PANEL: Internet of Things (IOT)

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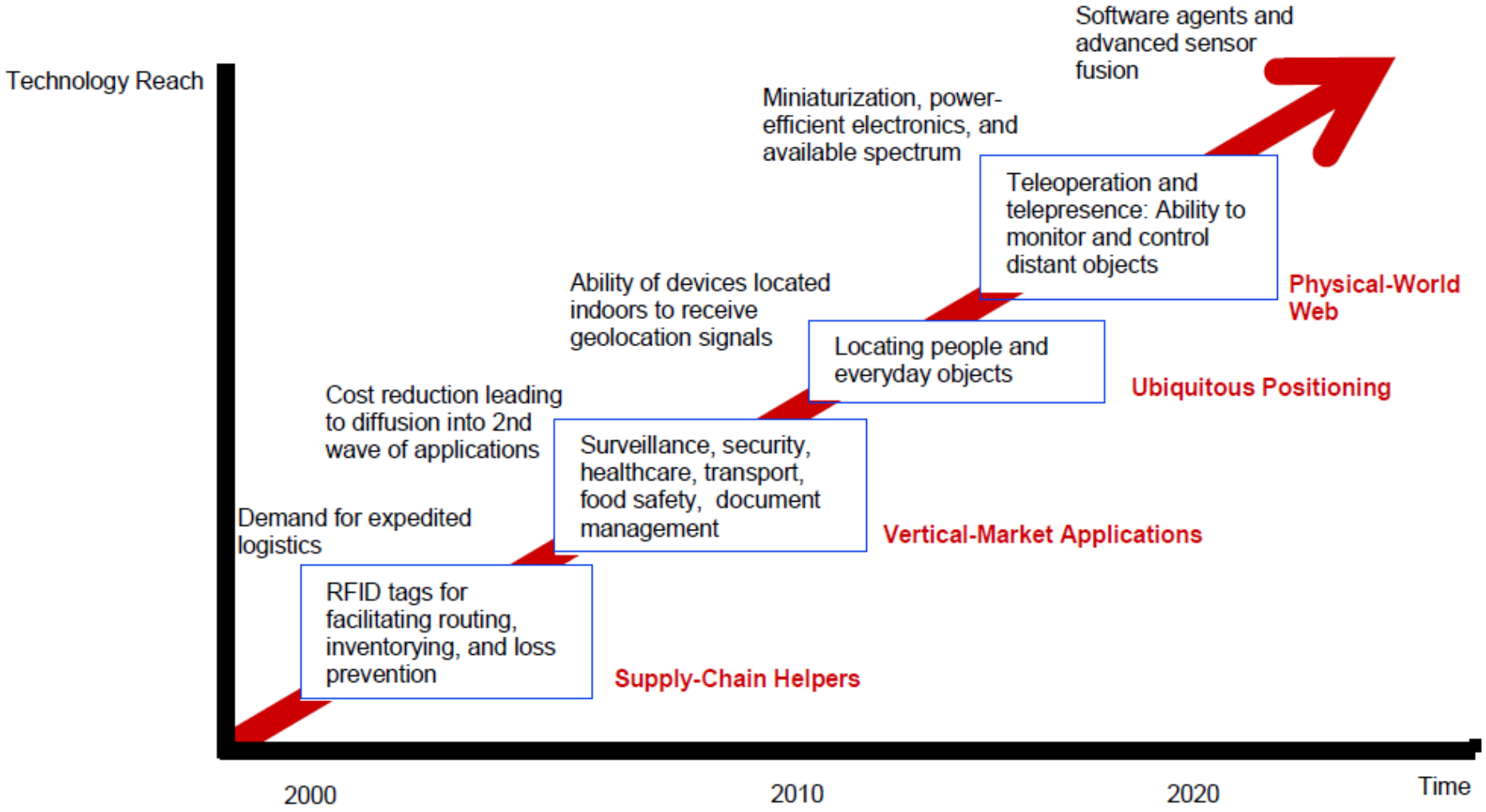
Bell's Law of Computer Classes

- "Roughly every decade, technology advances in semiconductors, storage, *networks*, and *interfaces* enable a new, lower cost computer class aka platform to form to serve a new need that is enabled by smaller devices e.g. less transistors per chip, less expensive storage, displays, i/o, network, and unique interface to people or some other information processing sink or source."

- In 2005 the computer classes include: mainframes (60's); minicomputers (70's); personal computers and workstations evolving into a network enabled by Local Area Networking or Ethernet (80's); web browser client-server structure that were enabled by the Internet (90's); web services e.g. Microsoft's .Net (2000's) or the Grid; cell phone sized devices c(2000); Wireless Sensor Networks aka motes (>c2005).

Source: Wikipedia, http://en.wikipedia.org/wiki/Bell's_Law_of_Computer_Classes

Internet of Things (IOT): Technology Roadmap



Source: SRI Consulting Business Intelligence

- Sensors
  - Small, affordable, low power
- Networking
  - From isolated points to surface
- Data
  - Lots of them! how to turn the signals into actionable information?

Panel Members

Microsoft Research Asia
Faculty Summit 2010

David CULLER

University of California, Berkeley

Talk Subject: Intelligent Energy

Hideyuki TOKUDA

Keio University

Talk Subject: Sensor Enabled Cyber-physical Coupling for Everyday Objects

Guihai CHEN

Nanjing University

Talk Subject: Internet of Things in China

Catharine van INGEN

Microsoft Research

Talk Subject: Sensors, Satellites and Synthesis Science

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