Lecture 1 - Historical Perspective on Networks of Communication

Importance, Advantages and Effects of Railroad Networks

- Greater interconnection among people in different location.
- Development of standards
- Economies of scale: greater utility with more locations linked
- Development of unforeseen opportunities and problems

Internet Networks

- Greater interconnection between people in different locations.
- Development of standards
- Economies network of scale
- Unforeseen problems and opportunities

Traditional Information Control Patterns

		Information or Content controlled by:	
		Central source	Individuals
Distribution of Information or content *(timing, selection, etc.)* controlled by:	Central source	**Transmission** e.g. broadcast TV	**Representation** e.g. interest groups (Greenpeace)
	Individuals	**Specification** e.g. encyclopedia	**Conversation** e.g. small groups, face-to-face

- Transmission describes the situation where a central source provides information and a central source controls its distribution
- Specification describes the situation where a central source provides information and an individual controls its distribution
- Representation describes the situation where a individual provides information and a central source controls its distribution
- Conversation describes the situation where a individual provides information and an individual controls its distribution

Internet/Web: Old or New

Internet as old:

Past networks of communication inform on the understanding of the Internet.

Internet as new:
Distinctive features of the Internet suggest new possibilities and new opportunities.

The Internet/Web as a "New Technology":

- Potential is largely unexplored
- Still a young technology
- New forms of communication initially imitate old forms
- New forms of communication are criticised early on
- New forms of communication can alter our view of the world.
- We are rarely aware of the enormity of change while it is underway.

Why study the Internet?

- Enormous social, organisational, political, economic, legal and relational impacts.
- Technology design and redesign
- Human interaction/communication

Lecture 2 - Technical Components of the Internet/Web

what is the internet?
a) physical network
b) of interconnected computers, cables, and other devices
c) that serves as the infrastructure for global communication
---- Thus, a network of networks or, "interworks"
How the internet works
access, viewing devices, and software
personal computers
modems (analog, dsl, cable etc) adapters, network interface
web browsers, other software
infrastructure guided by protocols
backbones & other Connections
internet service Providers (ISPs)
"final-mile" delivery technology and channels
content
information residing on "servers" -- e.g, web pages, email, files, newsgroups,.

Internet data connections
- Internet Backbone
- Network Access Points (NAPs) (backbone connects to regionals)
- Points of Presence (PoPs)
- Internet Service Providers (ISPs)
- Performance & Routes

Transmission Control Protocol / Internet Protocol (TCP/IP)

TCP (Transmission Control Protocol):
breaks up data into small "packets", each of which travels separately

upon arrival, reassembles packets in proper sequence - retransmits if errors are found

IP (internet protocol):
Assigns an address to each packet
choses best path for transmission by routing

!!! ERROR IN PAGE / The tcp part of the protocol... into packets AND ensure...

"Final Mile" Technologies
delivery technologies
example: ISDN, etherenet, wireles, dial-up access, dsl
Delivery channels
Example: telephone line, coaxial cable, fixed and mobile wireless airwaves, satellites

Selected Internet Applications
- File Transfer Protocol (FTP)
- Usenet / Newsgroups / Groups
- Electronic Mail (email)
- Chat and Instant Messaging (IM)
- World Wide Web (WWW or simply Web)

World Wide Web
A system of computers ("servers"), utilising graphical user interfaces and accessed via the internet, that provides access to documents, multimedia files, and web sites, that are connected by hyperlinks to other documents, multimedia files, and web sites.
Web Protocols and Control
- Hypertext transfer protocol (HTTP)
- Hypertext Markup Language (HTML)
- World Wide Web Consortium (W3C)

The Client - Server Model
Client requests information from server, server provides it
-> client can be server too

How the Web works
your computer Uniform Resource Locator (URL) = http://www.yahoo.com/
connects with cox, aol, etc local, regional and national internet service providers (**ISP**)
--> domain name system server
-> yahoo = 216.115.108.343

URLs and Domain Names
http://www.cnn.com
com: top level domain .biz, info, name, pro, org, edu, gov,.de, it.
cnn: domain name
www: web file
indicates web server
subdomain, hostserver, top level domain, directory/subdirectories, file name

