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Monitoring ICT developments Australia ICT Indicators Case Study

Vanessa Gray
(vanessa.gray@itu.int)
Market Economics and Finance Unit
Telecommunication Development Bureau



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



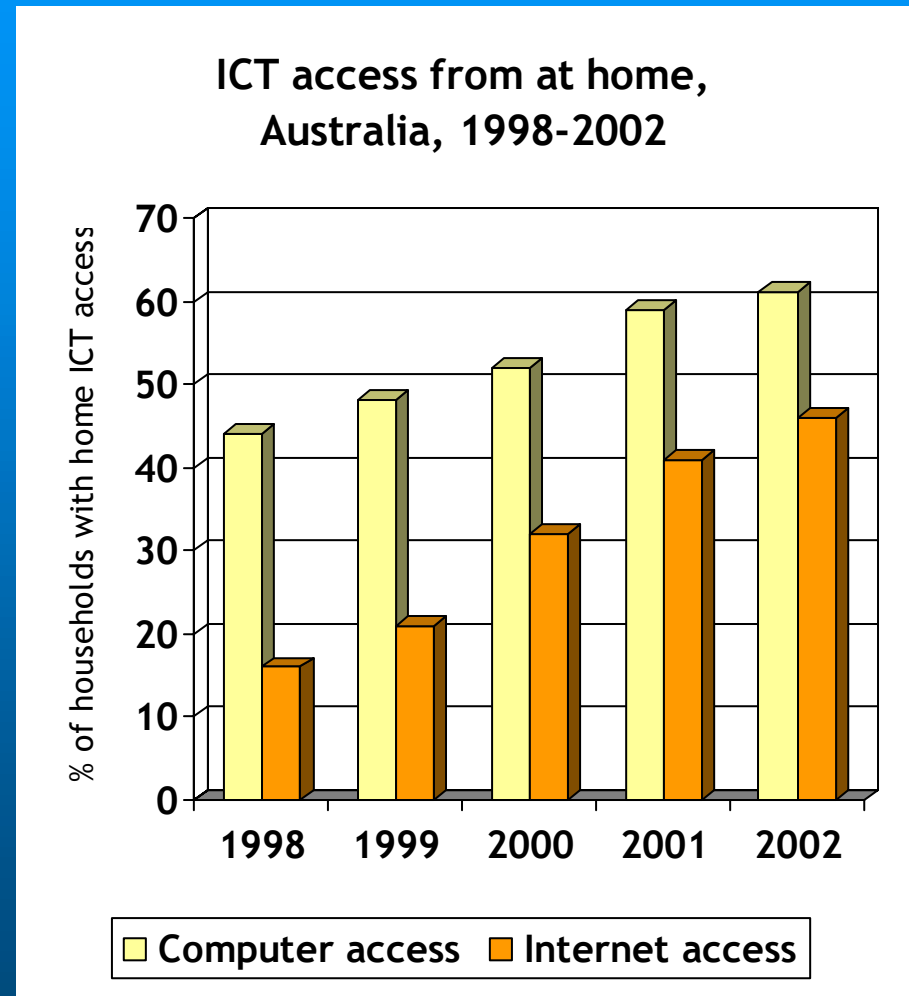
Household use of IT survey (HUIT)

- 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)

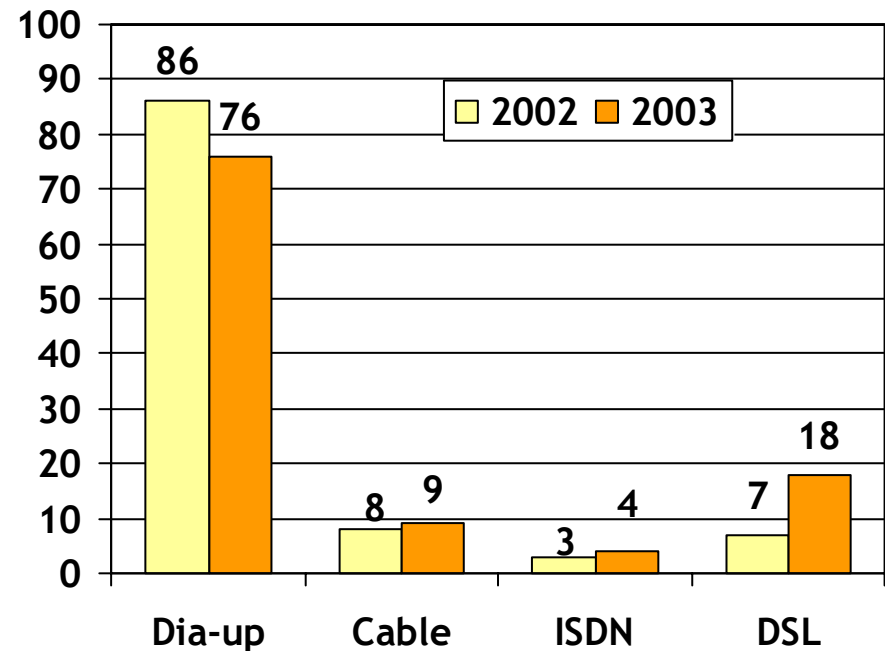
- The ABS's reply to the lack of information on business use of IT
- Reference group: All employing private businesses (680'000)
- Frequency: 5 surveys between 1993 and 2000; annually since 2000
- Results released March 2004 refer to June 2003 (9 months)
- Business characteristics defined by
 - Employment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



