Web 2.0 – anything new?

Olle Olsson
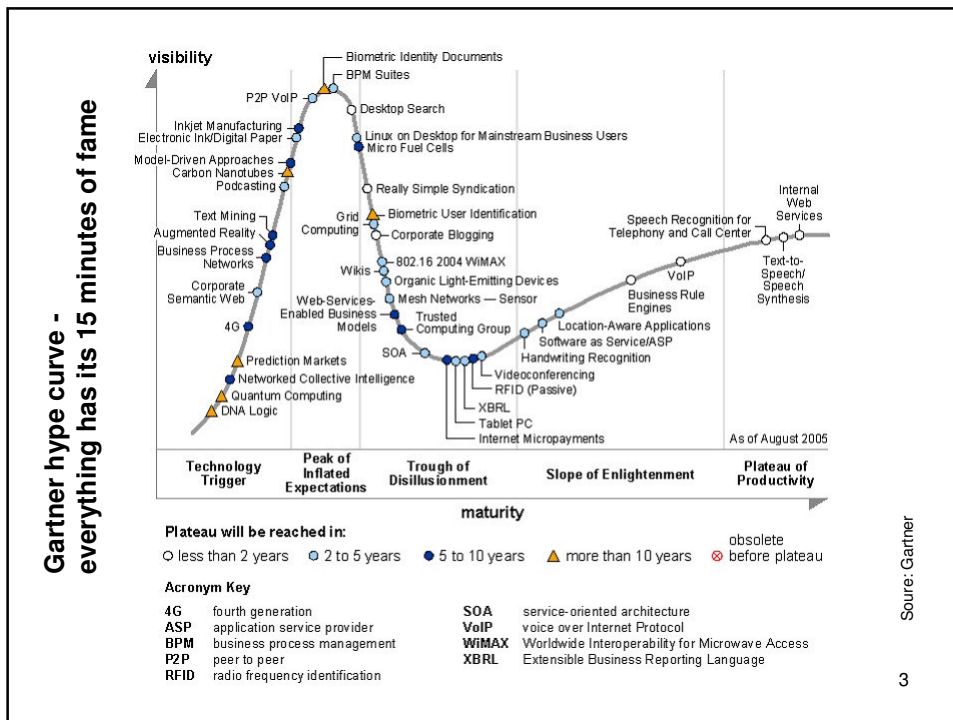
SWEDISH INSTITUTE OF COMPUTER SCIENCE · SICS

W3C WORLD WIDE WEB consortium
Svenska W3C kontoret

1

Hype?

