Provocation: Making The Sociotechnical Turn

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Bridging Prediction and Intervention Problems in Social Systems

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January 12, 2026

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The Sociotechnical turn

Sociotechnical–set of technical and material properties, along with organizational context that includes policies, practices and humans with different training and background and at times professional commitments

All shaped by the economic, social, and political forces

The Sociotechnical turn in AI governance

Emphasizes the importance of studying ***use cases*** not technical components or systems and of understanding ***impact on people/outcomes*** not system outputs

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- Biden-Harris Administration OMB guidance
  - Purpose of *use case* and *expected benefit* supported by specific metrics/qualitative analysis
  - Testing in *real-world* contexts
  - Ensuring *use* of AI *does not decrease equity or fairness*
  - Ongoing monitoring and thresholds for periodic human review
- Proliferation of **use case** oriented policies at state and city level

Testing and validating use cases

Testing Technologies

Operational Testing

Scenario Testing

Infrastructure, methods, and standards

Where is there infrastructure? Where could it be?

Establishing methods

Standardizing approaches

Challenges of composability

Importance of pilots and sharing learnings

Monitoring

Opportunities

Knowledge exchange with practitioners

Partnerships on pilots

Developing methods and standards for evaluating use cases

Understanding composability of testing and validation at component, system and operational levels