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## Monitoring ICT developments Australia ICT Indicators Case Study

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# ICT Monitoring Players - overview

## Australian Bureau of Statistics (ABS)

- o Supply statistics: Production of ICT good and services
- o Demand statistics: ICT user surveys

Overseas sources: OECD/UN/ITU

Private sector/consultants

## Department of Communications, IT & the Arts (DCITA)

- o Commissions data and surveys, funds research and publishes Information Economy Index (IEI) and 'Current State of Play'

Other government agencies

Academic Institutions

## Australian Consumer and Competition Commission (ACCC)

- o Focus on price competition/market shares
- o **NEW**: Broadband statistics


## Australian Communications Authority (ACA)

- o Monitors network performance through data from operators
- o Surveys to measure consumer satisfaction

Businesses and individuals in Australia are required under legislation to provide accurate and complete information required by the government (1905 Census and Statistics Act)



# The ABS: ICT statistics and surveys

- ABS develops and changes ICT statistics and surveys in line with industry changes and emerging policy needs
  - Inclusion of IT use questions in 2001 Census of Population & Housing
    - Computer use at home (by age and sex)
    - Internet use (by location and sex)
-  high degree of reliability and detail and useful to analyze the national digital divide



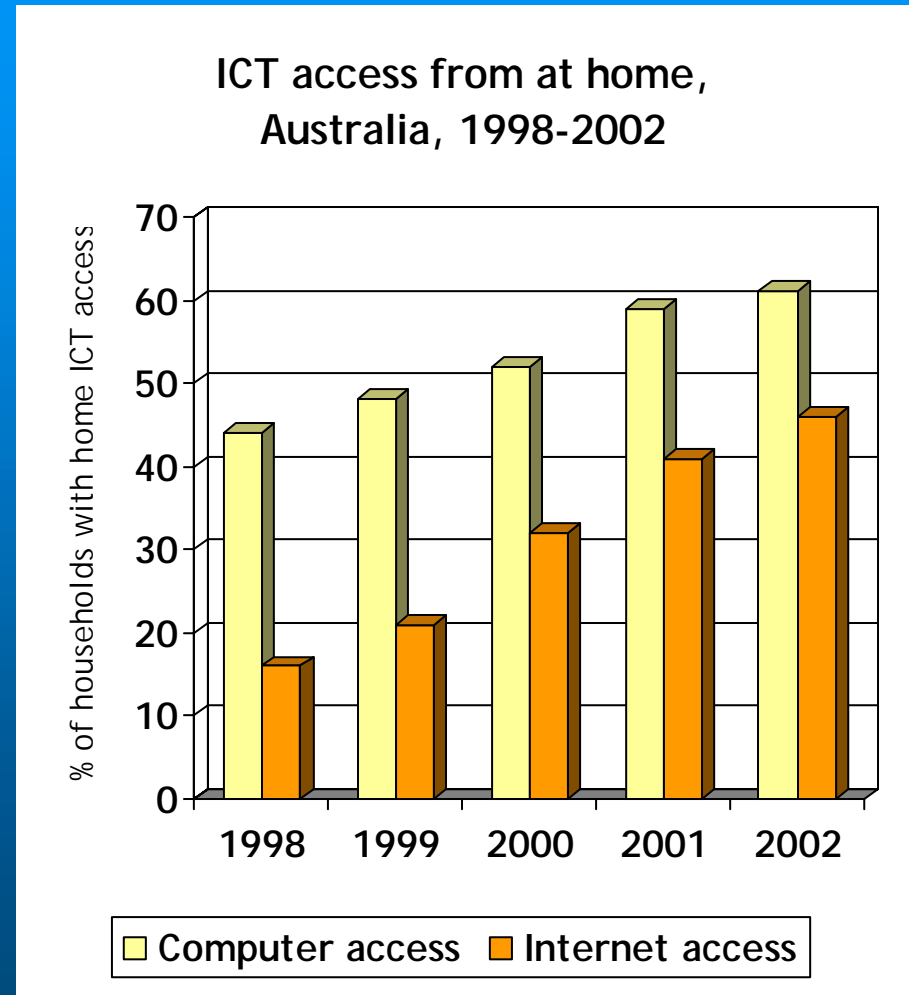
# Household use of IT survey (HUIT)

