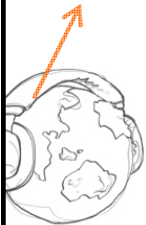


Next Generation Web Users

Darren Sharp – Swinburne University

AusWeb06: Special Interest Group Workshop

Wednesday 5 July 2006



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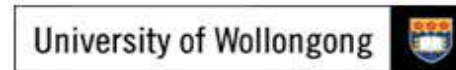
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Overview

- User Environments Program
- Smart Internet 2010
- Digital Lifestyles Monitor
 - Blogs, Wikis and Social Networks
 - Web 2.0
 - User-led Innovation
 - Understanding the "post-user"
 - Value Networks Map
 - Concluding Summary



User Environments Program

- The vision of this program is to ensure as far as possible that the new Internet products and services being developed work naturally and easily for the people using them.

Overall program objectives include:

- Methodologies and facilities for user-centric design, usability testing and evaluation.
- Analysis of the inhibitors and enablers leading to the emergence of a smart Internet.
- Analysis of end user capabilities for the next gen Internet.
- Develop methods, techniques and frameworks to enable assessment and prediction of user uptake.
- To construct a set of future alternative scenarios drawing upon technological, cultural and social perspectives.



Smart Internet 2010

- Co-authored by Barr, Burns and Sharp (2005).
- ***Smart Internet 2010*** offers an analysis of the way the Internet might evolve from the perspective of its end-users in the coming years.
- The prime research questions addressed were:
 - **What might the Internet be like in 2010?**
 - **What positions are taken by different people and institutional interests about the future of the Internet?**
 - **What are the possible outcomes for end-users towards 2010?**



Smart Internet 2010

- **Smart Internet 2010** explores future possibilities for Australia in Open Source and social network technologies, eHealth, digital games, voice applications and mobiles. It identifies possible outcomes that are relevant to innovation strategies and sectoral development.
- **Smart Internet 2010** also synthesises rich insights from local & overseas interviewees who are 'thought leaders' in their respective domains, and includes relevant coverage of global and industry trends.



Smart Internet 2010

- Officially launched by the Hon. Senator Helen Coonan, Minister for Communications, Information Technology and the Arts on 1st September 2005.
- 50,000 word report available at:

<http://www.smartinternet.com.au>



Digital Lifestyles Monitor

- This report provides analysis of contemporary digital lifestyles through investigation of social networks, blogs, wikis, p2p, games and 'remix culture'.
- It examines the significance of 'Web 2.0' related social tools by exploring the impact of RSS Feeds, podcasting, Web Services, social bookmarking and folksonomies in the context of broader trends in user-generated content.



Next Generation Web Users

- The digital services economy is experiencing a rapid period of transformation. The traditional broadcasting and publishing model of distributing professionally produced content to mass audiences is changing.
- No longer reliant on the narrow decisions of traditional gatekeepers—programmers, editors and advertisers—next generation Web users are firmly in the driver's seat.
- **This sophisticated demographic demand a media lifestyle that is personal, participatory and pull-driven.**