Access, Viewing Devices, and Web Software

Browsers/Graphical User Interface (GUI)
    Exp.: Mosaic, Netscape, Explorer, Firefox
Programming Tools
    Exp.: Java, JavaScript, ActiveX
“Plug-Ins” and other Software
    Exp.: Real Player, QuickTime, Media Player, Flash, Shockwave

Web Search Engines

Search Engine Components
    “Spider”, “bot” or “crawler” that creates
    an “index” or “catalog”
    that can then be searched by keyword
    -> can also be human intervention / augmentation

web spider --- builds list of words and notes where they were found --- builds index based on its own system of weighting ---- encodes ....

Search Query Types

    concept-based searching (exicte.com)
    natural language queries (ask.com)

Speciality Search Engines

    dogpile, gov, medical

More Nets and Webs

Internet versus Web
Intranets
Extranets
Internet 2

Lecture 3 - History of the Internet/Web

Development of the Internet

1950s - 1960s

ARPA and NASA launched.

ARPA Research

- Funded defence-related research projects
- Need communication system to withstand nuclear attack
- RAND Corporation comes up with decentralised network idea
- Decentralised network called ARPANET was created in 1969
- There were 4 notes; nodes at UCLA, UCSB, Stanford and University of Utah

1970s - 1980s

- National Control Protocol (NCP): set of rules for data exchange
- Early growth of ARPANET: 1960 = 4 hosts, 1979 = 188 hosts
- First email program developed (1972)
- TCP/IP developed and released in 1975

Transmission Control Protocol/Internet Protocol (TCP/IP)

- Developed by Vint Cerf, father of the Internet
- Allowed for more reliable and efficient transfer of data
- ARPANET switches to TCP/IP in 1983
- Individual networks could communicate over ARPANET

Domain Name Governance

- IP number system
- Domain name system created
- Domain name registration:
    - SRI NIC - InterNIC - Internet Corporation for Assigned Names & Numbers

Domain name extenders:

- 1985: .com .org .net .gov .edu .mil .int (1998)
- 2001: .biz .info .name .aero .coop .museum .pro
- 2002-11: .asia .cat .jobs .mobi .tel .travel .xxx .post
- 2012: 1,000+ more

1980s - 1990s

- Network splits into ARPANET (civilian use) and MILNET (military use)
- National Science Foundation creates NSFNET in 1984:
    - Used for email, FTP, BBS (Bulletin board system)
    - Rules: (1) anyone can link (2) no commercial use
    - ARPANET → NSFNET (start to see what is called Internet, different networks connected to each other)
    - Upgraded infrastructure: T1 → T3
- Restriction on commercial use lifted in 1991
- Rapid nation and international growth

Development of the World Wide Web
Early 1990s

- Tim Berners-Lee at CERN:
    - Envisions a network of interconnected documents and data
    - Invents HTTP and HTML
    - Becomes known as the “father of the WWW”

Mid 1990s

- Marc Andreesen introduces graphical web browser (MOSAIC)
- Browser war
- Features and services expand

Late 1990s - present

- Commercialisation of the WWW
    - Rise of the dot coms
    - Fall of the dot coms

    - ~220 dot-com companies fold in 2000.
    - 74,199 jobs cut Jan-June 2001
- Web 2.0

2010 and beyond...

- Technical issues - infrastructure
- Legal issues - i.e. copyright infringement
- Social issues - does it still server the original purpose

Lecture 4 - Internet User Demographics and Why They Matter

Internet Demographics

Who's online and what are they doing?

- Time for diffusion has been brief
- People online increased dramatically since 1995
- Americans spend average 40 hours a month online
- Online activities varied
- Access and use of the Internet vary by:
  - Education
  - Race Ethnicity
  - Income
  - Age
  - Gender
  - Type of access (broadband, T1, etc)
  - Region/Location

The good news:

- More people of all backgrounds now online.
- Diffusion of innovations and the S-curve.
- People with high SES (SocioEconomicStandard) lead the diffusion but less privileged groups.

The bad news:

- The digital divide
  - Groups and societies divided by their experiences with technologies
- Information is a resource with value (not exactly bad news per-se)
- Information is not distributed equally
- Information poor are often less informed about important social issues and opportunities.

