



ICT Professionals Shaping Our Future

2011

ACS EMPLOYMENT SURVEY REPORT

ABOUT THE AUSTRALIAN COMPUTER SOCIETY

The ACS (Australian Computer Society) is the recognised professional association for those working in Information and Communications Technology (ICT), seeking to raise the standing of ICT professionals and represent their views to government, industry and the community.

A member of the Australian Council of Professions, the ACS is the guardian of professional ethics and standards in the ICT sector, committed to ensuring the beneficial use of ICT for all Australians. It provides both members and non-members with opportunities for professional education, networking and certification, as well as enabling them to contribute to the development of their profession. Visit www.acs.org.au for more information.



PO Box Q534
Queen Victoria Building
Sydney NSW 1230

Ph: +61 2 9299 3666
Fax: +61 2 9299 3997

Website: www.acs.org.au

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INTRODUCTION

The 2011 ACS Employment Survey Report provides detailed information on the employment outlook for ICT professionals in Australia based upon survey responses.

Its aim is to assist ICT professionals; those contemplating a career in the industry, and other industry stakeholders, with a useful overview of employment conditions and attitudes in the profession.

This report was analysed and written by the Association of Professional Engineers, Scientists & Managers, Australia (APESMA) for the Australian Computer Society.

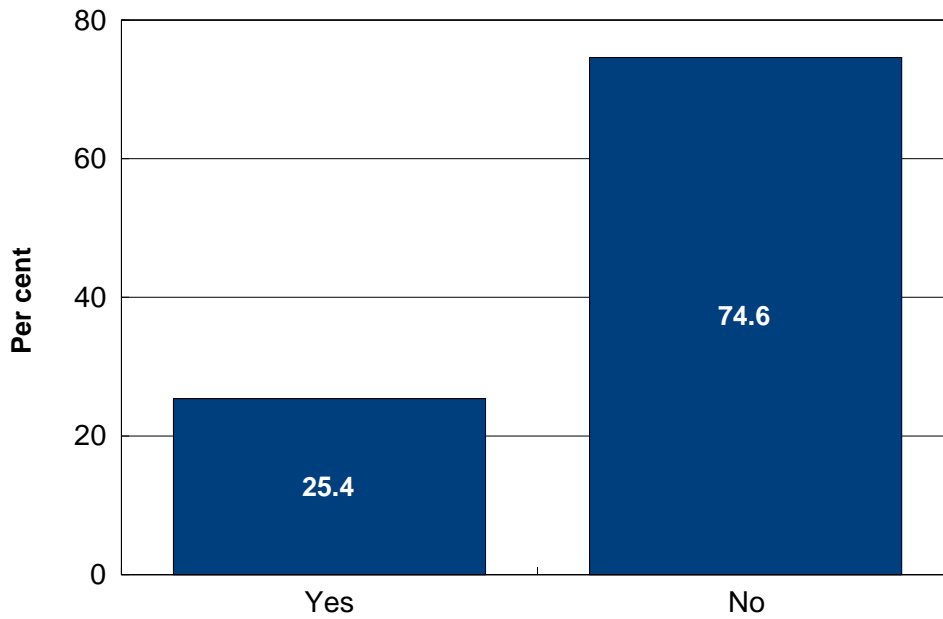
SURVEY PARTICIPATION

Analysis contained in this report is based on 1,599 responses received from survey participants. Invitations to participate in the 2011 ACS Employment Survey were forwarded by email to members of the Australian Computer Society, and ICT-based members of The Association of Professional Engineers, Scientists and Managers, Australia. The total number of invitations forwarded was around 20,000.

The level of participation in the 2011 ACS Employment Survey, at a response rate of about 10% provides a sound basis for assessing employment-related information affecting ICT professionals in Australia presently.

