Development in Official Statistics on the Adoption of ICT in Australia

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1. Introduction

This paper describes the history of Australian Bureau of Statistics (ABS) statistical developments for measuring the adoption of information technology and telecommunications (IT&T) in Australia. It also outlines the range of ABS IT use statistics which are available. It is a sister paper to the 'ABS Electronic Commerce Statistics and Methodological Issues' paper being presented at the 53rd Session of ISI Meeting in Seoul, Korea, which describes the electronic commerce statistics collected by the ABS.

Since the early 1990's, ABS has progressively introduced an IT&T statistics strategy to measure the production, distribution and use of IT goods and services. Specific surveys have been introduced to cover the supply side (IT&T Industry) and demand side (use of IT by households, individuals, businesses, farms and government). The ABS IT&T (supply-demand) statistics strategy has developed over time and has been influenced by a number of factors including:

- developments in international statistical standards.
- the current policy interest of federal and state/territory governments;
- statistical feasibility (is it measurable);
- the need to minimise reporting load on respondents; and
- resources available (funding, available survey vehicles, skilled staff).

Generally, survey developments have been guided by the stated requirements of key users such as policy makers, research analysts, industry associations and industry participants. Development of appropriate IT statistical indicators in surveys has usually led their availability as an international standard.

2. International Standards for IT Statistics

ABS has been working with the OECD since 1997 on addressing the need for international standards for ICT statistics. Standards work has progressed on establishing a set of definitions and methodologies to facilitate the compilation of internationally comparable data for measuring various aspects of the information economy/society and electronic commerce. Agreements between member countries have been reached on:

- a broad measurement model for e-commerce comprising indicators for E-readiness, E-intensity and E-impact;
- a set of core e-commerce indicators for businesses and households;
- the broad and narrow definitions of e-commerce transactions;
- the broad form of a model questionnaire for collecting business use of ICT statistics; and
- an industry based definition of the ICT sector, although this is being reviewed.

In May of this year, ABS hosted a meeting of statisticians from Singapore, Japan, Republic of Korea, Hong Kong (SAR of China), New Zealand and Australia who had expertise in the design and collection of statistics on IT&T. The meeting presented an opportunity to share experiences and to gain a better understanding of the issues and future directions for statistical work in the field of IT&T statistics, including proposals for promoting consistency in application of standards.

3. Priority areas for Australian IT Statistics

On an ongoing basis, ABS has been working with key users, including the Federal government Department of Communications, Information Technology and the Arts (DCITA), the National Office for the Information Economy (NOIE) and various State agencies responsible for IT, to determine where their current policy interests are and where statistical data might be required to assist in decision making. The key current information requirements or policy areas of these users are listed below:

- ***Opportunity, access and equity*** - covers issues of awareness, access, affordability, equity and learning opportunities.
- ***Skills and Education*** - covers the broad skill requirements of individuals and the specialist skill requirements of businesses to take maximum advantage of the opportunities offered by an information economy.
- ***Infrastructure for the Information Economy*** - covers the provision of a high quality supporting infrastructure across all of Australia and the manufacture and trade in new technologies.
- ***Electronic Commerce*** - covers the use of e-commerce by Australian businesses and consumers within a secure environment.
- ***Development of Australia's Information Industries*** - covers Australia's IT industries generally and their economic growth and contribution.
- ***Promotion of Australian content and culture*** - covers the promotion of Australian culture through, among other things, the facilitation of on-line cultural content.
- ***Delivering Government services on-line*** - covers government maximising the use and provision of on-line services.
- ***The importance of a regional information economy*** - covers the provision of improved communications and IT in regional Australia so as to build stronger regional communities, leading to enhanced investment, employment and quality of life.