Reason for knowledge gap:

- Differences in communication skills
- Differences in previous knowledge

- Nature of media system feared toward people of higher SES
- Differences in the means to access and process information

This means the less privileged groups may fall further behind.

Less privileged groups may fall further behind

Richard Levin 2000, Yale “As you seize the opportunities created by new technology, you must also assume the heavy burden of citizenship and share in the responsibility to spread those opportunities to others, who are now deprived of them by accident of birth or geography.”

Lecture 5 - Web Design, Web Use, and Information Processing

Web Usability:
How well users can learn and use a website to achieve their goals, and how satisfied they are with that process.

User-centred design:
Product development methodology involving users throughout all stages of website development.

Development process:
- Website planning & content development
- User data collection
- Prototype development
- Usability testing

The Importance Individual Differences

Locus of Control:
Internal Locus of Control = one’s own actions determine the rewards that they obtain.
External Locus of Control = one’s own behaviour doesn’t matter much and rewards in life are generally outside of one’s control.
Those with internal locus of control navigate sites more effectively.

Spatial Ability:
High spatial ability leads to more effective task completion.

Linear vs. Nonlinear Information Organisation

Linear: Straight path; direction procession.
E.g. plots in children’s books, times and the text on a page.
Nonlinear: indirect route: interconnection
E.g. the human brain, information databases and hypertext.

Sex
Males tend to use more nonlinear techniques

System Expertise vs. Domain Expertise

System Expertise = facility with hypermedia tools
    Nonlinear techniques increase with system expertise
Domain Expertise = facility with content area
    Nonlinear techniques increase with domain expertise

Learning from Print (linear) versus the web (nonlinear)

- **Structural Isomorphism:**
    Similarities between the organisation of human memory and hypermedia (Web) increase learning.
- **Learner Control Theory:**
    User controls the pace, order, and content, which leads to more personalised learning.
- **Cognitive Load:**
    Huge amount of mental effort required diminishes the learning experience.

Learning from Print vs. the Web: Research Findings

Web use → greater elaboration → greater content knowledge.
Web use → greater selective scanning → less content knowledge

Effect of selective scanning seems to be more greater than effect of elaboration

The Internet/Web, Information Processing & Human Development

- Structural similarities between human memory and Web information
- Information overload and information processing behaviours
  - "phishing" susceptibility
  - Information recall and the web
  - Multitasking and interruptions
- Human development and evolution

Lecture 6 - Impression Formation, Management, and Sustenance Online

Computer-Mediated Communication (CMC): Early Research Findings

- Effectiveness - More effective than face to face communication
- Task Orientation - Higher levels of focus on the tasks
- Equality Among Participants - More equality felt
- Participation -

- *Socioemotional Usage*
- *Conflict*
- *Time to Reach Decisions*
- *Consensus Reaching*
- *Group Cohesion*

Explanations of Early CMC Research Findings

- "Cues Filtered Out" Perspective
  - Reduced cues lead to outcome
- Channel or Medium Effects
  - Communication channels prompt outcomes

Alternative Evidence and Observations for CMC Dynamics

- Temporal Factors
- Amount vs. Rate of Communication
- Behavioural & Communicative Adaptation
- Nature of Groups

Social Information Processing (SIP) Model

- Cues-filtered-out perspective is legitimate
- Communication channels don't have fixed relational qualities
- Impressions are formed and refined
- Normal, albeit "temporally retarded", interpersonal development occurs

"Hyperpersonal CMC"

CMC that surpasses the level of affection and emotion in parallel face-to-face communication.

