

# Social Networks in Web 2.0

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# Billionaires' Shuffle

2007



2008



Facebook in 2004.02

**2008**

at **23** and \$**1.5** billion later...



# Global Traffic Rankings

## Alexa Global Traffic Rankings

2005 <sup>(1)</sup>		2007 <sup>(2)</sup>	
Rank	Web site	Rank	Web site
1	yahoo.com	1	yahoo.com
2	msn.com	2	google.com
3	google.com	3	msn.com
4	ebay.com	4	youtube.com
5	amazon.com	5	live.com
6	microsoft.com	6	myspace.com
7	myspace.com	7	facebook.com
8	google.co.uk	8	orkut.com
9	aol.com	9	wikipedia.org
10	go.com	10	hi5.com

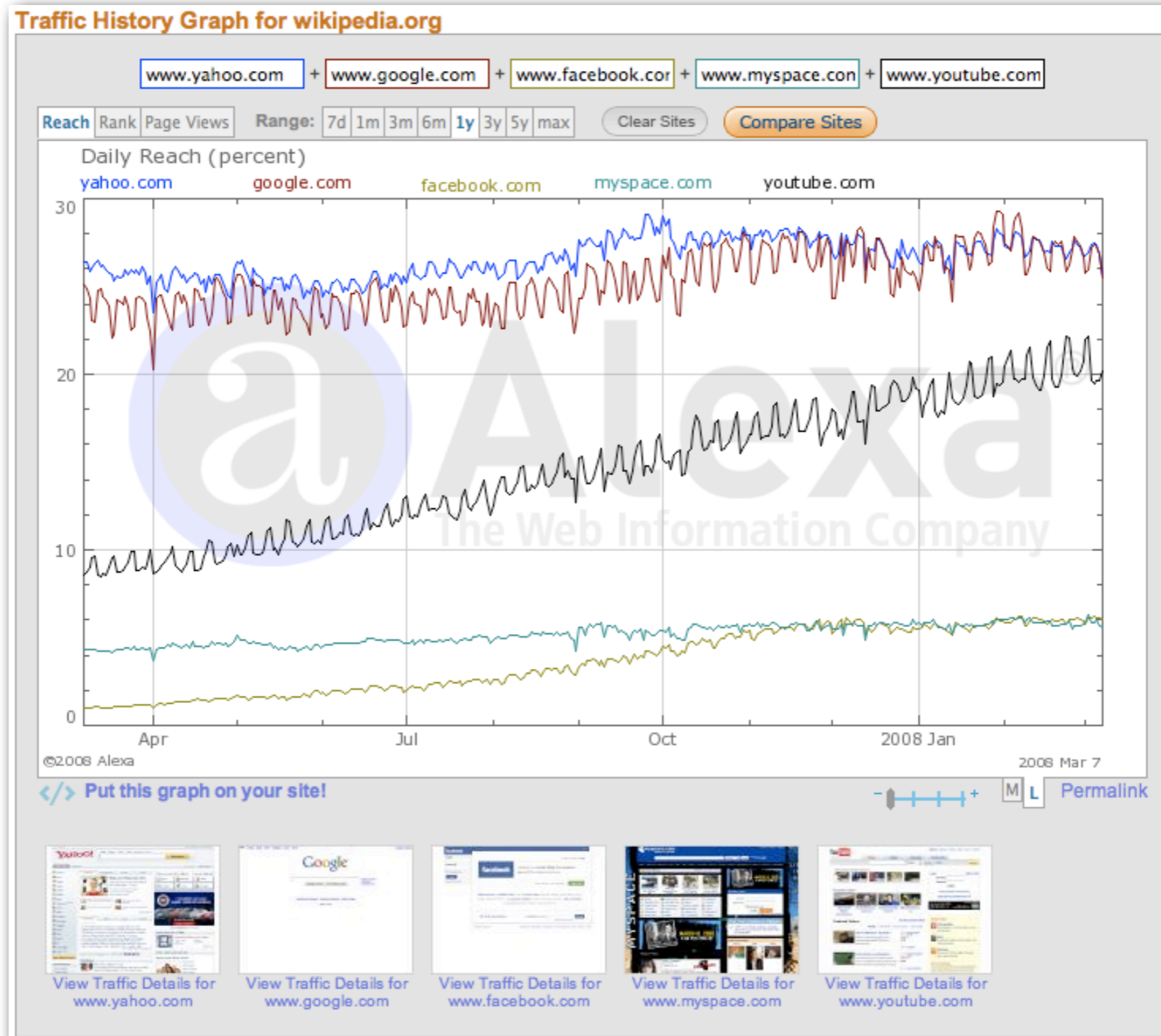
*Traffic rank is based on three months of aggregated historical traffic data from Alexa Toolbar users and is a combined measure of page views / users (geometric mean of the two quantities averaged over time).*

Morgan Stanley

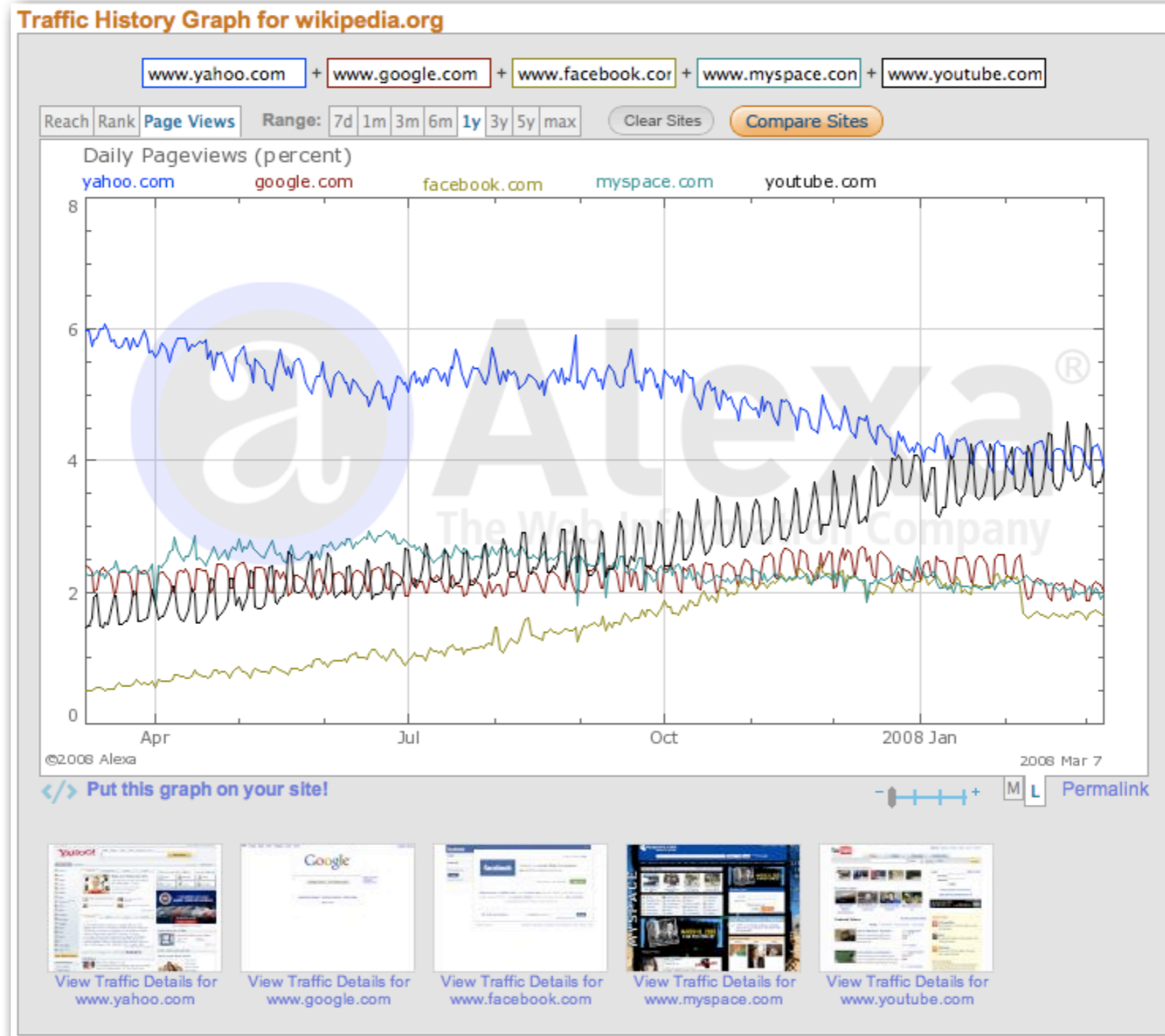
*(1) Rankings as of 12/31/05, excludes Microsoft Passport; (2) Rankings as of 10/15/07  
Source: Alexa Global Traffic Rankings, Morgan Stanley Research*



# Internet Reach



# Internet PageView



# Web 2.0 Growth

## Web 2.0 Two Year Growth



# Navigation Bar

- The Web 2.0 **Revolution...**
- Social **XXX**
- What's Cooking...



