Computer-Use Policies
for Colleges and Universities

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Three Themes

- The Internet and society:
  Changing at different rates
- Institutional policies:
  Why and how
- The forest and the trees:
  What to watch for

“On the Internet, nobody knows you’re a dog.”

The Internet Dogs… 7 Years Later

“You’re a four-year-old German Shephard-Schnauser mix…”

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Date: Thu, 4 May 1995 12:17:11 -0400
From: M------ I------ <xxxx@netaxs.com>
Subject: Ethernet in Dorms
To: cuinfo-admin@cornell.edu

I am not sure who to direct this e-mail to, but I got this address from
Cornell University's web site.

I am currently a high school junior looking around at different colleges.
My question concerns the dorms at Cornell.  Do most of the dorms have
ethernet connections (with Internet access) available in each room?  What
percentage?  What percentage of freshman dorms?

Thanks, and I'm sorry if I am sending this to the wrong person.  If you
could direct me to a certain web page or e-mail address, it would be
greatly appreciated.
--
M------ I------

mailto:xxxx@netaxs.com               | A student who changes the
http://www.netaxs.com/~xxxx          | course of history is probably
Finger me for my PGP Public Key      | taking an exam.
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Two Laws of Change: Technological and Cultural

- Moore's Law: The processing power available for a fixed dollar amount *doubles* every 18 months
- Metcalfe's Law: A network's value grows with the *square* of the number of people connected

Technology Changes Quickly The Law Changes Slowly

- 1974: VCR technology hits consumer market
- 1976: Universal files against Sony
- 1979: Universal loses
- 1981: 9th Circuit reverses "with unusual speed"
- 1983: Supreme Court hears Sony appeal (January)
- 1983: Supreme Court term ends without decision
- 1984: Supreme Court finds for Sony (5-4)

The Future of Storage

- Atoms / bit
  - 1954: 1,000,000,000,000,000,000
  - 2000: 20,000,000
  - 2020: 1,000
  - In today's labs: 1 bit / atom
  - Theoretical: Many bits / atom
    - No fundamental theoretical limit
- Cost / bit
  - 1954: 1 GB = $10,000,000
  - 2000: 1 GB = $20
  - 2020: 1 TB < $1 (pocket change)
    - .01 brain

The Future of Processing:

- Computations / second
  - 1900: .000001
  - 2000: 1,000,000,000 (1,000 mips)
    - Brain of a lizard
  - 2020: 1,000,000,000,000,000
    - Brain of a human
- Energy / operation
  - 1940: 10,000,000,000 picoJoules
  - 2000: .000001 picoJoules
  - 2020: Room temperature

Size Matters: Now You See It…

- 1996: 1,000,000 cm^3 (several cubic feet)
- 2000: .05 cm^3 (the size of a match-head)
- 2004: .000001 cm^3 ("smart dust")
  - Consider the military implications
  - Consider the medical implications
    - There are more pacemakers in people's chests than there are palm pilots on people's belts

Change: Technology meets Sociology

- Telephones
  - Answering machnes and etiquette
  - Cell phones and privacy
- E-Commerce
  - Where did the fear go?

“Talk in Private: 25¢”

"Colleges and universities
are just
Internet Service Providers
that charge tuition."

– Allan A. Ryan, Jr.
Harvard University Counsel

Evolution of Internet Service Provider Liability

- 1991: Cubby v. CompuServe
  - ISP as distributor (e.g., bookstore, library)
- 1994: Stratton Oakmont v. PRODIGY
  - ISP as publisher (e.g., newspaper)
- 1996: Telecommunications Act of 1996
  - Section 230 of the CDA
- 1997: Zeran v. America Online, Inc.
  - No ISP liability, per CDA
- 1999: Lunney v. Prodigy
  - Stratton Oakmont was wrongly decided

§230 Caveats

- It only applies to *third-party* content
  - Students are third parties
  - Faculty / staff are us
- It does *not* apply to copyright infringement
  - "Nothing in this section shall be construed to limit or expand any law pertaining to intellectual property."
  - Instead, rely on "safe harbor" provisions of the DMCA

The CDA: A First Attempt to Gag the Net

Whoever…knowingly…uses an interactive computer service to *send a specific person or persons* under 18 years of age…

Whoever …knowingly uses an interactive computer service to *display in a manner available to a person* under 18 years of age…

…any comment, request, suggestion, proposal, image, or other communication that in context, depicts or describes, in terms patently offensive as measured by contemporary community standards, sexual or excretory activities or organs, regardless of whether the user of such service placed the call or initiated the communications; or…

…and…

Whoever…knowingly *permits* any telecommunications facility *under such person's control* to be used for an activity prohibited by paragraph (1) with the intent that it be used for such activity…

From ACLU v. Reno: A Mailbox Isn't a Sandbox

- "Our cases provide no basis for qualifying the level of First Amendment scrutiny that should be applied to this medium."
- "It is true that we have repeatedly recognized the governmental interest in protecting children from harmful materials. But that interest does not justify an unnecessarily broad suppression of speech addressed to adults. … Regardless of the strength of the government's interest in protecting children, *the level of discourse reaching a mailbox simply cannot be limited to that which would be suitable for a sandbox."*

But the Door Was Still Open:

- "For the purposes of our decision, we need neither accept nor reject the government's submission that the First Amendment does not forbid a blanket prohibition on all 'indecent' and 'patently offensive' messages communicated to a 17-year-old — no matter how much value the message may contain and regardless of parental approval."

