

13

Information Technology and Communication

Introduction

This chapter contains data relating to information technology and communication. The information technology data concentrates on use of selected technologies by households, business and the government. The communications section looks at mail volumes in Victoria, and expenditure on postal and telephone charges.

Data in this chapter is sourced from surveys conducted by the ABS, and from the Australian Postal Corporation.

Information Technology

Information technology including telecommunications refers to the services and technologies that enable information to be transformed and disseminated, including the transmission or communications of voice and/or data over a variety of transmission media.

Over recent years, information technology such as computers and the Internet, has brought about many changes to the Australian way of life and of doing business. Many Victorians now do things with information technology which would have been unimaginable a decade ago. The new technologies have also brought about significant change to the way business is done.

Household use of computers and the Internet

In 1999, over half (51%) of Victorian households had access to a home computer (table 13.1). This was more than double the number with home Internet access (23%). During 1999, growth in Internet access was greater than growth in home computer access (10.2% and 8.5% respectively).

Households with children under 18 years of age were almost twice as likely to have access to a home computer than those without children under 18. Households with higher incomes were more likely to have access to a home computer or the Internet. Access to a home computer or the Internet was more likely in metropolitan Melbourne than in regional Victoria.

13.1 HOUSEHOLDS WITH HOME COMPUTER OR INTERNET ACCESS(a)

	Computer access		Internet access	
	1998	1999	1998	1999
	%	%	%	%
Family type				
Married/defacto couple	30	40	12	18
Married/defacto couple with dependants	69	73	20	36
Single parent	50	51	12	16
Single person	22	23	9	8
Other	53	57	21	29
Households				
Without children under 18	35	40	13	18
With children under 18	68	71	18	32
Household income				
\$0-\$24,999	20	21	4	5
\$25,000-\$49,999	49	46	11	16
\$50,000-\$74,999	60	66	19	33
\$75,000 or more	77	84	37	49
Region				
Metropolitan Melbourne	49	53	17	25
Rest of Victoria	42	44	10	16
Total	47	51	15	23

(a) Proportions are of all households in each category.

Source: Unpublished data, Household Use of Information Technology Survey.

There was a large increase in the number of adults who accessed the Internet during 1999 compared to the number who accessed the Internet during 1998 (table 13.2). The rate of growth in the number of adults who accessed the Internet was similar for each of the sites of access. Three times as many employed adults accessed the Internet than those that were unemployed. Eight percent more adults in metropolitan Melbourne accessed the Internet from home when compared with adults in the rest of the Victoria who had accessed the Internet from home. Overall, two-thirds of adults outside metropolitan Melbourne had not accessed the Internet from any site.

13.2 ADULTS INTERNET ACCESS(a)

	Home		Work		Other sites		Any site	
	1998	1999	1998	1999	1998	1999	1998	1999
	%	%	%	%	%	%	%	%
Age group (years)								
18–24	20	32	11	22	55	61	64	74
25–39	15	22	22	29	23	30	42	52
40–54	14	21	14	29	11	15	27	44
55 and over	4	7	*3	*4	*2	4	6	11
Sex								
Male	16	22	16	26	20	26	34	47
Female	9	16	11	17	17	20	29	36
Personal income								
\$0–\$39,999	10	15	8	12	19	22	28	34
\$40,000–\$79,000	20	35	38	52	16	29	51	68
\$80,000 and over	*31	38	43	54	*14	*27	61	68
Employment status								
Not employed	4	5	n.a.	n.a.	10	13	15	16
Employed	17	26	20	32	23	28	42	55
Region								
Metropolitan Melbourne	14	21	15	23	19	24	34	45
Rest of Victoria	8	13	8	17	16	19	26	32
Total	12	19	13	21	18	23	32	42

(a) Proportions are of all adults in each category. Adults can nominate more than one site if applicable.

Source: Unpublished data, Household Use of Information Technology Survey.

In 1999, approximately two-thirds of all adults in Victoria used Electronic Funds Transfer at Point of Sale (EFTPOS) or Automatic Teller Machines (ATM's) to pay bills, withdraw funds or transfer funds (table 13.3). Approximately one-third paid bills or transferred funds via the telephone. Of those adults 55 years of age or higher, over two-thirds had not paid bills, transferred or withdrew funds via the phone, EFTPOS or ATM's.

In 1999, 5% of adults had shopped via the Internet. Of those adults that shopped via the Internet, males were more than twice as likely as females to have done so.

