



Science,  
Innovation and  
Electronic  
Information  
Division



Division  
des Sciences,  
de l'Innovation et  
de l'Information  
Électronique




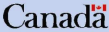
# Doing Business in the Information Society


Presentation to the Rideau Valley Section of  
The British Computer Society

May 16, 2007

**Bryan van Tol**  
Science, Innovation and Electronic Information Division  
Statistics Canada


 Statistics Canada Statistique Canada







## Outline

- Measuring ICTs
- Using the Internet
- Telecommunications
- Regulation and Policy
- International Comparisons
- Where next?
- Contacts and links

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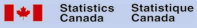



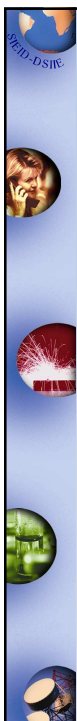


## Measuring ICTs

■ **At Statistics Canada we have several well developed measures of ICT infrastructure, access and use:**

- Canadian Internet Use Survey (CIUS 2005)
- Survey of Electronic Commerce and Technology (SECT 2006)
- General Social Survey (GSS 2005)
- ICTs in Schools Survey (2003/04)
- ...and more

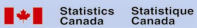

 




## Using the Internet - Individuals

■ **Canadian Internet Use Survey (CIUS)**

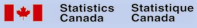

- conducted for the first time in 2005
- collects information on the Internet activities of Canadian individuals every two years
- design based on OECD model survey and needs of policy community in Canada
- voluntary supplement to existing Labour Force Survey
- replaces Household Internet Use Survey (1997-2003)


 



## Canadian Internet Use Survey (CIUS)

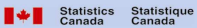

- **Key indicators**
  - access to and use of the Internet
  - frequency and intensity of use
  - location of use (home, work, school, library other)
  - type of use (email, general browsing, electronic banking, search for health, government, other information)
  - language of use
  - type of connection
  - reasons for non-use
  - electronic commerce and Internet shopping
  - privacy and security
  - social outcomes, digital divide, impacts
- **Socio-demographic characteristics**
  - age, sex, marital status, family type, education level, labour force status, geographical location, income

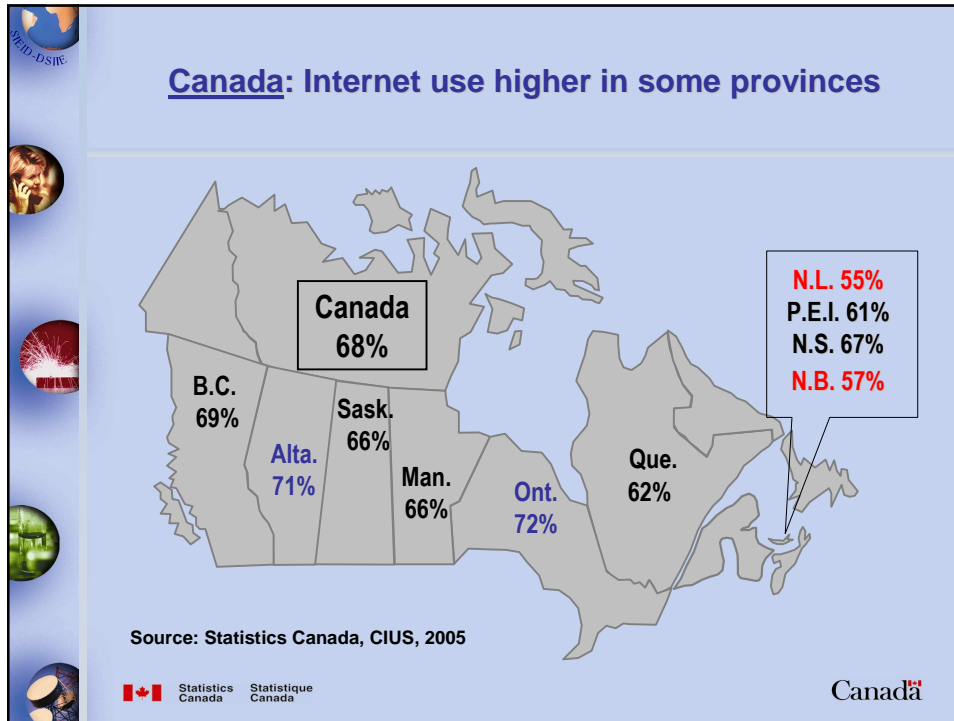
 




## Using the Internet - Individuals

- **An estimated 16.8 million adult Canadians (68%) used the Internet for personal non-business reasons in 2005**
- **Internet use depended on where people live and on who they are (e.g. age, education, income)**
- **Those living in large cities much more likely to surf than those in rural areas and small towns**