To address the IT statistical requirements covered by these policy concerns/issues, the ABS has developed and regularly reviewed an IT&T (supply-demand) statistics strategy over the years. The strategy currently has in place the following surveys and data sources:

- Annual (previously quarterly) Household (use of) Technology Survey
- IT questions in Survey of Children's Participation in Cultural and Leisure Activities
- IT questions in 2001 Census of Population and Housing
- Annual Business (use of) Technology Survey
- IT questions in Annual Agriculture Commodity Survey
- Annual Business IT&T Capital Expenditure from economy-wide Economic Activity Survey
- Biennial Government (use of) Technology Survey
- Quarterly Internet Activity Survey of Internet service providers
- Biennial IT&T Industry Survey
- IT&T commodity details from trade system (imports and exports)
- Annual R&D Expenditure by IT&T Industry
- IT&T Satellite Accounts
- IT&T Occupational data from Census of Population and Housing and Labour Force Survey

The content of ABS surveys will continue to change in line with developments in the IT field and as the needs of users evolve. For example, the move to digital systems coupled with the greater availability of broadband services will be an area requiring more attention in the future. Information on distribution systems, integration of computer systems and management of knowledge are other areas needing attention.

Most of the Australian e-commerce indicators currently available are mainly related to E-readiness indicators (i.e. the technical, commercial and social infrastructures which are necessary to support e-commerce) and E-intensity indicators (i.e. the state of e-commerce usage, volume, value and nature of transactions). ABS is beginning to explore the provision of E-impact indicators (i.e. measurements of the difference made by e-commerce in terms of efficiency and creation of sources of new wealth) by including a perception question on the 2000-01 Business (use of) Technology Survey and commencing work on an IT&T Satellite Account.

An outline of how the ABS IT&T (supply-demand) statistics strategy has developed over the years is presented below. The details have been organised according to the year in which decisions were made regarding the strategy. It shows how the ABS has responded to the greatly increased data needs of key stakeholders over the years by introducing new IT surveys and matching survey content with developments in the IT field.

The Appendix to this paper presents some of the ABS statistics on the information economy/society that go to addressing the priority needs of users. A range of additional statistics on electronic commerce are contained in the sister paper 'ABS Electronic Commerce Statistics and Methodological Issues'.

4. Development of the ABS IT&T Statistics Strategy

Late 1980's

In the latter part of the 1980's, the policy attention in Australia was primarily on developing the IT&T equipment industry in Australia (the strategic importance of this industry on business growth and performance was recognised). Federal government programs at this time were not intended to overcome impediments to the adoption of new IT technologies by other industries. There was no systematic collection of IT use statistics except for those collected as part of a wider range of advanced technologies used by manufacturers in the 1988 and 1991 Manufacturing Technology Surveys. These surveys aimed to provide information about the diffusion of advanced technologies in manufacturing businesses and to ascertain any impacts on business performance and productivity. The IT use details collected were on the use of local area computer networks and intercompany computer networks.

Early 1990's

In the early 1990's, the ABS IT&T (supply-demand) statistics strategy was put in place as a result of advances in technology convergence and policy developments. The ABS conducted its first comprehensive IT&T Industry Survey (covering relevant IT manufacturing, distribution and service industries) in respect of 1992-93.

Part of the assessment of user requirements made during the lead up to the 1992-93 IT&T Industry Survey revealed that information was also required about the demand for (or use of) IT goods and services. The importance of 'enabling' IT technologies for modernisation and productivity improvements across all sectors was accepted and policies promoting the wider diffusion and uptake of new IT technologies were beginning to be implemented by the federal government.

Plans were put in place to conduct surveys which measured the use of computers by businesses, government organisations and households in respect of 1993-94 (February 1994 for the household sector). These initial surveys mainly focused on the use of computers and measured the number of computers being used in business, government and in the home, the type of computers, the money being spent on them and (in the case of business and government surveys) the professional staff effort being spent on providing an IT service to the employees of the organisation. Based on the information collected in the various surveys it was possible to compose an overview of the supply (from domestic production, in house production, wholesale markup and imports) and demand (use by business, government, households and exports) situation in Australia.

1995

The ABS decided to undertake a repeat of the IT&T Industry Survey in respect of 1995-96 and to conduct quarterly household use of IT surveys during 1996. The government objectives at this time were to accelerate the development of the IT&T industry in Australia and to promote technology diffusion in all sectors (including households) with the intention of establishing Australia as an information society. There was a need for statistics to highlight areas of social and economic concern such as barriers to universal access. The 1996 quarterly household use of IT surveys collected a range of household and personal information covering the types of technology used at home, number of computers, types of computer peripherals, amount spent on computer equipment, computer use at home, work and other places, and barriers to having a home computer.