# Web 2.0 Manifesto

Web 2.0 is the **network as platform**, spanning all **connected devices**; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a **continually-updated service** that gets better the **more people use** it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows **remixing** by others, creating network effects through an **"architecture of participation,"** and going beyond the page metaphor of Web 1.0 to deliver **rich user experiences.**





# Web 2.0 Cloud



# Web 2.0 Defined

"Web 2.0 is the **business revolution** in the computer industry caused by the move to the **Internet as platform**, and an attempt to understand the rules for success on that new platform."

*Tim O'Reilly, 2004*

"Web 2.0 is a **knowledge-oriented** environment where human interactions generate content that is published, managed and used through **network applications** in a **service-oriented architecture**."

*Dario de Giudibus, 2008*



# Levels of Web 2.0

	Characteristics	Examples
Level-0	Operate well offline as well as online	MapQuest, Yahoo! Local and Google Maps, etc.
Level-1	Operate offline and <b>gain features</b> online	Google Docs & Spreadsheets, iTunes, etc.
Level-2	Operate offline and <b>gain advantage</b> online	Flickr, YouTube, etc.
Level-3	Exist <b>ONLY</b> on the Internet	eBay, Craigslist, Wikipedia, del.icio.us, Skype, AdSense, etc.



# Web 2.0

- Web as a medium vs. **Web as a platform**
- Read-Only Web vs. **Read-and-Write Web**
- Static vs. **Dynamic**
- Restrictive vs. **Freedom & Empowerment**
- Technology-centric vs. **User-centric**
- Limited vs. **Rich User Experience**
- Individualistic vs. **Group/Collective Behavior**
- Consumer vs. **Producer**
- Transactional vs. **Relational**
- Top-down vs. **Bottom-up**
- People-to-Machine vs. **People-to-People**
- Search & browse vs. **Publish & Subscribe**
- Closed application vs. **Service-oriented Services**
- Functionality vs. **Utility**
- Data vs. **Value**

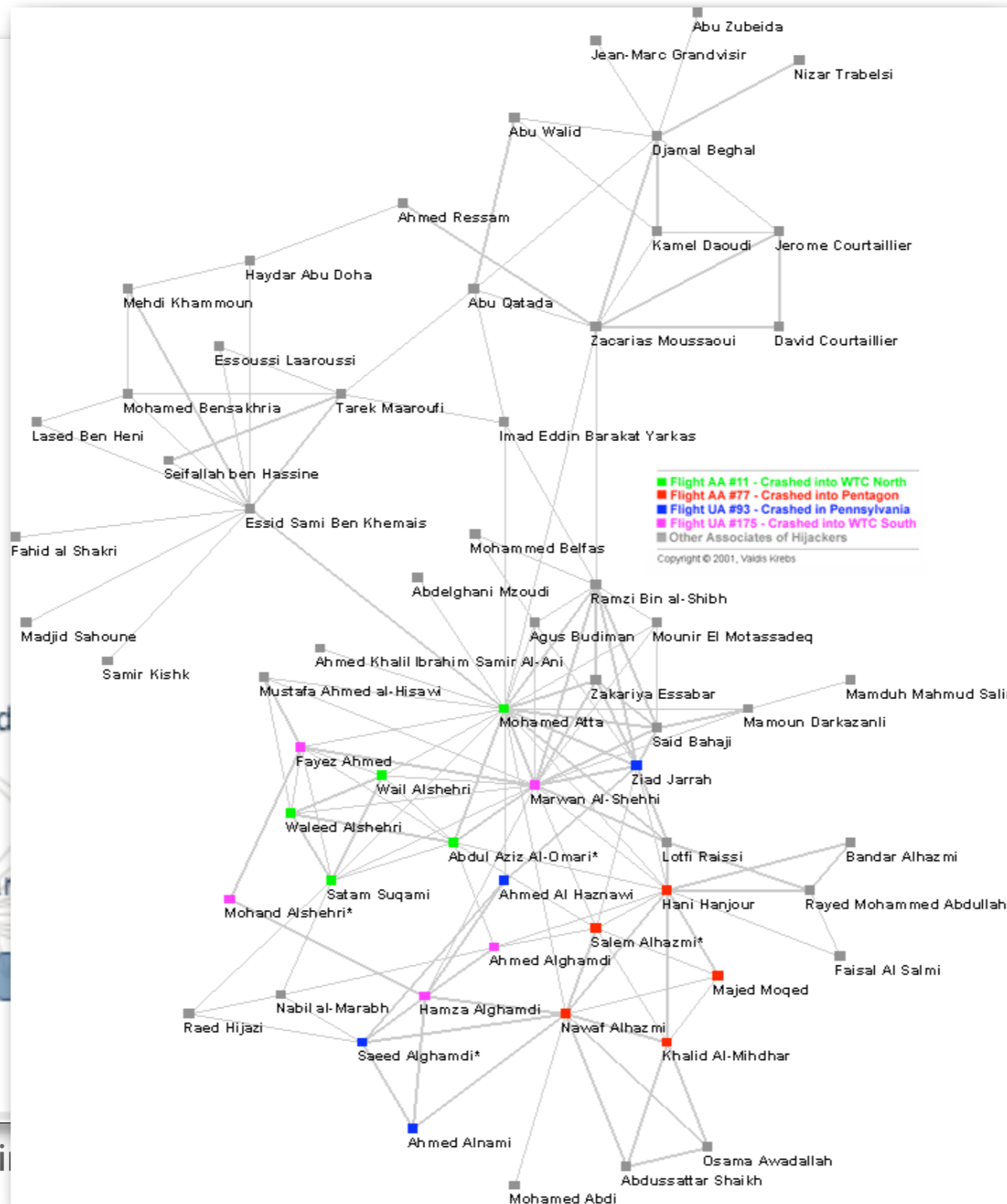


# Web 2.0 Revolution

- **Glocalization**-think globally and act locally!
- **Weblication**-Web is the application!
- **3 Cs**
  - **Connectivity**
  - **Collaboration**
  - **Communities**