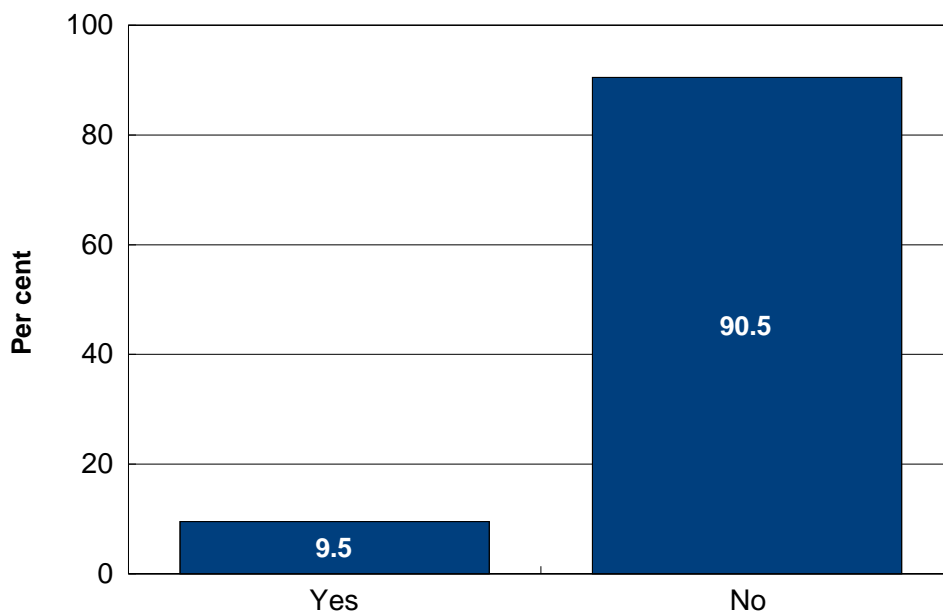
SECTION 1 – UNEMPLOYMENT & RETRENCHMENT

GRAPH 1.1 – HAD EVER BEEN RETRENCHED FROM A COMPUTING INDUSTRY POSITION

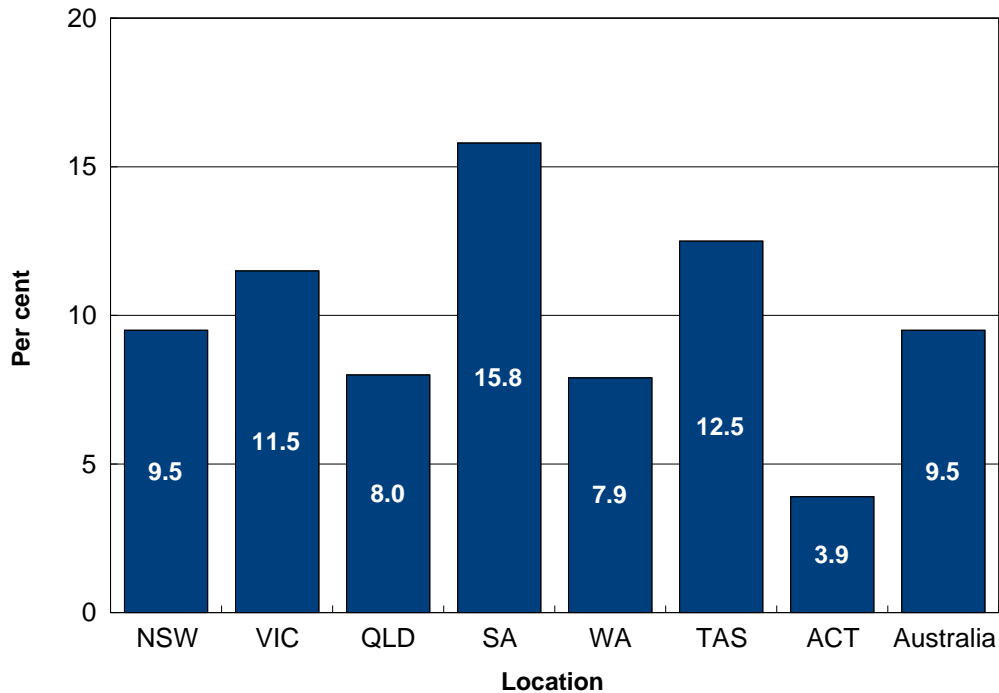


25.4% of respondents had been retrenched from a computing industry position at some time in their working lives.