- HUIT survey was designed to provide a profile of the uptake and use of information technology in Australian households
- Reference group: people aged 18 and older in some 0.2 percent of Australia's households (randomly selected)
- Frequency: quarterly (1996/98/99/00) annually (since 2001)
- Results since 2001 combine data from two different ABS surveys
  - Survey of Education, Training and IT (carried out between April-August 2001 in 12'200 households)
  - General Social Survey (carried out between March-July 2002, in 15'500 households)
- Results published in September 2003 refer to 2001/2002 (some 14-29 months)



# HUIT scope & results

- Households with access to PC/Internet
- Numbers of PCs per household
- Reason for households being without a PC or the Internet
- Households with mobile phones
- Type of web sites accessed
- Use of PC/Internet (applications/services)
- Electronic/financial transactions
- Characteristics of and expenditure on Internet purchases/orders
- Access to government services via the Internet



Source: ABS.



# Business use of IT survey (BUIIT)

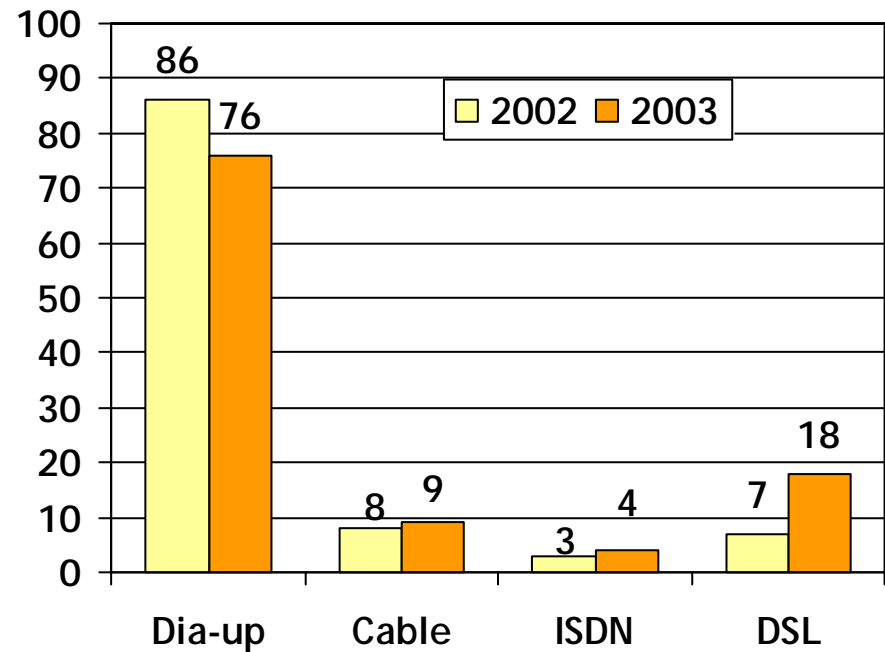
- The ABS's reply to the lack of information on business use of IT
- Reference group: All employing private businesses (680'000)
- Frequency: 5 surveys between 1993 and 2000; annually since 2000
- Results released March 2004 refer to June 2003 (9 months)
- Business characteristics defined by
  - Employment size
  - Income
  - Industry
  - Location (state)
  - Region (Capital cities, other areas)



# BUIT scope & results

- Business use of PCs/ Internet/web site
- Internet access by technology (dial-up/cable/ISDN/DSL)
- IT security measures & breaches/problems
- Web presence/features
- Internet commerce activity (ABS uses OECD definition!): value, barriers and benefits
- Use of government services by businesses

Internet access by technology, businesses, June 2003



Source: ABS.