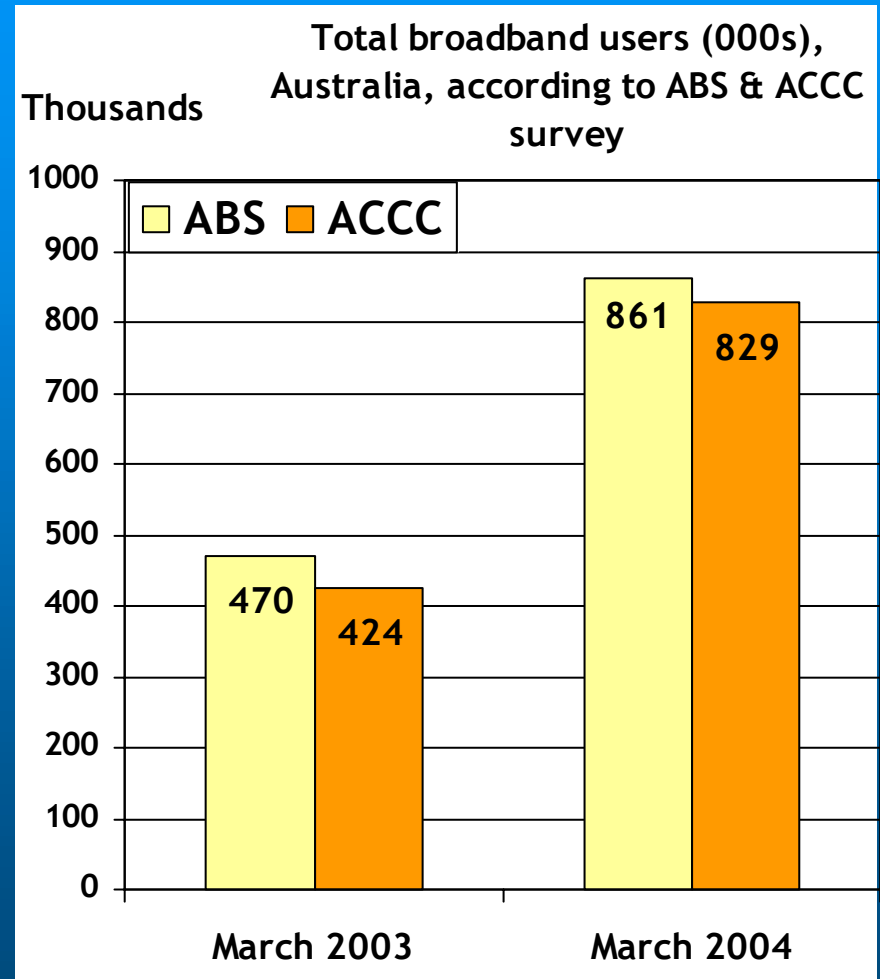
Other ICT sources

- 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.