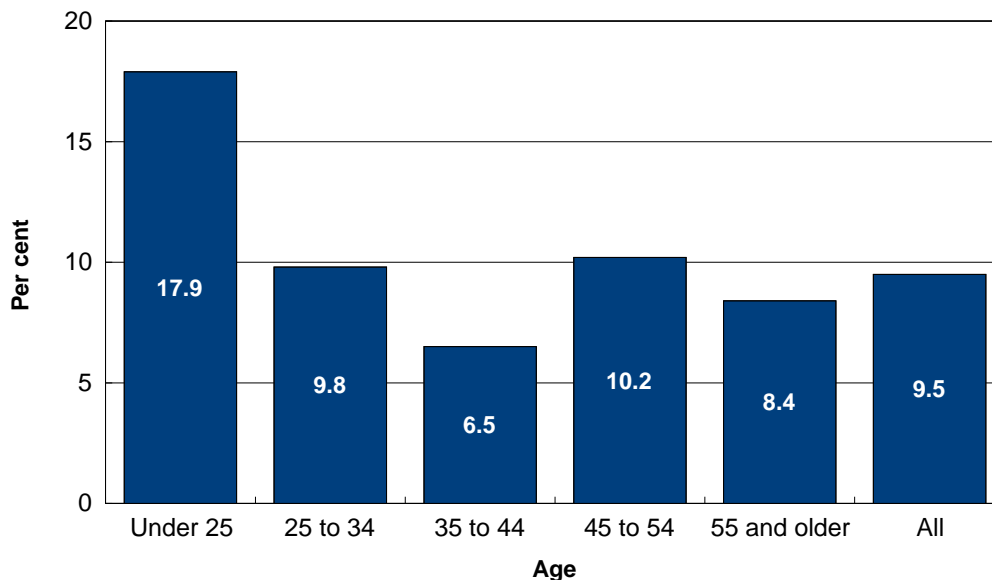
GRAPH 1.2 – HAD BEEN UNEMPLOYED DURING THE LAST 12 MONTHS



9.5% of survey respondents reported they had been unemployed at some time during the preceding 12 months.

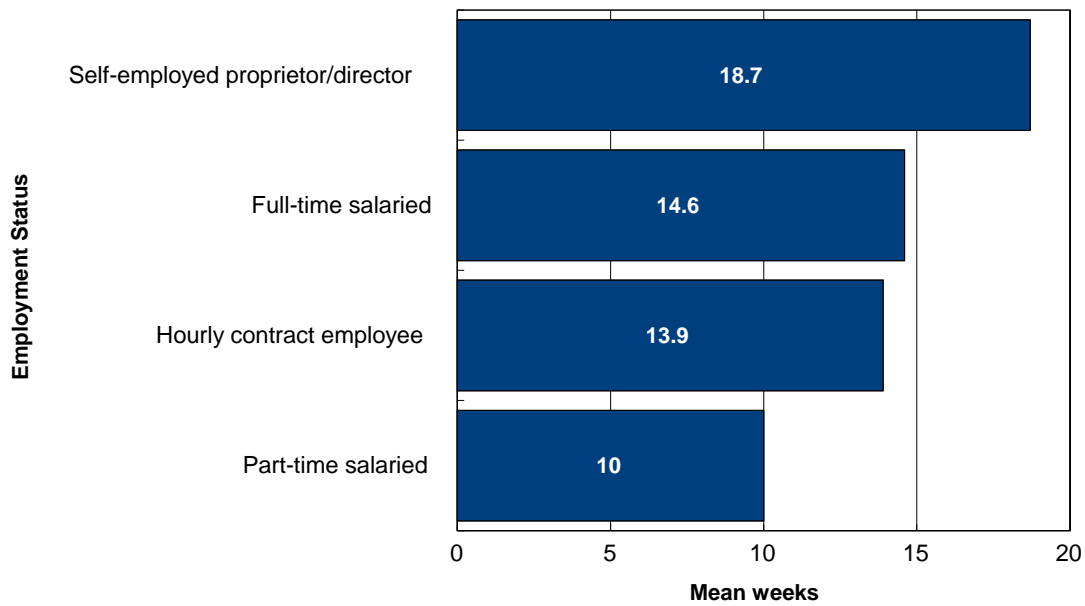
GRAPH 1.3 – HAD BEEN UNEMPLOYED IN PREVIOUS 12 MONTHS BY STATE


15.8% of survey respondents from South Australia reported having been unemployed at some time in the preceding 12 months, the highest proportion amongst Australian states and territories. 3.9% of survey respondents from the ACT reported having been unemployed at some time in the preceding 12 months, the lowest rate of Australian states and territories.