# Other IT surveys by ABS

Sector/Survey	Published/ Reference date	Scope	Main topics
Farm use of IT (questions included in agricultural survey)	First: 1997/98 Last: Sept. 2004 (15) June 2003 data Annual	Covers 35'000 farms (26% of total)	Computer & Internet access
Government technology	First: 1993/94 Last: 07/2004 (13) 2002/03 financial year data Annual	Total government	ICT expenditure and employment
Internet Activity Survey	First: Sept. 2000 Last: July 2004 (4) March 2004 data Biannual/annual since 2004	All ISPs	Business/residential Technology (broadband etc) ISP traffic by technology
Information Technology Survey	First 1992/93 Last: 2000/02 Ad hoc	All businesses specialized in IT&T	Structure and performance of IT&T goods and services by businesses : industry size, income, production



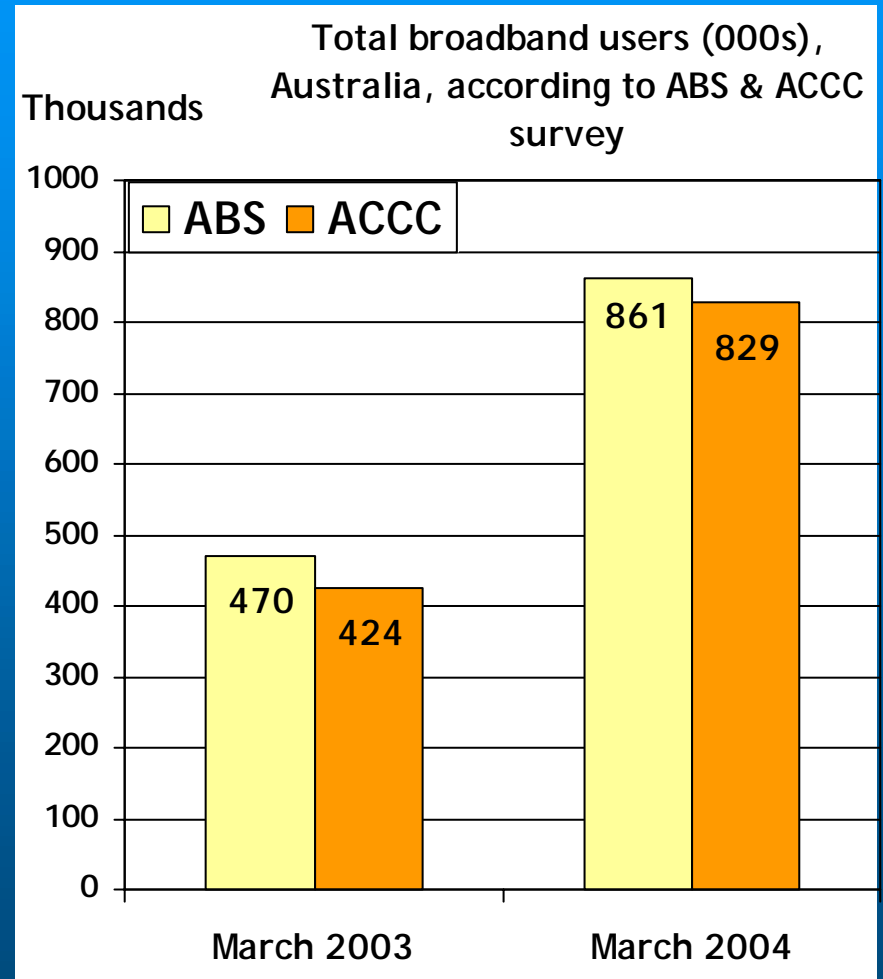
# Other ICT sources

- Administrative data
  - To allow modeling, for example data from the Australian Customs/Taxation Office to evaluate macroeconomic impact of ICT or labor force data to measure employment impact
- Other government agencies
  - Department of Education's survey on ICT literacy and use
- Private sector (SENSIS, AC Nielsen, AAS Consulting etc) is commissioned to collect ad-hoc surveys and to fill the gaps
  - Advantage: quick delivery of results
  - Example: e-government benefits study



# Duplication or cooperation?

- While the ABS collects broadband statistics as part of its Internet Activity Survey, DCITA has charged the ACCC with collecting quarterly broadband statistics by
  - Technology
  - Data speed
  - Geographic postcode
  - Business sector
- ABS will stop Internet Activity Survey if ACCC regularizes broadband survey
- Broadband issue highlights:
  1. Importance of timely data
  2. Independence of ABS
  3. Burden on operators



Source: ABS.



