The Dynamic Web

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The WWW in a Dynamic World

- Web based communication: people and information systems
  - traveling scenarios
  - logistics
  - cyber physical systems
  - „smart cities“

- Internet of things
State of the Art

- Message passing
  - Twitter etc.

- Web services (more for distributed Web based computation then for communication)

- Business Processes (BPEL etc.)

- Active databases (not really Web-enabled)

- Agents
Dynamic Web: Events and Actions

- Today: dedicated ICT for events and actions
  - CEP – complex event processing
  - Complex actions
- Reactivity: event condition action rules
- Declarative approach to dynamic processes
- to be integrated with semantic technologies
The Dynamic Web Layer Cake

- **Dynamic applications**: Business Processes, Business intelligence, Cyber-Physical Systems, dynamic social networks, machine learning, robotics, ...
- **Agent based reasoning and communication**
- **Complex Event Processing / Actions / Reactivity / Semantics / Coordination**
- **The reference Model: EACO**
- **Internet of Things / Message oriented Middleware / Web services**
- **Active Databases / Stream Computing /**
- **Network protocols / distributed operation systems**