13.3 ADULTS UNDERTAKING INTERNET AND SELECTED ELECTRONIC TRANSACTIONS(a)

	Paid bills or transferred funds via phone		Paid bills or withdrew funds via EFTPOS		Transferred or withdrew funds via ATM		Internet shoppers 1999
	1998	1999	1998	1999	1998	1999	
	%	%	%	%	%	%	%
Age group (years)							
18-24	27	33	83	75	94	87	7
25-39	38	52	77	79	82	89	8
40-54	34	42	54	62	69	70	5
55 and over	17	23	29	30	29	33	*1
Sex							
Male	28	38	60	61	66	68	8
Female	31	39	58	60	66	68	3
Region							
Metropolitan Melbourne	32	42	59	62	66	71	6
Rest of Victoria	24	29	58	56	64	62	*3
Total	30	39	59	61	66	68	5

(a) Proportions are of all households in each category.

Source: Unpublished data, Household Use of Information Technology Survey.

During 1999, 185,000 (5%) Victorian adults used the Internet to purchase or order goods or services for their private use. Of those adults making these purchases or orders, 29% did so on more than 5 occasions and more than half purchased books/magazines (table 13.4).

13.4 INTERNET PURCHASES — 1999(a)

	%
Type of good or service purchased/ordered	
Music	19
Books/Magazines	51
Computer software/equipment	26
Clothing, shoes etc.	12
Sporting equipment	**
Holidays	*6
Entertainment/tickets to entertainment events	*9
Other	31
Number of occasions on which purchases/orders made	
1	36
2-4	33
5 or more	29

(a) Proportions are of all adults making purchases or orders via the internet for private use in Victoria.

Source: Unpublished data, Household Use of Information Technology Survey.

Business use of computers and the Internet

In 1999, more than three-quarters of Victorian employing businesses used computers, while over half had Internet access (table 13.5). As might be expected, the larger the business, either in terms of employment or sales, the larger the proportion of those businesses that used the selected technologies. The proportion of businesses in metropolitan Melbourne had similar, although slightly higher prevalence of use for the selected technologies than for the rest of the State.

13.5 BUSINESS USE OF SELECTED TECHNOLOGIES, Selected Characteristics — 1999(a)

	Number of businesses no.	Computers	Internet access	Web site or home page	Internet commerce active
	'000	%	%	%	%
Employment size					
0–4 persons	110.9	71	51	8	6
5–19 persons	45.9	85	65	23	5
20–99 persons	10.3	97	85	46	*13
100 or more persons	2.0	100	90	60	*15
Value of sales orders					
Less than \$100,000	42.3	64	42	5	*2
\$100,000–\$999,999	96.2	76	58	14	7
\$1m–\$4.9m	23.5	93	77	25	9
\$5m or more	7.0	99	87	53	13
Region					
Metropolitan Melbourne	126.1	77	59	16	6
Rest of Victoria	43.0	74	54	12	6
Total(b)	169.1	77	58	15	6

(a) Proportions are of all businesses in each category. (b) Sum of components may not equal total due to rounding.

Source: Unpublished data, Business Use of Information Technology Survey.

The extent of use of selected technologies by businesses in Victoria varied considerably across industries. In 1999, computer use was lowest in the industries of accommodation, cafes and restaurants; transport and storage; and personal and other services (table 13.6). These industries also had low Internet access rates. In contrast, the manufacturing, and property and business services industries had high levels of access to computers and the Internet.

13.6 BUSINESS USE OF SELECTED TECHNOLOGIES, By Industry — 1999 (a)

	Number of businesses no.	Computers	Internet access	Web site or home page	Internet commerce active
	'000	%	%	%	%
Mining	0.2	78	68	24	**
Manufacturing	15.8	87	65	22	*9
Electricity, gas and water	—	—	—	—	—
Construction	24.0	68	43	*4	*2
Wholesale trade	11.7	85	68	20	*13
Retail trade	28.6	69	44	14	*4
Accommodation, cafes and restaurants	7.5	60	34	20	9
Transport and storage	8.7	60	42	10	*6
Communication services	1.5	76	43	15	*6
Finance and insurance	5.9	79	66	17	*3
Property and business services	40.8	88	79	16	*9
Health and community services	12.7	80	58	10	**
Cultural and recreational services	4.3	84	65	24	*8
Personal and other services	7.3	60	39	19	*4
Total(b)	169.1	77	58	15	6

(a) Proportions are of all businesses in each category. (b) Sum of components may not equal total due to rounding.

Source: Unpublished data, Business Use of Information Technology Survey.

Government use of computers and the Internet

Government use of personal computers (PC's) and Local Area Network/Wide Area Network (LAN/WAN) was high for State and local governments, with 100% of these organisations using PC's and LAN/WAN at the end of June 1998 (table 13.7). In 1997-98, access to the Internet for State and local government authorities and agencies was higher than for any industry in 1999 (95% and 97% respectively). Over half of local government authorities have a web site or home page while more than four-fifths of State Government departments and agencies have a web site or home page.