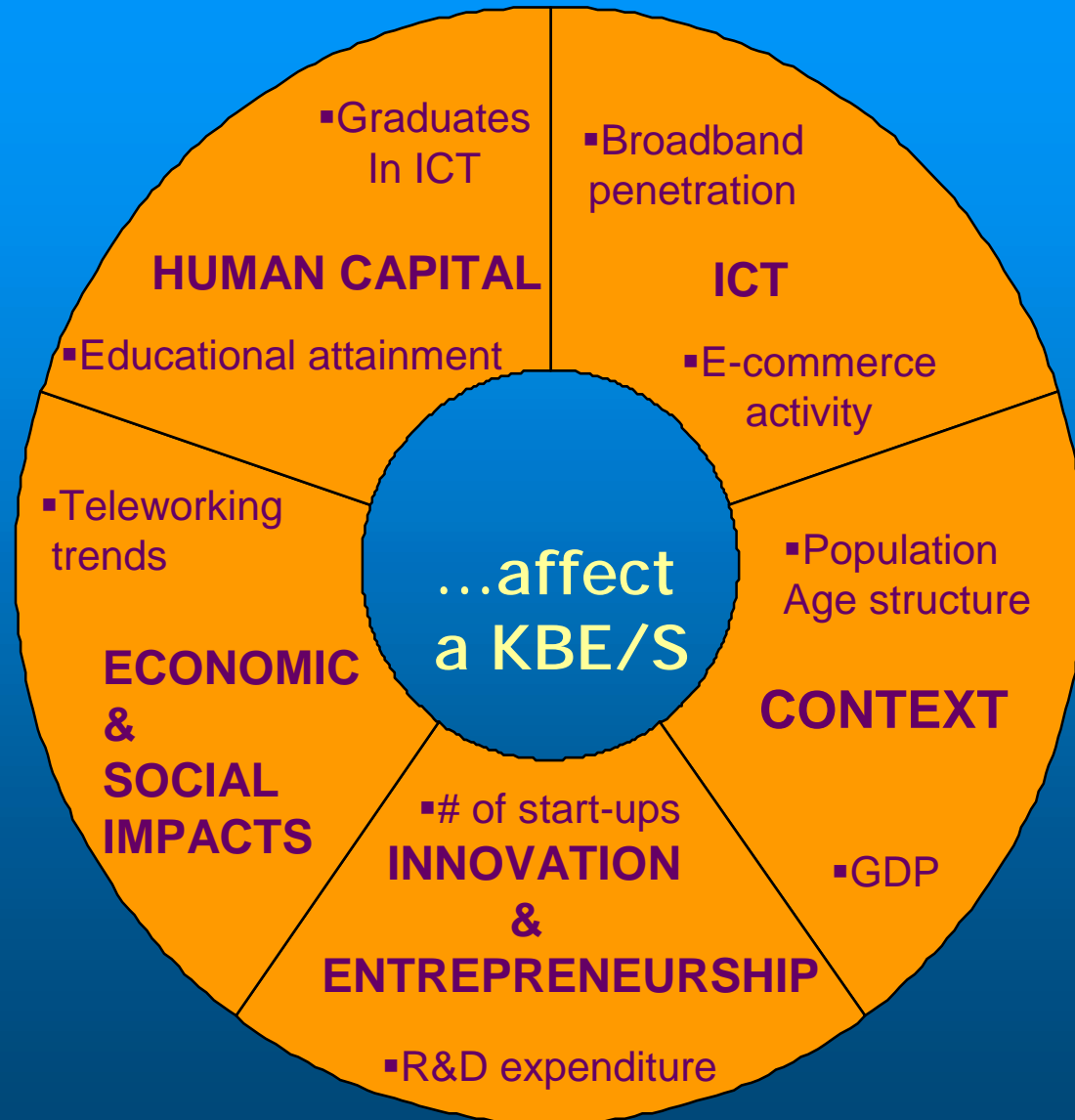
# Cooperation: The *ICT Reference Group*

- A formal mechanism/high level forum to bring together stakeholders to discuss ICT statistics
- Established by ABS in February 2004, includes representatives from the ICT industry, data providers (operators), government policy department (DICITA), the treasury portfolio (macroeconomic impact), and academic representatives
- Will meet twice a year to discuss new indicators, identify statistical priorities based on policy, business and community requirements, including such questions as:
  - How to measure SPAM filtering products by ISP and IT security
  - Regional/detailed broadband subscriber data



