Problems with Current Information Infrastructures

Occasionally Available Information Infrastructures
(e.g. only at your desk)

lack of

- accessibility,
- immediacy,
- transparency,
- interaction,
- responsiveness

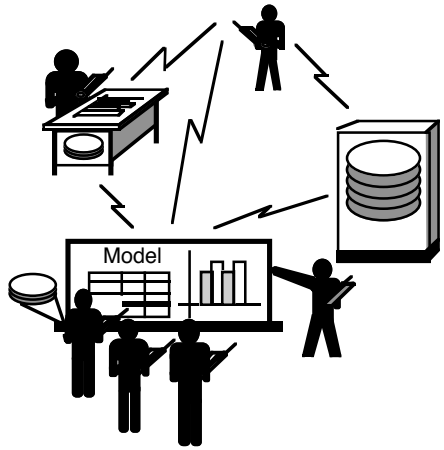
Absence of Semantics

lack of

- predictability,
- robustness,
- adaptability,
- assessibility

How *Continual Availability* Addresses Operational Needs

- Accessibility
  - at hand as needed
- Immediacy
  - recorded on site as it happens

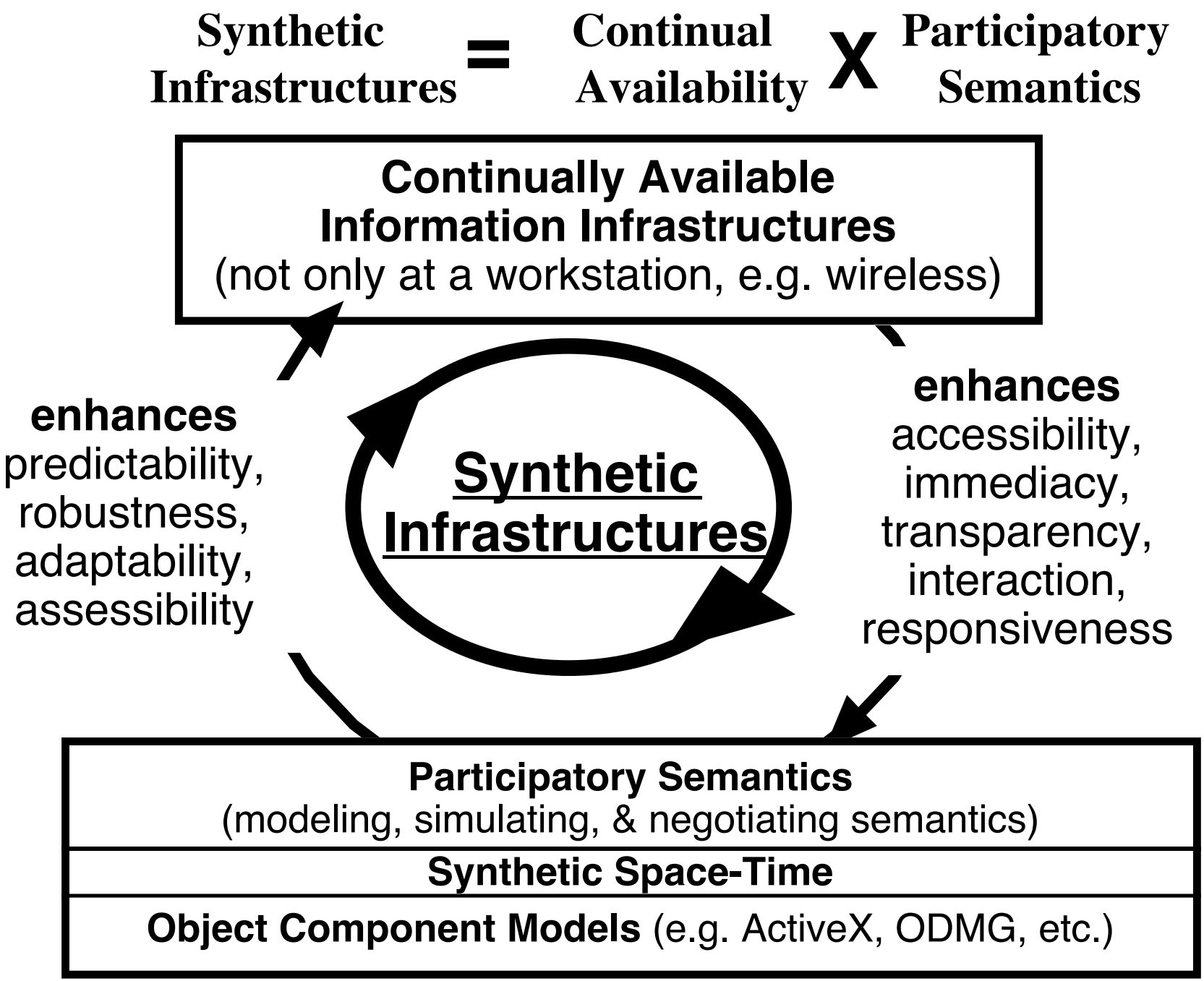


- Transparency
  - integrated naturally into the course of work
- Interaction
  - enables feedback and negotiating
- Responsiveness
  - effective in real time

How Management Needs are Addressed by *Participatory Semantics*

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

All informing future participating.


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