Web 2.0

- Definition of Web 2.0
- Details of Web 2.0
- Web 3.0
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. - Tim O'Reilly
Strategic Positioning:
- The Web as Platform

User Positioning:
- You control your own data

Core Competencies:
- Services, not packaged software
- Architecture of Participation
- Cost-effective scalability
- Remixable data source and data transformations
- Software above the level of a single device
- Harnessing collective intelligence
What the hell ...

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Major advances in applications occur when developers embrace a new platform

- Mainframes
- Desktop PCs
- Client-Server
- Web 1.0: N-tier Architecture
- Web 2.0: Web Services and Service Oriented Architecture (SOA)

Building applications and services around the unique features of the Internet, as opposed to building applications and expecting the Internet to suit as a platform
Web 1.0: Web Server and PC-based Browser

Mobile devices
- iPod / iTunes
- Next Generation mobile phone networks
- Loopt

Home Entertainment
- DVR (TiVo/Yahoo)
- Game consoles (Xbox / Xbox Live)
End of the Software Release Cycle
- The Perpetual Beta
- Releases occur daily or even hourly
- Users as co-developers
- Real-time monitoring of user behavior
- Operations as a core competency
- Operational competence must match software development competence
- Software will cease to perform unless it is maintained every day
- Deliver both a UI (Browser) and API (Web Services)
• Users add value
  • Software / Features (previous slide)
  • Data
    • Explicit contributions
      • Wikipedia, Digg improve as people contribute articles
    • Implicit contributions
      • File sharing, browsing, bookmarking, ...
  • Resources
    • BitTorrent download speed improves as more people connect
... consuming and remixing data from multiple sources...

- Data is the next Intel Inside
  - Every significant internet application is data driven
    - Google, Yahoo!, Ebay, Amazon
  - The race is on to own certain classes of core data:
    - identity, location, calendaring, product, ...
- The value of the software is proportional to the scale and dynamism of the data it helps to manage
- Web Services and Mashups
  - Creating new applications (and data) by mixing existing data
  - Google Maps + [Traffic, Weather, Real Estate Values,.....]
- Blogs
- Wikis
- Social Networking Sites
  - Myspace
  - YouTube
  - Flickr
- Syndication
  - RSS / Atom Feeds
  - Permalinks
“Architecture of Participation”...

- Network Effects
  - Value of good/service increases as the number of people using it increases

- The Architecture of Participation
  - Only a small number of users will explicitly add value
  - Set inclusive defaults for aggregating user data and building value as a side-effect of ordinary use
  - Example: Napster and other P2P File Sharing services
- **Web 1.0**
  - Page-based UI
  - Initially static, then dynamic “pages”
- **Rich Internet Applications (RIA)**
  - Desktop application UI with network-based data and services
  - Built using modern technologies
  - AJAX (Asynchronous Javascript and XML)
  - Adobe Flash and Flex
  - WPF (Windows Presentation Framework)
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People keep asking what Web 3.0 is. I think maybe when you've got an overlay of scalable vector graphics - everything rippling and folding and looking misty - on Web 2.0 and access to a semantic Web integrated across a huge space of data, you'll have access to an unbelievable data resource.” - Tim Berners-Lee
References

- O'Reilly -- What Is Web 2.0

- Wikipedia
  http://en.wikipedia.org/wiki/Web_2

- Dion Hinchcliffe's Web 2.0 Blog
  http://www.web2.wsj2.com/

- The Cornucopia of the Commons
  http://www.bricklin.com/cornucopia.htm