



Whither Non-proximate communications

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Very Recent history 😊



About my research

+ CS

- + Trust (tomorrow)
- + Clouds and externalities
- + eg Privacy Trust Sarbanes-Oxley etc
- + Ontology for licensing software
- + Decentralized Approach to Resource Availability Prediction using Group Availability in a P2P Desktop Grid

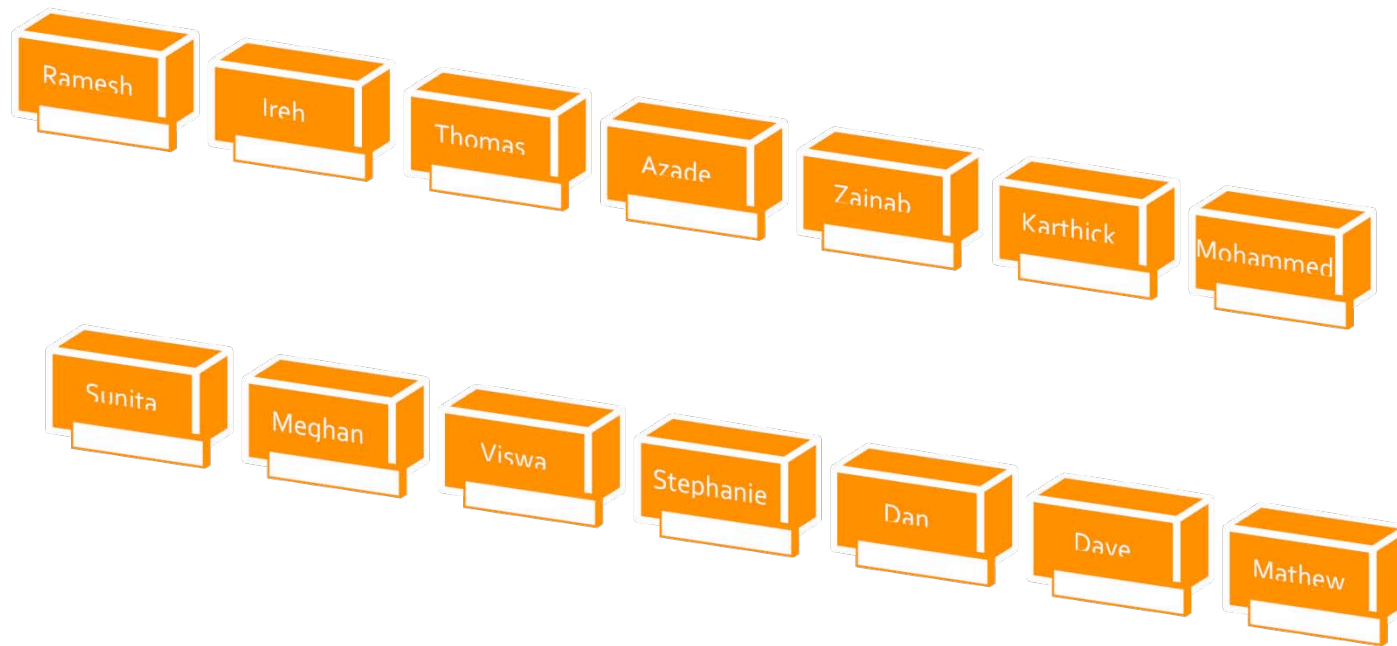
+ Law