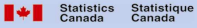
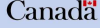
## Buying online

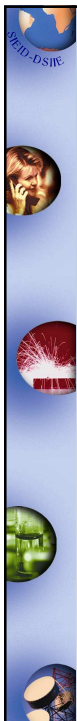
**Who: Characteristics**

- 41 years average age
- 58% male
- 63% in households with income > \$80,000
- 48% have university education

**What are people buying online?**

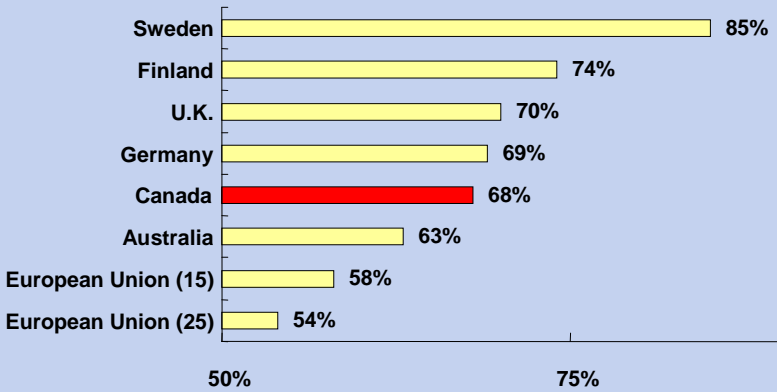
- The most popular purchases were travel and accommodation, books, and other entertainment products such as tickets

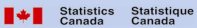
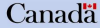



## Internet use: Selected country comparison

*Proportion of individuals using the Internet, 2005*



Country/Region	Proportion of individuals using the Internet (2005)
Sweden	85%
Finland	74%
U.K.	70%
Germany	69%
Canada	68%
Australia	63%
European Union (15)	58%
European Union (25)	54%

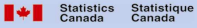




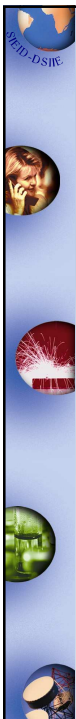


## Using the Internet - Businesses

### ■ Survey of Electronic Commerce and Technology (SECT)

- first cross-economy measures of e-commerce by a statistical office (data available for 2000-2006)
- collects information about e-Commerce and technology use by Canadian businesses and governments every year
- design based on OECD definitions, model survey and needs of policy community in Canada
- definitions focus on electronic transactions over the Internet, but do not address means of payment, methods of delivery





## Survey of Electronic Commerce and Technology (SECT)

### ■ Key indicators


- business use of E-mail, Internet, Web site
- employee access to PC, E-mail, Internet
- buying and selling on-line (with or without on-line payment)
- value of sales over the Internet (with or without on-line payment)
- % sales B2B, % sales B2C
- perceived benefits of conducting business over the Internet
- e-Business practices
- open-source software
- barriers to buying, selling on-line

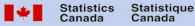
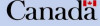
### ■ Key indicators by sector, employment size

## Using the Internet - Businesses

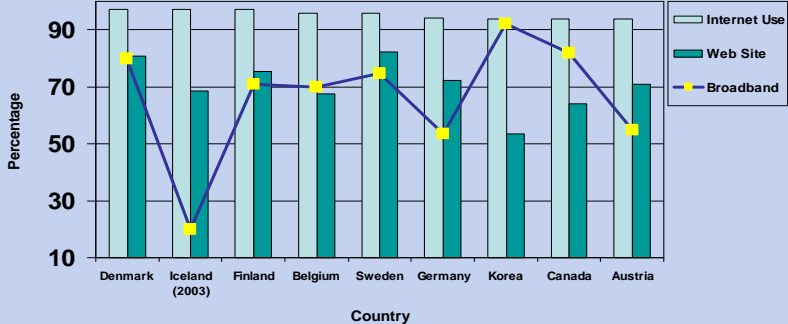
- **Survey of Electronic Commerce and Technology (SECT) 2006**
  - *The Daily* April 20, 2007
- **Rise in e-sales 6 times the rise in retail sales**
- **Large firms dominated and used broadband**
- **83% of firms used the Internet**
- **45% made purchases on the Internet**
- **40% had a Web site**
- **8% of firms sold on the Internet**
- **Exports accounted for 22% of e-sales**
- **B2B about 70%**



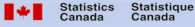
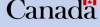
## Using the Internet - Businesses

### Use of ICTs by business - a selected country comparison



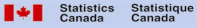
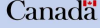
Country	Internet Use (%)	Web Site (%)	Broadband (%)
Denmark	95	80	80
Iceland (2003)	95	70	20
Finland	95	75	70
Belgium	95	70	70
Sweden	95	80	75
Germany	95	75	55
Korea	95	55	90
Canada	95	65	85
Austria	95	70	55