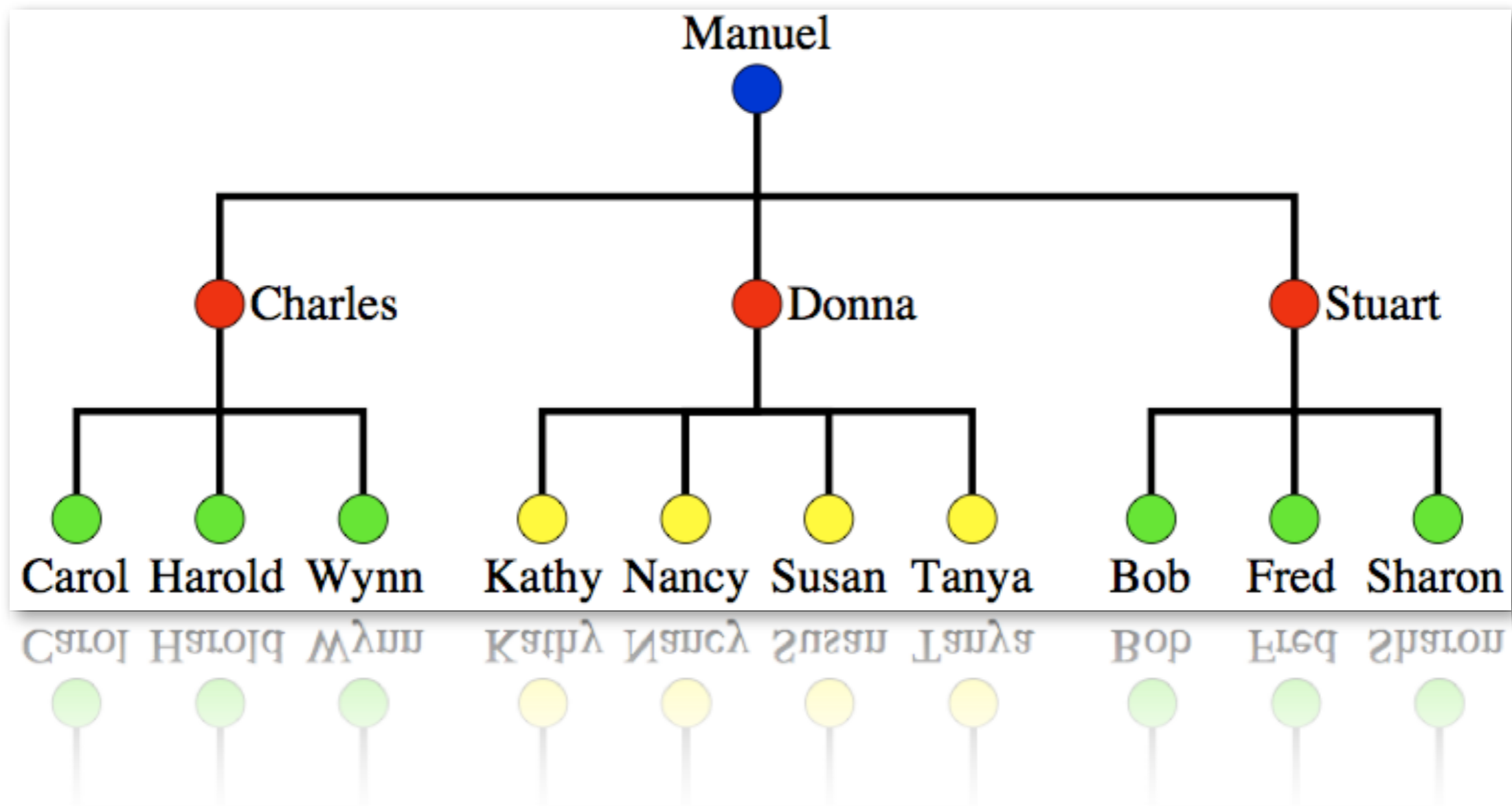
# The Social Web



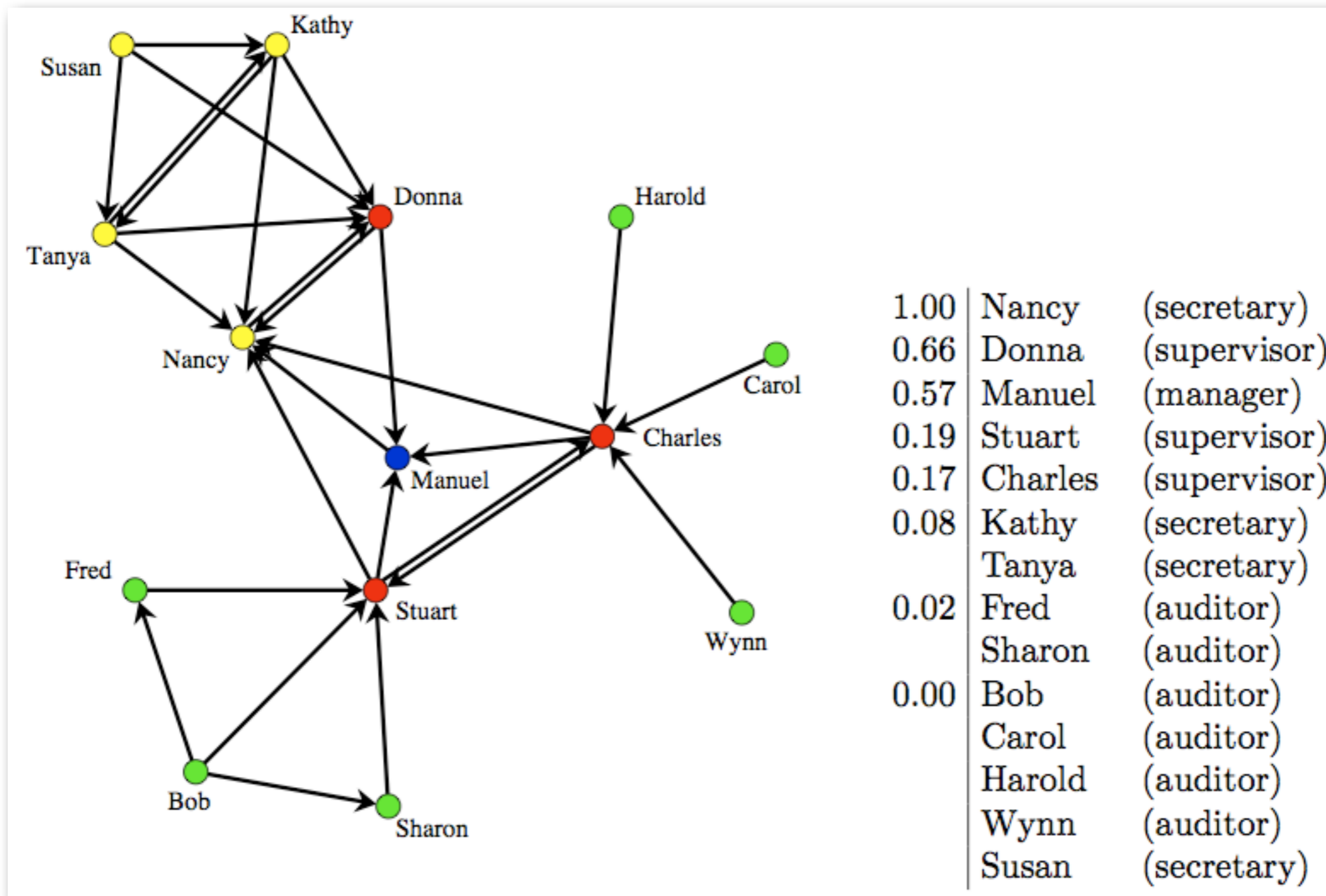
Social Networks in



# Organizational Chart



# Social Network Chart





# Social Networking

The screenshot shows a Facebook profile for Irwin King. The profile includes a profile picture, a cover photo, and a bio. The bio states: "What are you doing right now?" and lists his networks, sex, hometown, and religious views. The Mini-Feed shows recent updates, including a new address and friend additions. The Information section lists his contact info, website, and education. The Friends section shows 3 friends: Chi Chung Chan, Tom Hung, and David Shepherd.

**facebook** Profile edit Friends Networks Inbox home account privacy logout

Search

Applications edit

- Photos
- Video
- Groups
- Events
- Marketplace

more

**Irwin King**  
What are you doing right now?

Networks: CUHK Faculty  
Sex: Male  
Hometown: Taipei, Taiwan  
Religious Views: Christian

**Mini-Feed**  
Displaying 7 stories. See All

Today

- Irwin has a new address: Department of Computer Science and Engineering, The Chinese University of Hong Kong. 8:14pm
- Irwin edited Education Info, Hometown, Work Info, Website and Religious Views in his profile, and changed his profile picture. 8:14pm
- Irwin and Chi Chung Chan are now friends. 7:54pm
- Irwin and Tom Hung are now friends. 7:54pm
- Irwin and David Shepherd are now friends. 7:54pm
- Irwin joined the CUHK network. 7:54pm
- Welcome to Facebook! We're glad you're here. 7:54pm

**Information**

**Contact Info**  
Email: king@cse.cuhk.edu.hk  
Current Address: Department of Computer Science and Engineering, The Chinese University of Hong Kong, Hong Kong, Hong Kong  
Website: http://www.cse.cuhk.edu.hk/~king

**Education and Work**

**Education Info**  
Grad Schools: University Of Southern California '88 M.Sc., Computer Science  
University Of Southern California '03 Ph.D., Computer Science

**Friends**  
3 friends. See All

Chi Chung Chan Tom Hung David Shepherd

Search for friends  
Use the Friend Finder

**Friends in Other Networks**  
Networks with the most friends  
Hong Kong (2)  
Show All Networks | View All Friends

The screenshot shows a MySpace profile for drmanhattan. The profile includes a profile picture, a cover photo, and a bio. The bio states: "Like all good first albums should, the debut from drmanhattan is filled with throbbing punk melodies and the kind of lyrics you'll find yourself singing along to on your second listen. Listen to the album now, before it hit stores 3/11, exclusively on MySpace." The profile also features a "Cool New Videos" section, a "MySpace Music" section, and a "MySpace Specials" section.