- + IP / Regulation of technologies
- + Deep Packet Inspection

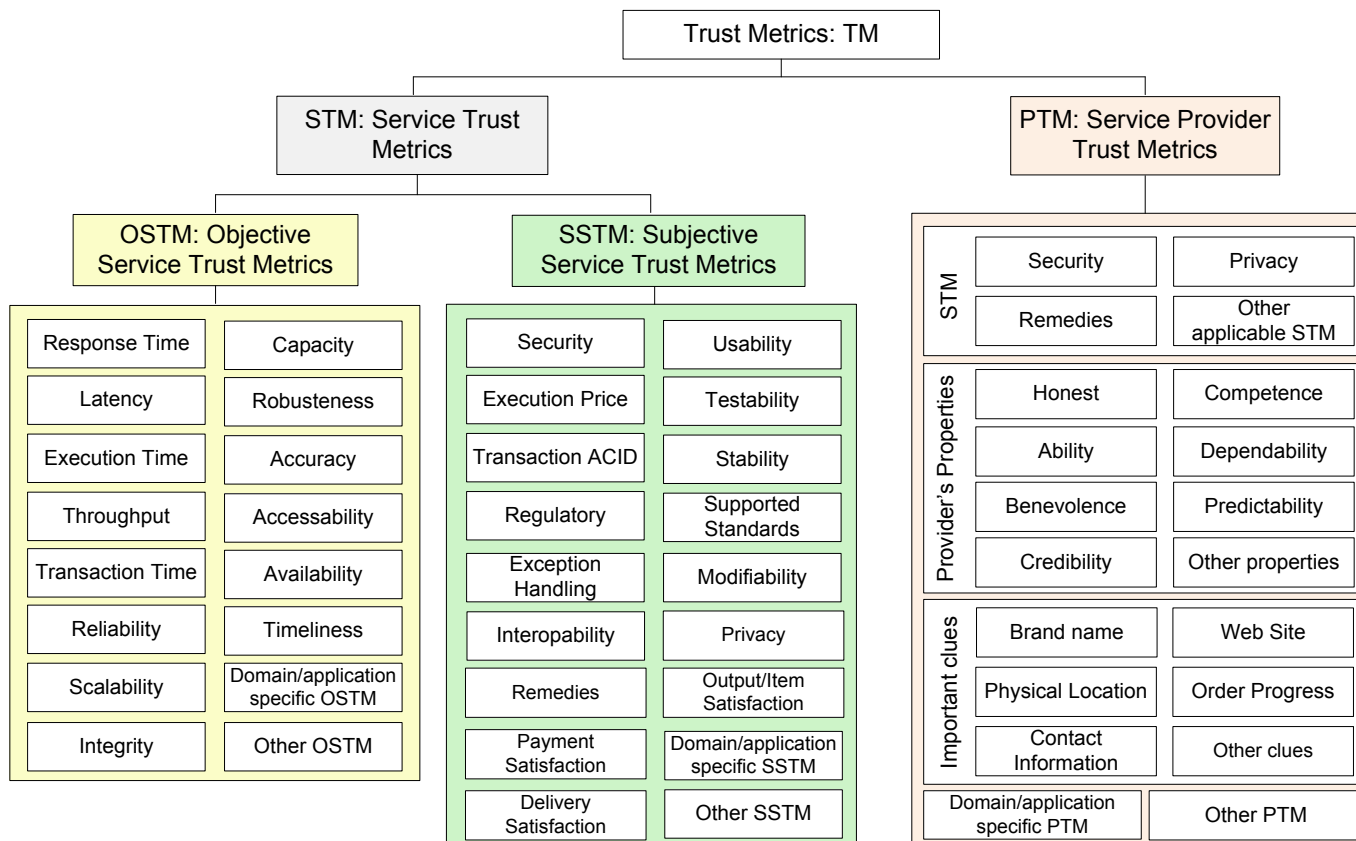
+ Biotech

- + Spider mite

My team



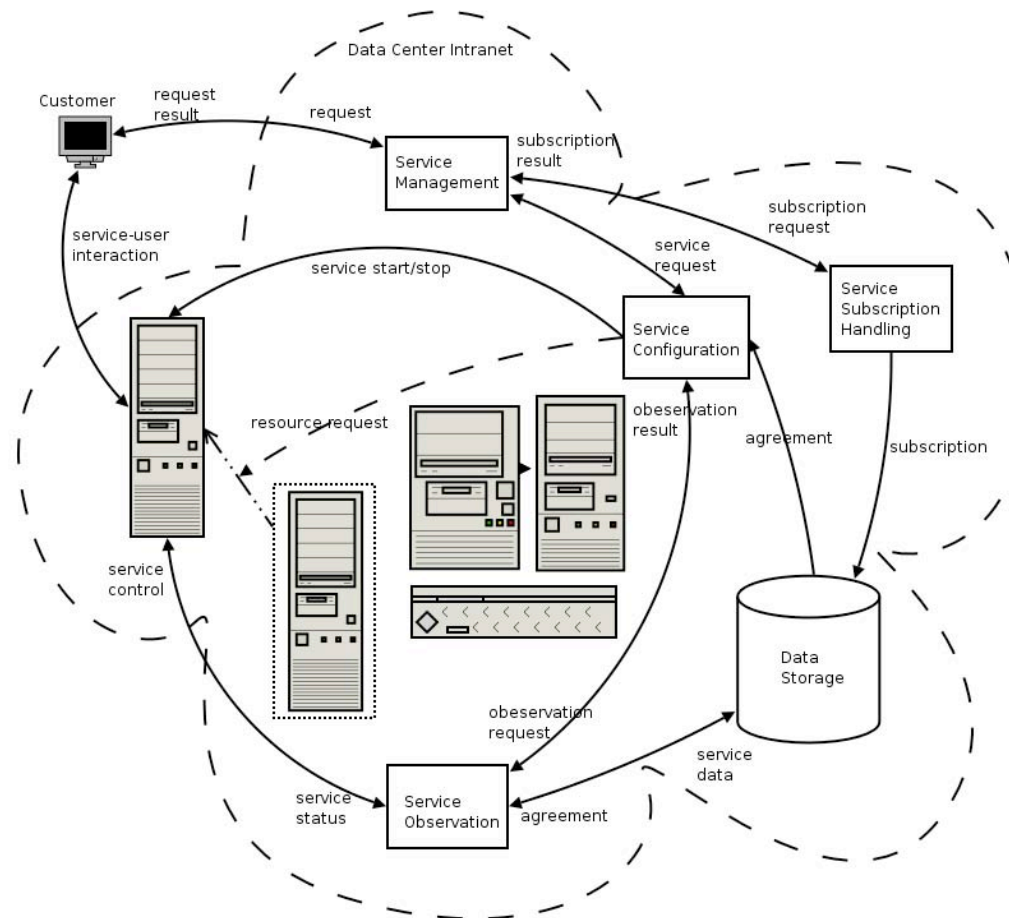
Trust

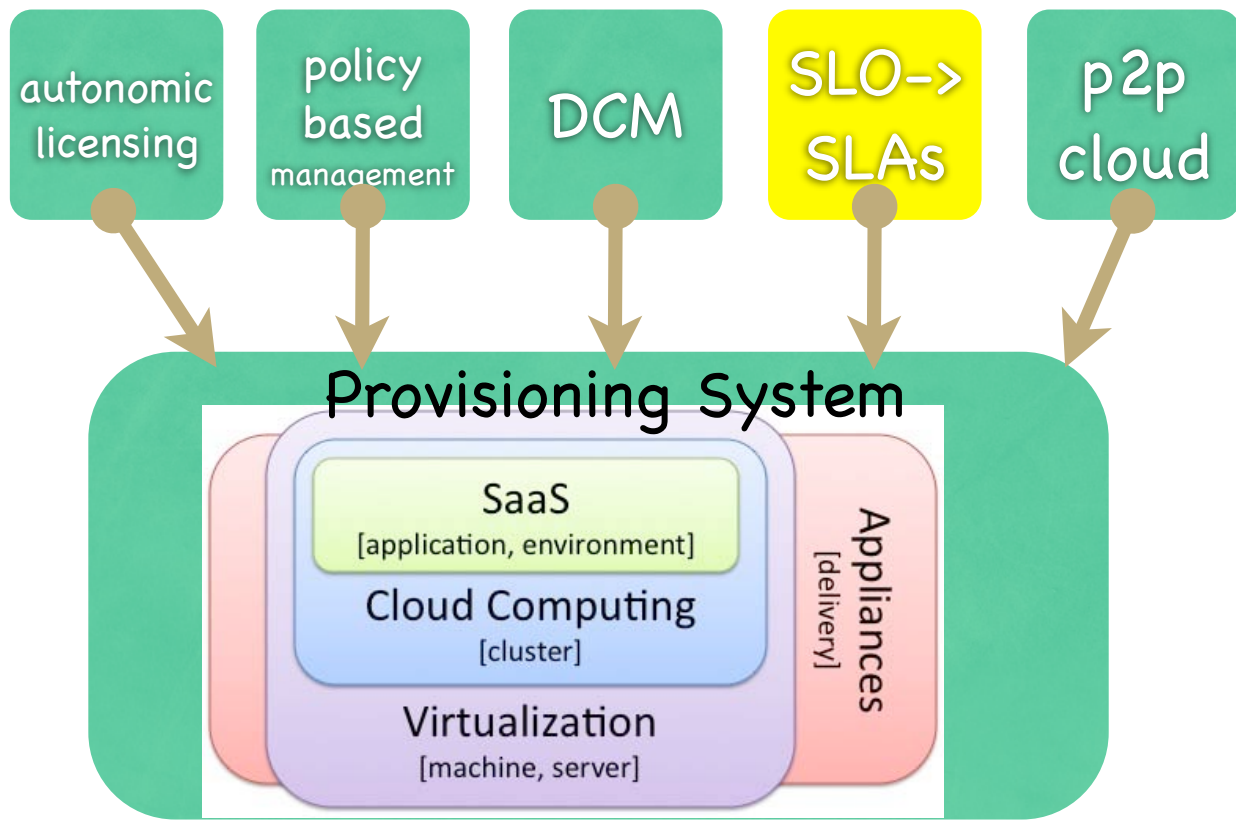


