The value of the Web

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General questions

• Why do we use the Web?
• What do we use the Web for?
• What value do we expect the Web to provide us?
• What value do we deliver to the Web?

• Our action on the Web has **purpose**
• There is an exchange of **value** to achieve it.
# Layers of Internet: Web Inside!

<table>
<thead>
<tr>
<th>Layers</th>
<th>No.</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content and Transaction (social)</td>
<td>5</td>
<td>Information exchanged and the interactions and behaviours involved</td>
</tr>
<tr>
<td>Application (engineering)</td>
<td>4</td>
<td>Utility protocols: FTP, <strong>HTTP</strong>, SMTP. Provides process-to-process data exchange for applications</td>
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<tr>
<td>Transport (engineering)</td>
<td>3</td>
<td>Protocols for data transport like TCP, UDP (chosen according IP packet indication), handling host-to-host communication</td>
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<td>Network / Internet (engineering)</td>
<td>2</td>
<td>IP carries packets from a source to destination, using the routing protocols to determine the paths taken by the packets, connecting independent networks, thus establishing internetworking</td>
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<tr>
<td>Physical / hardware link (engineering)</td>
<td>1</td>
<td>Over which packets are carried: ARP, NDP (auto-configuration of nodes: olds and news), MAC (Ethernet, DSL, FDDI), WiFi, satellite links...</td>
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<tr>
<td></td>
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<td>Containing communication methods for data that remains within a single network segment (link)</td>
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The Original Internet World

- NSFNet
- Universities
The Original Internet World (2)

- NSFNet
- Universities
- AOL
- COMPUSERVE
The Early Web Ecosystem

Internet Backbone

ISPs

Yahoo  MySpace  Geocities  Altavista

General Public
Modern Web Ecosystem

Tier 1 - 3

ISPs

CDNs + Clouds

Google  Facebook  Amazon  Twitter  Netflix  ...

Government  Industry  Civil Society  Universities

Publics
Who Pays? What Value?

- **Web 0: NSFNET 1980s**
  - Pre- and pre-historic web
  - NREN as public good, from govt research funds
  - Use restricted to research sector in US (at first)

- **Web 1.0 1990s**
  - ISP / telco as subscription access to Internet.
  - Web / free at point of use...emergence of monetised products
    - commercial services (EBay, Amazon, Netflix)
    - web advertising

- **Web 2.0 2000s**
  - Mobile operator as metered / capped access to Internet.
  - Monetised surveillance is dominant funding model for Web properties
  - Social Web as co-creative space where participants produce data...emergence of a data trading space
Web Participants

• The Web is a *data exchanging* space, we receive data if we deliver data in return.

• Data have different kinds of potential value
• Information has contextual value upon time, space, place and recipient

• The Web participants: people, governments, private companies, communities.
  • Most of them participate through their web sites
You as a Web Participant

What value do you think you give to the Web?

What value do you think you receive from the Web?
How to know

• List the key activities you do on the Web
• For each activity ask
  • Why do you do that activity?
  • What for?
  • What value do you want to obtain?
• Activities by top sites of the country
  • Relate each activity with the top sites that you use
  • Do you think your participation on each site matters?
  • What value do you give to the site?
  • What you don’t like from the site?
  • Will you pay for the use of it?
# Activities and value/values

<table>
<thead>
<tr>
<th>Activity</th>
<th>Why?</th>
<th>For what?</th>
<th>Value</th>
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<tbody>
<tr>
<td>Act 1</td>
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<td>Act 2</td>
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<td>.........</td>
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</tbody>
</table>
# Top sites - Activities

<table>
<thead>
<tr>
<th>Site</th>
<th>Act 1</th>
<th>Act 2</th>
<th>Your participation matters?</th>
<th>Value given</th>
<th>Value received</th>
<th>What Don’t like?</th>
<th>Will you pay?</th>
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<tbody>
<tr>
<td>Site 1</td>
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<td>Site 2</td>
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