**myspace.com** a place for friends Privacy | Help | SignUp

Search powered by Google

Home Browse Search Invite Film Mail Blogs Favorites Forum Groups Events MySpaceTV Music Comedy Classifieds

**Cool New Videos** 60,874 uploaded today!

- Imaginary Car Accident Mr. Happy
- Grab A Seat With Style Nomorals Proving ...
- Steve Carell Talks Myspace Myspace Celebrity
- Backflip Off Of Building The Horse

**Member Login**

E-Mail:   
Password:   
 Remember Me  
LOGIN SIGN UP!  
Forgot your password?

**Find Your Friends on MySpace**

Check your [Gmail](#), [Yahoo!](#), [Hotmail](#), [AIM](#) and [AOL](#) contacts and find them on MySpace!

**Cool New People**

Derreck Konvict Freshman ..

**MySpace Music** [more music]

**drmanhattan**  
Rock  
Wauconda, IL

**EXCLUSIVE**

Like all good first albums should, the debut from drmanhattan is filled with throbbing punk melodies and the kind of lyrics you'll find yourself singing along to on your second listen. Listen to the album now, before it hit stores 3/11, exclusively on MySpace.  
» Listen Now

**MySpace Specials**

**MySpace Secret Stand Up Presents... Aisha Tyler in Boston!**

You've seen her on Talk Soup, Reno 911 and Friends, now see her live and up close! For our next installment of MySpace Secret Stand Up, we are proud to bring you Aisha Tyler LIVE in Boston on March 9th. All FREE thanks to our friends at Toyota.  
» Get ready to laugh!

**Videos** [more videos]

**Y The Last Party**  
MySpace Comic Books and Meltdown Comics present Y: THE LAST PARTY -- a benefit for the Comic Book Legal Defense Fund!  
» Watch It Now!

**Sponsored Links**

[Hong Kong Chat](#)  
Hong Kong singles for dating. View photo profiles. Find love today!  
[www.HongKongCupid.com](#)



# Social Search

- Social Search Engine
- Leveraging your social networks for searching

The screenshot shows the EurekaSwicki website. At the top, there's a navigation bar with links for 'build new swicki', 'swicki directory', 'about swickis', and 'about eureka'. Below this is a search bar with the text 'Search and vote for your faves' and a 'swicki search' button. The main content area features a large image of a crowd and the text 'a custom search portal around the topic of your choice powered by your community'. There are several sections: 'Build a swicki!' with a description and a 'Build a swicki' button; 'Eureka news' with a 'Now out of beta!' announcement and several news items; 'Browse the directory' with a search prompt; and a grid of categories including 'Recently created', 'Top swickis', 'DIY: home improvement swicki showcase', 'Computers', 'Business', 'Home', and 'Regional'. Each category has a list of items and a 'More >' link.

The screenshot shows the Delver social network interface. At the top, there's a logo and the name 'liad agmon'. Below this is a search bar with the text 'Your friends are the best source of information! Look for information, media and people within your network'. The main content area features a network graph with several profile cards. One profile card for 'Noa Rabiner' is highlighted, showing a photo and a description: 'Noa Rabiner is connected to you directly'. There are several icons and links for interacting with the profile, such as 'This is me!', 'I know this person', 'Add as Connection', and 'Send Message'.



# Social News/Tagging

The screenshot shows the Digg website interface. At the top, there is a navigation bar with the Digg logo, links for 'Join Digg', 'About', and 'Login', and a search box. Below this is a secondary navigation bar with categories like 'All', 'News', 'Videos', 'Images', 'Podcasts', and 'Customize'. A third bar lists sub-categories: 'Technology', 'World & Business', 'Science', 'Gaming', 'Lifestyle', 'Entertainment', 'Sports', and 'Offbeat'. The main content area is titled 'News, Videos, Images' and includes sorting options: 'Most Recent', 'Top in 24 Hr', '7 Days', '30 Days', and '365 Days'. A promotional banner for 'Discover the best of the web!' is present. The main list of articles includes:

- 104 diggs** | **Microsoft Demos "ADD TO DIGG" Feature in IE8** | microsoft.com — Using the new "Activities" XML feature in IE8, users can right-click on any page and "ADD TO DIGG". Check out the screenshot on Microsoft's site! Other new IE8 features: Atom feeds in normal web pages using Microformats, Data URI support (fast page renders), CSS2.1 fully supports, and of course, tons of bug fixes... [More...](#) (Microsoft) | 16 Comments | Share | Bury | renesisx made popular 6 min ago
- 161 diggs** | **It was only a matter of time, The SIMS 3 Official** | strategyinformer.com — Maxis have already showcased The Sims 3 in a non-disclosure agreement (NDA) event with press, the blockade is said to end on March 19. Wasting no time to rally the Sim communities around their latest expansion-spawner 'The Sims 3' website has launched promising more once the March embargo is lifted. [More...](#) (PC Games) | 36 Comments | Share | Bury | JamieSI made popular 14 min ago
- 151 diggs** | **Universe submerged in a sea of chilled neutrinos** | space.newscientist.com — 'Cosmic' neutrinos produced in the big bang fill space, according to five years of data from NASA's WMAP satellite - they can't be detected on Earth [More...](#) (Space) | 21 Comments | Share | Bury | MaggieMcKee made popular 26 min ago
- 180 diggs** | **Unique locks on microchips could reduce hardware piracy** | ns.umich.edu — The technique is called EPIC, short for Ending Piracy of Integrated Circuits. [More...](#) (Hardware) | 45 Comments | Share | Bury | cosmikdebris made popular 45 min ago
- 519 diggs** | **Warren Buffett Passes Gates To Become World's Richest Man** | ... | cosmikdebris made popular 42 min ago

The right sidebar features a Microsoft Visual Studio advertisement for 'MIX '08 - The Next Web Now' and a 'Top in All Topics' section with items like 'The ravages of aging: Sean Connery, 20 years ago vs Today' (2387 diggs), 'A 10-Year Prison Sentence for Selling Light Bulbs' (1718 diggs), 'Tree circus' (1175 diggs), 'Is this the perfect celebrity?' (1075 diggs), 'Top 10 Worst Urban Myths' (1064 diggs), '8 Movie Adaptations that Must be Stopped' (1029 diggs), and 'Wanna protect Windows from Hackers?...Set NO Password !!' (850 diggs).

# Social Bookmarking

The screenshot shows the del.icio.us homepage. At the top left is the logo and the text "del.icio.us social bookmarking". To the right is a search bar with "del.icio.us" and a "search" button, and links for "login", "register", and "help". Below the logo are three main navigation links: "» all your bookmarks in one place", "» bookmark things for yourself and friends", and "» check out what other people are bookmarking". A "learn more..." link is also present. In the center, there is a "» get started «" link. On the right side, there is a "Tags" section with a definition: "A tag is simply a word you use to describe a bookmark. Unlike folders, you make up tags when you need them and you can use as many as you like. The result is a better way to organize your bookmarks and a great way to discover interesting things on the Web." Below this is a "tags to watch" section with a "more ..." link. The main content area is titled "hotlist" and "what's hot right now on del.icio.us". It features a "HOT NOW" section with a "see also: popular | recent" link. The hotlist contains five entries, each with a thumbnail, title, "save this" link, number of people, and tags. The entries are: 1. "Video: Twitter in Plain English | Common Craft - Explanations In Plain English" (130 people, tags: twitter, video, howto, commoncraft, web2.0), 2. "Home | NotchUp Beta" (212 people, tags: jobs, interview, career, search, job), 3. "PrimeTimeRewind - The TV Cube" (145 people, tags: tv, video, streaming, television, media), 4. "The Simple Dollar » Planning a Kitchen Garden" (133 people, tags: gardening, food, garden, cooking, vegetables), and 5. "Office Live Workspace vs Google Docs: Feature-by-Feature Comparison - ReadWriteWeb" (135 people, tags: microsoft, google, office, google\_docs, live).



