Problems with Current Information Infrastructures

- are available only occasionally (e.g. only at your desk)
- lacking in modeling, simulating, & negotiating semantics

<u>Current</u> Information Infrastructures are available only occasionally (e.g. only at your desk)

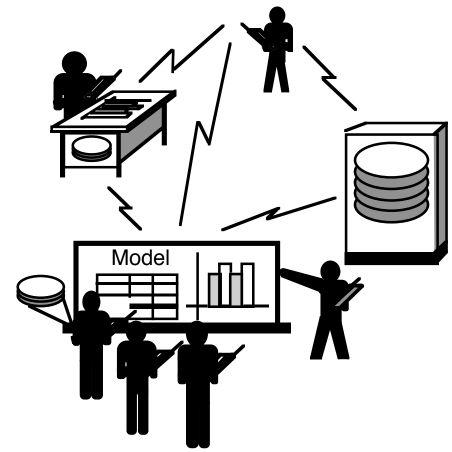
lacking in

- accessibility,
- immediacy,
- responsiveness
- transparency,

which are needed for

- modeling, simulating, & negotiating semantics

Needs addressed by Continual Availability



- Accessibility
  - at hand as needed
- Immediacy
  - recorded on site as it happens
- Responsiveness
  - effective in real time
- Transparency
  - integrated naturally into the course of work

<u>Current</u> Information Infrastructures lack Modeling, Simulating, & Negotiating Semantics

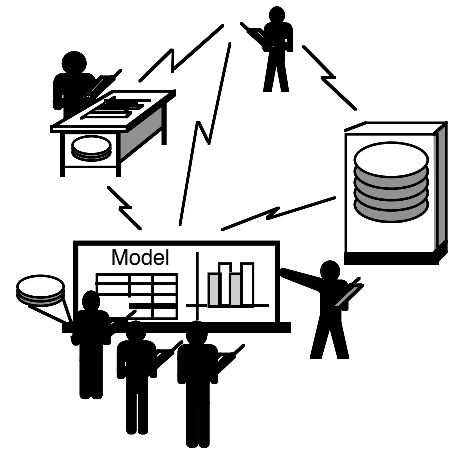
lacking in

- adaptability,
- assessibility,
- predictability,
- robustness

which are needed-for

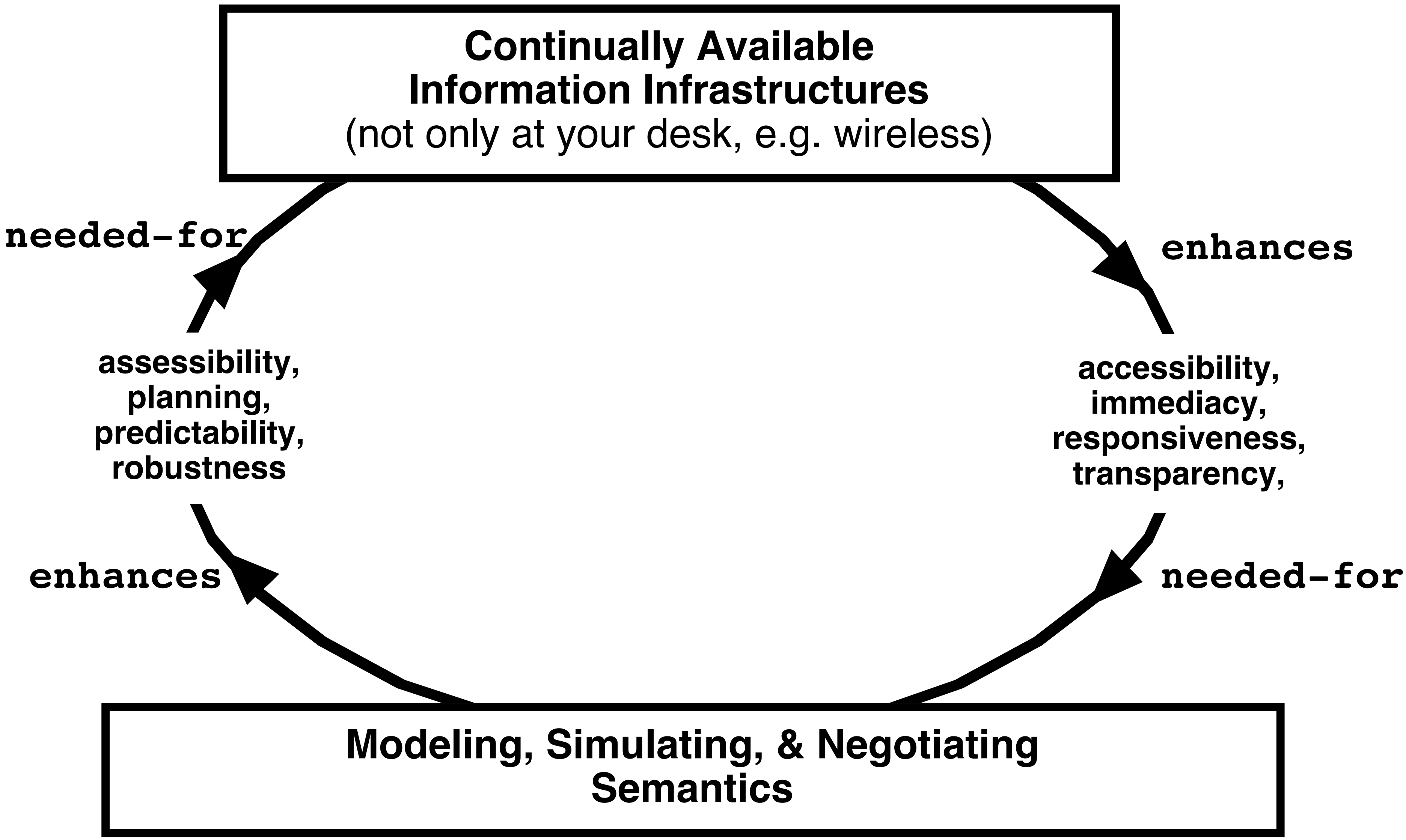
- continually available information infrastructures

