

How do we measure the Information Economy?

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British Computer Society

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With additions on April 24, 2008

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Outline

- ICTs have penetrated
- Use is the issue
- Supply
- International Comparisons
- Regulation and Policy
- Where next?
- Discussion

ICTs have penetrated

- Since last presentation: May 2006
- More use and more uses
- Was Government Online Realistic?
- What about the Digital Divide?
 - The knowledge divide?
- What are the threats and opportunities?

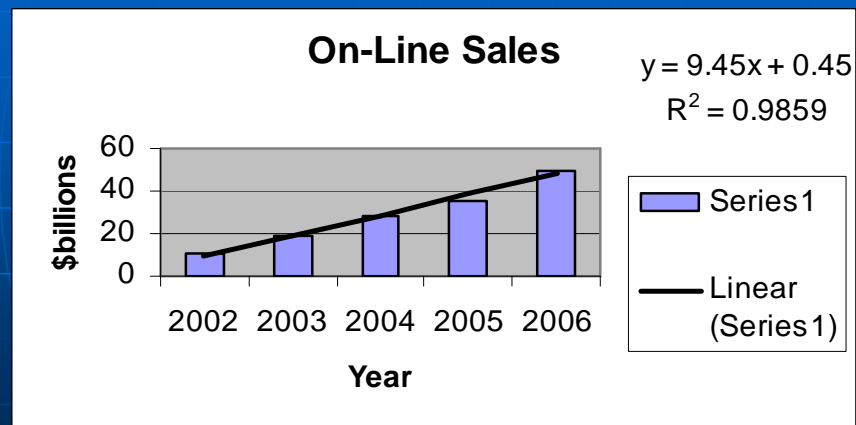
Use is the issue

- In 2005, 66% of individuals used the Internet
 - Regularly from any location
 - Users were urban, educated, affluent, with children
 - Calgary and Ottawa tied at 77%
 - After email (91%) and browsing (84%),
 - Weather or road conditions (67%)
 - Travel(63%), News and sports (62%)
 - 58% of households used banking services or looked for medical information
 - Canadian Internet Use Survey (CIUS), *The Daily* August 15, 2006

Use is the issue

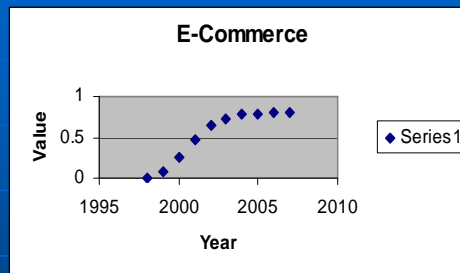
- Survey of Electronic Commerce and Technology (SECT) 2007
 - Look at 2007 release as a guide
 - *The Daily April 24, 2008 results in brackets*
- Rise in e-sales expected
- Large firms dominated and used broadband
- 83% of firms used the Internet (87%)
- 45% made purchases on the Internet (48%)
- 40% had a website (41%)
- 8% of firms sold on the Internet (8%)
- B-B about 68%, going down (62%)

Use is the issue



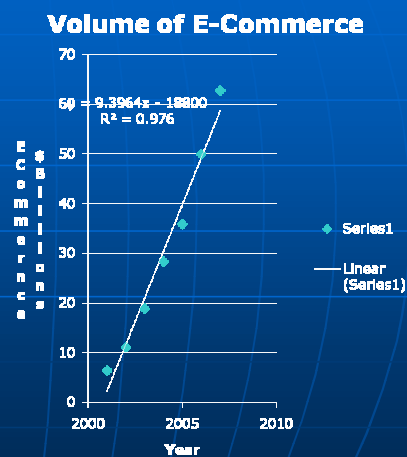
Use is the issue

- The Daily, April 24, 2007
- Linear prediction 57.2
- Will the measure be higher or lower?
- Consider
 - $V = \text{beta} * (1 - \exp(\text{alpha} * (\text{year} - 1998) ** 2))$
 - Beta = 0.8
 - Alpha = 0.1
- Result for 2007 was 62.7, within 10% of the prediction



2008 Results

- Linear fit still works
- Straight line approximates middle of the logistic curve on previous slide
- Try other fits – power or exponential



Supply

- Q3 2006 Telecom, *The Daily*, March 5, 2007
 - 26.9 \$Billion in 2006, about 2.5% of GDP
 - Wireless
 - subscribers over 17 million
 - Profits exceeded \$1 billion for the first time
 - Residential lines dropped down to 11.4 million
- Cable, Satellite and multipoint distribution 2004 *The Daily*, December 7, 2007
 - 4 million high speed internet users, up 17%
 - Do not need a telecom line, but you do need cable?
 - Competition introduced in 1997, revenue growth declined initially but Cable operators made \$1.5 billion in profits in 2006, up 11.6% on 2005
 - Illegal dishes are still an issue
- 1 million web sites with .ca, 17th largest domain registry

International Comparisons

- OECD Working Party on Indicators for the Information Society (WPIIS) 1997 -
 - ICT Definition 1998
 - E-commerce definition 2000
- OECD statistics
 - Guide to Measuring the Information Society OECD(2005)
- OECD Ministerial on the Internet Economy
 - Seoul, June 2008

International Comparisons

- International Issues
 - Trust
 - Cyber crime
 - E-Skills
 - E-Business practices
 - Classification
 - Broadband and economic impact

International Comparisons

- UN Organizations
 - Core ICT Indicators February 2005
 - World Summit on the Information Society (WSIS)
 - Digital Divide
 - Knowledge Divide growing issue

Regulation and Policy

- **Telecommunications Policy and Review Panel 2006**
 - March 2006
- Recognized the impact of:
 - Internet Protocol based networks
 - Broadband and wireless technologies
 - Convergence of previously distinct ICTs
 - Transformation from monopoly to competition

Regulation and Policy

- Many of the discussions in the Policy Review could not have happened without concepts and definitions developed in order to measure the characteristics of the Information Society.

Where Next?

- Wireless / Wireline
 - Implications for cable companies
- Convergence
 - Of technologies and service provision
 - Implications for regulation
- Global Issues
 - China - ICT manufacturing
 - India - software and services
 - What makes Canada competitive?
- User generated content
- And?

Discussion

More Information

- www.statcan.ca The Daily or
- Click on
 - Publications
 - Free Internet
 - Information and Communication Technology
- www.orbicom.uqam.ca
 - Google
 - Digital Divide and Knowledge Divide
- www.telecomreview.ca
- www.oecd.org