1996

As the telecommunication services industry was being deregulated and opened up to full competition from July 1997, a separate survey of the industry in respect of 1996-97 was conducted to provide a detailed picture of the structure and composition of the industry just prior to these changes.

1997

To ensure that Australia captured the benefits of the information economy, the then federal government's policy initiatives were aimed at fostering business and consumer confidence through a light touch regulatory framework, establishing the federal government as a leading edge user, improving Australia's information technology industry base, ensuring that Australia was a more competitive global information economy player, facilitating equitable access to the information age (including regional Australia) and ensuring that Australians had the skills necessary to embrace the information economy.

The introduction of more powerful computers and the greater availability of access to the Internet, in conjunction with declining IT costs, had led to an increase in the take up of IT in households and businesses. In response to the need for a greater and more frequent range of data about the supply and demand of IT goods and services in Australia, the ABS developed a new strategy involving a program of regular IT&T surveys. However, the rapidly changing IT field and lack of international standards presented the ABS with a challenge in developing statistical indicators which were relevant for policy and research needs. The program involved the following elements:

- To conduct the next business and government use of IT surveys in respect of 1997-98 and then every second year. The 1997-98 surveys focused on measuring a wider range of IT use including details on Internet and web-site activities/services, barriers to Internet access, IT employment and IT expenditure details. An attempt was also made to collect a value for Internet sales transactions from businesses.

- To conduct the next quarterly household use of IT surveys in respect of 1998 and then every second year. The 1998 surveys collected a wider range of household and personal information covering the types of technology used at home, number of computers, types of computer peripherals, amount spent on computer equipment, computer and Internet use at home, work and other places, frequency of home computer use, barriers to having a home computer, intention to gain Internet access at home, Internet purchases for own private use, incidence of electronic financial transactions and working from home details.

- To conduct the next IT&T Industry Survey in respect of 1998-99 and then every second year.

User funding also enabled farm use of IT details to be collected for the first time in the 1997-98 Agriculture Commodity Survey. Information on farm use of selected technologies, barriers to Internet use, intention to connect to the Internet and telephone line problems were collected with regional output being available.

1998

In order to address strong user needs for continuity of indicators, it was decided to continue the quarterly household use of IT surveys during 1999. However, due to budgetary constraints, a smaller range of household and personal information was collected (excluded were questions on types of technology used at home, number of computers, types of computer peripherals, amount spent on computer equipment and barriers to a home computer; included were questions on how often the Internet was accessed at home, work and other places and additional information about Internet purchases).

With the further assistance of user funding, it was decided to collect farm use of IT details in respect of 1998-99. A two phased collection approach was adopted with the 'core' questions on use of computers and the Internet and intention to connect to the Internet being included on the 1998-99 Agriculture Commodity Survey. A supplementary 1998-99 Agriculture Internet Use Survey was then forwarded to those farms which had indicated Internet use, requesting additional details on place and frequency of Internet access, cost of Internet access, services accessed via the Internet and Internet purchases.

1999

A review of the ABS IT&T (supply-demand) statistics strategy was undertaken in 1999 and an examination of key user requirements revealed the need for:

- more regular information on the IT&T industry (annual preferred over biennial);
- information on the contribution of the IT&T industry to GDP and productivity growth;
- more regular indicators of Internet penetration, barriers to Internet adoption and e-commerce activities including incidence and value of Internet sales and use of on-line services;
- State and regional indicators of household and business adoption of (and barriers to) the Internet and e-commerce activities;
- continuation of farm use of IT indicators, particularly on a regional basis;
- additional information about infrastructure performance (service quality and reach) on a regional basis; and
- information on IT skills.

ABS consideration of these statistical needs resulted in the following decisions being made:

- To change the biennial business use of IT survey to annual, commencing with the 1999-00 survey, so as to provide continuity of indicators and to explore to a greater depth issues concerning the Internet, web sites and e-commerce (including the value of Internet commerce). The data content of the 1999-00 survey changed with additional questions on Internet and web sites activities/services being added and questions on IT income, IT expenditure and number of employees using IT being deleted.

