

NPUC 2006

Power to the users: the new web



New Paradigms for Using Computers Workshop

July 24, 2006



IBM Almaden Research Center

NPUC 2006

Power to the users: the new web



Welcome to the 14th annual NPUC

July 24, 2006

We're glad you've decided to join us this year. In response to feedback from previous years, we've increased the time for socializing and interaction. We hope you'll find many opportunities to participate, and that you'll have an intellectually stimulating and exciting day.

This year's workshop explores a fundamental shift in authoring on the web. A decade ago, the web was considered to be a broadcast medium. Now, ordinary people are adding their voice to the web via wikis, blogs, podcasts, tagging, photo sharing, and other user-driven services. As more traditional office applications such as spreadsheets are delivered via a web browser, we expect this trend to continue. In addition, the underlying theme of social networking is tying people together and changing the way we collaborate in fundamental ways. We characterize these trends as bringing power to the users.

In planning this workshop, we posed a number of questions:

- What are the cultural implications as more and more people publish? Is there a limit to how many people will publish?
- What will the web look like five years from now? What tools will we need then?
- How will wide deployment of these new technologies affect accessibility and reusability of content?
- What impact will these technologies have on the information economy? Who are the winners and losers?
- Is it inevitable that desktop software will be replaced by web applications?

We have a great lineup of speakers to give us new perspectives on these questions. We hope you'll add your voice to the discussion, in the spirit of this year's topic.

Thank you for coming, and enjoy the day.

Steve Cousins and Tessa Lau, NPUC 2006 Co-chairs

NPUC 2006

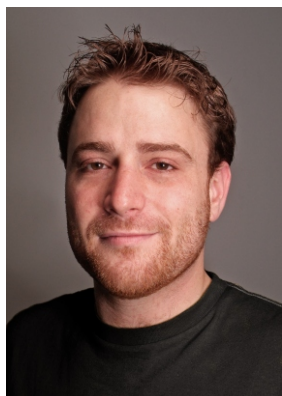
Power to the users: the new web



Agenda

July 24, 2006

8:00	Registration	Lobby
8:00	Continental Breakfast	Servery
9:00	Introduction	AUD A
	Steve Cousins, NPUC Co-Chair	
	Tessa Lau, NPUC Co-Chair	
9:15	Stewart Butterfield	AUD A
	<i>"Flickr and the User"</i>	
10:15	Break	Servery
10:45	Ross Mayfield	AUD A
	<i>"New Paradigms in Social Computing"</i>	
11:45	Lunch	J2-109 served/ Patio/East Bay
12:30	Posters/Dessert	Servery
1:15	Rob Miller	AUD A
	<i>"Automation and Customization of the Rendered Web Pages"</i>	
2:15	Break	Servery
2:30	Sam Ruby	AUD A
	<i>"Teenagers on the Go"</i>	
3:30	Break	Servery
3:45	Tom Gruber	AUD A
	<i>"The Travesty of the Commons?"</i>	
4:45	Wrap Up	AUD A
	<i>"Moderated by Ted Selker, NPUC founder"</i>	
5:30	Wine Reception	Lab Director's Patio



Stewart Butterfield

*Director of Product Management
Yahoo*

"Flickr and the User"

Flickr is almost certainly the best online photo management and sharing application in the world. Flickr has two main goals: to help people make their photos available to the people who matter to them; and, to enable new ways of organizing photos.

Flickr gets photos into and out of the system in many ways: from the web, from mobile devices, from the users' home computers and from various software used in managing photos. And, Flickr pushes out the photos in numerous ways: on the Flickr website, in RSS feeds, by email, and by posting to outside blogs.

Organizing digital photos can be overwhelming. It is no longer feasible to store photos in antiquated albums. Flickr attempts to make the process of organizing photos collaborative. In Flickr you can give your friends, family, and other contacts permission to organize your photos by adding comments, notes and tags while they review the photos over the internet.

Flickr is continuing to evolve in myriad ways, all of which are designed to make it easier and better.

Biography

Stewart Butterfield is the co-founder of Flickr and was CEO of Ludicorp, its parent company, before its acquisition by Yahoo! in the spring of 2005. He currently oversees the development of Flickr.com as Director of Product Management at Yahoo! With over a decade of web design and development, he has had a distinguished career as a designer, entrepreneur, and technologist.

He has been honored with various awards including being named one of the 100 Most Influential People in the World by Time Magazine in 2006, BusinessWeek's Top 50 Leaders for 2005, Technology Review's "TR 35" award for technology innovators under 35, also in 2005.

Butterfield studied philosophy at the University of Victoria and graduated with honours from the University of Cambridge with a Masters in Philosophy.



Ross Mayfield

SocialText

"New Paradigms in Social Computing"

Socialtext's web-based platform takes a bottom-up approach that empowers people to develop their own solutions while working openly. Based on open source architecture, Socialtext combines the best of wikis and weblogs. That means the tools work the way people do: people can form groups flexibly and build structure on the fly without design or coding skills. Anyone can edit pages, categories, documents and organization. "Simple tools with simple rules yield the best results."

Biography

Ross Mayfield is a serial entrepreneur with over 10 years of startup executive management experience and a focus on helping people and companies communicate effectively.