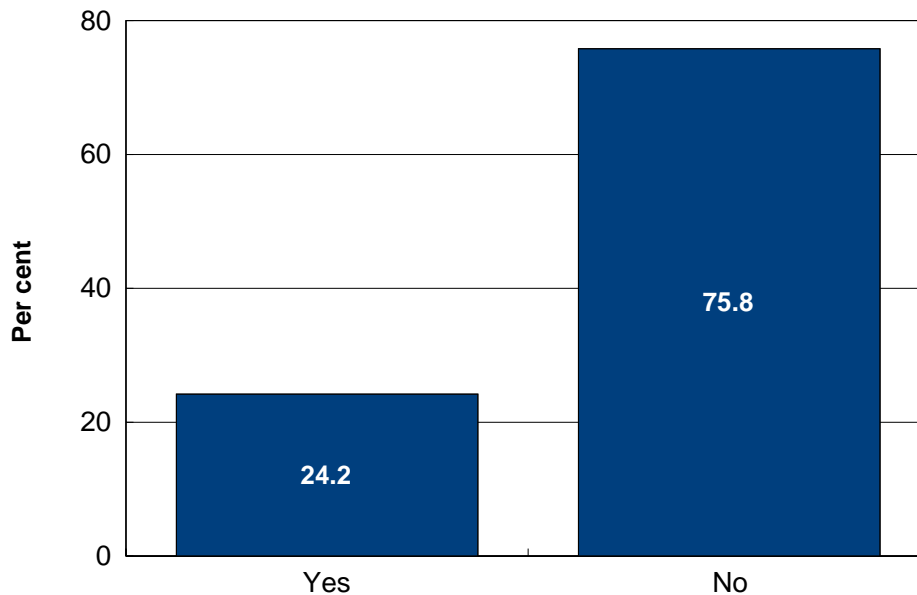
GRAPH 1.4 – HAD BEEN UNEMPLOYED IN PREVIOUS 12 MONTHS BY AGE


Whilst those under 25 years of age reported the highest proportion of respondents having been unemployed in the previous 12 months, the result would reflect those respondents who have only recently entered the job market after having completed their studies.

Those aged 35-44 appeared to have had the lowest incidence of unemployment in the preceding 12 months at 6.5%.

GRAPH 1.5 – DURATION OF UNEMPLOYMENT IF HAD BEEN UNEMPLOYED IN PREVIOUS 12 MONTHS


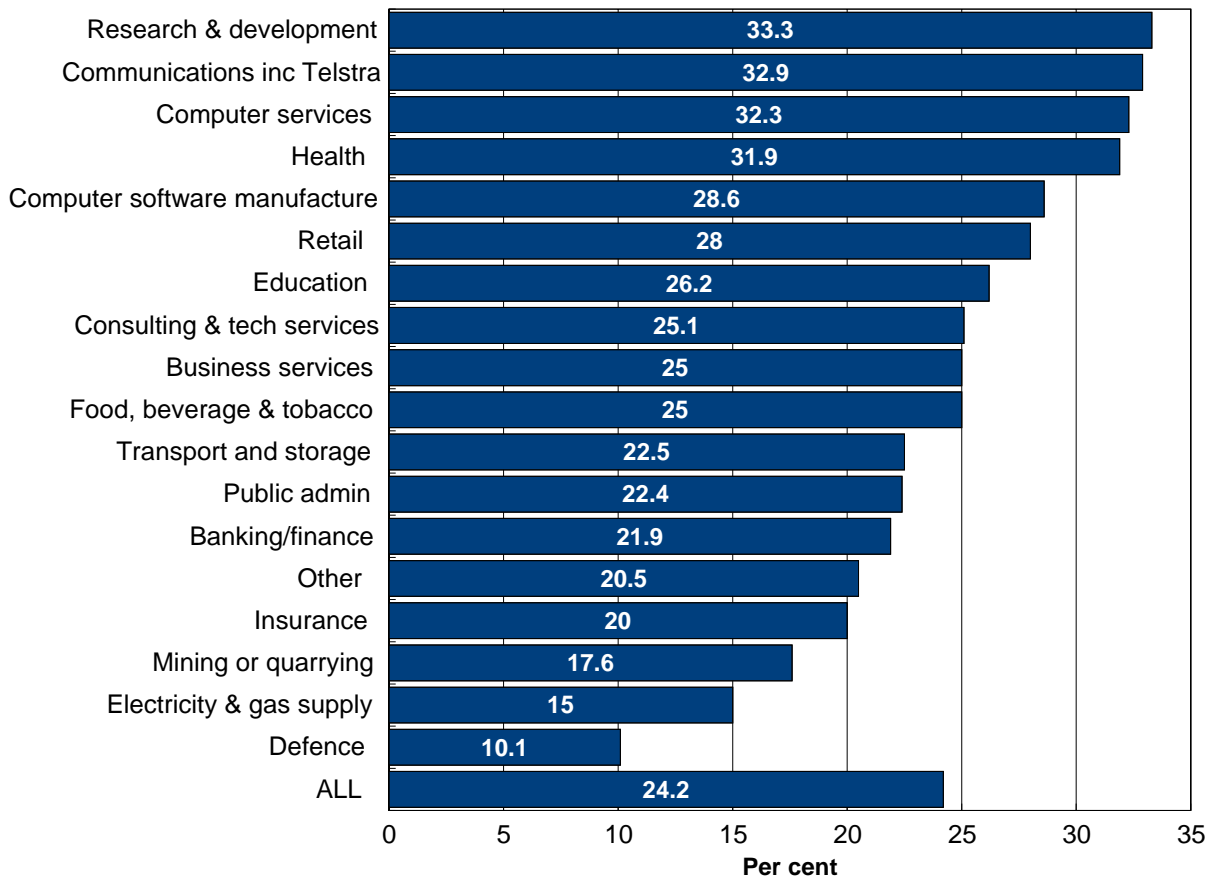
The median duration of unemployment amongst those who had been unemployed at some time in the preceding 12 months was 10 weeks, whilst the mean (average) duration was 14.9 weeks. The result suggests a number of respondents had been unemployed for much longer than the median of 10 weeks, as the mean was skewed significantly upwards away from the median.