Next Try: CDA-II

- Child On-Line Protection Act
  - Not to be confused with the Children's On-Line Privacy Protection Act
- Criminalizes the act of making *commercial* communications that include "*harmful to minors*" materials available to those under the age of 18
- Preliminary injunction issued Feb. 1, 1999 by Judge Lowell Reed, Jr. "despite personal regret…"

"Despite personal regret…"

"Despite the Court's personal regret that this preliminary injunction will delay once again the careful protection of our children, I without hesitation acknowledge the duty imposed on the Court and the greater good such duty serves. Indeed, perhaps we do the minors of this country harm if First Amendment protections, which they will with age inherit fully, are chipped away in the name of their protection."

- Federal District Court Judge Lowell Reed, Jr.

What Controls our Activity on the Net?

- Not the law
  - Changing too slowly
- Not technology
  - Changing too fast
- *Policies*
  - Set by each institution according to its needs and culture

To Succeed You Need…

- Understanding of the technology
- Understanding of the law
- Effective policy-creation process
  - Open
  - Inclusive
- Effective follow-up
  - Consistency
  - Evolutionary

Policy Benefits

- Mold institutional culture
  - Establish expectations and norms
- Do things in advance
  - Planning in non-crisis mode
  - Allows appropriate participation
  - Time for buy in
- Lessen institutional liability
  - Consistency
  - Accountability (who's in charge?)
  - What is the action / reaction? (external)
- Influence the development of the law
  - Role of higher education

What is an Institutional Policy?

- It has broad application throughout the institution
- It helps ensure compliance with applicable laws and regulations
  - Promotes operational efficiencies
  - Enhances the institution's mission
  - Reduces the institution's risks
- It mandates actions or constraints and contains specific procedures for compliance
- The subject matter requires high level review and approval for issuance and major changes

Policy Basics

- Identify the policy "owner"
- Explain the purpose of the policy
- State what the policy covers
- State who is covered
- Provide specific examples of covered activities
- Provide information on how to report non-compliance
- Specify consequences of non-compliance

Policy Process

- High level management support
- Policy "owner"
- Stakeholder identification
- Understanding vs buy-in
- Technical controls vs user behavior
- Technical feasibility
- Legal constraints and requirements
- Trade-off between functionality and risk
- Education
- Enforcement
- Evolution

Policy Issues to Cover–1

- Hate speech, harassment, defamation
- Privacy
- Intellectual property
  - Copyright / patent / trademark
  - Napster, deCSS, etc.
  - DNS names
- Free speech
  - Censorship
  - The First Amendment and state versions
  - Minors on- and off-campus

Policy Issues to Cover–2

- Commercial use
  - Entrepreneurship classes
  - Used books
- Jurisdiction
  - Including international issues
- General ISP liability
  - Cost of defending suits
- SPAM
  - Outgoing
  - Incoming

Policy Issues to Cover–3

- Data access
  - Linked with re-engineering efforts
  - Challenges traditional privacy (or is it secrecy?) values
  - Policy-based limits/capabilities vs technology-based
  - Surprisingly strong passions on surprisingly small points
  - Top-level ownership and universal buy-in essential

The *Real* Promise of the Internet:

Full Employment for Lawyers

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Everything I Need to Know

I Learned from the NASDAQ

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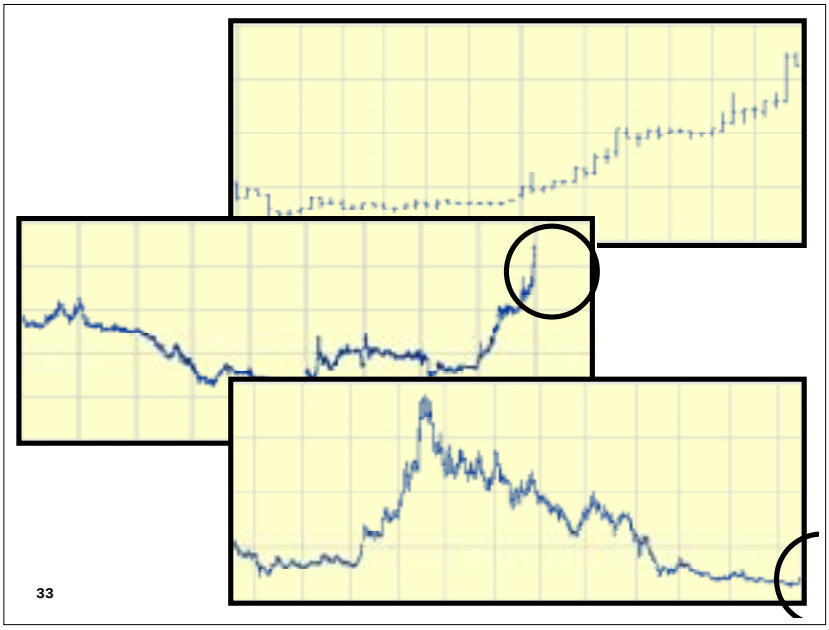