- Reduced cues available
- Idealised perceptions of others
- Optimised self-presentation
- Behavioural confirmation

Relational Development Online

- Online dating
  - Long-term face-to-face relationships
  - Relationship success (strategic)
  - Relationship succes (impression management)
  - Realistic self-presentation and honesty

- Modality switching
  - Relational intimacy
  - Social attraction

Social Identity model of Deindividuation Effects (SIDE)

- Deindivudation = reduced self-awareness and accountability
- Importance of social context online
- Characteristics of CMC make available group cues more important
- This prompts certain behaviours, when they are consistent with situational/group norms

Identity and Online Identity Manipulation

- Actual identity

- Masked identity - hiding certain information
- Espoused identity - adopting another persons identity who already exists (online identity theft)
- Assumed identity - construct a fake identity

Lecture 7 - Politics in Cyberspace

The Structure of Democracy

Defining the Structure of Democracy

Formal: the structure of the government (e.g., executive, legislative, judicial branches)

Informal: the structure of the mass public (e.g., political organisation expression)

Historical Patterns of the Informal Structure of Democracy

Founding - 1830s: Control by elites
~1830s - 1930s: Control by political parties
~1930s - 1980s: Control by political interest organisations

Democracy as a Communication Phenomenon

Politics is fundamentally a phenomenon of communication and information.

Role of the Internet:

- Decreases cost of communication
- Increases access to information
- Increases flow of information and communication

The Internet and New Political Structures

- Weakening boundaries of political groups
- Changing informal structure
- Case studies: moveon.org, Enlace Zapatista, Environmental Defence Fund, Howard Dean Presidential Campaign

The Internet and the Contemporary Political Environment

- New organisational strategies
- Greater interconnection among groups
- The evolution of political campaigns
- Increased individual options and control

The Internet and Civic and Political Engagement

Social Participation and Social Capital

Privatisation of leisure

Civic participation
Social capital
Role of the Internet/Web: digital divide, social cues and trust and cyberbalkanization

Negative impact on engagement, declines in civic participation
Positive impact on engagement, activate the predisposed, mobilise inactive populations

Research findings
Internet use and engagement is pretty small.
Little bit of evidence

Context: Internet on election campaigning must be viewed within the context of a number of significant themes:
- US, UK, and liberal democracies voter turnout in decline
- ongoing debate about decline of parties, particularly their social bases of support
- participation in parties has fallen not because there are less people participating in politics overall, but because more choose to participate in interest groups, single-issue
- decisive shifts in parties‘ strategies and organisational structures over the last thirty years
- professionalization. paradigm shift. rise of TV -> has led to campaigns dominated by personality contest (compare “infotainment”)
- party funding. in US/UK huge increases in campaign spending over the las 30 years => role played by wealthy donors in the political process

Lecture 8 - Business to Consumer Electronic Commerce

Electronic Commerce

Electronic commerce (or “e-commerce”) is a set of technologies, applications and processes that links businesses and consumers to one another to each other.
- buying, selling, delivering products and services
- integrating and optimising processes within and between businesses
- approximately $300 billion annually in the US (8% of commercial activity)

Types of E-Commerce

Business -(Business to Consumer [B2C]-> Consumer
Business -(Business to Business [B2B]-> Business
Consumer -(Consumer to Consumer [C2C]-> Consumer

E-commerce Supporting the “Virtual Value Chain”

(getting raw materials) - (actually building it) - (getting it to retailers) - (creating a buzz) - (point of selling) - (follow up of the sale)
Inbound logistics - Production Process - Outbound logistics - Marketing - Sales - Customer support

Everything before and including outbound logistics is B2B (Internal) and everything after is B2C (External).

Business-to-Consumer E-commerce (B2C)

Interaction relating to the purchase and sale of goods and services between a business and consumer - i.e., *retail transactions*

Transactions preformed over the Internet

Historical perspective on alternatives location retailing

Traditional versus Electronic Commerce

Traditional Commerce

Product: typically, a tangible, material object
Process: physical interactions between buyers, sellers, and producers
Agent: people interacting in a store

Electronic Commerce

Product: either a tangible, material object, or a digital object
Process: interactions online between buyers, sellers and producers
Agent: web storefront or Internet transaction

Dimensions of Electronic Commerce

Business and Consumer Advantages of B2C Electronic Commerce

Business Benefits
- Market expansion
- Mass customising and targeting
- Inventory and overhead reductions
- Substantial cost savings / competitiveness

Consumer Benefits
- Convenience
- Greater range of products/services
- Quick delivery (especially digital products)
- Consumer interactions
- Price competition

Manufacturer -> Wholesaler / Distributor -> E-tailer -> Portal Aggregator -> Consumer

Disintermediation - skipping intermediate processes

B2B Revenue Models

- Sell goods and services for a profit
- Sell advertising
- Charge transaction fee
- Sell digital content through subscription

Revenue Models for Online Ads
- Number of Impressions - how many times does the user cause the advertiser's content to be displayed?
- Click Through - how many times does the user click on the ad to go to the advertiser's site?
- Pay-per-sale - how many times does the user click through and then buy something?

