IIPS International Conference
"The IT Revolution and the Transformation of Society

Tokyo
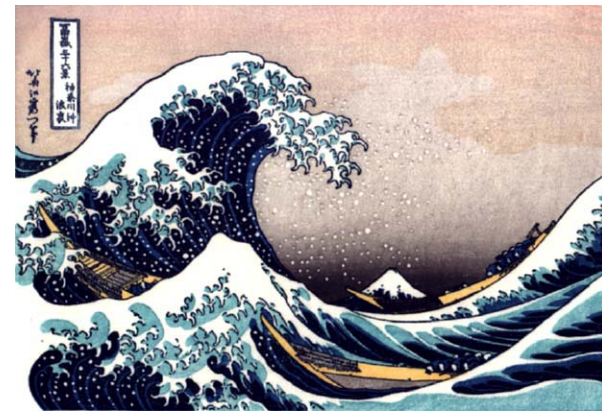# November 5-6, 2003

"CyberTrust – a new matra"
by
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Computer Science and Public Policy
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Project Libra: Optimizing Individual & Public Interests in Information Technology

Technology Pull

- *Andrew, and many other infrastructure projects, were pursued on the "Build it, and they will come." principle.*
- *Libra should run with extensive, structured community input.*
  - Sometimes they don't come, don't use, or rebel.
  - More intimate, intrusive technology than just computing.
  - Our students should see themselves as choosers, not victims or soldiers.
  - The world needs a better understanding of how communities can shape their communications environments.
- *Technology is now a buyers' market.*
  - Moore's Law
  - "IT doesn't matter" (HBR, May 2003)
  - Wireless, 3G, 4G, Video, Sensors, etc.

Difficult Choices Lie Ahead

- *Trends in information technology*
  - Mobility
  - Personalization
  - Location awareness
  - Passive observation
  - Biometrics

- *Result in unprecedented opportunities to collect, store and transfer information about individuals for*
  - Personal benefit
  - Public safety
  - National defense

- *And the potential to diminish our privacy and civil liberties*

Create a Living Laboratory to Gain This Knowledge

- *Based on*
  - Next generation information technology
  - Communities that use prototypes of the technology
- *Conduct multi-disciplinary research to identify*
  - Policy making processes that result in *rational balance points*
  - Elements of desirable policies
  - Technology capabilities that protect privacy and/or enhance safety
  - Acceptability and utility of specific safety-enhancing, privacy-compromising technologies

Security and Availability Will Be the Drivers

- The current internet is vulnerable
- Points of potential vulnerability
  - Service protocols
  - Commercial arrangements
  - Old software
  - Hard to design security in after the fact

Digital Rights Management DRM

- Lots of "we hate it"
- Lots of ban it
- What is it?
- Why might we actually learn to love it

Privacy Rights Management

- The global data about **me**
- Who will look at it?
- Who will use it for what
- Accountability

Can software alone do the job

- Software is vulnerable – millions
- Hardware is needed
- Distributed "trust"

My favorite quotes

- *They that can give up essential liberty to obtain a little temporary safety deserve neither liberty or safety –* Ben Franklin 1784

- *The Net interprets censorship as damage and routes around it* -- John Gilmore