GRAPH 1.6 – HAD BEEN UNEMPLOYED DURING THE LAST 5 YEARS


24.2% of survey respondents reported they had been unemployed at some time during the previous 5 years.

The result compares to 24.7% reported in 2009 and 29% in 2007* suggesting that despite varying economic conditions, the rate at which ICT professionals suffer job loss remains relatively constant.

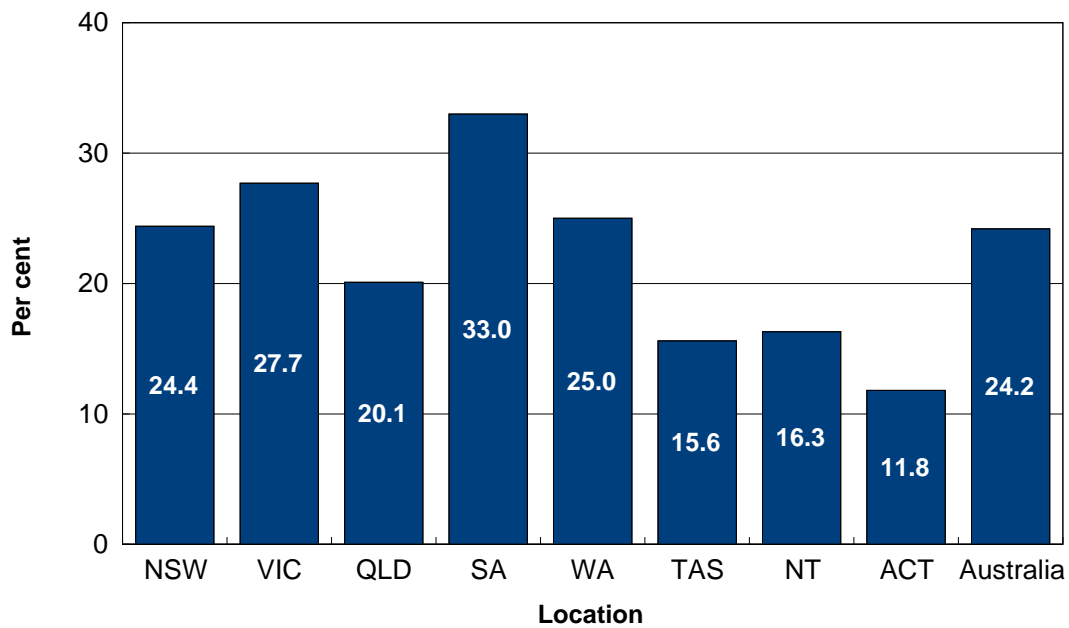
* Source: 2009 ACS Employment Survey Report pp.19

