Postcards from the Information Society

Living with Always-On Technology:
The Good, the Bad and the Just Plain Baffling

John Alden & Jay Chauhan
Vice President, Freedom Technologies, Inc.

10th Global Symposium for Regulators

"Enabling Tomorrow's Digital World"
Dakar, Senegal, 11 November 2010

Living in the Info Society

- Where Is the Info Society – And Where Isn't It?
- Networks, Devices & Apps
- The Good, the Bad & the Baffling
- Digital `Natives' and Digital `Immigrants'
- Has the Internet Overtaken Regulation?
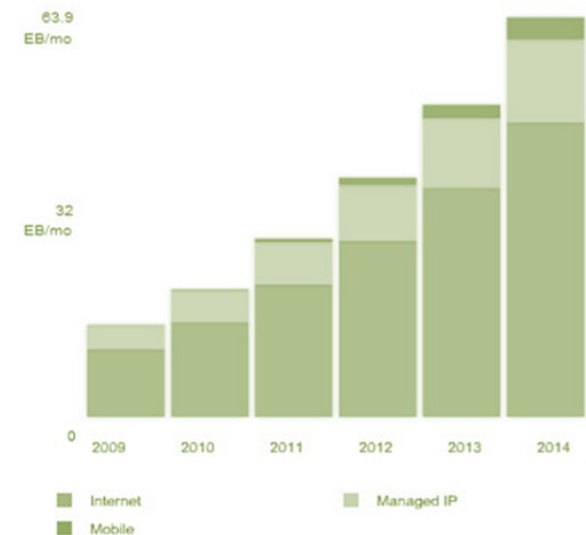- What Should Regulators Do?
- What's Next

The Digital Divide

- Where the Info Society Is:
  - Internet users worldwide: 1.7 billion
  - Wireless broadband users: 650 million
  - Fixed broadband users: 480 million
- Where the Info Society Isn't:
  - Internet penetration in developing countries: 18%
  - Fixed BB penetration in those countries: 3.5%
  - Mobile BB penetration in LDCs: 3%
- The digital divide is both among countries and within them.

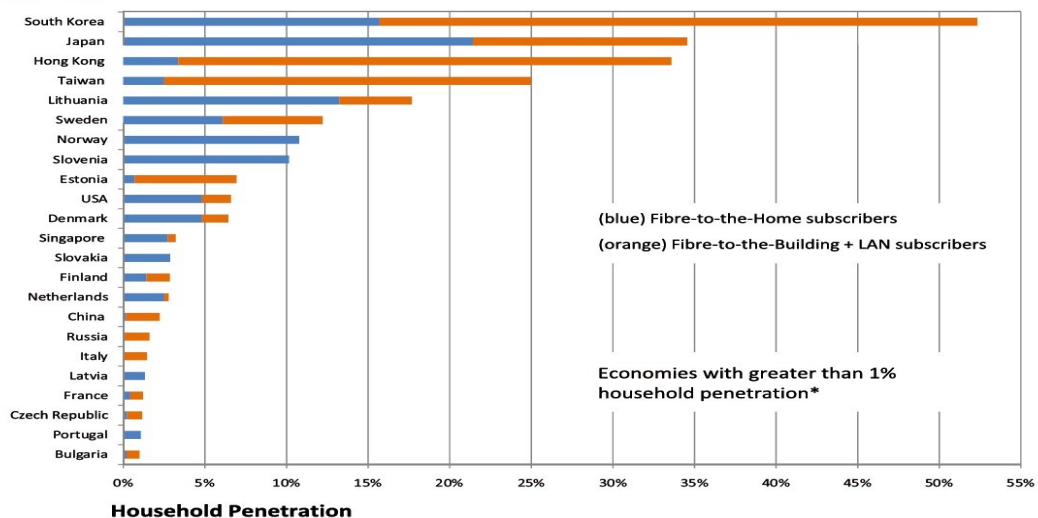**Stairway to (Digital) Heaven: Broadband Global Usage Forecast**

63.9 EB/mo

32 EB/mo

0   2009   2010   2011   2012   2013   2014

■ Internet   ■ Managed IP
■ Mobile

Source: ITU, *Measuring the Information Society, 2010*

3

Nets, Dongles & Apps

- The Information Society is driven by:
  - **Networks**: NGNs, 3G & 4G BWAs
  - **Devices**: laptops, netbooks & smart phones
  - **Applications**: social networking, location & `augmented reality'

2009 **Economies with the Highest Penetration of Fibre-to-the-Home / Building + LAN**

South Korea
Japan
Hong Kong
Taiwan
Lithuania
Sweden
Norway
Slovenia
Estonia
USA
Denmark
Singapore
Slovakia
Finland
Netherlands
China
Russia
Italy
Latvia
France
Czech Republic
Portugal
Bulgaria

0%   5%   10%   15%   20%   25%   30%   35%   40%   45%   50%   55%

(blue) Fibre-to-the-Home subscribers

(orange) Fibre-to-the-Building + LAN subscribers

Economies with greater than 1% household penetration*

Household Penetration

Source: IDATE, RVLL, OVUM for Global FTTH Councils

The Good

- E-government
- Tele-medicine/e-health
- Distance learning
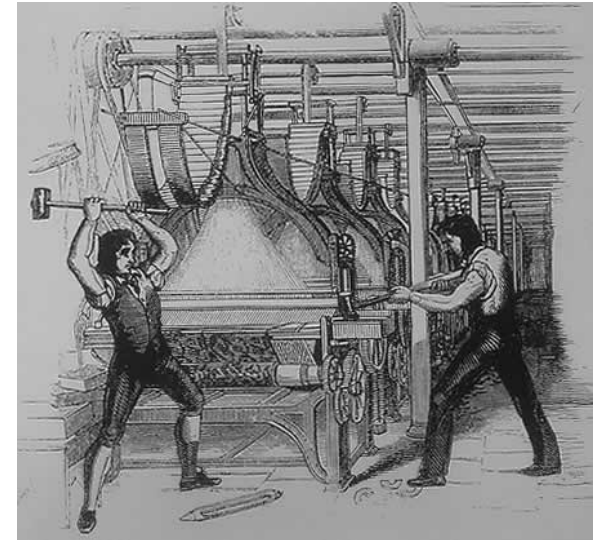- ICTs for Development
- E-commerce
- Personal Networking