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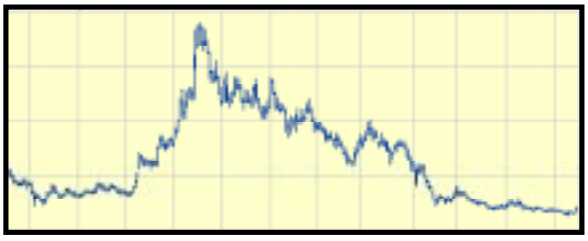
An Idea Whose Time Has Come and Gone



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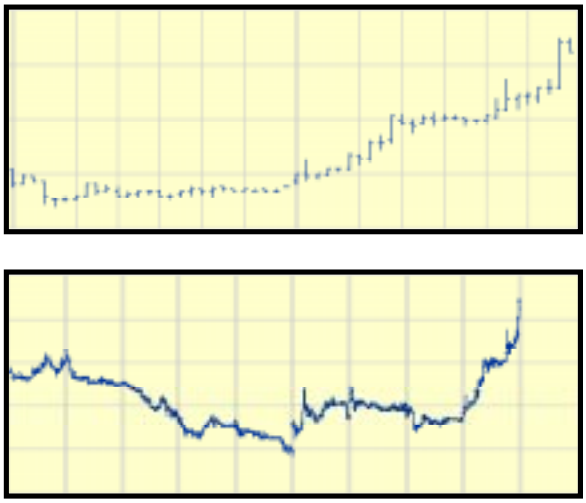

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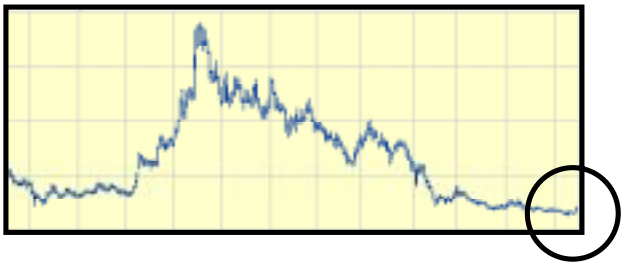
Fixating on the Thickness of the Line



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Wires? We Don't Need No Wires!

- "Conventional" wireless Web access
  - Well-developed in Europe and Japan
    - What they have we'll have in 2 years
  - Gigabit speeds are coming
  - 2001: Full-video streaming over cellular
  - WAP (Wireless Access Protocol)
    - 2002: >50% of Web page accesses
- Proximity, GPS, etc.
  - Auto tolls
  - No-swipe smartcards
  - Mobil easy-pass
  - McDonalds
  - You?
- Wearable computers

SANTA ANA, California (Reuters; Jan. 28, 2000) -- Fast food is about to get faster in southern California, where the car is king, hamburgers are considered heavenly, and speed is of the essence.

Five McDonald's restaurants have signed a deal with a local transportation authority to allow motorists to zip through the drive-through line without having to stop and pay for their food -- cutting 15 seconds off the normal 131 second-wait.

The trick is utilizing the same technology that permits motorists to skip stops on Orange County toll roads. A transponder on some cars emits a signal to antennae on the toll roads, automatically calculating the fee. The motorist is then billed.

Now five McDonald's restaurants in Orange County are installing similar antennae to interact with cars equipped with transponders. Customers using the faster service will be automatically billed for their food when they receive their statement from the same agency that oversees the toll road accounts.

Antonio Hernandez, a spokesman for McDonald's, told the Orange County Register the company believes the time-saving plan, which goes into effect in March, will be a big hit. "With today's lifestyles, everyone's on the go. If they can omit any time having to wait in the drive-through line, they would welcome that," said Hernandez.

The World Our Customers Will Live In

- Inverted life-cycle
  - College is no longer a technology bubble
  - The burden of an installed user base
- Electronic communication is the norm
  - From the time they're very young
  - It's about relationships
- "There is nothing so powerful as an idea whose time has come"
  - Consider Napster
- Who is mentoring whom?
  - Consider "Stewart"