Privacy (and other externalities) for clouds

+ *Image redacted*

Autonomic licensing management





P2P Cloud

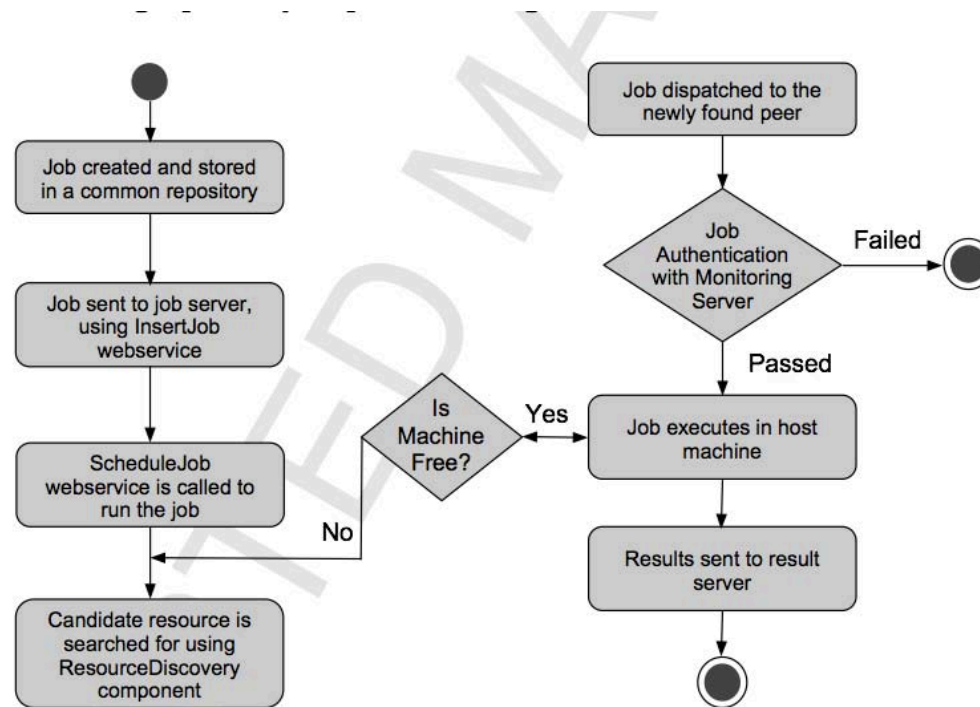
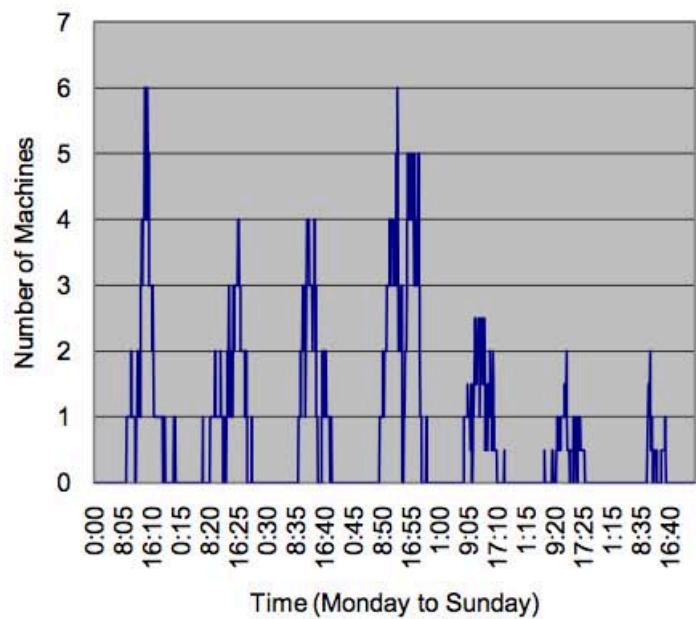


