

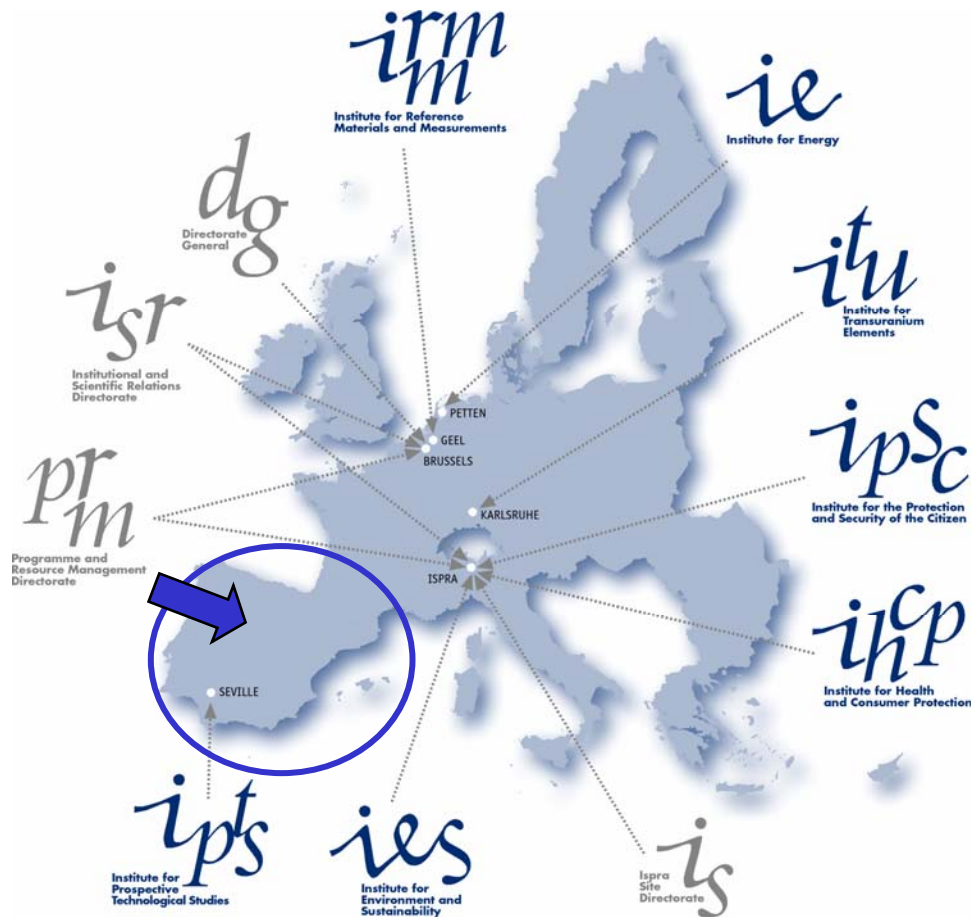
POTENTIAL IMPACT OF SOCIAL COMPUTING (WEB 2.0) ON eHEALTH

Jose A. Valverde

eApplications Action

Information Society Unit





IPTS: Part of DG JRC of the EC: 7 Research Institutes across Europe

Mission: "to provide customer-driven support to the EU policy-making process by researching science-based responses to policy challenges that have both a socio-economic as well as a scientific/technological dimension"

Modus operandi: desk research, expert groups, modelling, centres of expertise

OVERVIEW - CONTENTS

- Emerging Technologies and Applications
- Implications for eHealth
- eLearning trends
- Conclusions

Emerging ICT trends and Applications with great disruptive potential:
→ e-ruptive trends

VoIP
P2P
Wifi, WiMax, etc



connecting

Searching as appl platform
Networking, etc.



sharing/interface

Podding
Gaming
Blogging
Wikiing
Buying, etc.