■ Source: STI Scoreboard, OECD, 2005

**Telecommunications**

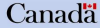
- **The Telecommunications Section at SIEID collects and publishes financial, production and infrastructure statistics for the industry. The resulting information is primarily used by:**
  - Telecommunications companies to compare their performances
  - Government for national and regional programs and policy planning
  - Private sector for industry performance measurement and market development information
  - International telecommunications organizations
- **Includes organizations that fall under the following NAICS:**
  - Wireless telecommunications
  - Wired telecommunications
  - Resellers
  - Satellite telecommunications
  - Other telecommunications

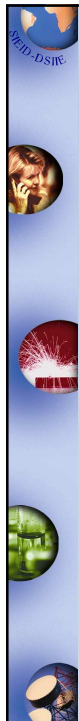



**Telecommunications**



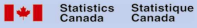

- **Measured at Statistics Canada through annual and quarterly surveys of providers**
- **Accelerating decline in the number of traditional residential phone lines**
- **At the end of the fourth quarter of 2006, there were 11.1 million traditional residential lines, down 7% in the past year**
- **Financial Post - May 3, 2007**

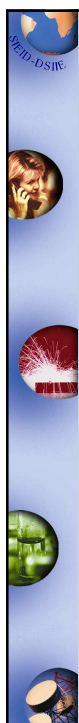





## Telecommunications

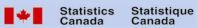

- Profits rose in conjunction with the number of wireless subscribers
- Wireless operating profits exceeded \$1 billion for the first time ever in 2006
- As of December 31st, 2006 there were 18.0 million wireless subscribers; 8.4% higher than a year previously


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## Telecommunications



- Cable, Satellite and multipoint distribution 2005
  - *The Daily*, November 2006
- 9.9 million subscribers
- A few cable operators added telephony to their list of available services in 2005. Together they had just over 210,000 subscribers at August 31.
- Convergence of technologies

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## 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
- **Recognized also that:**
  - ICTs are essential 'general purpose technologies' that contribute to economic prosperity and social well being


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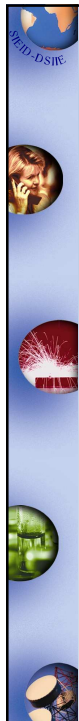
## Regulation and Policy



### New Rules...

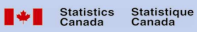

- Effective April 18, 2007, Maxime Bernier, the Minister of Industry, has changed the rules outlining the way that phone companies can set their prices
- Companies will only have to show that there are three different competitors offering phone services, including cell phones, in a given residential market, or two in a business market
- Eliminate "win-back" restrictions
- Aimed to help speed deregulation and lead to lower prices through open market competition

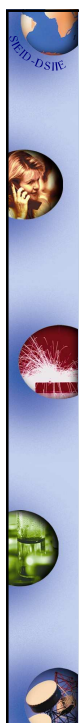

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## Regulation and Policy

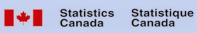

- Many of the discussions in the Policy Review could not have happened without concepts and definitions developed in order to measure the characteristics of the Information Society.



## International Comparisons

- OECD Working Party on Indicators for the Information Society (WPIIS)
- ICT Sector definition 1998
- e-Commerce definition 2000
- OECD statistics
  - The Economic Impact of ICT OECD(2004)
  - Measuring the Information Economy OECD(2002)
  - Guide to Measuring the Information Society OECD(2005)



## International Comparisons

- **International Issues**
  - Trust
  - Cyber crime
  - e-Skills
  - e-Business practices
  - Classification
  - Broadband and economic impact
  - Digital Divide


 



## Where next?

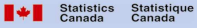

- **Data linkages**
  - Develop linkages that can lead to analytical work on the impacts of ICTs in firms
- **International comparability**
  - Continue to work with the OECD and Industry Canada on the development of new model questionnaires
  - Continue to work with the international community to develop comparable statistics



## Where next?

- **Wireline / Wireless**
  - Implications for cable companies
- **Convergence**
  - Of technologies and service provision
  - Implications for regulation
- **Global Issues**
  - China - ICT manufacturing
  - India – software and services



## Information / Contact

- [www.statcan.ca](http://www.statcan.ca)
  - Publications and Daily releases
- [www.orbicom.uqam.ca](http://www.orbicom.uqam.ca)
  - Digital Divide and Knowledge Divide
- [www.telecomreview.ca](http://www.telecomreview.ca)
- [www.oecd.org](http://www.oecd.org)

**Or email your questions to...**  
[bryan.vantol@statcan.ca](mailto:bryan.vantol@statcan.ca)