Challenges to Successful B2C E-commerce

High "customer acquisition costs"
Amazon = $29; E*Trade = 257; avg = ~$15

Low customer "switching costs"

Fierce competition across markets segments - a response is SEO

Lecture 9 - Business to Business and Consumer to Consumer Electronic Commerce

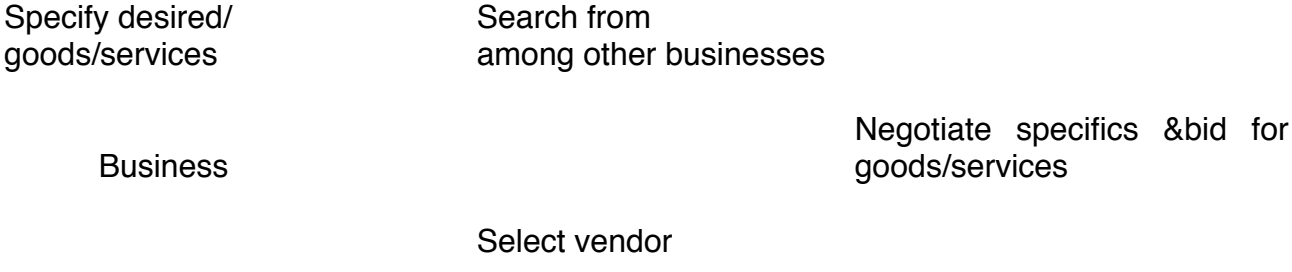
Business-to-Business E-commerce (B2B)

Interactions relating to the purchase and sale of goods and services between businesses

Examples include ordering goods from suppliers, receiving invoices, and making payments

Origins of B2B E-Commerce
- Business to business use of electronic data interchange (EDI)
- Decreased costs of computer hardware and software
- Disappearance of the National Science Foundations's (NSF) acceptable use policy (AUP) prohibiting commercial activities on the Internet (in 1991)
- The rapid growth of the Internet / Web

Electronic Data Interchange (EDI)
-> EDI is the electronic transfer of *unambiguous* business information in *standard syntax* between computers of independent organizations
- examples: purchase orders, invoices, global procurement, electronic funds transfer
- occurs between trading partners Smith minimal manual intervention
- reduces the time and distance involved in doing business



Types of B2B E-Commerce

Company websites
Example: Blue Fountain Media
E-procurement sites
Example: Ariba
Brokering sites
Example: Alibaba

Advantages of B2B E-Commerce
- Greater efficiency and flexibility in internal operations
- Closer relations with suppliers
- Greater responsiveness to the needs and expectations of customers
- Greater selections among suppliers regardless of their geographic location
- Access to a global market

Consumer-to-Comsumer E-commerce (C2C)
= Interactions mediated by the Internet/Web that enable the transfer of goods and services directly between individuals

C2C Transaction Models
- Person-to-Person
  - transactions take place directly between people
  - example: Craigslist
- Mediated Transactions
  - transactions between people that are meditate by a third party
  - example: StubHub, Skillshare
- Cottage Industries
  - individual acts as commercial enterprise
  - example: Etsy, artbreak
- Online Auctions
  - person to person sales transactions in auction format, facilitated by third party
  - example: eBay

Online Auctions: eBay.com
History of eBay
- "online trading community" of approximately 233 million users worldwide
- over 1 million new items added each day
- ~ $14 billion in sales annually

Operation
- sellers pay fee (~$.10 to $300) per listed item, and eBay takes a cut (~9% or less) of some sales
- buyers and sellers handle exchange and payment
- eBay has no inventory, no transportation, and no costs except employees and website operation

Online Auctions: Issues & Research
Online Auctions Environments
Feedback Ratings
Feedback and selling prices
Negative vs. positive feedback

“Reputation gaps”
Feedback reciprocation

Auction Features
Auction starting price (höhere Startpreis - höhere Endpreis)
Commodity information (mehr Text/Fotos - höherer Endpreis)
Minimum bids and reserve prices
Auction length
Website quality

Lecture 10 - Free Speech, Privacy & Censorship in Cyperspace

First Amendement to U.S. Constitution
Congress shall make no law…abridging the freedom of speech, or of the press.

