

Broadband: The Current Context

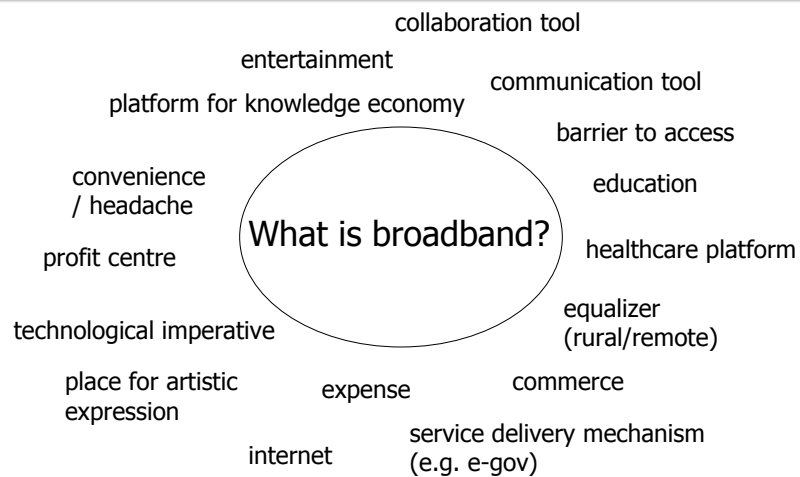
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What is Broadband?

- Technical definitions
 - bandwidth
 - OECD definition >256 kbps
 - National Broadband Taskforce (2001): "a high-capacity, two-way link between an end user and access network suppliers capable of supporting full-motion, interactive video applications"
 - "Based on today's technology and applications, we concluded that a minimum two-way, or symmetrical, transmission speed of 1.5 Mbps per individual user is required to meet this standard." We're not there yet...
 - symmetrical
 - always on

Social Definitions: What is it for?

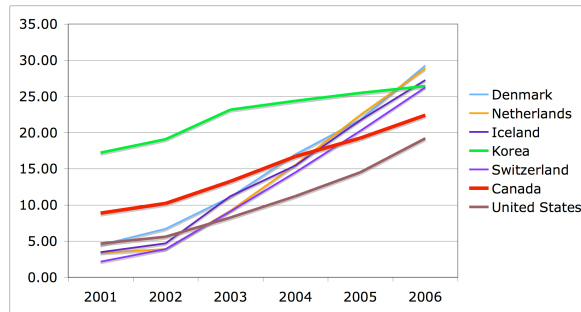


Stakeholders

- users
 - citizens/consumers
 - institutions: education, health
 - business
 - government
- providers
 - public internet: telecom industry/ISPs
 - research/educational networks: ORION, CANARIE/CA*net 4
- government
 - promotion of info society, knowledge economy

Broadband and Competitiveness

- International discourse around broadband and productivity/competitiveness, e.g. (perceived) importance of OECD "league tables"



Source: OECD Broadband Statistics, Dec. 2001, June 2002 - June 2006

Access to Broadband

- Supply issues:
 - very different perspectives for urban and rural/remote areas
 - broadband is widely available in urban areas (98%), most Canadians use DSL or cable modem access
 - \$4.5B in revenues for ISPs in 2005
 - telcos 43% of retail revenues, cablecos 42%
 - estimated 74% of rural/remote areas have access
 - remote areas served by satellite, fixed wireless
 - Except in rural/remote Canada, broadband adoption is constrained by demand, not by supply

Demand for Broadband

- 2005 data (Statistics Canada)
- Internet uptake is plateauing in Canada
 - 68 % of Canadians use the internet
 - 61% of Canadian households have internet access
- 81% of private firms are using broadband
- Ontario
 - 72% of households have internet access
 - 54% have a broadband connection, 18.5% have DSL, 35.5% have cable
- Digital divide is persistent:
 - age, education, income

What *should* be available?

- Is broadband an essential service?
 - Should there be universal access?
 - National Broadband Taskforce, Telecom Policy Review panel recommendations for ubiquitous broadband
- What are the specs for universal broadband?
 - speed? pricing? ubiquity? mobility?
- Who should provision it?
 - technical options (e.g. use of wireless technologies)
 - municipal broadband?
 - role of private sector?

Is Broadband the right answer?

- What's the question? Why do we want broadband?
- When is broadband the right solution?
- When are other options more appropriate?
 - mobility? accessibility? affordability?
 - 3G/4G telephony instead of, or supplemental to, broadband?
 - Are we focusing on the right technologies and devices?

www.broadbandresearch.ca

- Portal for research on broadband
- See "Endnote" link for bibliography of broadband/mobile/internet/digital divide research
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