producing content

*New Techno-
Economic
Paradigm?*



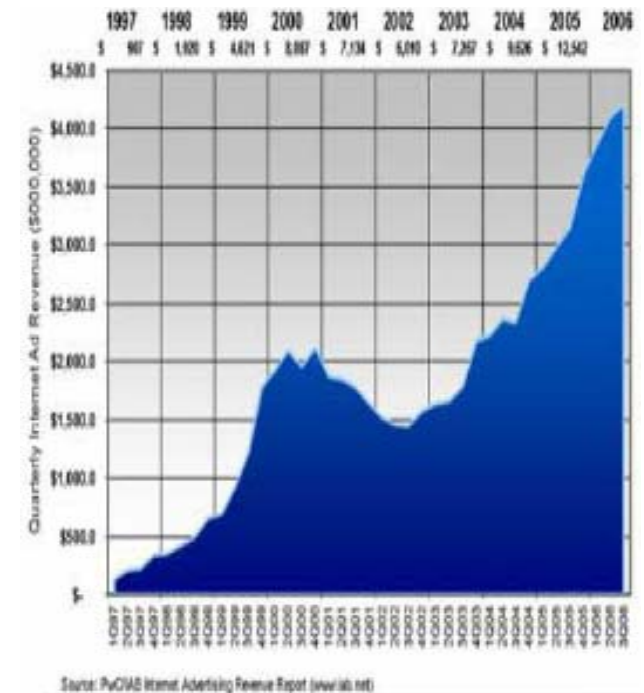
TEP spectacular growth

Blogs	Doubling every 6 months since 2003
Podcast	50 M audience in 2010, 15 M producers
Wiki	Wikipedia 100K authors since 2003, taken seriously; citizens as reporters
Multiplayer online gaming	MMPOG largest growth segment. In 2005 online games audience has grown 16% - 4 times the rate of overall Internet growth
Social networking	Myspace 100 M users, Youtube 100M videoviews/day, 45% of web users visit those sites
Search engines	"Google is the environment, not the competition" (IPO in 2004)
P2P	In 2003 became no 1 source of traffic (above http)
VoIP	Skype 80 M users (since 2003)
Wi-fi sharing	FON World largest hotspots network