Online Pornography: Pivotal Cases and Rulings

Obscenity = unprotected speech
Indecency = protected speech (still some limitations)

US vs Thomas: “Amateur Action”
Reno vs ACLU: Communications Decency Act or “CDA” (1997)
Ashcroft vs. ACLU: Child Online Protection Act or “COPA”
Ashcroft vs Free Speech Coalition: Child Pornography Prevention ACT or “CPPA”
US vs American Library Association (ALA): Children’s Internet Protection Act or “CIPA”

Online Pornography: Relevant Issues

Community standards and jurisdiction
The nature of harm
Filtering technologies
COPA Commission findings
Ratings

Hate Speech and Threats Online

Hate Speech: abusive or attacking speech directed at others because of their race, religion, gender, or sexual orientation.
Incitement test

Important Cases:
US vs Jake Baker and Arthur Gonda (1995)
Planned Parenthood vs American Coalition of Life Activists (2001) “Nuremberg Files”
“Chilling effects” - hesitate to exercise a particular right. Fearful of repercussions
ISP liability

Data Privacy and Security

Passive information collection
Privacy Statements

Privacy Seals
Secure Servers

Internet Intrusion

Ability to stop receipt of unwanted information
Spam: unsolicited commercial email
Legal issue: Is spam illegal trespass onto proprietary networks?
Cyber Promotions, Inc v. AOL

Controlling the Assault of Non-Solicited Pornography and Marketing Act (CAN-SPAM)
Stipulates certain features of unsolicited commercial e-mail messages.

Internet Privacy Legislation

Child Online Privacy Protection Act of 1998 (COPPA)
Notice of what information is being collection
Parental consent to get and collection the information
Give parents the right of refusal of information already collected

Lecture 11 - Intellectual Property & Copyright

Copyright Origins
- Original works created by individuals or groups
- Intellectual property is protected by copyright law

U.S. Constitution empowers Congress „to promote the progress of scone and useful arts by securing to authors and inventors for limited times exclusive rights to their respective writings and discoveries

Purpose of Copyright Law
=> A delicate balance of creators' rights and consumers' rights

SCALE

Exclusive Rights — Public Domain, Fair Use, First Sale

Creators' Exclusive Rights
- Copyright Act of 1976 gave copyright owners the right to:
  - reproduce the work
  - prepare derivative works
  - distribute copies of the work to the public
  - perform and display the work publicly
  - perform the work publicly by means of digital audio transmission (added in 1995)

Consumers' Rights
Public domain: allows for copies to be made by anyone after the copyright term expires

First Sale Rule: allows the owner of a particular copy to sell or otherwise dispose of that copy without the authority of the copyright owner
Fair Use Doctrine: allows for some noncommercial copies to be made without the authority of the copyright owner

Four Conditions for „Fair Use“

The purpose and character of the use
The nature of the copyrighted work
The amount of the work used
The effect of the use on the market value of the work

Peer to Peer File Sharing, Copyright Violation, and Legal Challenges

- “Betamax” decision (Sony v. Universal City Studios; 1984)
- Napster copyright case
- MGM v. Grokster
- Enforcement issues and strategies

Shifts in the Delicate Balance of Copyright Law

Licensing
Shrinkage of Public Domain

1790: 28 years
1909: 56 years
1976: life + 50 years for indivs; 75 years for corporations

Mickey Mouse

1998: Sonny Bono Copyright Term Extension Act: life+70 years for indiv; 95 years for corps

Erosion of Private Use
Technical Protection Mechanisms

Digital Millenium Copyright Act (DMCA)

Illegal to circumvent technical protection mechanisms or to distribute circumvention tools
ISPs exept from liability for copyright infringements by users unless they (a) know about it, (b) profit from it, and (c) do not stop it