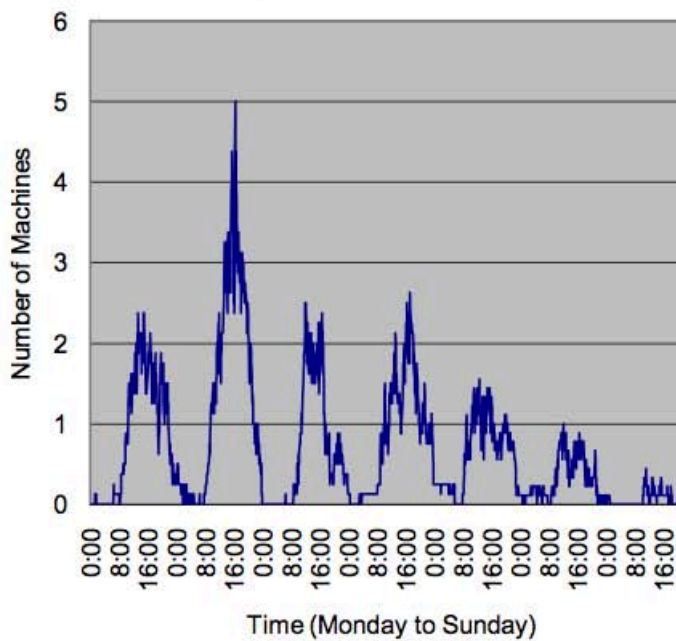
Figure 4: Job Life Cycle

**Machine Availability
(First Week)**



— Busy Machines

**Average Machine Availability
(Final Week)**



— Busy Machines

+ Rights Management Information, lifeform patents, FLOSS use etc etc

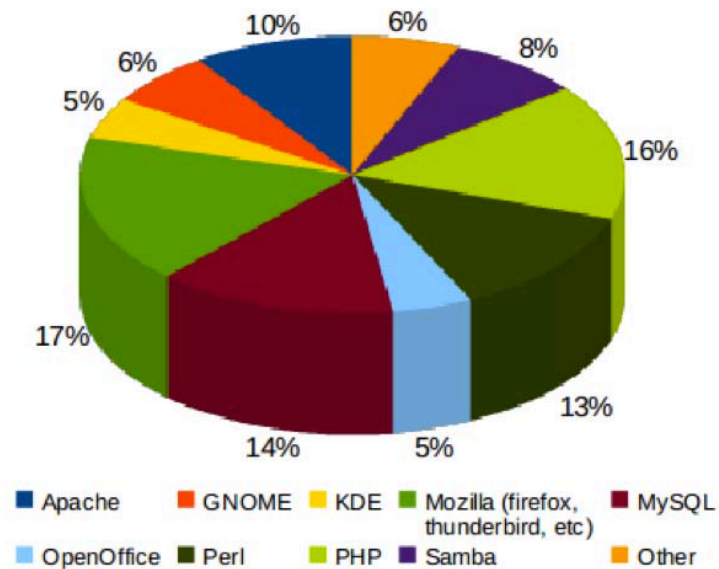
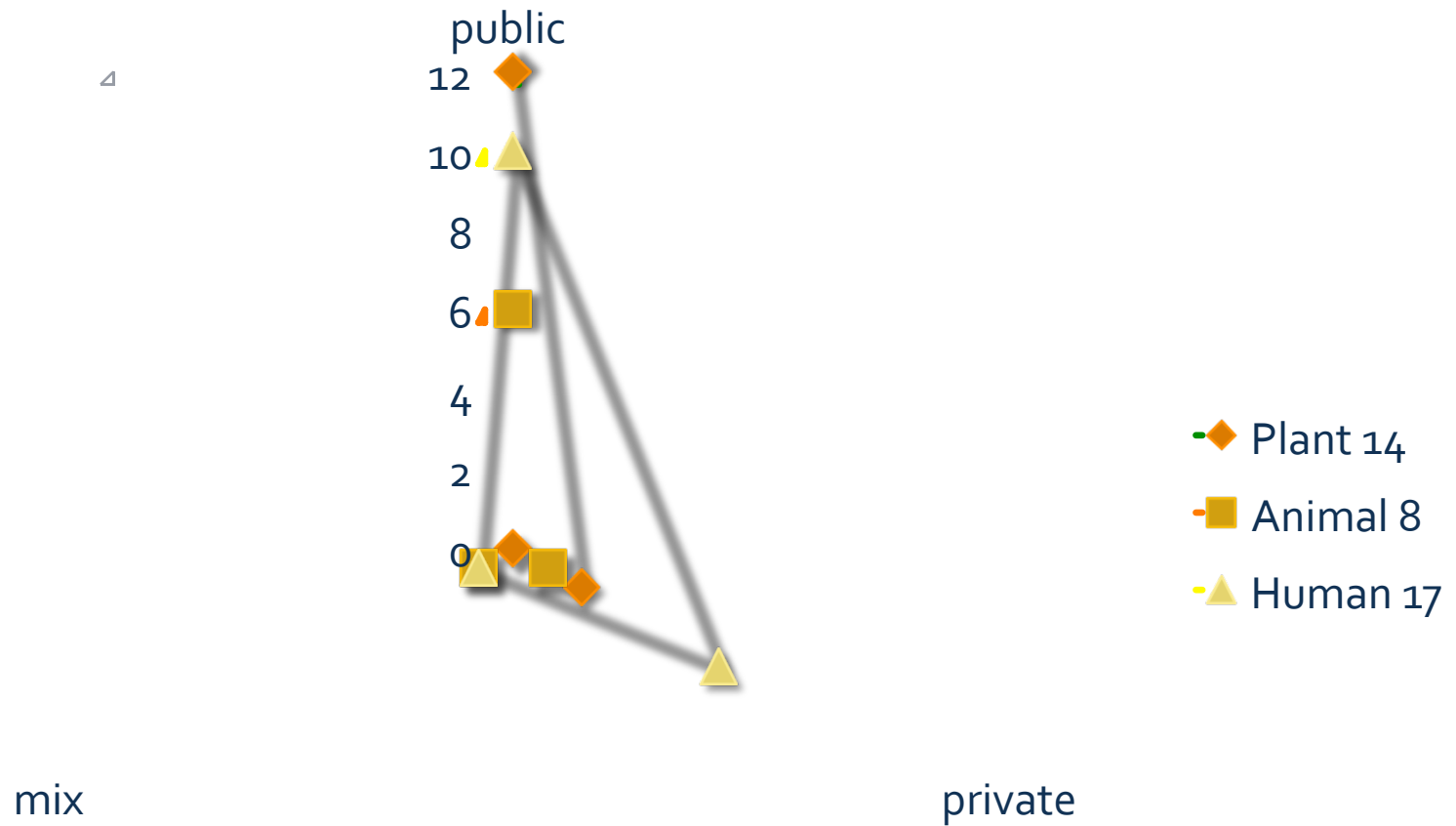