- ”Hyperbole”
  - ”Exageration”, ”overstatement”
- Hot air and handwaving?
- Taken on-board by media and publicity departments
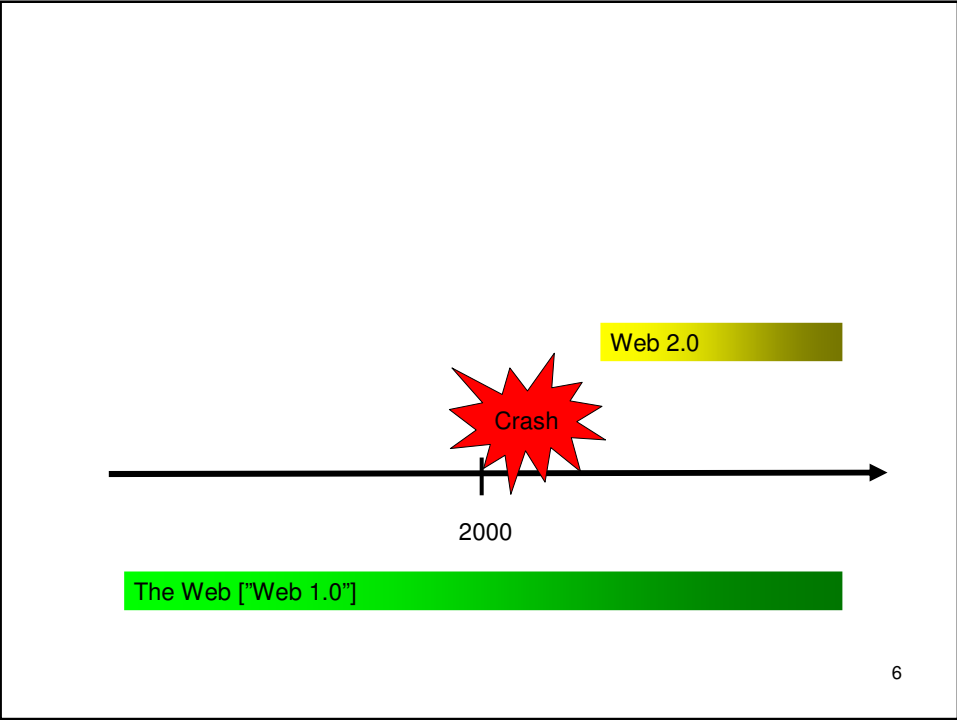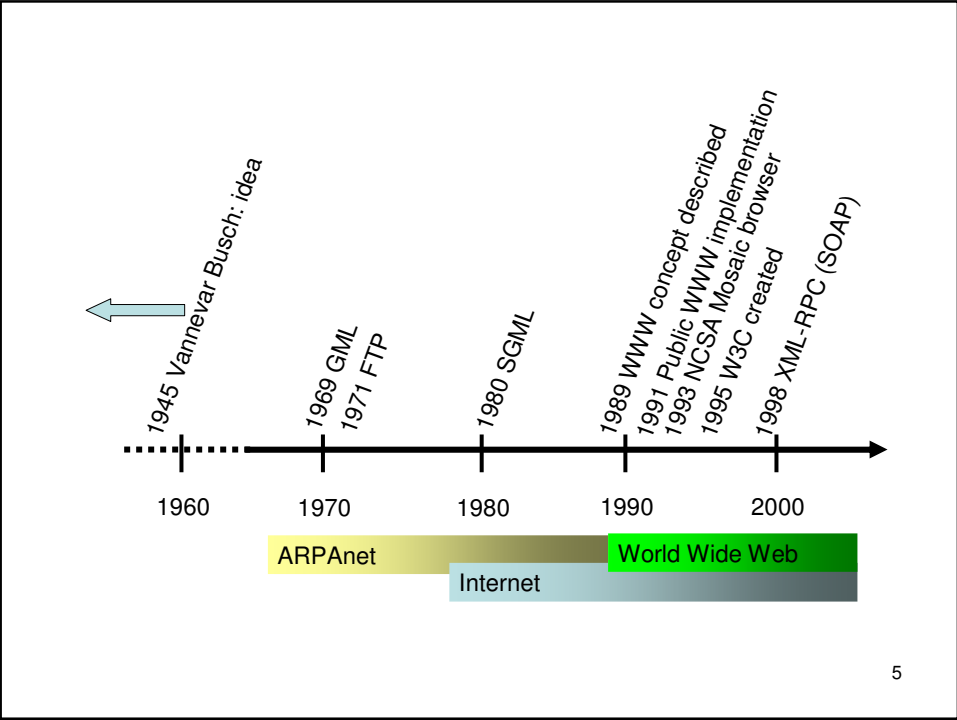- Influences mental image of what is important
- Should not be ignored

2

1

Gartner hype curve - everything has its 15 minutes of fame

visibility

Biometric Identity Documents
BPM Suites
P2P VoIP
Desktop Search
Inkjet Manufacturing
Electronic Ink/Digital Paper
Linux on Desktop for Mainstream Business Users
Micro Fuel Cells
Model-Driven Approaches
Carbon Nanotubes
Podcasting
Really Simple Syndication

Internal Web Services

Text Mining
Grid Computing
Biometric User Identification
Speech Recognition for Telephony and Call Center
Augmented Reality
Corporate Blogging
Business Process Networks
Wikis
802.16 2004 WiMAX
Organic Light-Emitting Devices
VoIP
Text-to-Speech/Speech Synthesis
Corporate Semantic Web
Web-Services-Enabled Business Models
Mesh Networks — Sensor
Business Rule Engines
4G
Trusted Computing Group
Location-Aware Applications
Software as Service/ASP
Prediction Markets
SOA
Handwriting Recognition
Networked Collective Intelligence
Videoconferencing
Quantum Computing
RFID (Passive)
DNA Logic
XBRL
Tablet PC
Internet Micropayments