- To develop and trial a quarterly Internet Activity Survey (of Internet Service Providers) commencing in the September quarter 2000 to provide information about the ISP industry, more frequent information on business take up of the Internet and the provision of regional Internet details (points of presence usage statistics). The range of information collected in the new survey included the number and type of Internet subscribers (new and at end of period), volume of data downloaded, Internet technologies utilised, Internet access plans used, number of web sites hosted and technical and other services provided and points of presence details (access lines, subscribers and data downloaded).

- To maintain the quarterly household use of IT survey in 2000 and include the full range of household and personal questions.

- To maintain the biennial (even year) government use of IT survey and examine government on-line services. The 1999-00 survey focused on measuring government use of web sites and electronic service delivery, as well as IT employment and IT expenditure (including outsourcing payments).

- To maintain the 'core' farm use of IT indicators in the annual Agriculture Commodity Survey (except in a full census year) which would enable industry and regional information to be provided. Data requirements in addition to this would have to be met by user funding.

- To maintain the biennial IT&T Industry Survey and investigate the possibility of compiling an IT satellite account.

As part of the planning for the first survey of the cultural and leisure activities of Australian children, ABS decided to include a module on IT use. The Survey of Children's Participation in Cultural and Leisure Activities was undertaken as a supplementary survey to the April 2000 Monthly Population Survey and collected household information on home computer and Internet access and personal information on computer and Internet access including place of access, frequency of use and IT activities usually undertaken.

In order to address the policy needs for IT use information on small geographic areas and on small population groups, ABS decided in November 1999 to include two questions on the 7 August 2001 Census of Population and Housing on use of a personal computer at home and use of the Internet at home, work and elsewhere (both are personal questions).

2000

The ABS undertook a review of its household surveys program during 1998 and 1999 to assess its continued relevance. As a result of this review, the ABS decided in 2000 to introduce an expanded program of household surveys from 2002 containing the following elements:

- Monthly labour force and supplementary surveys;
- Special social surveys (SSS);
- General social survey (GSS);
- Indigenous general social survey (IGSS); and
- Multi-purpose household survey (MPHS).

As part of these changes, it was decided to discontinue, at the end of 2000, the quarterly Population Survey Monitor (PSM) - the survey vehicle for household use of IT statistics. It was resolved to incorporate the information technology topic into the new household survey program by utilising the following survey vehicles:

- For 2001, the important household use of IT data items are incorporated into the education and training topic which is run as part of the SSS program every 4 years (2001 Survey of Education, Training and Information Technology).

- For 2002, the information technology topic will be included in the GSS. The GSS program will be conducted every three years and will obtain broad information across all areas of social concern. The GSS will provide an insight into the living standards that families achieve from the range of human and economic resources at their disposal and allow for an assessment of the various dimensions of social advantage and disadvantage. The content of the survey will be largely stable, with some capacity to cover contemporary and emerging issues. The information technology questions in the GSS cover the important data items previously included in the PSM.

- For 2003 and 2004, the information technology topic will be included in the MPHS which will be conducted in those years when the GSS is not in the field (ie two years in every three). The MPHS is a new flexible multi-topic survey vehicle which will collect a well chosen set of data in a number of subject fields rather than a large amount of data about a single topic.

Late in 2000 it was decided to provide technical assistance for a Survey of Future Demand for IT&T Skills being conducted by a private consultancy firm on behalf of the Australian IT&T Skills Exchange. The IT&T Skills Exchange is a joint Federal Government and industry initiative to assess the shortage of IT&T skills in Australia and to work with industry and education sectors to better match the supply and demand for skills in emerging areas of IT&T technologies. The ABS involvement was to provide expertise to design the sample, facilitate the despatch of survey materials and provide other technical support such as form design advice, survey maintenance procedures and technical reports.

The data content of the survey included total employment and numbers of IT&T employees and IT&T contractors, employment by IT&T occupation groups and their characteristics, demand for IT&T skills by type, importance of business skills for IT&T employees and methods and barriers to filling vacant IT&T positions.