# Social Media

The screenshot shows the YouTube homepage with the following elements:

- Header:** YouTube logo with "Broadcast Yourself™" tagline. Navigation tabs for Home, Videos, Channels, and Community. A search bar and an "Upload" button.
- Videos being watched right now...:** A row of five video thumbnails with their durations: 02:13, 03:29, 01:58, 07:01, and 03:53.
- Promoted Videos:** Four video thumbnails with titles: "Think Again Awards", "Think Again Awards", "第14屆十大電視廣告頒獎典禮 - 搬出...", and "紅館觀眾向肥姐獻花".
- Featured Videos:** A list of featured videos with thumbnails, titles, and view counts:
  - David Sedaris delivers a pizza:** From weaknights, 11,313 views, 5 stars, 01:01 duration. More in Comedy.
  - Erbert and Gerbert's Candle Cannon:** From candlecannon, 109,029 views, 5 stars, 02:34 duration. More in Entertainment.
  - Girl's Night Out:** From dianidevine, 169,435 views, 5 stars, 03:49 duration. More in Comedy.
  - Lionel Neykov - Freeze My Senses:** From LionelNeykov, 150,758 views, 5 stars, 03:35 duration. More in Music.
- What's New:** A yellow box containing:
  - YouTube Mobile:** New! Watch ALL YouTube videos on your mobile device.
  - Warp!** Visually fly through YouTube videos in the Fullscreen player.
  - RSS Feeds:** Click on the "RSS this page" link to get fresh videos delivered.
  - SXSW on YouTube:** For the next week and a half, the SXSW festival is taking over Austin, Texas, to celebrate music, film and all things interactive. [Read more in our Blog](#)
- Footer:** Links for Sign Up, Account, History, Help, Log In, and Site.

The screenshot shows the Flickr homepage with the following elements:

- Header:** Flickr logo and "Sign In" link.
- Main Content:** A large photo of a small plant growing in a crack in the pavement. Text: "Share your photos. Watch the world." A "Create Your Account" button and a "SEARCH" button.
- Statistics:** "3,602 photos uploaded in the last minute · 558,832 photos tagged with urban · 2.2 million photos geotagged this month · [Take the tour](#)"
- Navigation:** Four icons with labels: "Share & stay in touch", "Upload & organize", "Make stuff!", and "Explore...".
- Footer:** "Take the Tour" button and text: "Explore Flickr Blog, the World Map, Camera Finder or interesting photos from the last 7 days."

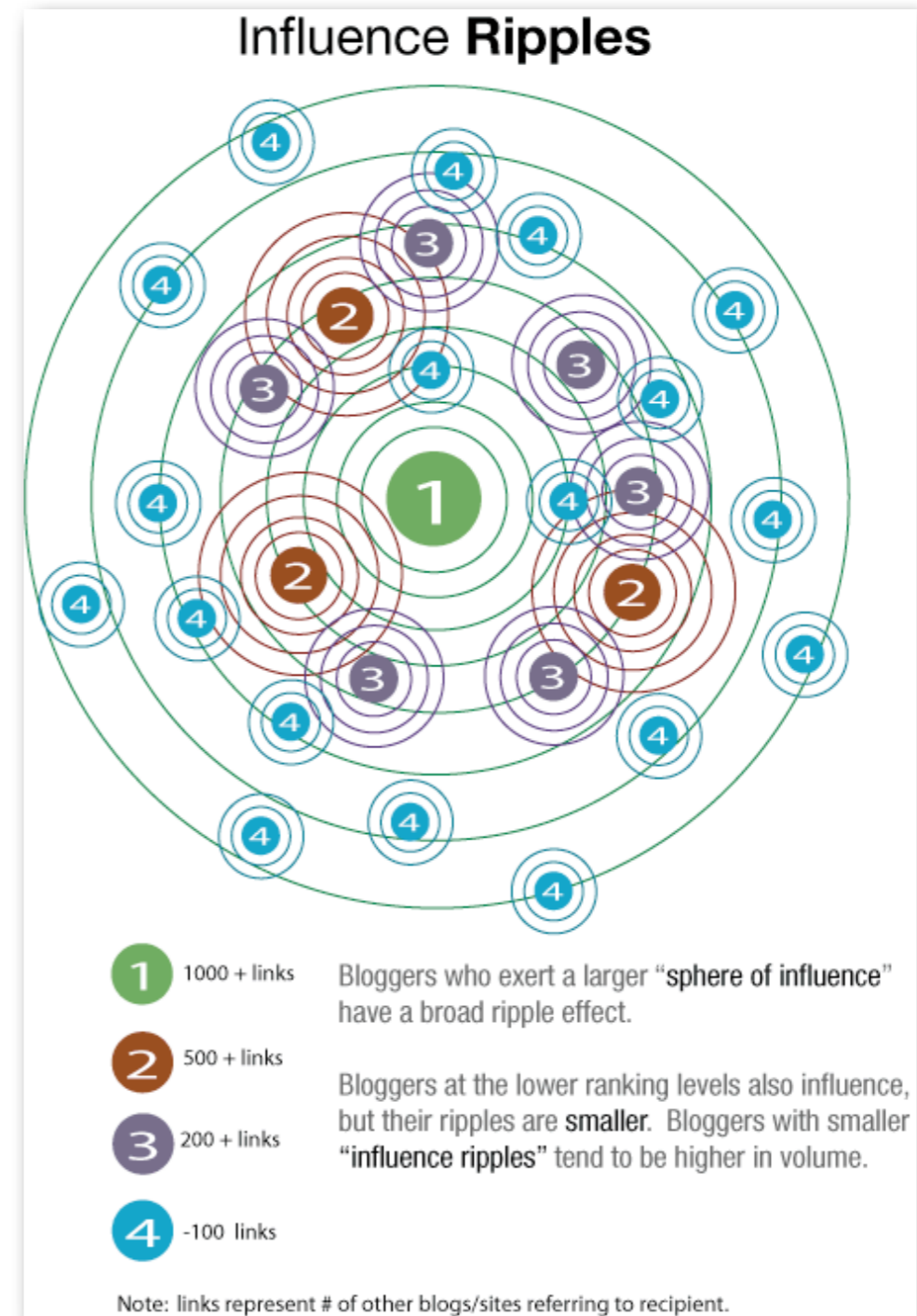
The screenshot shows the Second Life website with the following elements:

- Header:** "SECOND LIFE" logo with tagline "Your World. Your Imagination." and "Resident Login | Join" link.
- Navigation:** "WHAT IS SECOND LIFE? | SHOWCASE | COMMUNITY | BLOG | SUPPORT" and a search bar.
- Main Content:** A large image of two avatars flying in a virtual sky. Text: "Get Started! Membership is FREE!" and "Second Life is an online, 3D virtual world imagined and created entirely by its Residents."
- Footer:** "Discover a whole new world of friends, fashion, music, videos and fun! Explore the best of Second Life >>"
- Bottom Section:** "Your Organization in Second Life! Find out why your business, school or nonprofit organization should get its own virtual world presence." with a "VISIT SECOND LIFE GRID" button.



# Social Marketing

- Viral marketing
- Who are the **brokers**?
- Who can exert the **most influence** on buying/selling?
- How **much** should one advertise?



