Web 2.0

http://www.oreillynet.com/lpt/a/6228

Dot-com Bust

- Fall 2001
- Party is over
  - Job market crashed
  - CS enrollment down 40%
  - No more instant wealthy techies

But

- Web more important then ever
- Exciting apps & sites
  - housing maps
  - Wikipedia
  - flickr, mappr, YouTube
  - 37signals

Bubbles and Shakeouts

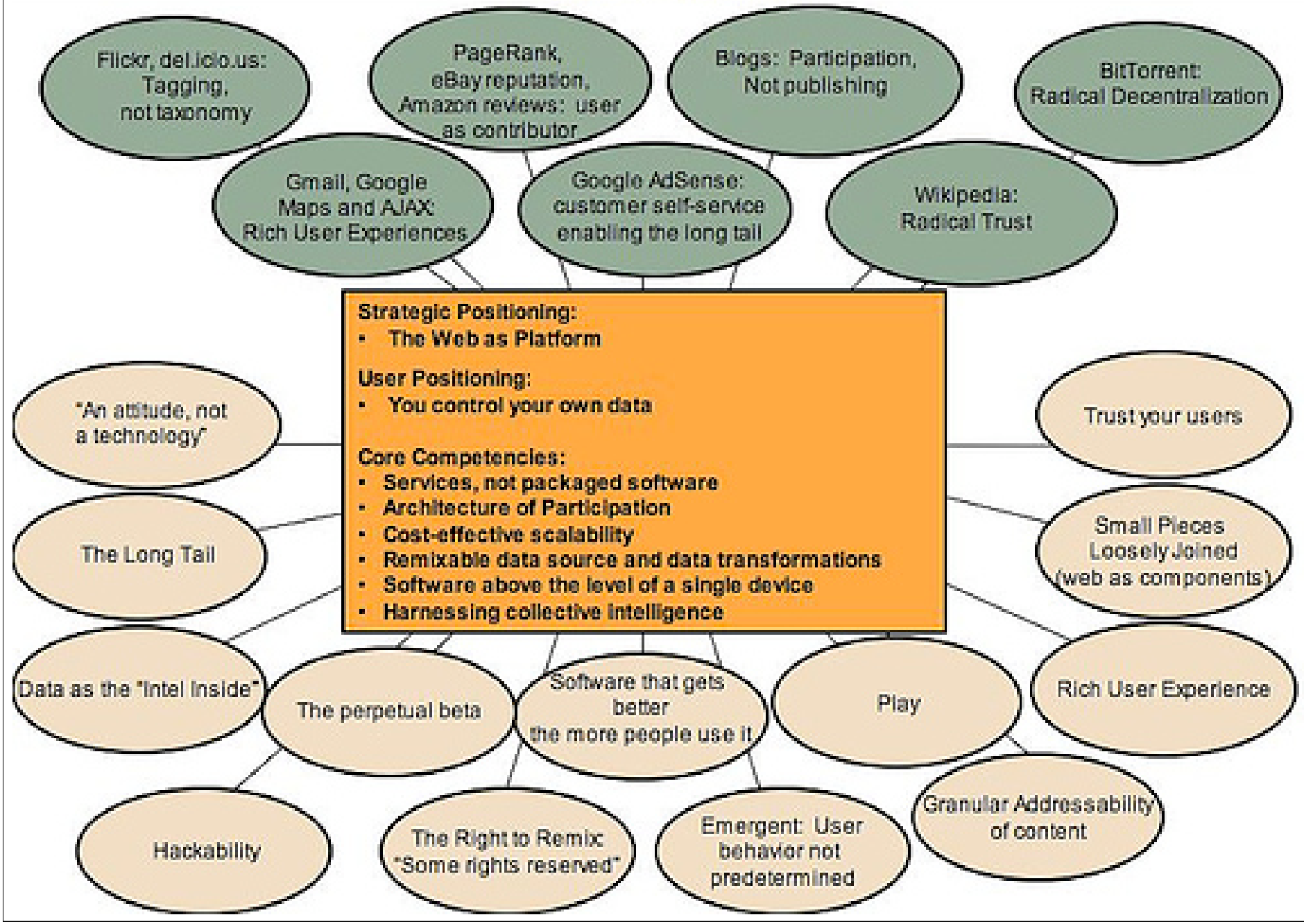
- Common in technological revolutions
  - Railroads
  - Automobiles