GRAPH 1.7 – HAD BEEN UNEMPLOYED DURING THE LAST 5 YEARS BY INDUSTRY


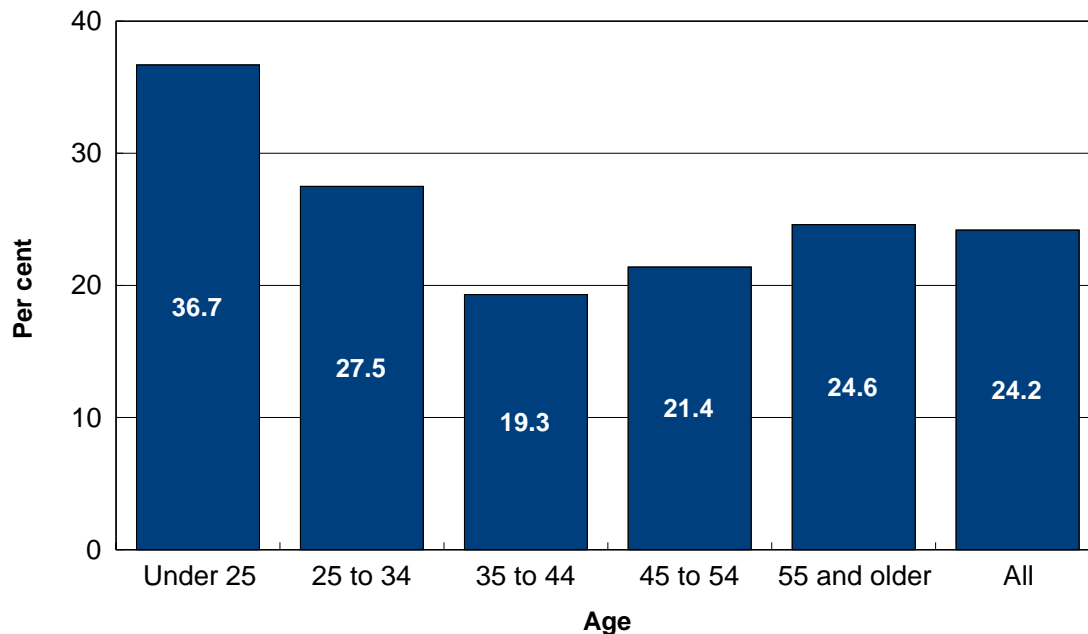
The rates at which ICT professionals had experienced unemployment varied between industries.

Those working in Research and Development (33.3%), Communications (inc.Telstra) (32.9%) and Computer Services (32.3%) reported higher than overall incidence of unemployment within the previous 5 years.

Those working in Defence (10.1%), Electricity and Gas Supply) (15%) and Mining or Quarrying (17.6%) reported lower than the overall incidence of unemployment within the previous 5 years.