Figure 3: What kind of programs or applications are in use in your department?

Biobank accessibility



etc

- + All these areas come together as “technological advancement and policy”

Let's talk about communication

- + Today from a high-level of abstraction

In the next 40+ proximate minutes

- + Non-proximate
 - + Some history
 - + Some technology
 - + Infrastructure
 - + Network
 - + Servers/services
 - + Devices
 - + Some issues
 - + Some crystal ball gazing
 - + Some questions and ideas

Hypothesis A

“Electric communication will never be a substitute for the face of someone who with their soul encourages another person to be brave and true.”

+ Attributed to Charles Dickens

Hypothesis B

“Connect as if you were face-to-face, even if your meeting members are spread across the globe. This simple to use technology will improve your meeting communication and help eliminate your travel budget and greenhouse gasses.”

“Meet together as if you were in the same room, and help save the planet - who wouldn't want to do that?”

+ Per AccuConference



Image: Yoninah



Image: Lokilech

+ *Semaphores for landing plances*



Early communication – slow

- + Information transfer
- + Smoke, fire, drums
- + 5th century BC
 - + “Mounted couriers could travel 1,677 miles (2,699 km) in 7 days...”
- + Earlier systems often required translation manually

- + Postal systems
- + realtime
 - + Phone
 - + Fax
 - + DARPA → 'web'
 - + Cellphones
 - + 'smart' handhelds