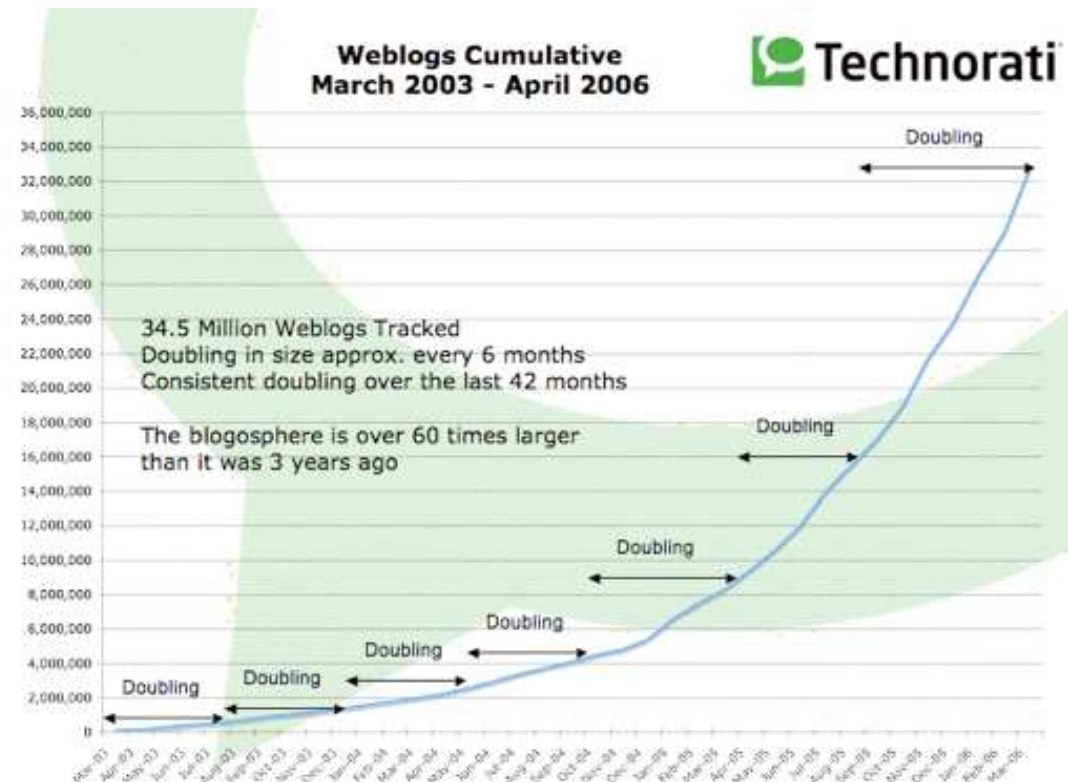
Blogs, Wikis and Social Networks

- A range of emerging Web innovations are empowering users to collaborate, share information and meet up offline to engage in **collective action**.
- Groupware such as online **social networking** applications, **blogs** (Web diaries) and **wikis** (group-edited Web pages) have attracted millions of global users leading to the emergence of novel services that enable **ongoing user participation**.



Blogosphere

- The blogosphere (collective blog ecosystem) continues to experience phenomenal growth with over **75,000 blogs created daily**.
- The blog search engine company Technorati is currently tracking over 46.8 million blogs in the United States market alone.
- A new blog is created every second of every day.



Wikipedia

- The collaborative knowledge platform Wikipedia recently celebrated the publication of its one millionth English-language article.
- Maintains a growing base of over 1.5 million registered users.
- “Open-edit” platform which enables any user to become a knowledge producer.



MySpace

- Social Networking service acquired in 2005 by Murdoch's News Corporation for US\$580 million.
- Over 78 million registered user accounts in May 2006.
- Adds 280,000 new users everyday.
- WIRED cover story quoting Murdoch: *"Technology is shifting power away from the editors, the publishers, the establishment, the media elite. Now it's the people who are taking control."*



Real-time Social Infrastructure

- The active knowledge transfer taking place over the Web catalysed the foundation of a new type of **real-time social infrastructure**.
- Early adopters have begun a move away from traditional media to rely on trusted sources in their network of friends, family and peers for reviews, feedback, and advice about the latest product, service, or political party.
- Amazon, Whirlpool, PhoneChoice, InfoChoice, MoveOn, Meetup.



Web 2.0

- The Web is moving into a more mature phase of development commentators have dubbed **Web 2.0**
- From 2004 a number of converging trends began to reach a tipping point:
 - Mainstreaming of blogs, wikis, RSS feeds & APIs;
 - Growing ubiquity of hardware like digital cameras, mp3 players (iPod) and camera-enabled mobile phones;
 - increased bandwidth, memory and storage capacities;
 - and the widespread take-up of broadband.
- Driving these changes are the increasing numbers of users committed to participating in the collaborative production of the content they consume.



Defining Web 2.0

- The Web as Platform
- You control your own data
- Services, not packaged software
- Architecture of Participation
- Cost-effective scalability
- Remixable data
- Software above the level of a single device
- Harnessing collective intelligence



O'Reilly, Tim (2005). 'What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software'. O'Reilly Media.

Web 2.0 Taxonomy

- Web Services
- Mashups
- Tag-based Folksonomies
- User-generated Content
- RSS
- Social Bookmarks
- AJAX
- The Long Tail



The Do-It-Yourself (DIY) Internet

- A range of simple Do-It-Yourself (DIY) media technologies have given any user with access the ability to become a producer in a variety of social fields.
- This has spawned an entirely new understanding of authorship and content production in video (YouTube), games (player-producers), journalism (blogs), radio (podcasting), and knowledge production (Wikipedia).