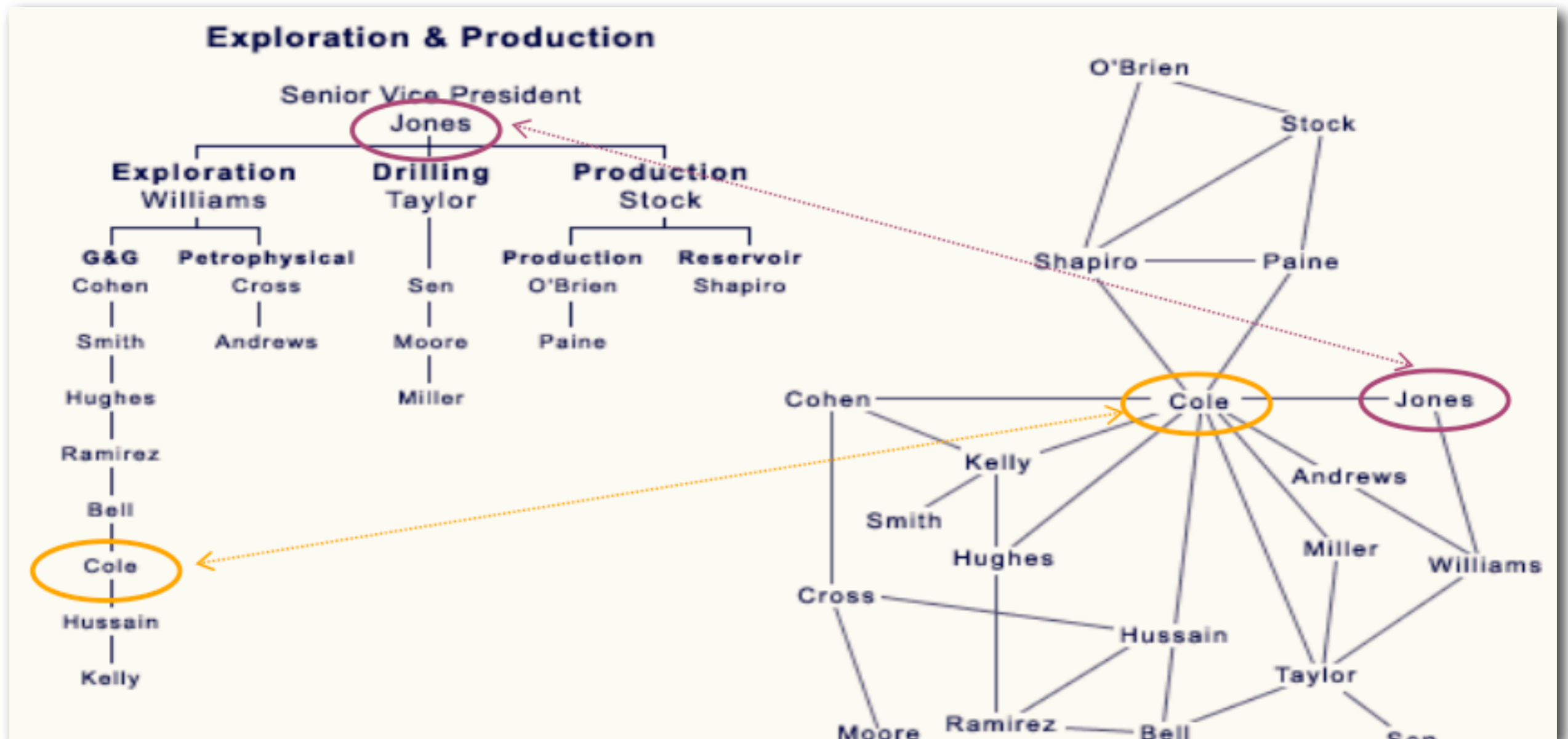
# The Golden Rules

- Gives away valuable products or services
- Provides for effortless transfer to others
- Scales easily from small to very large
- Exploits common motivations and behaviors
- Utilizes existing communication networks
- Takes advantage of others' resources





# Social Management



# Social/Human Computation

Security Check: Enter **both** words below, separated by a space. [What's This?](#)  
Can't read this? [Try another.](#)  
[Try an audio captcha](#)

**discharge** **Carolina**

Text in the box:

I have read and agree to the [Terms of Use and Privacy Policy](#)

[Sign Up](#)

[Problems signing up? Check out our help pages](#)

Security Check: Enter **both** words below, separated by a space. [What's This?](#)  
Can't read this? [Try another.](#)  
[Try an audio captcha](#)

**discharge** **tesbiten**

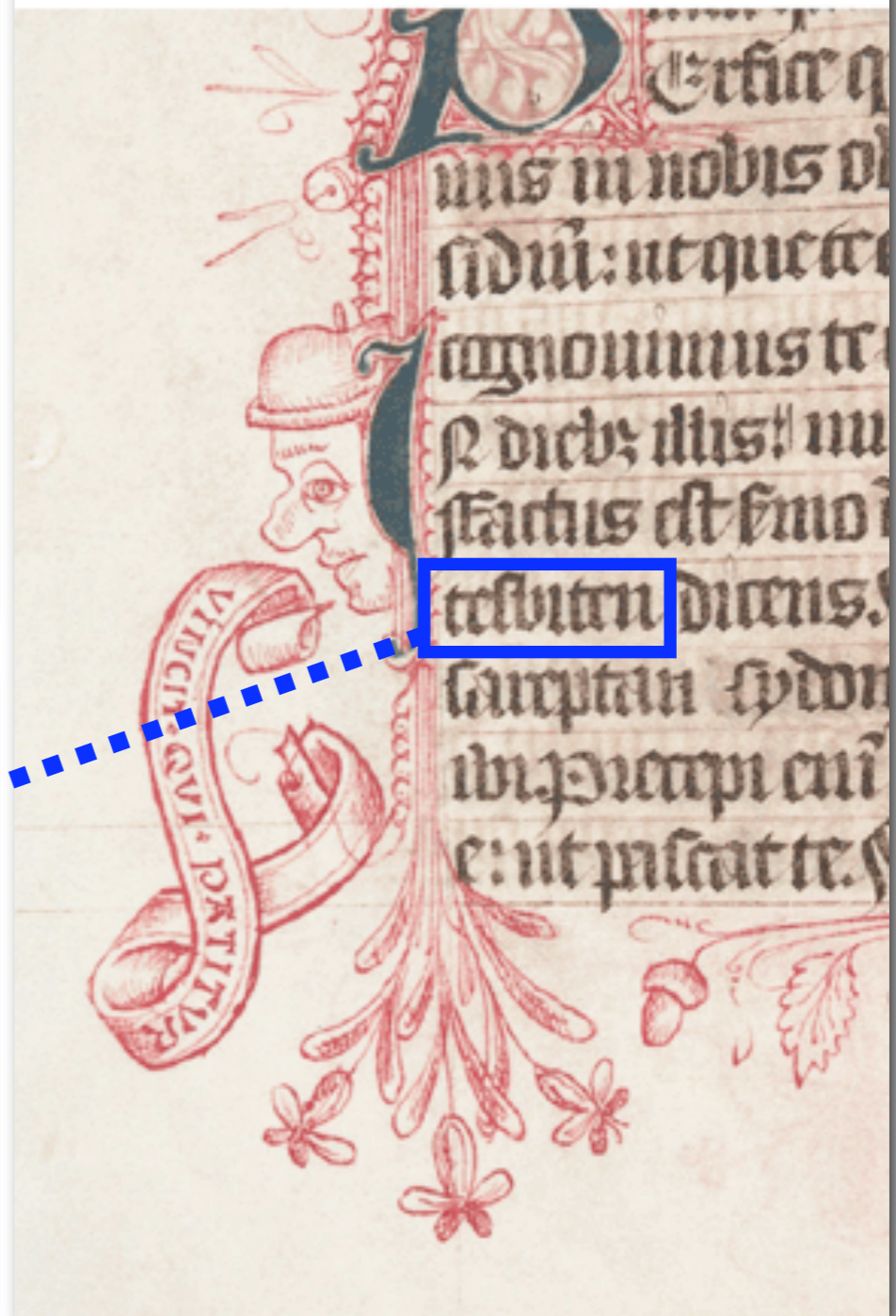
Text in the box:

I have read and agree to the [Terms of Use and Privacy Policy](#)

[Sign Up](#)

[Problems signing up? Check out our help pages](#)

MS. Don. b. 6, fol. 48v (detail) © Bodleian Library, University of Oxford



# Google's Image Labeler

The screenshot shows the Google Image Labeler interface. At the top left is the Google logo with 'Image Labeler BETA' and 'Google Image Labeler' text. On the right are links for 'Help' and 'Sign In'. Below the header is a 'time left' section showing '01:17', a 'score' of '0', and 'passes' of '0'. A central text box says 'Your partner has suggested 10 labels.' with 'label' and 'pass' buttons. Below this is a landscape image of a lake and mountains, with a 'zoom out' button underneath. On the right side, there is a list of labels: 'off-limits', 'sky', 'water', 'blue', 'lake', and 'mountain', followed by a 'my labels' section. Red starburst shapes are overlaid on the interface, highlighting the 'time left', 'score', 'passes', the central text box, the image, and the labels list.