Content production

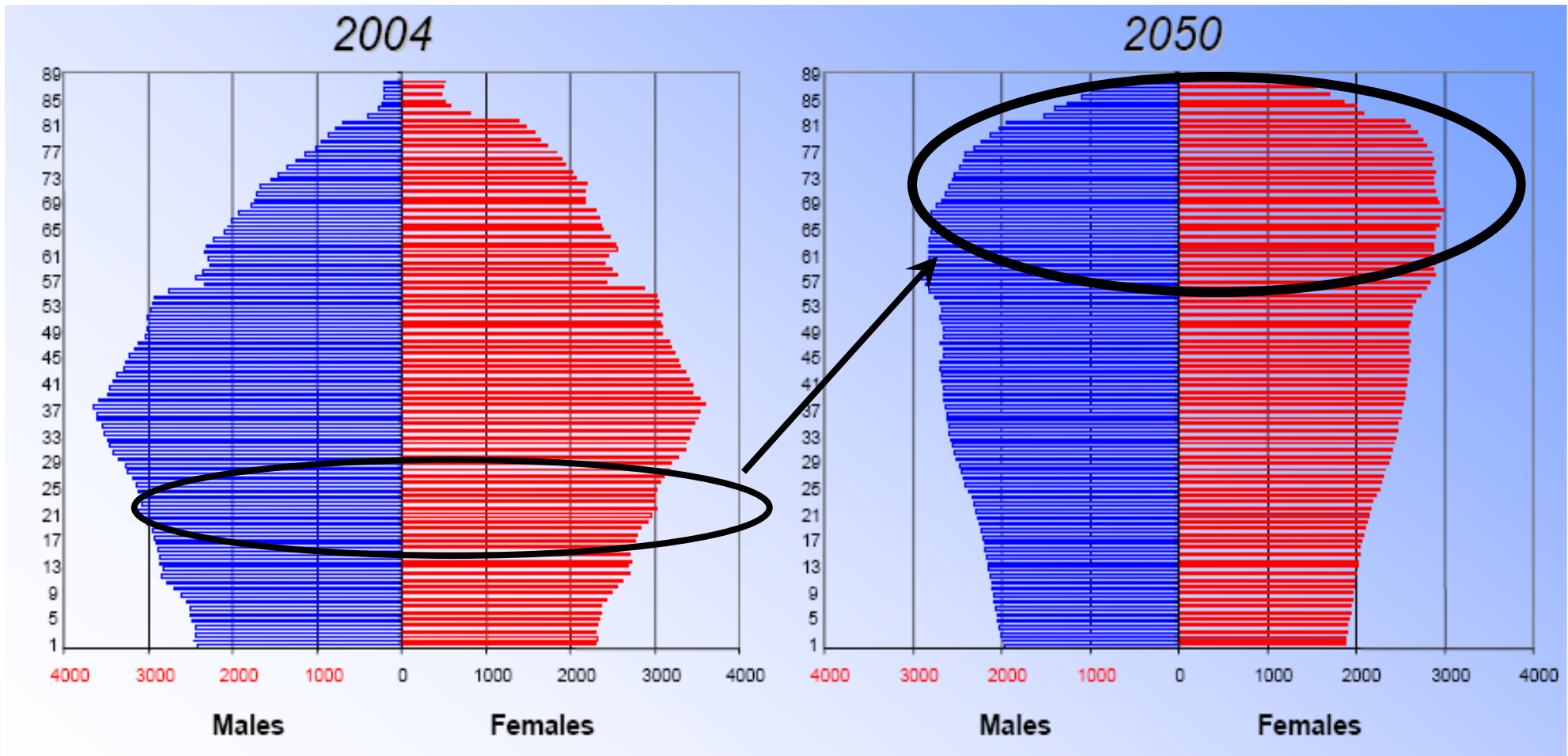
Filtering and sharing

Connecting and distributing



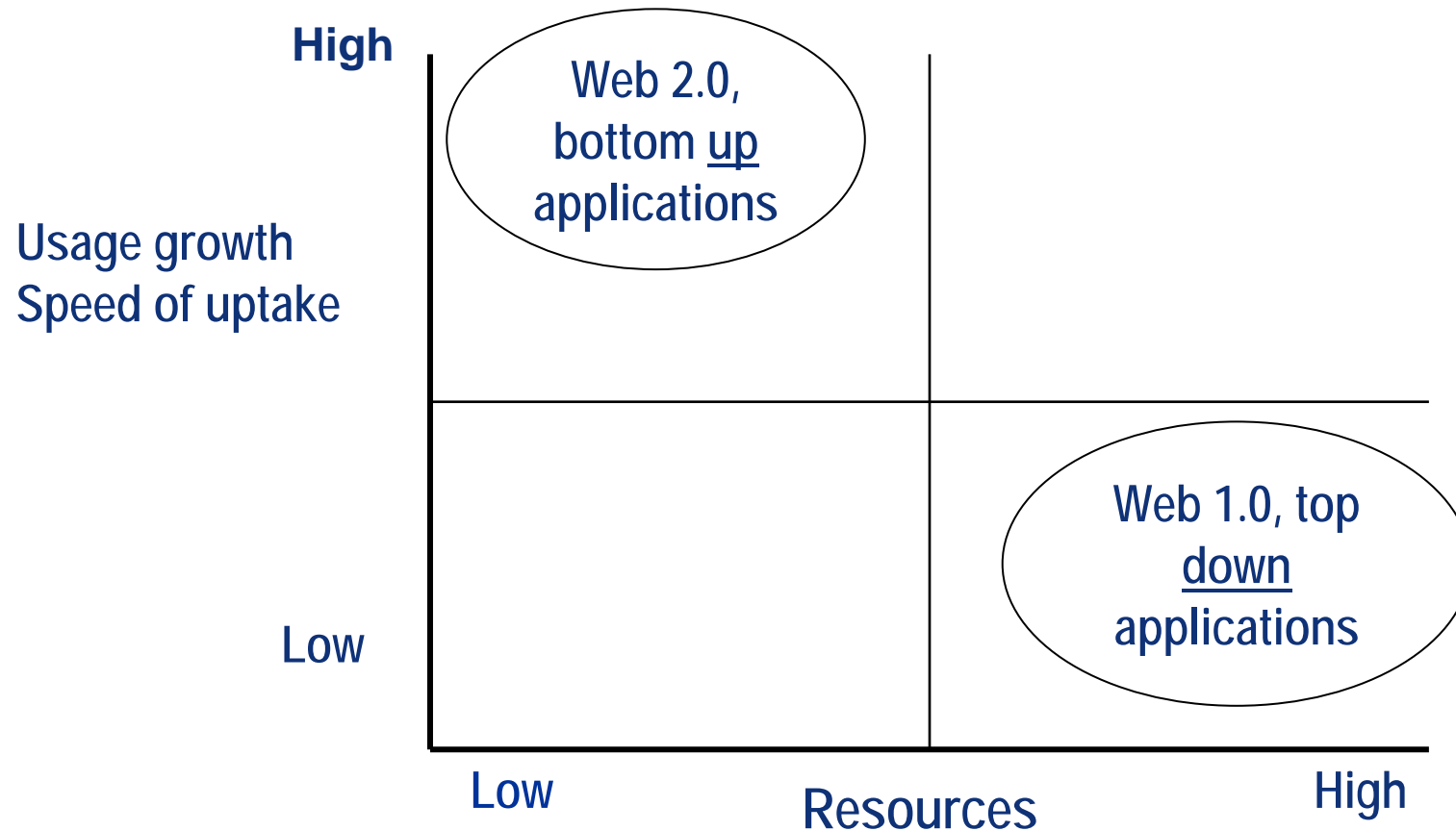
Internet advertising 1997-2006

TEP: irreversible



Today's "geeks" → Tomorrow's customer, user, voter, elderly....

A “new” innovation paradox?



→ To apply Web 2 dynamics → rethink innovation dynamics

Web 2.0 trends

- Users as producers
- Many to many, person to person communication
