



CHAPTER 1

Foreword

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eb 2.0' is a marketing term," remarked Google CEO Eric Schmidt. And, of course, he was right. After some years in the wilderness, Silicon Valley has recovered its confidence and cash flow—and with them its capacity for overstatement. "Web 2.0" and its variants ("Enterprise 2.0", "Mobile 2.0" etc.) have become labels of choice for thousands of global startups.

But acknowledging that the term is overhyped doesn't mean that it's meaningless. Interesting Web businesses today contrast quite sharply with those of the dot-com era. With a few exceptions, the dot-coms were about *distribution*: using the low cost and ubiquity of the Web to deliver products, or information about products, through a radically efficient new channel. With a few exceptions, the interesting business now are about production, specifically the distributed *production*, reuse, and recombination of content, chiefly by consumers. Thus *Britannica Online* was Web 1.0; Wikipedia is Web 2.0. Pointcast, 1.0; podcasting, 2.0.

Why is this new? Because technology now makes it easy. Any network adapts to its binding constraints. Ten years ago, processing power and storage were a hundred times less efficient, broadband a rarity, and programming web sites was difficult and expensive. The web therefore evolved as a library of static, professionally-created resources ("pages") downloaded by consumers from corporate servers.

But today's PC has the power of yesterday's server, broadband is increasingly the norm, and new programming approaches (such as Perl and Ruby) maximize ease of coding instead of computational efficiency. Anybody can be a Webmaster. A more symmetrical, peer-to-peer architecture enables more symmetrical peer-to-peer behavior. Higher bandwidth and processing power allow richer content; not just photos and video, but also the rich interactivity of dynamic HTML and JavaScript: static pages evolve into interactive applications remotely delivered: the Web as *noun* becomes the Web as *verb*.

While technology makes this symmetrical, peer-to-peer behavior possible, it is human nature with its rules and norms that are making it valuable and productive. Those rules and norms define key principles of "Web 2.0": *modular architecture* and *community*.

Notes

The architecture of Web 2.0 is “small pieces loosely joined”, as David Weinberger famously described it: modular information services that do just one thing well, but can be combined with others to create richer content. Google Maps and YouTube, for example, publish APIs (application programming interfaces) that allow any web page to download a customized map or video and embed it in other content. Because of this modularity and openness, the programming is trivial, the price zero, and no coordination is needed. About 500 published APIs thus make possible a quarter-of-a-million combinations, each the germ of a business that can be created at negligible cost. And 2,400 of these so-called “mashup” businesses have already appeared. As of this writing, there are forty-eight mashups of Google Maps with You Tube alone.

“Community” has three crucial elements. The first is significant sharing of intellectual property: the vast bulk of content posted on Web 2.0 sites is put into the public domain or published under generous licenses allowing sharing and reuse. Second, contributors are motivated by a range of intrinsic and extrinsic motivations: fun, applause, making friends, skill-building, self-advertisement, or commerce. While traditional economic motivations are present, they do not necessarily dominate. And third, trust is often based on reputation, using simple technologies to allow people or products to be rated by everyone. This serves both as a guide to navigation (as in RateMyProfessors.com or DontDateHimGirl.com), and as a guarantee of good behavior (as in eBay, where the value of preserving one’s reputation is generally greater than the profit from reneging on a transaction). Sharing, non-economic motivations, and reputational trust are mutually reinforcing.

The intersections of these developments in technology, architecture, and community are at the heart of Web 2.0. And the results are already spectacular. More than 220 million members of eBay trading over \$50 billion per year. One thousand people writing the 30 million lines of Linux code, competing with Microsoft’s \$10 billion investment in Windows Vista. Two hundred million people creating and consuming MySpace—which for American teens, commands more of their collective attention than television. Nearly 10 million “avatars”—alter egos created by members to represent them—building the metaverse of *Second Life*, a virtual world whose commercial construction would cost more than Hollywood’s most ambitious movie. One hundred thousand writing the five million pages of Wikipedia, and rivaling *Encyclopædia Britannica* in a blind test of quality.

Huge swaths of Web 2.0 are not businesses at all, and will never be “monetized.” Much of the content is amateur, vapid, and boring. Some of it is of questionable legality. But the implications for conventional businesses are nonetheless enormous. In a few cases (e.g. MySpace, You Tube, Google) huge shareholder value has been created. For some conventional businesses (e.g. media, *software*) Web 2.0 is a seriously disruptive technology. Every business with Web presence needs to rethink how to present itself in an era where Google is its “portal.” For advertisers Web 2.0 is a new way to reach consumers and a way the consumers will influence each other whether the advertiser likes it or not. Some companies are building community sites for their customers, or distributors, or suppliers. Others are building presence in the community sites that their customers already frequent. Some companies have adopted Web 2.0 principles as a means of outsourcing innovation. Others are experimenting internally with those principles as a new means of organizing work, especially knowledge-intensive activities that benefit from sharing best-practice. The energy is extraordinary. And the phenomenon only a couple of years old. The 2007 Future Trends Forum was focused on Web 2.0. The energy of the Forum was also extraordinary, as the following pages will show.

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