[Privacy Policy](#) - [Terms of Use](#) - [Return to Google Image Search](#)  
© 2007 Google

© 2007 Google



# Games With A Purpose



- **Matchin**
  - Image search by aesthetic value
- **Babble**
  - Translate foreign language into English
- **InTune**
  - Tags songs with description text
- **Squigl**
  - Image segmentation
- **Verbosity**
  - Database of common knowledge description



# What's Cooking

- Link-based Similarity
- Negative Opinion
- Diffusion Rank
- Collaborative Filtering
- CUPIDE



# Link-based Similarity

- How to find **similar** pages given a starting page?
- Compute only based on **links**
- Extended Neighborhood Structure (ENS)
  - **Bi-directional**
  - **Multi-hop**



# Extend Co-citation and Bibliographic Coupling

- **Co-citation**

$$Sim(a, b) = |I(a) \cap I(b)|$$

- **Bibliographic coupling**

$$Sim(a, b) = |O(a) \cap O(b)|$$

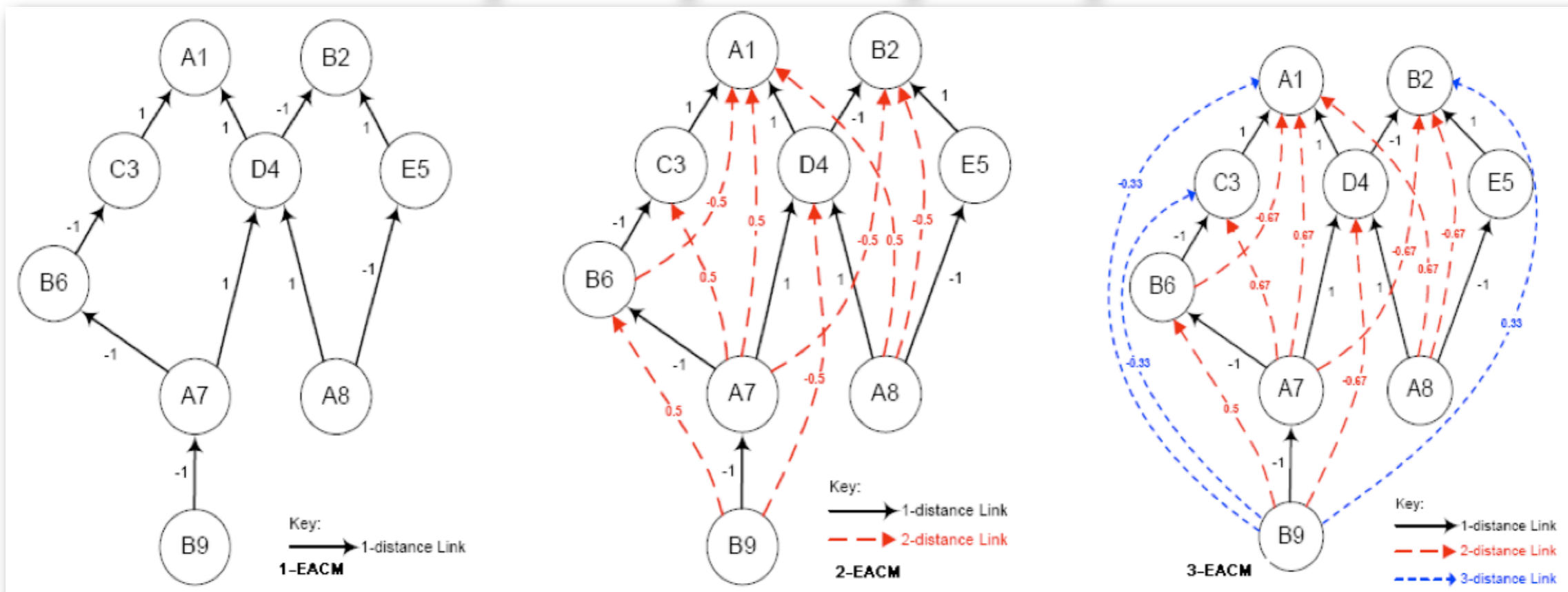
- **ECBC**

$$Sim(a, b) = \alpha |I(a) \cap I(b)| + (1 - \alpha) |O(a) \cap O(b)|$$



# Negative Opinions

- Links are **positive** reinforcements
- How about **negative** feedback?
- **The enemy of my enemy is my friend!**





# Diffusion Rank

- Web **spamming** is a headache on the rise!
- Can we use the **heat diffusion** equation to model the flow of information in a graph?
- Heat diffusion flow on **manifolds**, e.g., DG, UDG, RDG
- Advantages
  - **Closed-form** solution
  - **Group-to-group** relations
  - **Graph cuts**
  - **Anti-manipulation**



# Collaborative Filtering

- Online recommendations are often quite **sparse**, e.g., MovieLens
- How can we use sparse data to **predict missing data** for recommendation?

	$i_1$	$i_2$	$i_3$	$i_4$	$i_5$	$i_6$	$i_7$	$i_8$	$i_9$	$i_n$
$u_1$	$r_{1,1}$			$r_{1,4}$						
$u_2$		$r_{2,2}$						$r_{2,8}$		
$u_3$						$r_{3,6}$				
$u_4$				$r_{4,4}$						$r_{4,n}$
$u_5$			$r_{5,3}$				$r_{5,7}$			
$u_6$									$r_{6,9}$	
$u_m$			$r_{m,2}$							$r_{m,n}$

(a)

	$i_1$	$i_2$	$i_3$	$i_4$	$i_5$	$i_6$	$i_7$	$i_8$	$i_9$	$i_n$
$u_1$	$r_{1,1}$	0	$\hat{r}_{1,3}$	$r_{1,4}$	0	$\hat{r}_{1,6}$	0	$\hat{r}_{1,8}$	$\hat{r}_{1,9}$	0
$u_2$	0	$r_{2,2}$	0	$\hat{r}_{2,4}$	$\hat{r}_{2,5}$	0	$\hat{r}_{2,7}$	$r_{2,8}$	0	$\hat{r}_{2,n}$
$u_3$	$\hat{r}_{3,1}$	0	$\hat{r}_{3,3}$	$\hat{r}_{3,4}$	$\hat{r}_{3,5}$	$r_{3,6}$	0	$\hat{r}_{3,8}$	$\hat{r}_{3,9}$	0
$u_4$	$\hat{r}_{4,1}$	$\hat{r}_{4,2}$	0	$r_{4,4}$	$\hat{r}_{4,5}$	$\hat{r}_{4,6}$	$\hat{r}_{4,7}$	0	$\hat{r}_{4,9}$	$r_{4,n}$
$u_5$	$\hat{r}_{5,1}$	$\hat{r}_{5,2}$	$r_{5,3}$	0	$\hat{r}_{5,5}$	0	$r_{5,7}$	$\hat{r}_{5,8}$	$\hat{r}_{5,9}$	$\hat{r}_{5,n}$
$u_6$	$\hat{r}_{6,1}$	$\hat{r}_{6,2}$	0	$\hat{r}_{6,4}$	$\hat{r}_{6,5}$	$\hat{r}_{6,6}$	$\hat{r}_{6,7}$	0	$r_{6,9}$	$\hat{r}_{6,n}$
$u_m$	$\hat{r}_{m,1}$	0	$r_{m,2}$	$\hat{r}_{m,4}$	0	$\hat{r}_{m,6}$	0	$\hat{r}_{m,8}$	$\hat{r}_{m,9}$	$r_{m,n}$

(b)



# CUPIDE

- **Bilingual** plagiarism detection
- **Readability** analysis



HOME TOUR COLLABORATORS MEDIA PACKET ABOUT US CUPIDE@CUHK STUDENT-ORIENTED

## 剽檢通 CUPIDE

### Chinese University Plagiarism Identification Engine (CUPIDE)

- Promote and uphold academic honesty
- Support Traditional and Simplified Chinese
- Provide class management web interface
- Analyse electronic homework submissions
- Maintain homework database for institutions
- Support various common document formats
- Generate detailed originality reports
- Highlight suspected plagiarized content

### Technical Sponsorship

The CUPIDE team is pleased to provide technical sponsorship to not-for-profit organizations and events. Please contact us for further information.