Results from the survey (demand for IT&T skills) were compared with information from the Department of Employment, Training and Youth Affairs and the National Centre for Vocational Education Research on the number of IT&T graduates from Australian universities and institutions, net migration of people with IT&T skills and IT&T course completions from private providers (supply of IT&T skills).

The current areas of government policy interest in relation to the information economy/society are outlined in Section 3.

For the 2000-01 business use of IT survey, a major change in the approach to measuring Internet sales values was made from 'value of Internet sales orders for goods and services' to 'earned income from the sale of goods or services ordered via the Internet'. This has enabled a generalised form approach to be maintained which should be able to be completed by all businesses (including businesses acting as agents for other businesses).

It was decided to commence work on compiling an IT&T satellite account which would bring together all the IT&T goods and services produced by all industries (including own-account IT&T work), allowing the measurement of the direct impact on the economy. An IT&T satellite account would define IT&T products and identify the supply and use of such products (goods and services) within the context of the balanced supply and demand (use) framework, which is a central feature of the national accounts.

A variety of supply and demand outputs would be generated from an IT&T satellite account which would also provide information on the contribution of IT&T activity to each industry's output, the contribution of IT&T activity to each Industry's value added and IT&T contribution to GDP. It is expected that an IT&T satellite account would facilitate investigations on where the productivity gains arising from IT&T are being made. However, identifying and filling data gaps will be the first step in compiling these accounts.

5. Conclusion

The range of data now collected under the ABS IT&T statistics strategy is substantial and meets most of the priority statistical requirements of users. Over the years ABS has been responsive to the changing needs of key users by introducing new surveys and adapting the content of existing surveys. However it is recognised that it has not been possible to address all policy areas due to infrastructure and funding constraints. A major review of the ABS IT&T statistics strategy is planned for this year.

6. References

ABS publications on the use of IT in Australia are:

- Use of the Internet by Householders, Australia (Catalogue no. 8147.0)
- Household Use of Information Technology, Australia (Catalogue no. 8146.0)
- Business Use of Information Technology, Australia (Catalogue no. 8129.0)
- Use of Information Technology on Farms, Australia (Catalogue no. 8150.0)
- Government Use of Information Technology, Australia (Catalogue no. 8119.0)
- Internet Activity, Australia (Catalogue no. 8153.0)

The Information technology theme page on the ABS web-site can be accessed by going to www.abs.gov.au and selecting 'Themes' from the menu shown on the left side and then selecting the 'Information Technology' theme page.

APPENDIX: SUMMARY OF RESULTS FROM SURVEYS

Table 1. Households with home computer access and home Internet access (a)

Item	Total number of	Home computer access		Home Internet access	
	households ('000)	Number ('000)	Per cent (%)	Number ('000)	Per cent (%)
1998	6 832	3 045	45	1 082	16
1999	6 948	3 329	48	1 536	22
2000:					
Family type:					
Married/de facto couple	1 845	818	44	513	28
Married/de facto couple with dependants	2 389	1 825	76	1 168	49
Single parent	615	331	54	157	26
Single person	1 541	408	26	228	15
Other	690	386	56	263	38
Households:					
Without children under 18	4 552	1940	43	1 202	26
With children under 18	2 528	1828	72	1 126	45
Household income:					
$0 - $24,999	1 878	450	24	190	10
$25,000 - $49,999	1 530	794	52	424	28
$50,000 - $74,999	1 239	821	66	496	40
$75,000 - $99,999	604	473	78	331	55
$100,000 or more	641	544	85	441	69
Not stated/Don't know	1 188	687	58	447	38
Region:					
Capital cities	4 501	2 537	56	1 666	37
Other areas	2 579	1 232	48	662	26
Total 2000	7 080	3 768	53	2 329	33

(a) Results are derived by combining the four quarterly surveys conducted in the year.