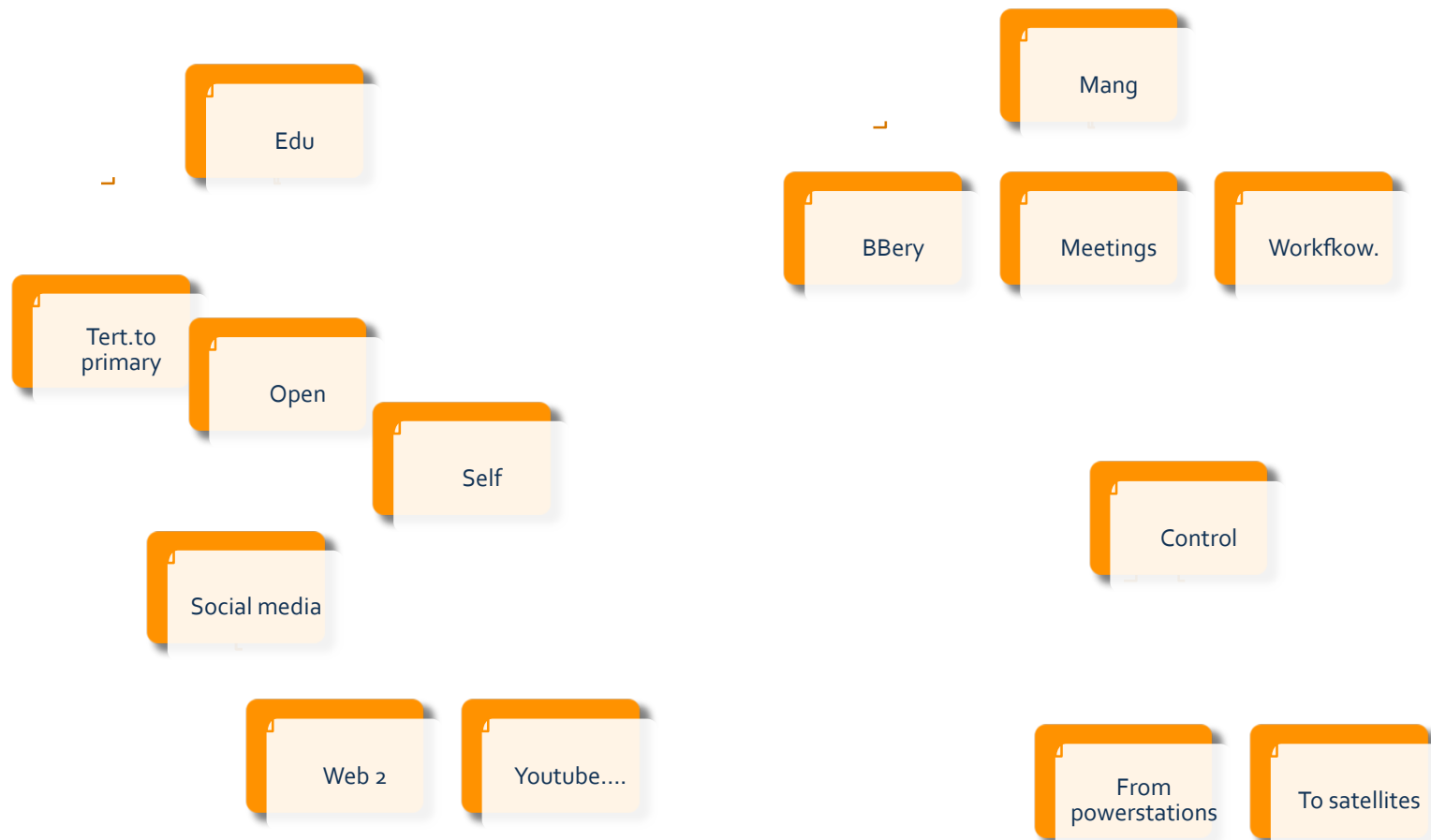
"Hubbard and Bell want to install one of their "telephone devices" in every city. The idea is idiotic on the face of it. Furthermore, why would any person want to use this ungainly and impractical device when he can send a messenger to the telegraph office and have a clear written message sent to any large city in the United States?"

+ *Report of Telegraph Co. (to become W.U) in 1876 quoted by William von Alven, Manager, FCC Part 68 Operations 1998*

+ Policy influence

- + 1934 - Federal Communications Commission founded. Combined functions of RF spectrum allocation previously handled by the Federal Radio Commission and interstate regulation for common carriers. Introduced "*value-of-service*" pricing which required the subsidization of residential subscribers to speed the availability of nationwide telephone service.

Where used

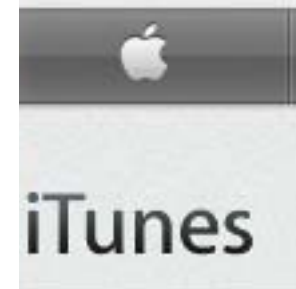


As CS folk, and probably everyone else here...

- + Words in paper titles:
 - + Performance, time, efficient, probe, manage, improve, measuring, minimising, analysis, study,
- + Our work is typically to achieve
 - + System efficiencies
 - + New/better/faster/cheaper/safer/cooler..

Social media example

+ What is the difference between Skype / Facebook / Twitter...?



<http://communications.uwo.ca/web2-0/>

Education



- + Is computer mediated teaching effective?
- + Cheaper than F2F?
- + Can reach remote communities?
- + "The Faculty of Health Sciences provides its users with a state of the art Video Conferencing System which networks with Bell Canada's fiber optic ISDN lines. Currently there are six lines for high performance at 384 Kbps."....