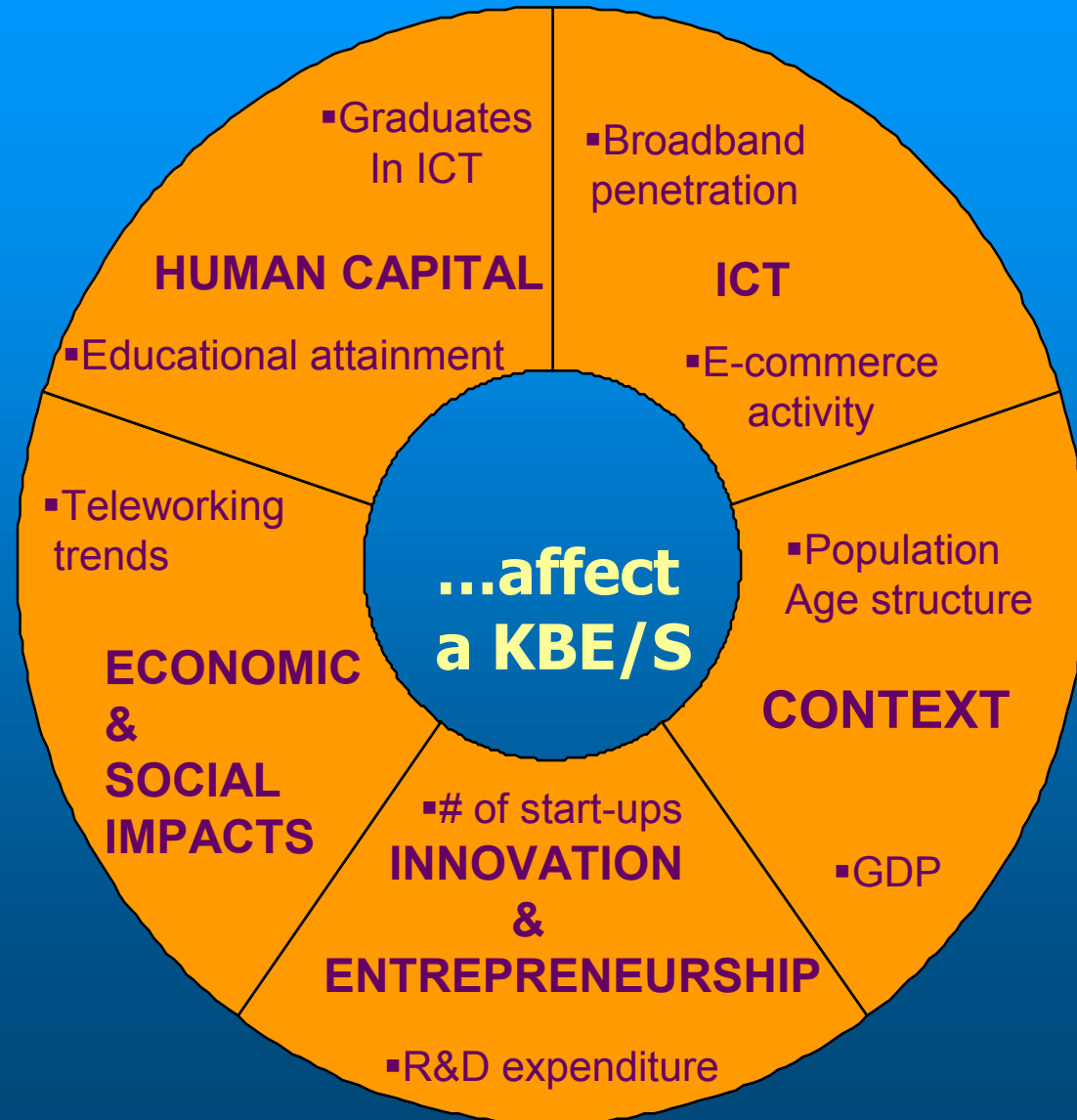
Cooperation: The *ICT Reference Group*

- 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

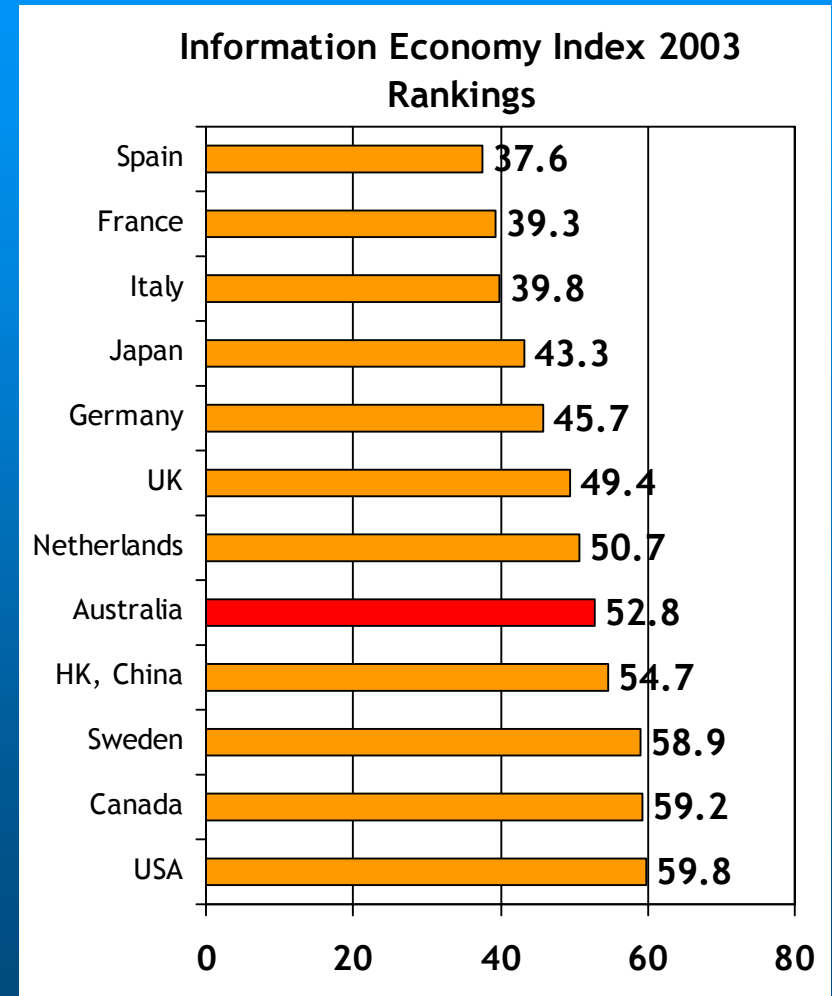
- *Measures of a knowledge based economy/society, Australia (ABS, 2003) - a proposed framework based on*
 - 5 dimensions
 - many possible indicators
- Inventory of existing data (including foreign sources, such as OECD)
- Points to missing data
- Highlights use of data





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