13.7 GOVERNMENT USE OF SELECTED TECHNOLOGIES 1997-98(a)

	State Government(b)	Local Government(c)
	%	%
PC's	100	100
LAN/WAN	100	100
Internet access	95	97
Email access	95	96
Web browser access	91	97
Restricted Web browser access	*48	15
Web site or Home page	81	52

(a) Proportions are of all agencies in each category. (b) Includes State departments and State Authorities; this includes organisations providing services such as police, ambulance and fire services, Legislature, Courts etc., State museums and libraries, with employment greater than or equal to 20 persons. (c) Includes Local Government Authorities and Aboriginal and Torres Strait Islander Community Councils.

Source: Unpublished data, Government Use of Information Technology Survey.

Farm use of computers and the Internet

Almost half (49%) of Victorian farms owned or used a computer at March 1999 (table 13.8). The proportion of farms with computer access increased by more than 30% between 1998 and 1999. Over the same period, the proportion of farms with Internet access increased by 70%.

The proportion of farms having access to computers or the Internet generally increased with size as measured by the level of Estimated Value of Operations (EVAO). In 1999, poultry farming had the largest proportion of farms using both a computer and the Internet (73% and 36% respectively).

13.8 FARMS USING A COMPUTER AND THE INTERNET(a)

	Computer access %		Internet access %	
	1998	1999	1998	1999
Broad farm industry				
Horticulture and fruit growing	46	65	14	31
Grain, sheep and beef cattle farming	34	43	9	14
Dairy cattle farming	41	52	9	12
Poultry farming	58	73	26	36
Other livestock farming	60	54	24	31
Other	42	*53	11	*18
Farm size (b)				
Less than \$50,000	28	41	9	16
\$50,000–\$99,999	29	40	7	15
\$100,000–\$149,999	32	45	7	11
\$150,000–\$199,999	43	52	9	17
\$200,000–\$249,000	49	67	12	14
\$250,000–\$299,999	54	63	14	20
\$300,000 or more	65	71	21	29
Total	37	49	10	17

(a) Farms with an estimated value of agricultural operations of \$5,000 or more. Proportions are of all farms in each category. (b) An estimation of agricultural activity undertaken by an agricultural establishment, this measure is an indicator of the extent of agricultural activity rather than an indicator of the value of receipts of individual farms.

Source: Unpublished data, Agricultural Commodity Survey.

Communications

Australian Postal Corporation

The Australian Postal Corporation (trading as Australia Post) is a government business enterprise owned by the Commonwealth of Australia. Australia Post offers letter and parcel delivery services within Australia and internationally. Most (90%) mail delivered in Victoria is delivered to private delivery points (table 13.9). The volume of mail delivered in Victoria between 1998 and 2000 has increased by 10%.

13.9 AUSTRALIAN POSTAL CORPORATION, Delivery points and retail outlets.

	June 1998	June 1999	June 2000
	no.	no.	no.
Delivery points			
Private	1 711 265	1 817 211	1 893 390
Business	202 144	200 107	214 886
Total	1 913 409	2 017 318	2 108 276
Retail outlets			
Post Offices (Corporate)	234	213	214
Licensed Post Offices	833	851	848
Total	1 067	1 064	1 062

Source: Australian Postal Corporation.

The volume of mail posted in Victoria for delivery overseas increased by 12% between 1997–98 and 1999–2000 (table 13.10). The volume of mail posted overseas for delivery in Victoria increased by 5% over the same period.

13.10 AUSTRALIAN POSTAL CORPORATION, Mail Volumes

	1997–98	1998–99	1999–2000
	million	million	million
Posted in Victoria for delivery in Victoria	1 208.1	1 300.9	1 342.2
Posted overseas for delivery in Victoria	44.0	44.9	46.1
Posted in Victoria for delivery overseas	40.6	39.4	45.5
Total posted in Victoria(a)	1 485.4	1 554.8	1 637.2

(a) Includes articles posted in Victoria and Tasmania.

Source: Australian Postal Corporation.

Expenditure on communication

Average weekly household expenditure on communication is similar in Victoria to that spent by Australians as a whole (table 13.11). Expenditure on postal charges has varied little between 1993–94 and 1998–99. In contrast, expenditure on telephone charges has increased by 50% over the same time period, this increase is largely attributable to the increase in mobile phone use.

13.11 AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON COMMUNICATION

	1993–94		1998–99	
	Victoria	Australia	Victoria	Australia
	\$	\$	\$	\$
Postal charges	1.19	1.19	1.10	1.09
Telephone charges(a)	12.51	12.47	18.24	18.83

(a) Includes facsimile and telegram charges.

Source: Household Expenditure Survey: Detailed expenditure items (Cat. no. 6535.0).

Bibliography

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Non-ABS sources

Australian Postal Corporation.