+ *image redacted*



Business

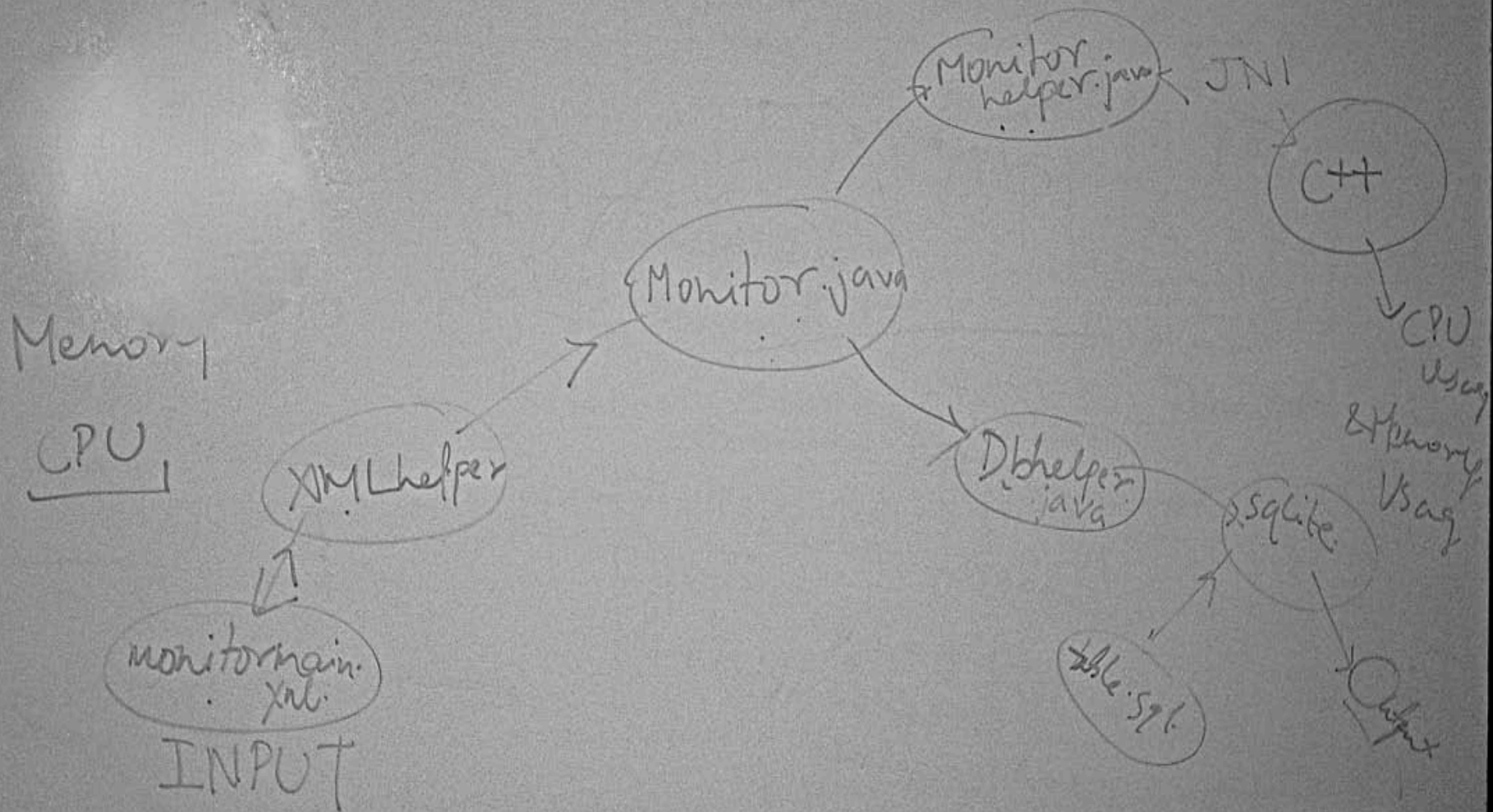
- + Business today cannot be done without internet mediated exchanges
- + Some businesses are those exchanges
- + Have we lost the 'handshake' deal? (this relates to trust)

Breaking communications

- + “UAE-based Thuraya Telecommunications said on February 25 that it had “conclusive evidence” that the Libyan government, one of its shareholders, was the source of what it called an “unlawful and intentional jamming” of its signals in Libya over the past week as violence continues to take hold in the country.” (three weeks ago)
- + Tomahawk missiles
- + Jamming devices

Is there a disconnect in our digital society

- + Connection stress?
- + Going black is a good idea?
- + In the last five years how many of you have been without using telecommunication for five days?



Memory
CPU

monitormain.xml
INPUT

JNI

CPU Usage
& Memory Usage

Output





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IBM Center for Advanced Studies Faculty Fellow
IARIA Fellow
Barrister and Solicitor

View some research at SSRN page: <http://ssrn.com/author=10510>