BUSINESS 2.0

50 WHO MATTER NOW

Rank	Name	Company
1	You!	The consumer as creator
2	Sergey Brin and Larry Page	Co-founders, Google
3	Paul Jacobs	CEO, Qualcomm
4	Rupert Murdoch	CEO, News Corp.
5	Steve Jobs	CEO, Apple Computer
6	Susan Desmond-Hellmann	President of product development, Genentech
7	The Emerging Global Middle Class	China, India, Russia, Brazil, and elsewhere
8	Fujio Cho	Chairman, Toyota
9	The New Oil Despots	King Abdullah bin Abdul aziz al Saud (Saudi Arabia), Mahmoud Ahmadinejad (Iran), Hugo Chavez (Venezuela), and Vladimir Putin (Russia)
10	Ray Ozzie	Chief technical officer, Microsoft
11	Marc Benioff	CEO, Salesforce.com
12	Robert Iger	CEO, Walt Disney Co.
13	Stewart Butterfield and Caterina Fake	Co-founders, Flickr

Teen Content Creators

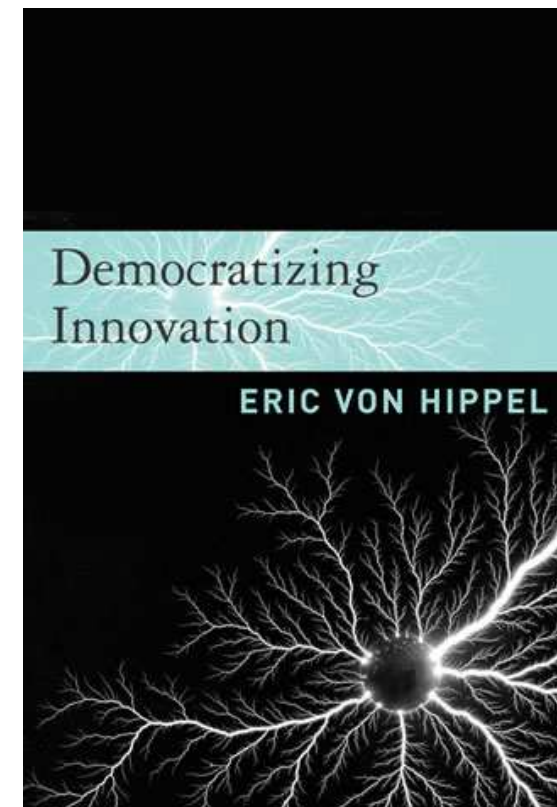
- “Some **57% of online teens** create content for the Internet. That amounts to half of all teens ages 12-17, or about **12 million youth**. These Content Creators report having done one or more of the following activities: create a blog; create or work on a personal webpage; create or work on a webpage for school, a friend, or an organization; share original content such as artwork, photos, stories, or videos online; or remix content found online into a new creation.”

Lenhart, Amanda & Madden, Mary (2005). 'Teen content creators and consumers'. *Pew Internet and American Life Project*.
http://www.pewinternet.org/pdfs/PIP_Teens_Content_Creation.pdf



User-led Innovation

- Von Hippel (2005) has explored these practices through the notion of 'user-led innovation communities'.
- Benkler (2006) through his concept of 'commons-based peer production' in digitally networked environments.
- Leadbeater and Miller's (2004) study on 'Pro-Ams': "innovative, committed and networked amateurs working to professional standards".



The Pull Economy

- Microcontent
 - RSS feeds, smarter search technologies, content aggregation and folksonomies are radically transforming the media/entertainment territory.
- Micromarkets
 - The emerging digital services economy is characterised by an infinite variety of virtual shelf space which leading Internet companies like Amazon, Google, iTunes and eBay have leveraged to create micro-markets in advertising, books, collectibles, mp3 downloads, CDs and DVDs.
- Social Networks
 - Networked consumers have become empowered by leveraging their community of peers. Traditional information asymmetries have been subverted as more consumers turn to sites like Tripadvisor, Epinions, and kulist to compare companies' offerings and deconstruct their brand speak.



The Battle for Attention

- Traditional media proprietors face intense competition from a range of new media platforms in the battle to win the attention of the global Web community.
- Audience fragmentation is occurring at a rapid pace.
- Blogs, podcasts, videos and digital games continue to build audience/contributors in the millions.
- Major changes to the way users find, consume and relate to the media choices available.