Table 2. Adults use of computers, the Internet and Internet purchasing (a)

Item	Total number of	Adult computer use		Adult Internet access		Adult Internet purchasing	
	adults ('000)	Number ('000)	Per cent (%)	Number ('000)	Per cent (%)	Number ('000)	Per cent (%)
1998	13 429	8 085	60	4 230	32	347	3
1999	13 589	n.a.	n.a.	5 551	41	653	5
2000:							
Age group (years):							
18 - 24	1 843	1 635	89	1 375	75	155	8
25 - 34	2 815	2 325	83	1 750	62	272	10
35 - 44	2 887	2 259	78	1 508	52	250	9
45 - 54	2 532	1 764	70	1 199	47	201	8
55 - 64	1 681	795	47	439	26	69	4
65 or over	2 083	340	16	179	9	20	1
Sex:							
Males	6 832	4 660	68	3 449	50	621	9
Females	7 008	4 458	64	3 002	43	346	5
Personal income:							
$0 - $39,999	9 328	5 498	59	3 653	39	396	4
$40,000 - $79,999	2 428	2 140	88	1 681	69	330	14
$80,000 or more	514	477	93	426	83	151	29
Employment status:							
Employed	8 792	7 174	82	5 279	60	832	9
Not employed	5 049	1 944	39	1 172	23	135	3
Region:							
Capital cities	9 060	6 171	68	4 557	50	738	8
Other areas	4 780	2 947	62	1 894	40	229	5
Occupation:							
Manager and professional	3 392	3 079	91	2 585	76	556	16
Clerk, sales person	1 851	1 677	91	1 224	66	144	8
Trades person, labourer	2 720	1 958	72	1 210	45	116	4
Qualifications:							
Secondary school	6 949	3 684	53	2 362	34	281	4
Trade or other certificate	3 770	2 606	69	1 699	45	202	5
Undergraduate diploma	969	851	88	670	69	110	11
Bachelors degree	2 014	1 858	92	1 633	81	363	18
Total 2000	13 840	9 118	66	6 451	47	967	7

(a) Results are derived by combining the four quarterly household surveys conducted in the year.

Table 3. Children's use of computers and the Internet, April 2000

Item	Total number of children 5 to 14 years ('000)	Used a computer but not the Internet		Accessed the Internet		Total computer and Internet	
		Number ('000)	Per cent (%)	Number ('000)	Per cent (%)	Number ('000)	Per cent (%)
Age group (years):							
5 - 8	1 056	710	67	232	22	943	89
9 - 11	817	344	42	450	55	794	97
12 - 14	770	210	27	552	72	762	99
Sex:							
Males	1 354	639	47	643	48	1282	95
Females	1 287	626	49	591	46	1217	95
Region:							
Capital cities	1 549	741	48	724	47	1 465	95
Other areas	1 092	523	48	511	47	1 034	95
Employment status of parents:							
One-parent families							
Parent employed	253	104	41	140	55	245	97
Parent not employed	248	131	53	93	37	223	90
Total	501	235	47	233	46	468	93
Couple families							
Both parents employed	1 238	544	44	653	53	1 197	97
One parent employed	737	389	53	296	40	685	93
Neither parent employed	166	97	58	52	31	149	90
Total	2 141	1 029	48	1 002	47	2 030	95
Total	2 642	1 264	48	1 234	47	2 498	95

Table 4. Business use of information technology, June 2000

Item	Number of businesses ('000)	Computers (%)	Businesses with - Internet access (%)	Web-site (%)	Businesses which are - Internet business active (a) (%)	Internet commerce active (b) (%)
Employment size:						
1 - 4 persons	415	69	50	9	38	5
5 - 19 persons	184	85	65	24	55	8
20 - 99 persons	36	97	83	46	76	12
100 or more persons	6	100	95	68	93	14
Value of annual sales/orders:						
Less than $100,000	158	63	43	6	33	4
$100,000 - $999,999	365	76	55	14	44	5
$1.0m - $4.9m	92	91	74	32	64	11
$5m or more	26	99	87	52	78	13
Industry:						
Mining	2	82	70	30	57	1
Manufacturing	54	79	60	23	50	8
Electricity, gas and water supply	0	85	79	56	73	2
Construction	90	68	46	6	34	2
Wholesale trade	45	83	62	22	51	11
Retail trade	112	68	42	15	34	5
Accommodation, cafes and restaurants	32	61	40	19	35	9
Transport and storage	32	64	46	14	37	8
Communication services	4	77	42	17	37	7
Finance and insurance	23	81	71	19	57	5
Property and business services	149	88	76	19	63	8
Health and community services	51	83	57	9	43	1
Cultural and recreational services	17	81	63	26	53	6
Personal and other services	30	60	39	19	34	4
Region:						
Capital cities	430	77	58	18	48	7
Other areas	211	74	52	13	42	5
Total	641	76	56	16	46	6

(a) Covers activities associated with buying or selling goods or services, banking, recruitment and company promotion - excluded are email, information searches and other basic uses. (b) Covers businesses which have received sales income for goods and services ordered via the Internet.