### News and Events

- CUPIDE seminar to be held in October 16, 2006
- CUHK Students Swept Top Award in National Technological Competition (PDF)
- CUHK Students Bag Top Award in National Technological Competition (PDF)
- Mr. Mak Chi Chung and Mr. Chan Chi Chung won the champion in the IEEE (Hong Kong) Computational Intelligence Chapter Final Year Project Competition 2005 (PDF)
- 中大推功課原創聲明 開發軟件杜絕抄襲 (明報 14-8-2007) (PDF) | (原網址)
- 中大防抄襲系統全國賽奪獎 (香港經濟日報 12-1-2006) (PDF)
- 大学生创新项目告别纸上谈兵-点击五大名校'潜力股' (PDF)
- 第九屆挑戰杯揚威 (9th Challenge Cup) (PDF)
- 香港中文大學蟬聯第九屆「挑戰杯」港澳地區冠軍 (PDF)



# On-Going Research

- **Web Ranking/Classification Related**
  - MatchSim: **link-based** web page similarity measurements (WI'07)
  - Diffusion rank: Ranking web pages based on **heat diffusion** equations (SIGIR'07)
  - Web text classification (WWW'07)
- **Social Networks and Web/Opinion Mining**
  - Recommender system: accurate recommendation based on **sparse matrix** (SIGIR'07)
  - Feature-opinion association for sentiment analysis: “The quality is **low**” vs. “The noise level is **low**”
  - User credibility analysis: “**the enemy of my enemy is my friend!**” phenomena
  - Expert finding in **DBLP bibliography** database
- **Machine Learning**
  - Transductive Support Vector Machine (NIPS'07)
  - Global and local learning (ICML'04, JMLR'04)



# WWW2008

SWKM2008

## Social Web and Knowledge Management

### Social Web 2008 Workshop

Located at the 17th World Wide Web Conference [WWW2008](#)  
April 22nd, 2008 (Workshop day)  
Beijing, China

Supported by the EU projects [KIWI](#) and [Active](#)

[The session on Social Web Search and Mining of the Social Web Workshop can be found here](#)

<a href="#">Programme</a>	<a href="#">Topics</a>	<a href="#">Organisation committee</a>	<a href="#">Program committee</a>	<a href="#">Submission</a>	<a href="#">Important dates</a>
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### Objectives

The social web, the most interesting part of the Web 2.0, aims at bringing people together and facilitating richer interaction among them. It is characterized by a strong focus on communities where people share experiences, information and knowledge, meet and discuss, or do business together. The social web challenges will be studied in this workshop from two perspectives: knowledge management and social web search and mining.

Knowledge management systems focus on knowledge and experience sharing. They enhance organization capabilities by externalizing knowledge of its employees and combine them in novel forms. Therefore, there is a common interest in social structures as well as social computing in both fields. The social web can be the common underlying platform for novel and web-based knowledge management systems. It breaks up rigid processes and enables much richer interaction possibilities and creativity. In this workshop we will bring together people from the areas of social web technologies, semantic systems, and knowledge management. We would like to study synergies between social computing, social web, semantic systems, and knowledge management and provide a look at the current state of the art in the area.

This event is supported by the EU projects [ACTIVE](#) and [KIWI](#).

### Programme

To ensure a creative atmosphere during the workshop, the presenters will be selected based on their submitted papers and demonstrations. In order to obtain an intensive exchange of ideas between the participants, enough time for discussion will be ensured.

A programme will be published here upon notification of the authors and receiving the camera ready versions of the submissions.



## WWW2008 Workshop on Social Web Search and Mining (SWSM2008)

Beijing, China  
April 22th, 2008

[The session on Social Web and Knowledge Management of the Social Web Workshop can be found here](#)

### Objectives

### Invited Speaker

### Topics of Interests

### Important Dates NEW

### Submissions

### Workshop Chairs

### Program Committee

### Contact us

### Objectives

The workshop aims to discuss key issues of searching and mining a special kind of increasingly important sources: Social Web and Social Networks (SWN).

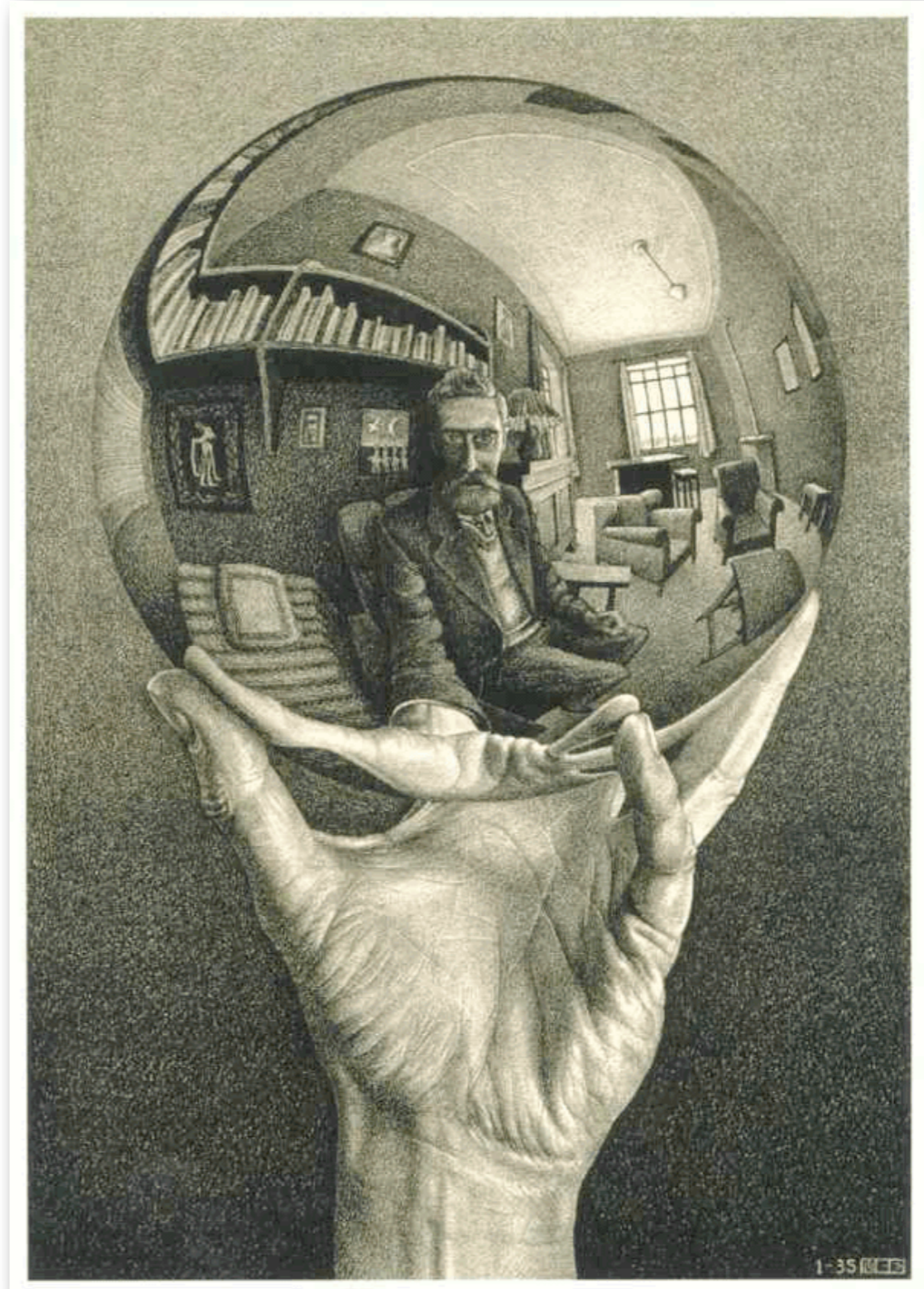
There are a growing number of highly-popular user-centric applications, especially with the popularity of the Web 2.0. Such examples include blogs, folksonomies, wikis and Web communities in specific topics such as in academic research area. They have formed a new Web, Social Web and further formed social networks. SWN generates a lot of structured and semi-structured information. This information greatly enlarges the content of Web. At the same time, it introduces many interesting research issues (e.g., social web storage, search and mining, social network building, expertise oriented search and association search in social networks) and as well many real-world applications (e.g. web community detection and search, hot-topic detection in a specific web community). These research issues have been receiving in the recent years growing attentions.

This workshop solicits contributions on SWN search and mining including Webbased and Semantic Web-based social applications, the emerging applications of the Web as a social medium such as its typical application in the academic area. Workshop Papers will elaborate related methods, issues associated to SWN extraction, storage, search, and mining.



# On the Horizon...

- **CLOUD** (broadband + wireless)
- **Web Services**
- **Monetization** of Social Interactions
- **Security & Privacy**



# Acknowledgments

- Prof. Michael R. Lyu
- Prof. Jimmy Lee
- Dr. Kaizhu Huang
- Dr. Haixuan Yang
- Patrick Lau (R.A. on CUPIDE)
- Thomas Chan (M.Phil)
- Hongbo Deng (Ph.D.)
- Zhenjiang Lin (Ph.D.)
- Hao Ma (Ph.D.)
- Haiqin Yang (Ph.D.)
- Wei Wei (Ph.D.)
- Zenglin Xu (Ph.D.)



# One More Thing...

"Don't worry about what anybody else is going to do... ***The best way to predict the future is to invent it.*** Really smart people with reasonable funding can do just about anything that doesn't violate too many of Newton's Laws!"

Alan Kay, 1971





# Q & A

<http://www.cse.cuhk.edu.hk/~king>



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