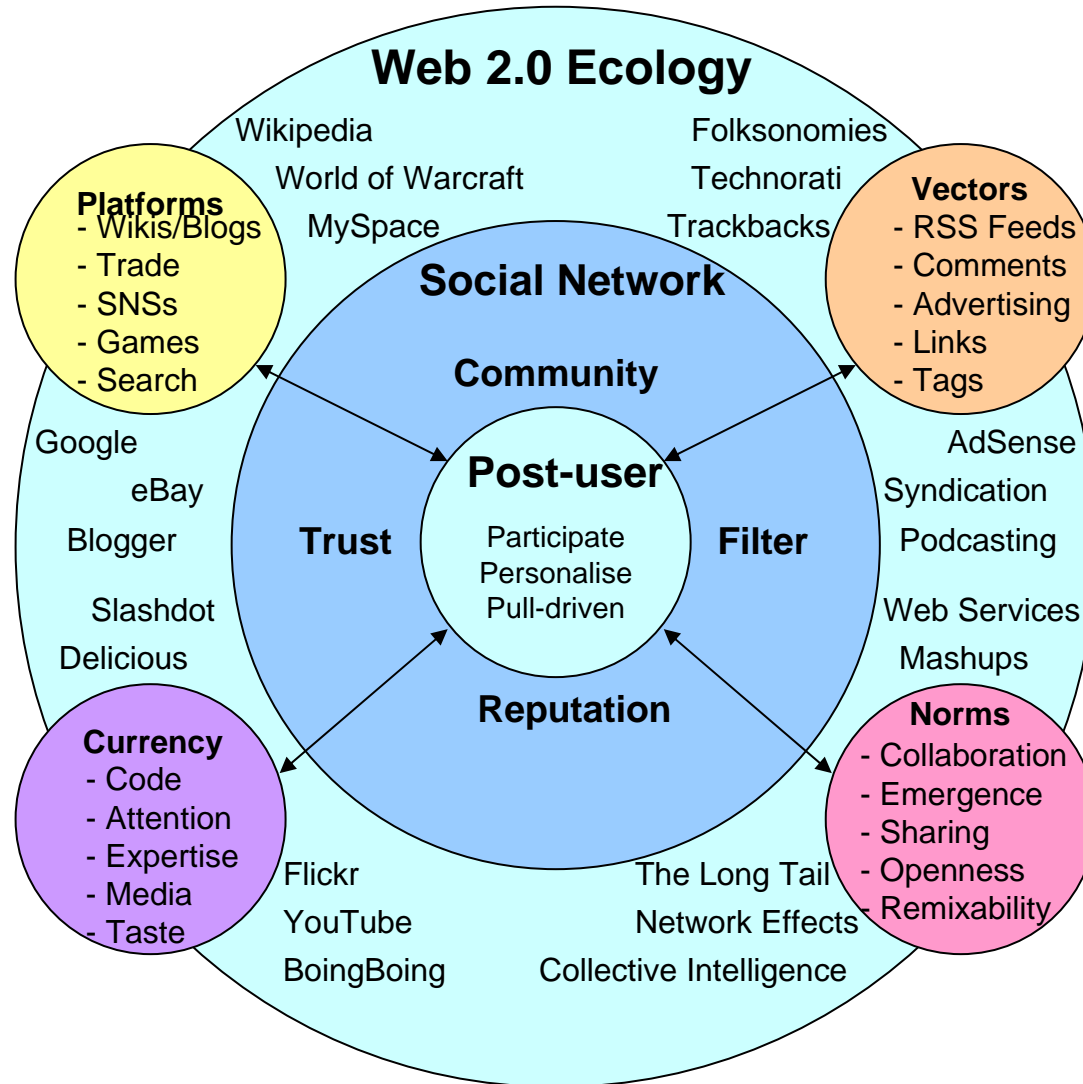


Understanding the "post-user"

- Futurist Alvin Toffler in his book *The Third Wave* coined the term 'prosumer' to denote a coming shift from passive to active consumption as mass production makes way for an era of mass customisation.
- The term "post-user" seems more appropriate given the complexity of today's innovation beyond mere customisation, and the abundant nature of knowledge-based goods and services.



Value Networks Map



Concluding Summary

- Exciting time to examine the social dynamics of network-enabled collaboration.
- New social practices and Web technologies co-evolve within much larger global system.
- Web users play a central role in:
 - adapting technology to meet social needs,
 - diffusing practices, norms and values through social networks.
- Web 2.0 technologists, designers and engineers have succeeded by welcoming users in as co-creators of the sociotechnical systems under development.



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