The Bad

- Getting Hacked
  - Viruses, worms, trojans, botnets
- Loss of Privacy
  - Online records, `street view' captures
- Cyber-crime
  - Fraud, identity theft, stalking & "cyber-bullying"
- Inappropriate Content
  - Pornography, defamation, violation of community values

The Baffling

- Internet "addiction"?
  - Managing social change
- The "Bowling Alone" argument
  - Are online friendships and communities authentic?
- New Media
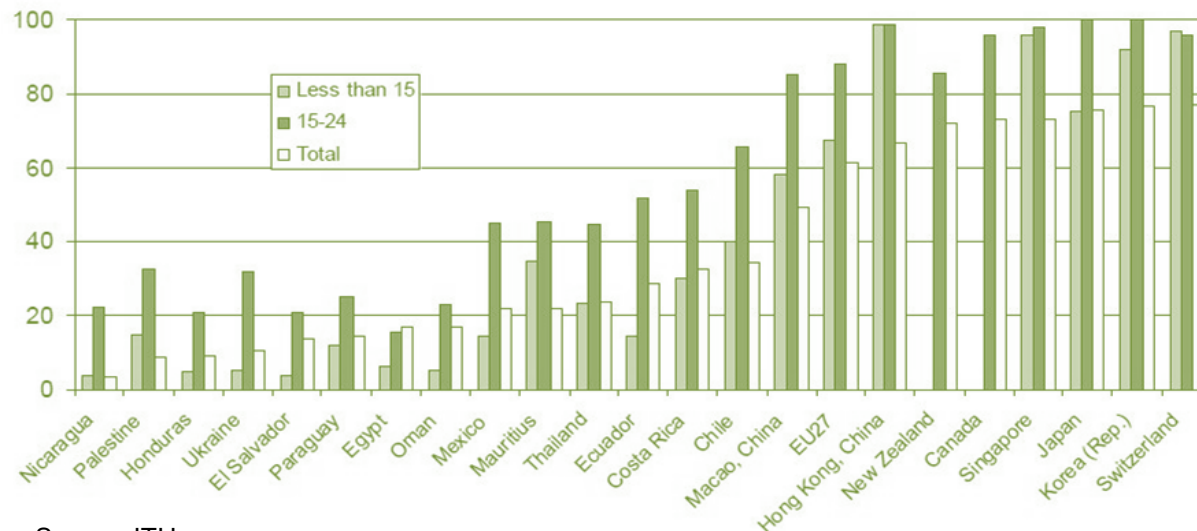 - Replacing or complementing old media?

Luddites!

Digital Natives and Immigrants

- ## The Natives are Restless
  - Children face the new media unmediated
- ## Immigrants: No Country for Old Telephone Dialers
  - Consumers face cyber crime, password fatigue

Proportion of Internet Users, by age and total (2008)

Legend: Less than 15, 15-24, Total

Countries (left to right): Nicaragua, Palestine, Honduras, Ukraine, El Salvador, Paraguay, Egypt, Oman, Mexico, Mauritius, Thailand, Ecuador, Costa Rica, Chile, Macao, China, EU27, Hong Kong, China, New Zealand, Canada, Singapore, Japan, Korea (Rep.), Switzerland

Source: ITU

➢ In some countries, nearly 100% of children under 15 are Internet users.

➢ In most countries, the most active group of Internet users is young people, ages 15-24.

➢ In all countries cited, users under 24 exceed older cohorts in proportion of Internet use.

8

The Internet & Regulation

- ## Is the Internet Overwhelming Regulation?
  - Jurisdiction: Who oversees the Internet?

- ## How Do You Classify Internet Services?
  - Common Carriage vs. "broadcasting"
  - Are ISPs or social networking websites responsible for users' posts?
  - Is YouTube a broadcaster or a carrier – or something else?

- ## How can NRAs regulate the Internet?
  - It's a global medium, with transnational infrastructure

Choices for Regulators

- Promoting BB Infrastructure
  - Universal access/service – Should BB be included?
  - International backbone access – How to address the conundrum
- Asymmetric regulation/regulatory convergence
  - Should Internet-based services be given a "lighter touch"?
  - Regulating "down" or "up"
- Consumer Protection & Education
  - Privacy Protection: Who has access to customer information, and why?
- The `Net Neutrality' Debate
- Spectrum assignment and harmonization

Are All Bits Created Equal?

Questions to Consider

- How should regulators confront digital divide realities?

- Are regulators paying enough attention to consumer issues? Do consumers want them to intervene more often?

- How can the Internet be used to bolster, not erode, cultural integrity and participation in civil society?

- How can governments address security concerns without stifling the full benefits of the Info Society?

www.freedomtechnologiesinc.com
John Alden: ja@ftidc.com
Jay Chauhan: jc@ftidc.com
+1-703-516-3020