- Usage of ICT for communication rather than transaction; information more useful than transaction
- Collective management of reputation
- Self-regulation
- Syndication – mash up content and open content

Implications for eHealth

Some examples



eHealth: as we did it up till now

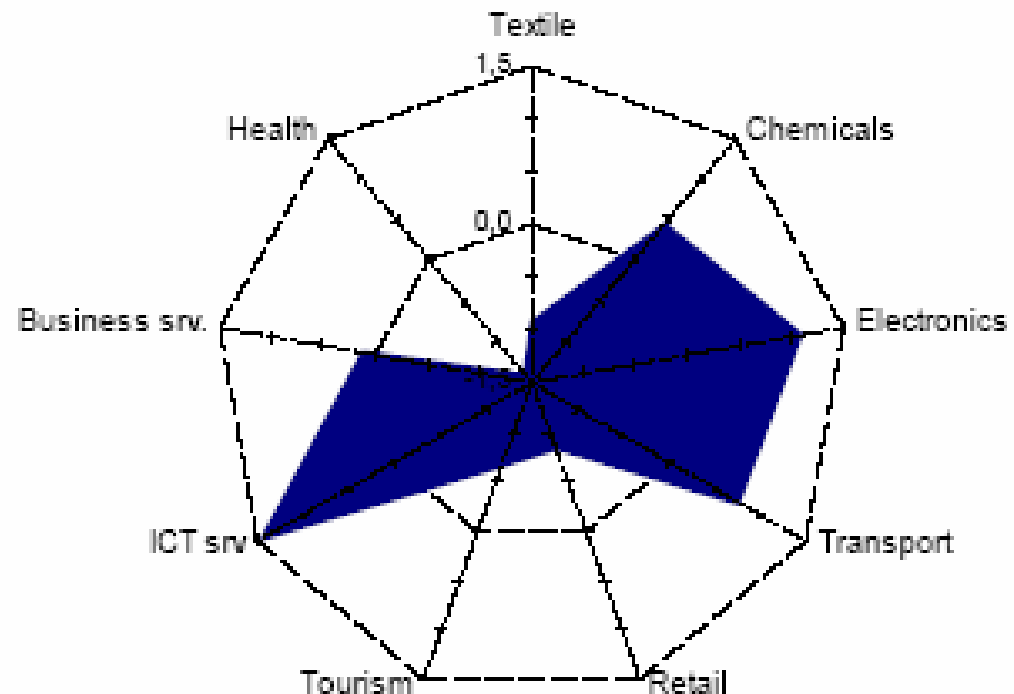
Offering e-solutions has been a high priority (economically and human speaking)

But

ICT use in health sector:

- least connected sector,
- great disparities across countries and regions

ICT Infrastructure Index 2003/04




Source: e-Business W@tch (2004)




Web 2.0 examples for Medicine

Web 2.0 examples in medicine

Application	Website	Purpose
Bloglines	www.bloglines.com	RSS reader
Citizendium	www.citizendium.org	Expert wiki
Connotea	www.connotea.org	Online reference organiser
Del.icio.us	http://del.icio.us	Website tagging
Flickr	www.flickr.com	Photo sharing
Ganfyd	www.ganfyd.org	Medical wiki
Google blogsearch	http://blogsearch.google.ca	Blog searches
Google health	www.google.com/coop/topics/Health	Create your own search tool
MedWorm	http://medworm.com	RSS aggregator
SlideShare	http://slideshare.net	Slide sharing
Wikipedia	http://en.wikipedia.org/wiki	All purpose wiki
YouTube	www.youtube.com	Video snippets


Giustini, D. *BMJ* 2006;333;1283-1284

Patient Opinion  **this is our NHS...
let's make it better**

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What is this about?

Patient Opinion is all about enabling patients to share their experiences of health care, and by doing so help other patients — and perhaps even change the NHS.

As well as allowing everyone to see what patients are saying about their services, it also offers a way to feed the experience of patients back to the NHS so that their insights and ideas can be put to good use.

Latest Patient Opinions

“ My friend was a patient in Arr ... ”
31 August 2007 , 17:34 PM
Deirdre Hewitt on Arrowe Park Hospital

“ I had a gallbladder removal on ... ”
30 August 2007 , 12:02 PM
(anonymous) on Derriford Hospital - General Surgery

Your opinion

If you have been to hospital recently, either as a patient or as a carer or friend or someone else, please tell us about your experience

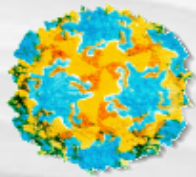
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Enter your postcode to compare hospitals in your area and see what people are saying about them

Your postcode

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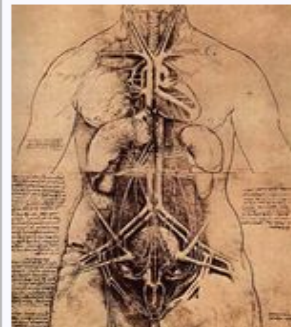
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 Submitted by [Helen](#) 29 days ago

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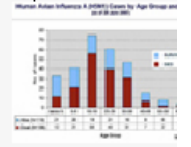
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Pandemic Influenza: Warning, Child At-Risk TFAH Report and [Press Release](#) Oct. 17, 2007

Pandemic Risk: Electrical Utilities

Pandemic Risk: Financial Sector

Promising Practices for Pandemic Preparedness: [press release](#) 5/24, 2007

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What's new in Open Medicine

Safety and effectiveness of point-of-care monitoring devices in patients on oral anticoagulant therapy: a meta-analysis

 Oct 16, 2007. Vol. 1(3), pp.131-146

Philip S Wells, Allan Brown, James Jaffey, Lynda McGahan, Man-Chiu Poon, Karen Cimon

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Rapid Responses


Variations in rates: why we need clinical management recommendations

 August 31, 2007

Denise Avard, Jaques Simard, Doug Horsman, Brenda J. Wilson, Wendy S. Meschino, Charmaine Kim Sing, Marie Plante, Andrea Eisen, Heather E. Howley




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Enriching our Understanding of Medicare