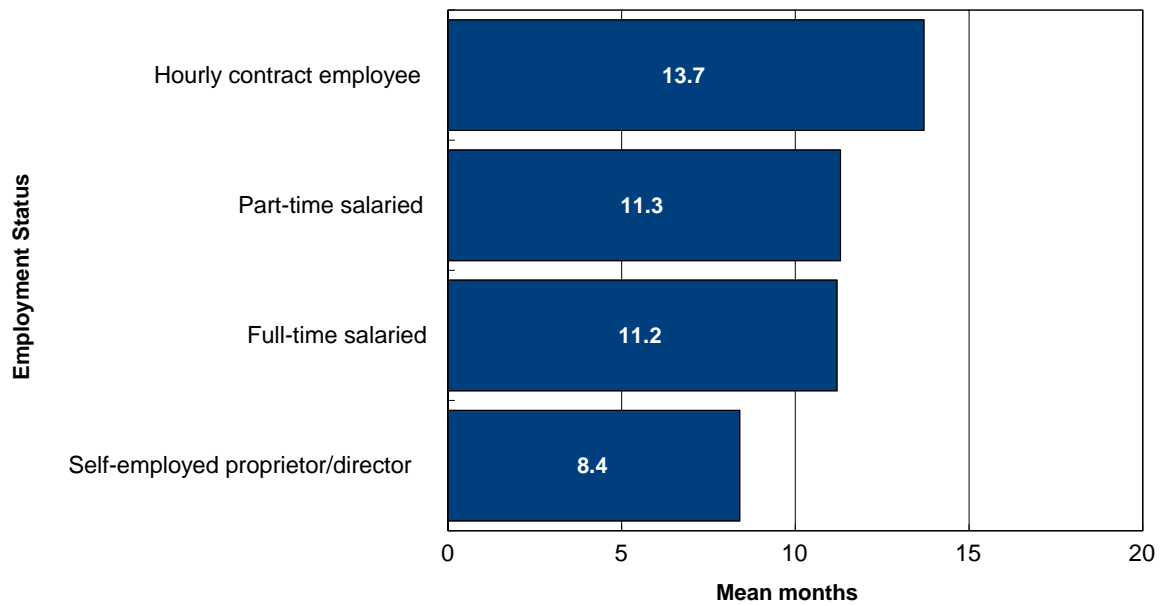
GRAPH 1.8 – HAD BEEN UNEMPLOYED IN PREVIOUS 5 YEARS BY STATE


33% of respondents, from South Australia, reported having been unemployed for some time in the preceding 5 years, the highest of any state or territory. 11.8% of respondents, from the ACT, reported having been unemployed at some time in the preceding 5 years, the lowest of any state or territory.

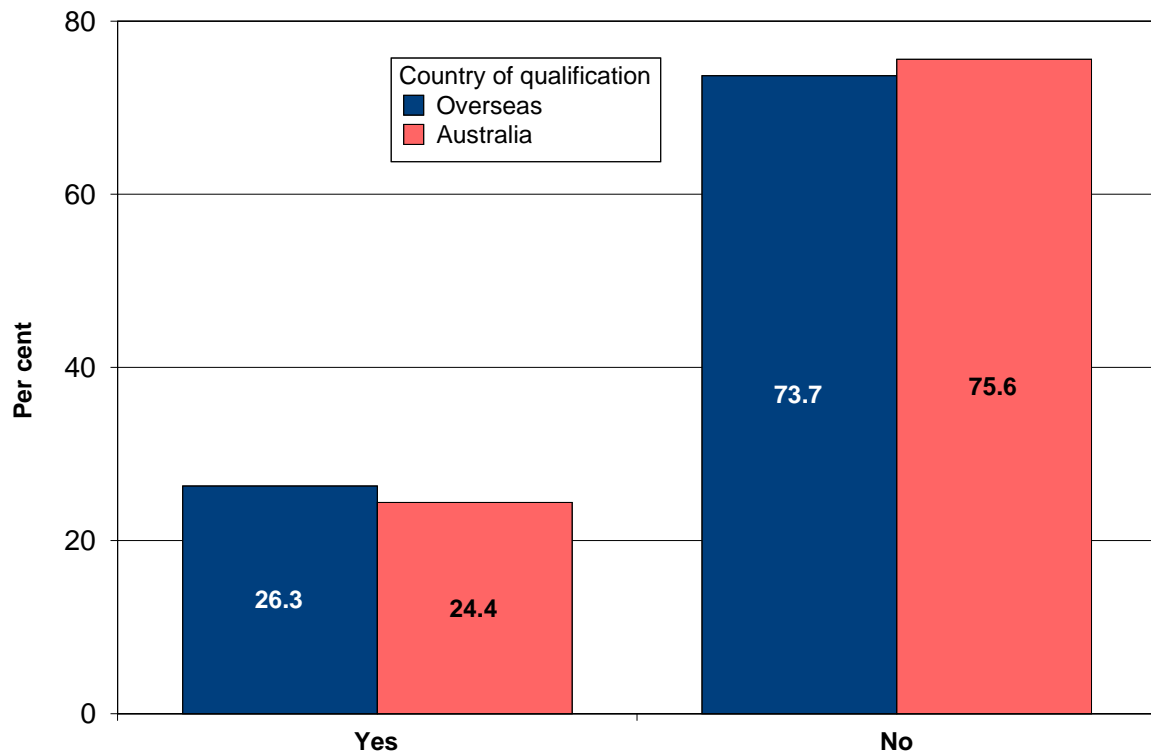
GRAPH 1.9 – HAD BEEN UNEMPLOYED IN PREVIOUS 5 YEARS BY AGE


The reported incidence of unemployment in the preceding 5 years was highest amongst the under 25 age group; however this result would be skewed as many respondents in this category would have only completed their studies during this time.