Table 5. Farm use of information technology, March 1999 (a)

Item	Total number of farms (No)	Farms using a computer		Farms using the Internet		Farms Internet shopping	
		Number (No)	Per cent (%)	Number (No)	Per cent (%)	Number (No)	Per cent (%)
State:							
New South Wales	43 994	21 545	49	8 231	19	1 943	4
Victoria	37 289	18 075	49	6 174	17	1 328	4
Queensland	31 045	13 870	45	4 830	16	938	3
South Australia	15 854	8 361	53	3 030	19	621	4
Western Australia	14 038	8 271	59	2 548	18	554	4
Tasmania	4 487	2 186	49	973	22	189	4
Northern Territory	371	241	65	114	31	21	6
Australian Capital Territory	103	66	64	27	26	14	14
Farm size (EVAO):							
Less than $25,000	34 792	13 568	39	5 073	15	1 749	5
$25,000-$49,999	18 680	7 435	40	2 906	16	517	3
$50,000-$99,999	23 815	9 836	41	3 217	14	582	2
$100,000-$149,000	16 052	7 577	47	2 480	16	415	3
$150,000-$249,999	21 677	12 160	56	3 821	18	702	3
$250,000-$499,999	19 601	12 524	64	4 436	23	865	4
$500,000-$999,999	8 755	6 312	72	2 406	28	463	5
$1m or more	3 810	3 204	84	1 587	42	316	8
Broad farm industry:							
Horticulture and fruit growing	23 041	13 065	57	5 973	26	1 411	6
Grain, sheep and beef cattle farming	94 175	43 887	47	14 444	15	3 032	3
Dairy cattle farming	14 000	7 113	51	1 896	14	348	3
Poultry farming	1 411	917	65	364	26	61	4
Other livestock farming	4 966	2 767	56	1 253	25	304	6
Other crop growing	7 967	3 873	49	1 488	19	284	4
Other (b)	1 621	993	61	508	31	169	10
Total	147 181	72 615	49	25 927	18	5 608	4

(a) Farms with an estimated value of agricultural commodity (EVAO) of $5,000 or more. (b) Establishments which are classified to a non-agriculture industry class.

Table 6. Internet activity details, March quarter 2001

Item		Capital cities	Other areas	Total
Internet Service Providers (No)		492	277	665
Points of presence -	Number (No)	1 030	1 280	2 310
	Per cent (%)	45	55	100
Access lines -	Number (No)	349 888	140 220	490 108
	Per cent (%)	71	29	100
Subscribers ('000) -	Number (No)	2 888	1 080	3 968
	Per cent (%)	73	27	100
Data downloaded -	Number (No)	791	249	1 040
(million Mbs)	Per cent (%)	76	24	100
Average number of subscribers per access line (No)		8.4	7.7	8.1
Average data downloaded per subscriber (Mbs)		276	231	262

Table 7. Government use of information technology, June 1998

Item	Number of organisations (No)	Computers (%)	Organisations with - Internet access (%)	Web site (%)	Organisations which - Received orders via Internet (%)	Placed orders via Internet (%)
Government type:						
Federal departments/agencies	186	100	100	89	12	33
State departments/agencies	561	100	85	61	5	18
Local councils	682	100	77	28	1	16
Other	1 050	94	60	21	4	15
Employment size:						
1 - 19	1 092	95	56	20	}	
20 - 99	585	100	78	31	} 4	15
100 - 499	516	100	92	54	4	20
500 - 999	119	100	95	71	4	25
1,000 - 4,999	111	100	97	91	9	23
5,000 or more persons	28	100	100	100	0	14
Total	2 452	97	73	37	4	18