Recent Piracy Legislation

PIPA (Protect IP Act)
SOPA (Stop Online Piracy Act)

expand laws to fight online trafficking in copyrighted intellectual property
problems: no „safe harbor“ / overly broad

protest / status (wikipedia blackout, protest)

Intellectual Property as a Public Good

The importance of *shared* intellectual property
Public access to intellectual property is important for the public good, and strong content control threatens both individual freedom and creativity

Lecture 12 - From Mass Media to Social Media

Traditional Mass Media, Mass Communication, and the Control of Information

- Scale of Communication

- Information Flow
- Obtrusiveness and Alternatives
- Production Costs and Effort

The Internet & New Forms of Communication & Information Sharing
- Alternative news & information sources - e.g. Drudge Report / blogs / independent media centre
- Altered scale of communication
- Decentralized communication and information sharing - example: Nike email
- Expanded information sharing - craigslist
- Mediated self-organisation - moveon, facebook gruppen

Social Media / Social Computing / Web 2.0
the deployment of *computer and network communication systems* for the purpose of allowing communities of people to interact in particular *domains of knowledge* for one or more shared goals

Accessibility
Mobility
Reach / Scale
Immediacy / Recency
Content creation

User-Generated Content
Online content, provided by and shared among Internet users themselves
Examples: flickr, bizrate, digg, wikipedia, delicious

Advantages
Dynamics
Content self-organization

Case Study: the Jesusita Fire

What's New About This?
- Enormous capacity to tap into diverse information resources
- Sufficient processing power to make sense of connections among information
- Greater participation leads to greater value

Lecture 13 - Peer Production and the Creation of Web Based Public Goods

Peer Production / Social Production
- Firm production
- Market-based production
- Peer production / Social production (wikipedia)

Open Source Movement
- Traditional Software Production
- Open Source Software Production

Principles (free, non-restrictive licenses…)

Example: Linux; Sourceforge

Peer / Social Production of Web-based Information Public Goods

- Social information filtering (movielens)
- Credentialing (ebay)
- Peer product reviews (amazon)
- Peer to Peer network resources (Pirate Bay)
-
- Information repositories (wikipedia)
- Information communities (slashdot)
- Volunteered geographic info (wikimapia)
- Citizen science Audubon, Nasa-Project

The Widsom of Crowds

Circumstances under which imperfect individual judgments are combined and become superior to expert individual judgments

- Diversity of opinion
- Independence
- Decentralisation
- Aggregation

Motivations for Contributing to Information Public Goods

- Commitment
- Reputation
- Altruism
- Enjoyment

The Potential of Metadata

- Data about, or beyond, data
- Draws attention to secondary relationships

Example: Where's George, Google flu Trends

Lecture 14 - Limits and Threats to Internet Freedom and Potential

Perspectives of Internet Effects

- Internet/Web as enhancing community information sharing, and control
- Internet/Web as divise or deceptive

Selective Exposure

- Attitudinally-consistent information
- Counter-attitudinal information
- Role of Internet and Web
- Political debate
- Group polarisation

Net Neutrality

The principle that Internet providers should not be able to discriminate between different kinds of content or customers by providing different levels of speed or access (i.e., network access must remain “neutral”)

Limits to Internet Freedom

- New gatekeepers

Critiques of Social/Peer Production

- Free is costly
- Unwise crowds
- Scarcity of talent
- Importance of training and professions
- Information momentum vs. information value
- Information and source credibility

Lecture 15 - Trust, Credibility, and Internet Literacy

Defining Credibility

The quality of being trusted and believed in.

Findings on the Internet and Web-based Information & Source Credibility

- Medium credibility
- Site type
- Site design/recognition
- Sex differences
- Information type
- Information verification
- Attitudes versus behavior
- Missinformation
- Optimistic Biases
- User-generated content online

Wikipedia Research Findings and Assessment Strategies & Tools

- Wikipedia information quality
- Perception of Wikipedia Credibility
- Wikipedia assessment tools
    - Wikipedia trust colouring project
    - Wikipedia dashboard (who’s writing?)
    - History flow visualisation

Lecture 16 - What the Internet Was, Is, and May (or may not) Become