Party is just Starting

- Technology takes off after the bubble
- Technology takes time to
  - Mature
  - Integrate into society
  - Understand its use

Web 1.0	Web 2.0
DoubleClick	Google AdSense
Akamai	BitTorrent
Britannica Online	Wikipedia
Personal websites	Blogging
Screen scraping	Web services
Content manage sys	Wikis
stickiness	syndication

Web 2.0 Meme Map



Web 2.0 Principles

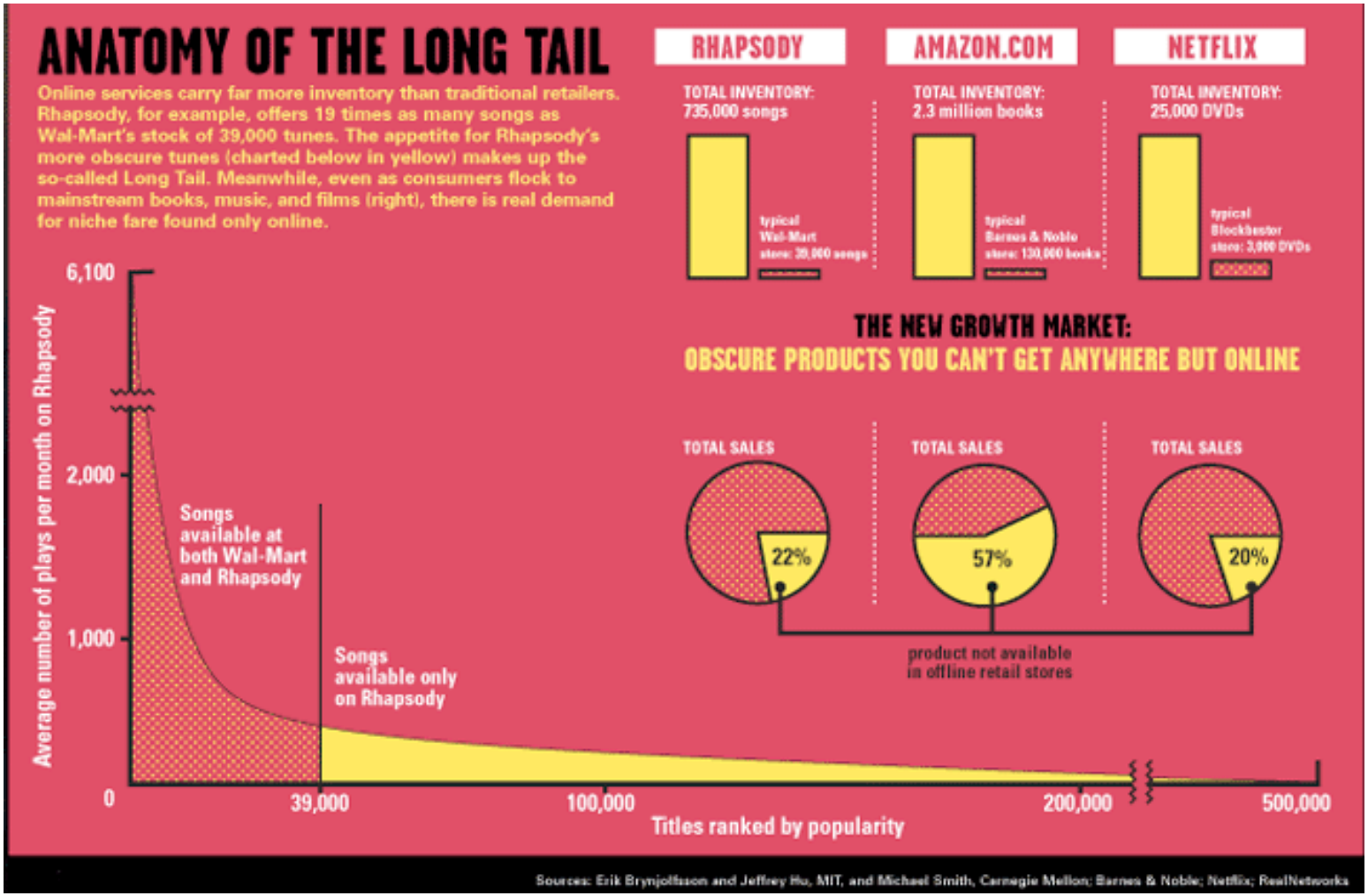
- Long Tail
- Web as Platform
- Harnessing Collective Intelligence
- Data, data, data
- End of software release cycle
- Lightweight Programming Models
- Software above the level of a single device
- Rich User Experiences

Why can't we rent Indian movies at Blockbuster?

