepts

Need more

– FB emotional contagion study couldn't define the concept of privacy at issue crisply; couldn't distinguish harm crisply; big issue now with "algorithmic manipulation", clearly sense of concerns but not well formulated concept to inform design of policy or tech

Tools to do discovery and translation

- Threat models
 - Useful to a point
 - Not just about adversaries as defined in security
 - Adversary may be one with lawful access
 - Need a broader terminology than adversary
 - Misaligned incentives
 - Aligned incentives but obligated to behave in adversarial way (lawful access)
 - Variations over time or other variables

Approaches to teasing out "adversary"

- Actor network theory
 - Take artifacts seriously, look at them as agents expressing values, and behaving in certain ways
 - Focuses on dependencies and networks, not static analysis
- Game theory
 - Useful to think about changing states of alignment of parties
- Not just about adversaries