 July 2, 2007

Robert Y. McMurtry

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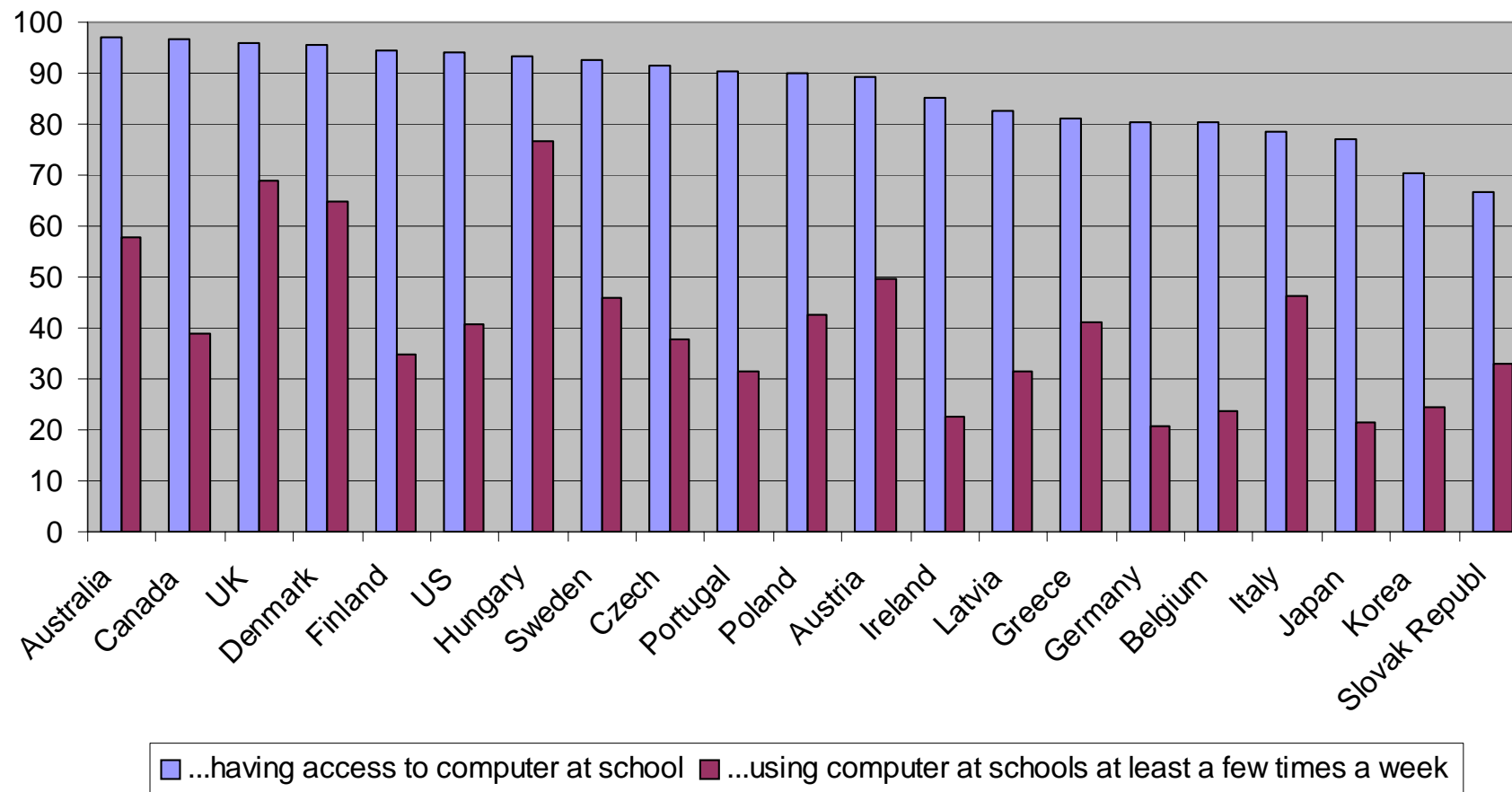
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eLearning trends