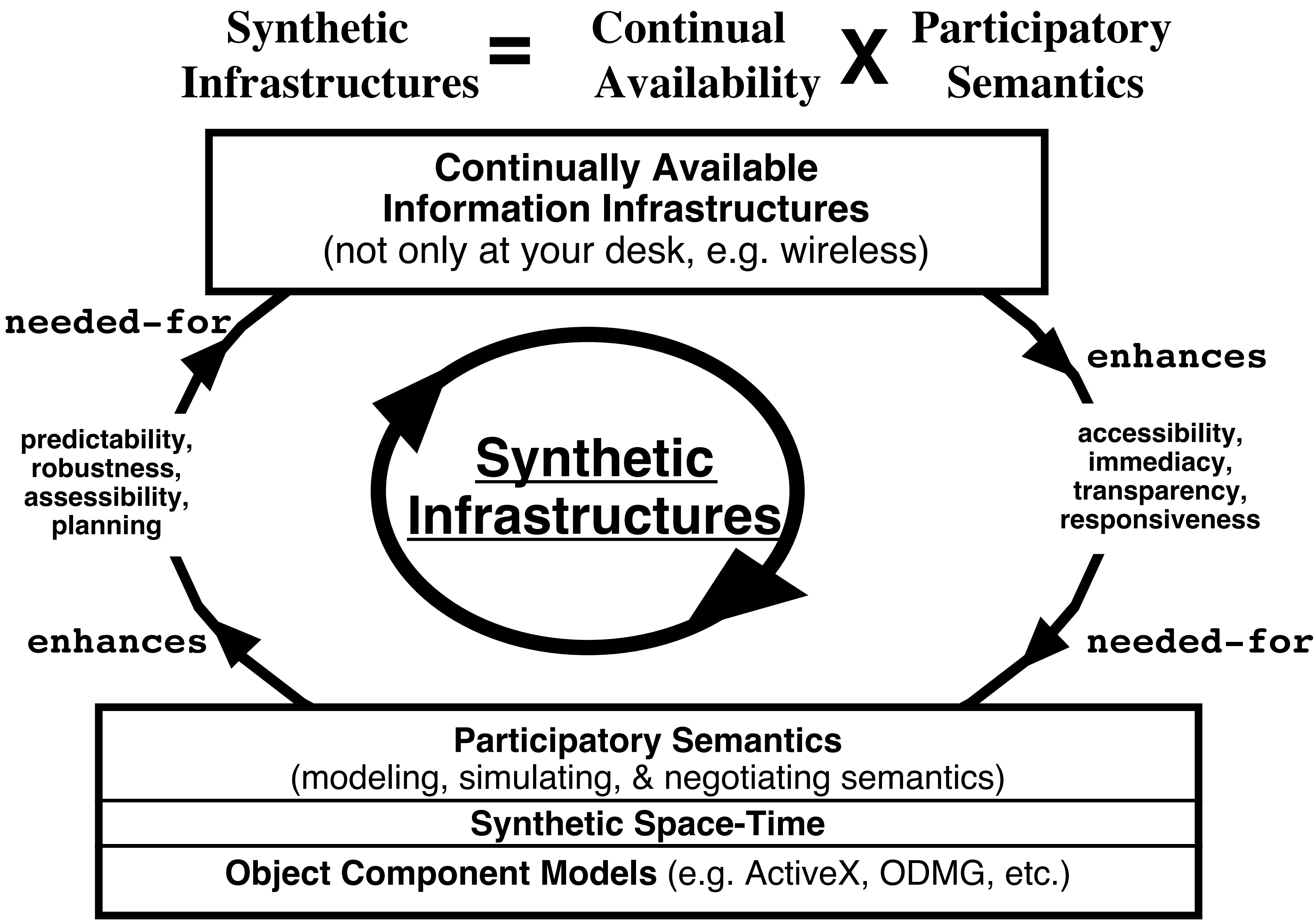
Needs Addressed by *Modeling, Simulating, & Negotiating Semantics*



- **Assessing:**
  - understanding past participating
- **Planning:**
  - arranging future participating
- **Predicting:**
  - anticipating potential contingencies
- **Robustness:**
  - dealing with conflict and difficulty

Synthetic Infrastructures




Synthetic Infrastructures = Continual Availability X Participatory Semantics
Continually Available Information Infrastructures
(not only at your desk, e.g. wireless)
needed-for
enhances
predictability, robustness, assessibility, planning
Synthetic Infrastructures
accessibility, immediacy, transparency, responsiveness
enhances
needed-for
Participatory Semantics
(modeling, simulating, & negotiating semantics)
Synthetic Space-Time
Object Component Models (e.g. ActiveX, ODMG, etc.)

Synthetic Infrastructures

increasing productivity in 6.036?

- **Teaming**
  - Focus on *<u>Projects</u>*
- **Partnering**
  - Focus on *<u>Relationships</u>*
- **Networking**
  - Focus on (unanticipated) *<u>Encounters</u>*

Participation typically involves aspects of all three.