As of August 2005

| Technology Trigger | Peak of Inflated Expectations | Trough of Disillusionment | Slope of Enlightenment | Plateau of Productivity |

maturity

Soure: Gartner

Plateau will be reached in:
○ less than 2 years　◐ 2 to 5 years　● 5 to 10 years　▲ more than 10 years　obsolete ⊗ before plateau

Acronym Key

4G	fourth generation	SOA	service-oriented architecture
ASP	application service provider	VoIP	voice over Internet Protocol
BPM	business process management	WiMAX	Worldwide Interoperability for Microwave Access
P2P	peer to peer	XBRL	Extensible Business Reporting Language
RFID	radio frequency identification		

3

A new web?

- The old web – "Web 1.0"
  – Publishing framework
  – Publisher driven
- Web 2.0
  – Interaction space
  – Community driven

4

1945 Vannevar Busch: idea
1969 GML
1971 FTP
1980 SGML
1989 WWW concept described
1991 Public WWW implementation
1993 NCSA Mosaic browser
1995 W3C created
1998 XML-RPC (SOAP)

1960   1970   1980   1990   2000

ARPAnet
Internet
World Wide Web

5

Web 2.0

Crash

2000

The Web ["Web 1.0"]

6

What perspectives?

- Technology?
- Applications?
- Business models?
- Or something about the user?

7

Drivers in the field

- Have:
  - Infrastructure in place – the net
  - Mature/stable technology – standards and tools
- See:
  - Innovation at the service level
  - New actors on the scene
  - New business models
  - Evolution at a rapid pace

8

User – experience

- Rich user experience
  - Making web interaction feel like desktop interaction
    - Downplay link clicking
    - UI effects in-place
- Attractive content and services
  - New kinds of contents/services
  - Natural to be a contributor

9

User – role

- Web 1.0:
  - Users as consumers of published content
- Web 2.0:
  - Users are publishers: blogs, ...
  - Users are direct contributors: commenting on blogs, ...
  - Users are indirect contributors: google, tagging frameworks

10

Where is the value?

- The services you offer
- The data you have
- The users that are *your* users

- Clayton M. Christensen:
  - "the conservation of attractive profits"
  - When some technology gets commoditized, profits move elsewhere in the value chain

11

Value-adding

- Services:
  - Extend some available web functionality by something useful
  - Combine some available web functionalities into something useful
- Content:
  - Extend existing data w. something you have
  - Combine existing data
  - Make your users contribute

12

Business models

- Pay for software vs pay per use
- Advertising-supported
  - google
- Making value of user contributions
  - amazon

13

Threats

- Software industry
  - "Software as a product" vs "software as a service"
- Content industry
  - Self-publishing: blogs
  - Collaborative publishing: wikipedia
  - User contributions: Amazon

14

Technology management

- Traditional:
  - Requirements, design, construct, validate, release + acquire, configure, deploy – cycle of years
- New – "constant beta"
  - Develop, deploy, monitor – cycle of days or weeks

15

Enabling technologies

- AJAX
  - "Asynchronous JavaScript and XML"
  - XHTML, CSS, JavaScript, XMLHttpRequest

- W3C
  - *Rich Web Client Activity*: Web Application Formats WG, Compound Document Formats WG

16

Other technologies/1

- "RSS" – "syndication"
  - Distribution of news about something
  - RSS 0.91, ..., RSS 1.0,, RSS 2.0, Atom
  - Pull and push
- Blogging software
  - webb-based: PITAS, WEBCRIMSON, ...
  - intallable: Userland, MovableType, ...

17

Other Technologies/2

- Tagging platforms:
  - del.icio.us, de.lirio.us, Technorati, Flickr (photos), ...

- Social networking
  - Socialtext, Friendster, Orkut, …

18

Summary – Web 2.0

- Basic technology – nothing new
- Biting into the application software sector
  - "Office on the web"
- Attractive new kinds of services
- Users contribute to value
- New business models

- ... "stay tuned"

19