eLearning: as we did it up till now

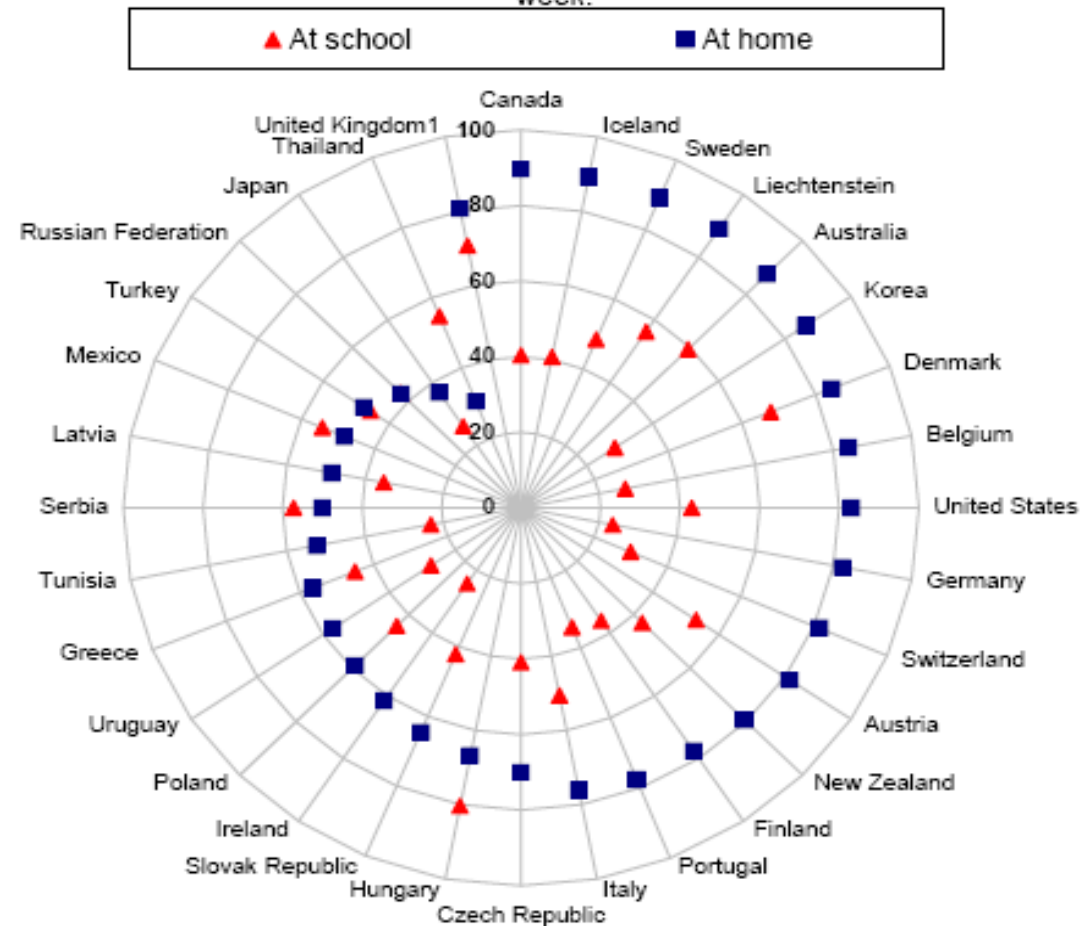
Access and usage of computer in schools: % of 15 years old students...



Source: IPTS calculation based on OECD PISA 2003

- MySpace, Bebo, MSN, etc. **dominate** the **youngster** market.
- Students are using computers at **home** more frequently than at school
- Their **home learning environment** consist of blogging, gaming, chatting, social software, etc.
- Experience of computing at home has **positive effects** on learning achievements.
- **Educational blogs** are on the rise

Percentage of students using a computer at least a few times each week:



Source: OECD (2005) Are students ready for a technology-rich world? (Based on PISA 2003)

Conclusions (1)

Web 2

- Tool for Self-help and empowerment
- Personalised service delivery
- Transparency and openness
- New ways of knowledge mining (increasing efficiency)
- Many to many interaction
- Scale it does not matter (eg.- rare diseases)

- **Social capital as fundamental input and output**
- **Institutional re-engineering required**

Conclusions (2)

Applications meet Visions !

- The networking potential of Social Computing to impact on the **empowerment** of the citizen/patient (and shift towards Prevention / Promotion).
- From symptom-based to preventive healthcare, from hospital-centred to person-centered health systems, better informed patients, medical acts tend to be consensuated.
- The end user (patient, healthcare professional) as **innovator**: potentially very important.
- Policies for building **Social Networks** as important infrastructures for inclusion.
- **Self-steering** networked communities.

A new innovation model for public eServices

- A new WAY to innovate public services
 - Continuous and incremental,
 - open and informal
 - not only by government
- A new effective DRIVER of innovation in public services
 - citizens' ratings and reviews: democratization of voice where there is no exit possibility
 - openness and transparency
 - wider availability of tools for innovation by citizens, civil servants, civil society

The future?

THINK DIGITAL..
NOT ANALOGUE ++

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