# Use of ICT Statistics - KBE/S

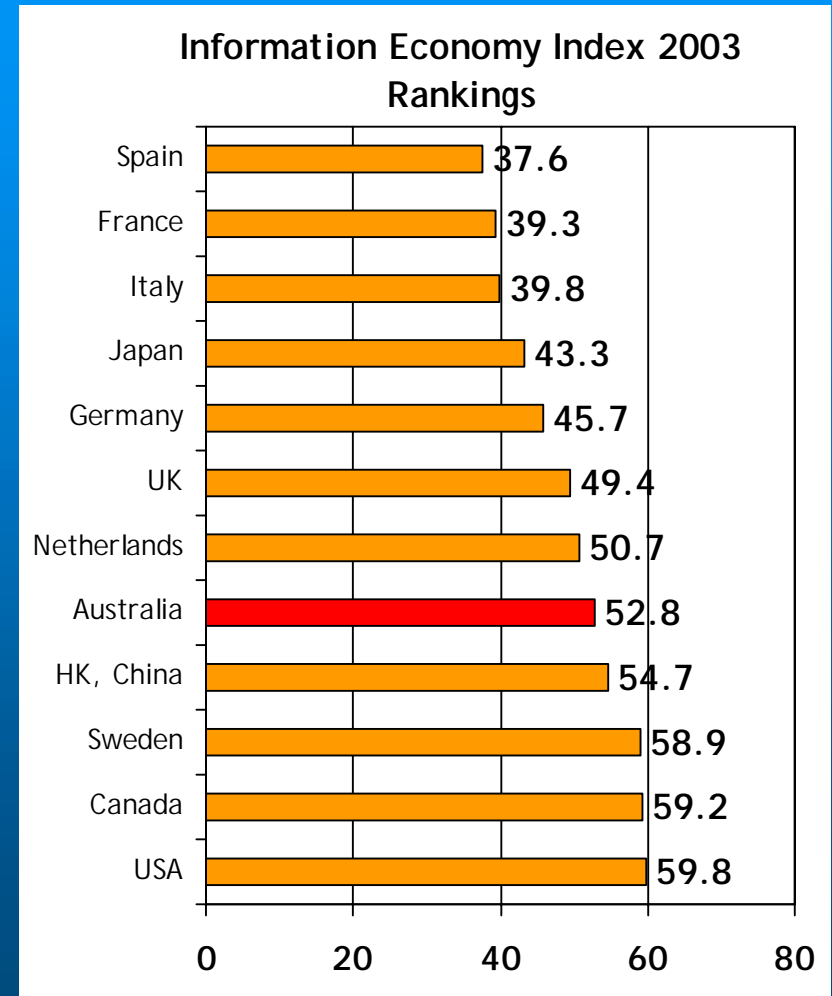
- *Measures of a knowledge based economy/society, Australia (ABS, 2003) - a proposed framework based on*
  - 5 dimensions
  - many possible indicators
- Inventory of existing data (including foreign sources, such as OECD)
- Points to missing data
- Highlights use of data





# DCITA's Information Economy Index

- Benchmarks Australia against 11 other economies
- 23 Indicators, including:
  - Use of mobile phone
  - Internet access/use (by gender/age)
  - Price of Internet use
  - Broadband use
  - E-business ranking, etc
- Source: AC Nielsen; DCITA was able to influence data collection by private sector
- Highlights importance of international comparability



Source: DCITA



# Conclusions

- Use the existing channels
  - Strengthen the NSO and build on its expertise
  - Add questions to existing questionnaires/surveys/census (cross-sector cooperation)
  - Negotiate with market research companies and explore regional data collection and cost-sharing
  - User funded surveys which allow departments to pay for certain information from the statistical office
- Use the existing data and identify new indicators
  - Formal & informal cooperation among players
  - Make use of private market research companies and the academic sector
- Methodology
  - Use existing definitions
  - Provide details & identify changes in methodology
- Create the right legal basis
- Minimize burden on operators