Most recently, Mayfield served as VP of Marketing for a Fujitsu spinout developing enterprise software for the telecommunications industry and as Interim VP of Marketing for an Immersive Group Simulation provider to military and homeland defense markets. Previously he was CEO of an enterprise risk management software company.

Mayfield co-founded and served as President of RateXchange (AMEX:RTX), the leading B2B commodity exchange for telecom. RateXchange reached \$1 billion market capitalization, raised over \$45 million in equity and debt and generated a thousand-fold return on investment for initial shareholders. His management of marketing led to majority market share, perceived leadership in its market category and recognition by Forbes as "The Best of the Web."

Mayfield served as the Marketing Director of the largest privately held telecommunications group in Eastern Europe and was the internal lead manager of their Initial Public Offering. He also founded an ISP, a web-design company and has served on a number of Advisory Boards of high tech startups.

Mayfield is a former advisor to the Office of the President of Estonia and began his career in the non-profit sector. He holds a BA in Political Science from the University of California at Los Angeles and completed the Management Development for Entrepreneurs (MDE) program of the Anderson School of Business.



Rob Miller

*Massachusetts Institute of Technology
EECS, MA*

*"Automation and Customization of the
Rendered Web Pages"*

On the desktop, an application can expect to control its user interface down to the last pixel, but on the World Wide Web, a content provider has no control over how the client will view the page, once delivered to the browser. This creates an opportunity for end-users who want to automate and customize their web experiences, but the growing complexity of web pages and standards prevents most users from realizing this opportunity. This talk will describe Chickenfoot, a programming system embedded in the Firefox web browser that enables end-users to automate, customize, and mash up web applications without examining their source code. One way Chickenfoot addresses this goal is a novel technique for identifying page components by keyword pattern matching. We have recently extended this technique to use keywords to describe whole script commands, such as "click search button" or "choose 300GB hard drive". A user study revealed that end-users could use these keyword commands to successfully automate 90% of the web browsing tasks in our study without instructions or training. The future Web will see end-users asserting more and more control over the presentation, behavior, and content of the sites they use. Some sites will embrace this trend and see great things done with their data; others will fight it and lose mindshare.

Biography

Rob Miller is an associate professor in the MIT EECS department and a member of the MIT Computer Science and Artificial Intelligence Laboratory. He earned his Ph.D. in Computer Science from Carnegie Mellon University (2002), and B.S. and M.Eng. degrees in EECS from MIT (1995). His research interests span human-computer interaction, user interfaces, software engineering, and artificial intelligence, with a current focus on end-user programming for the Web.



Sam Ruby

IBM, Senior Technical Staff Member, N.C.

"Teenagers on the Go"

I've hosted one of the most public wikis for over three years now. I've had a semi-popular (say Technorati 1000ish) blog for over four. I've talked at conferences about the social differences between mailing lists, blogs, and wikis. But I'm also the father of two teenagers, and if they are any indication, the web is only one small portion of their online activity. This presentation attempts to put the web in perspective.

Biography

Sam Ruby is a prominent software developer who has made significant contributions to the many of the Apache Software Foundation's open source projects, and to the standardization of web feeds via his involvement with the Atom web feed standard and the popular Feed Validator web service. He currently holds a Senior Technical Staff Member position in the Emerging Technologies Group of IBM. He resides in Raleigh, North Carolina.



Tom Gruber

Need univ/com?

"The Travesty of the Commons?"

In the "people-powered web"

- everyone has a voice
- every voice can be heard by all
- the collective chorus brings joy and enlightenment
- or chaos and Babylon.

Will it be the wisdom of crowds or the travesty of the commons? It depends. The value of user-contributed content depends on the *design* of the space for social interaction, with its own set of design questions. What kinds of people should be attracted to contribute to a site, and what other kinds might learn from it? How are people motivated to contribute? How does meeting the needs of contributors, such as recognition or connection, produce behaviors that drive the growth of content that is useful to the learners? In a world of high diversity (in taste, opinion, and desire), how is the "usefulness" of content or contributors computed from "user ratings"? How can information be structured so that the aggregation of individual contributions leads to an emergent value for the collection? How can people be guided to structure or label their contributions to create increasing returns of value? How are conversations moderated, and content reviewed, so that the system is robust against abuse? And who (or what) gets to determine which subset of user-contributed content is actually exposed via search engines to the rest of the Internet? These are the questions we will pose, with examples, and discuss.

Biography

Tom Gruber is a researcher, inventor, and entrepreneur with a focus on systems for knowledge sharing, collaboration, and collective intelligence. Stanford University, he did foundational work in ontology engineering, and is well known for his definition of ontologies in the context of Artificial Intelligence. The approaches and technologies from this work are precursors to the infrastructure for today's Semantic Web. He invented HyperMail, a widely-used open source application that turns email conversations into collective memories, which chronicled many of the early discussions that helped define the Web. In 1995, Tom founded Intraspect, an enterprise software company that pioneered the space of collaborative knowledge management. Intraspect applications help professional people collaborate in large distributed communities, continuously contributing to a collective body of knowledge. His current project is RealTravel.com, which aspires to be the best place on the web to share knowledge and experiences about travel. RealTravel provides an environment for a community of travel enthusiasts to create beautiful travel journals of their adventures, share them with friends and family, and learn from other like-minded travelers.

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