The Internet Economy: On line Usages, Reshaping Economies and Societies

Andrew Wyckoff
OECD
The 1880s: Pre-History

- Underwood typewriter
- Early telephone
- Cinématographe Lumière
- Early radio equipment

The Future of the Internet: Perspectives emerging from R&D in Europe
2000+: The Internet Economy
3 Large Trends, reshaping the Internet and our economies

1) CONVERGENCE: The Internet is becoming the global platform to deliver voice, video and data services,

2) CREATIVITY: The Internet is an essential element in the economic and social infrastructure of OECD and world economies, and a catalyst for globalisation and innovation,

3) CONFIDENCE: As our dependence on the Internet increases, so does the need to maintain its integrity, and the work to make it a trusted system.
1. Fundamental trends: *infrastructure*

Rapid decline in price of computing and communications, has both contributed to and caused a shift towards the Internet Protocol (IP) ("convergence");
2000+: the “C” catches up with IT

Price of “always on” Internet access
(per kilobit / second, USD, US incumbent operator)

1997: $0.36
2005: $0.01
...not only price but speed as well...

OECD broadband price and speed changes, similar plans, Oct 2006-2007

<table>
<thead>
<tr>
<th></th>
<th>Prices</th>
<th>Speeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>-19%</td>
<td>29%</td>
</tr>
<tr>
<td>Cable</td>
<td>-16%</td>
<td>27%</td>
</tr>
</tbody>
</table>
...fueling the diffusion of broadband Internet access.

OECD Broadband subscribers per 100 inhabitants, by technology, June 2007

Source: OECD
Convergence: requirements

-- coping with new user profiles & demands
-- providing sufficient resources
-- shifting away from the PC
-- remaining open & interoperable
-- better understanding the network / creating metrics of use
2. Fundamental trends: **Creativity**

- A driver of *Creativity*: over a short period the Internet and its ability to network ICT has spurred an outpouring of creativity that has turned businesses upside-down and driven economic growth.
Creating new business models…
(Change in average UK monthly communications spend)
…poised for huge leap forward with the “Internet of Things” (RFID & sensors)…

- Supply Chain Management
- Work In Process Manufacturing (WIP)
- Asset Management
- Security & Access Control
- Consumer Applications
...and social creativity.

**Economy to Society:**

- **1990s**: advent of e-commerce and the commercial use of the Internet;

- **2000+**: the impact on the economy is still significant and growing, but now non-economic – more social uses are proliferating (Blogs, wikis, podcasts, user-created content)
Creativity: requirements

-- human-oriented interfaces
-- openness & interoperability
-- advent of intelligent objects
-- preparing for aging societies, energy-climate change
3. Fundamental trends: confidence

As networks converge towards the Internet (& IP) and it becomes a key part of the economic infrastructure, concern has grown regarding how much trust we can place in the Internet and about its possible vulnerability to events, both accidental and malicious;
Social Engineering is also a powerful tool for criminals...id theft, malware, phishing..

Phishing Incidents at UK Banks
Confidence: requirements
-- the Internet of today “only just works”
-- identity management systems
-- knowing who is collecting what data
-- one click “opt out”
OECD Ministerial Meeting on the Future of the Internet Economy
Seoul, Korea, 17-18 June 2008

www.oecd.org/FutureInternet