Stores

- Limited space
- Overhead
- Cater to main stream

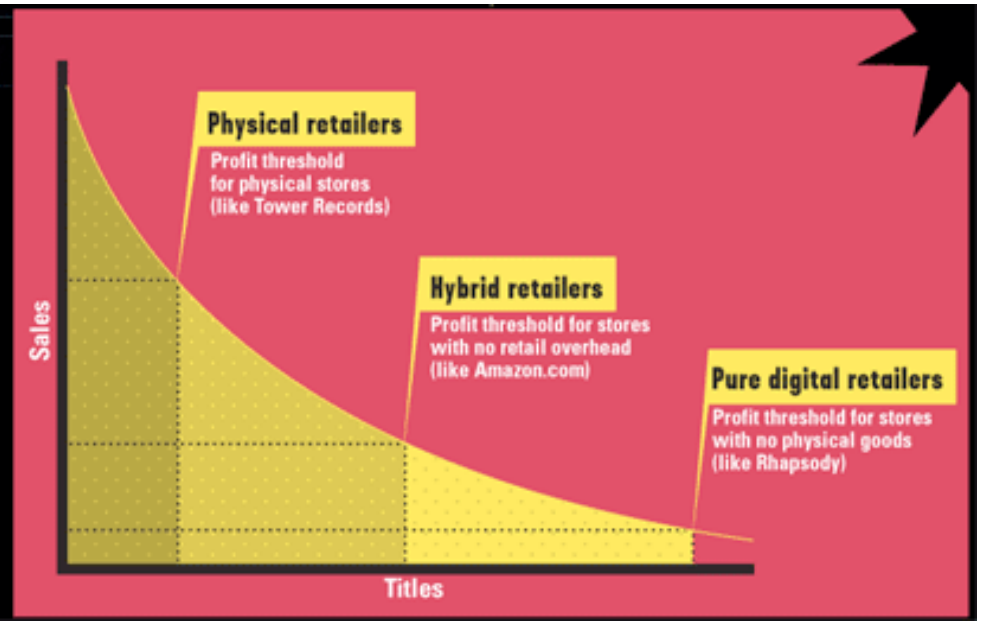
The Long Tail



THE BIT PLAYER ADVANTAGE

Beyond bricks and mortar there are two main retail models – one that gets halfway down the Long Tail and another that goes all the way. The first is the familiar hybrid model of Amazon and Netflix, companies that sell physical goods online. Digital catalogs allow them to offer unlimited selection along with search, reviews, and recommendations, while the cost savings of massive warehouses and no walk-in customers greatly expands the number of products they can sell profitably.

Pushing this even further are pure digital services, such as iTunes, which offer the additional savings of delivering their digital goods online at virtually no marginal cost. Since an extra database entry and a few megabytes of storage on a server cost effectively nothing, these retailers have no economic reason not to carry *everything* available.



Web as Platform

- Netscape vs. Google
- DoubleClick vs. AdSense
- Akamai vs. BitTorrent

Leverage customer-self service to

- Reach out to entire web, not just a few

A service gets better the more people use it

Wisdom of Crowds

- Wikipedia
- eBay
- Amazon
- Cloudmark - collaborative spam filtering

Its the Data, stupid

- Google
- Amazon reviews
- eBay profiles
- Sxip Identitiy 2.0

Race is on to own certain classes of core data

End of Software Release

- Microsoft - upgrade every 2-3 years
- Google - new features almost daily
- Flickr - new builds every 1/2 hour

End of Software Release

Operations must become a core competency

- Googles - efficient sys administration
- Dynamic languages
  - Perl, Python, PHP, Ruby
  - For systems requiring constant change

End of Software Release

Users must be treated as co-developers

Short feedback loop

Lightweight Systems

Design for hackability and remixability

- RSS, REST, Google maps
- Hurricane Information Maps

Go beyond single device

PC, Mac, Linux, PDA, Cell Phones, MP3 players

- ☆ iTunes

Rich User Experiences

- Flash
- OpenLaszlo
- AJAX

References

- The Long Tail, http://www.wired.com/wired/archive/12.10/tail.html
- Web 2.0, http://www.oreillynet.com/lpt/a/6228
- Images in presentation from The Long Tail