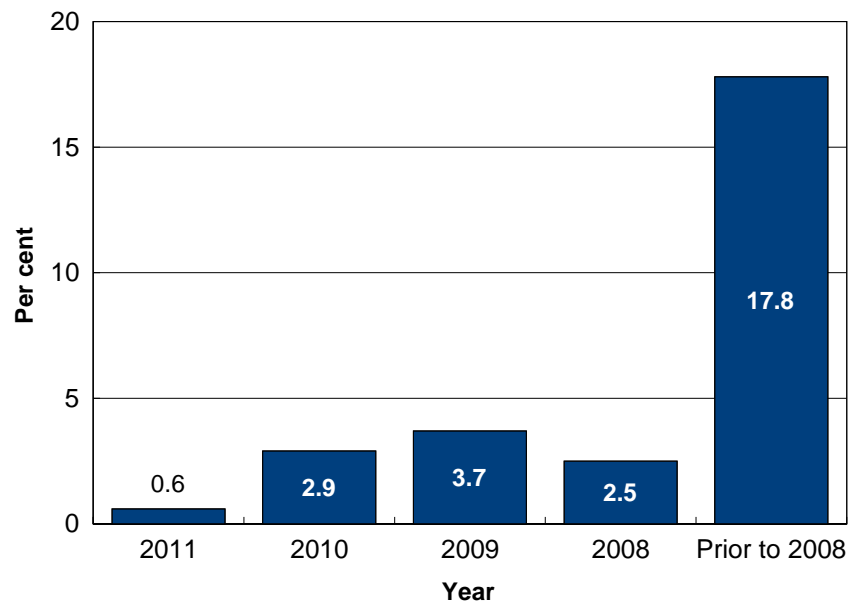
Those aged 35-44 appeared to have had the lowest incidence of unemployment in the preceding 5 years at 19.3%.

GRAPH 1.10 – DURATION OF UNEMPLOYMENT IF HAD BEEN UNEMPLOYED IN PREVIOUS 5 YEARS


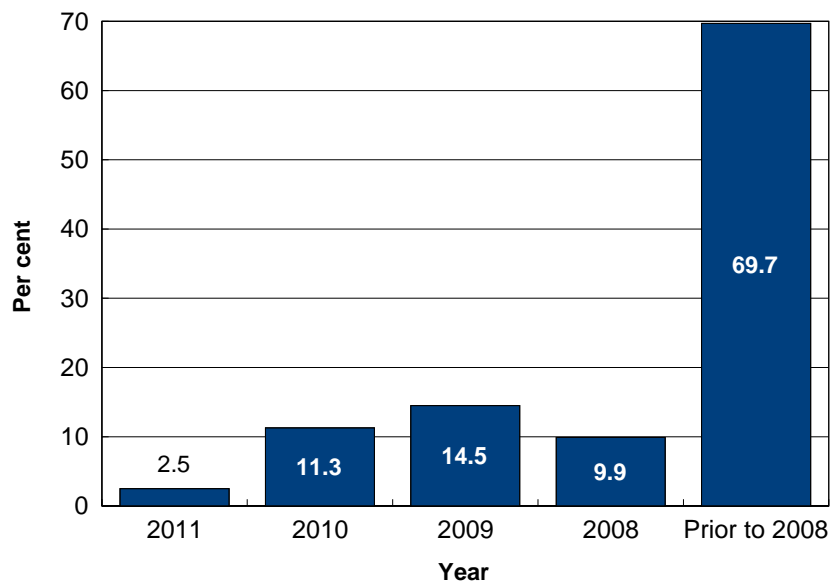
The median duration of unemployment amongst those who had been unemployed at some time in the preceding 5 years was 6 months.

GRAPH 1.11 – HAD EVER BEEN RETRENCHED FROM A COMPUTING INDUSTRY POSITION BY COUNTRY OF QUALIFICATION


No significant difference emerged in the proportion of respondents who had been retrenched from a computing position based on whether they had gained their highest computing qualification in Australia or overseas.

GRAPH 1.12 – YEARS EXPERIENCED RETRENCHMENT – ALL RESPONDENTS


17.8% of all respondents indicated they had been retrenched from a computing position prior to 2008. Since then, a significant increase in the incidence of retrenchment could be seen as having occurred in 2009, subsequent to the deterioration of global economic conditions after the global financial crisis of 2008.

GRAPH 1.13 – YEARS EXPERIENCED RETRENCHMENT IF EXPERIENCED RETRENCHMENT


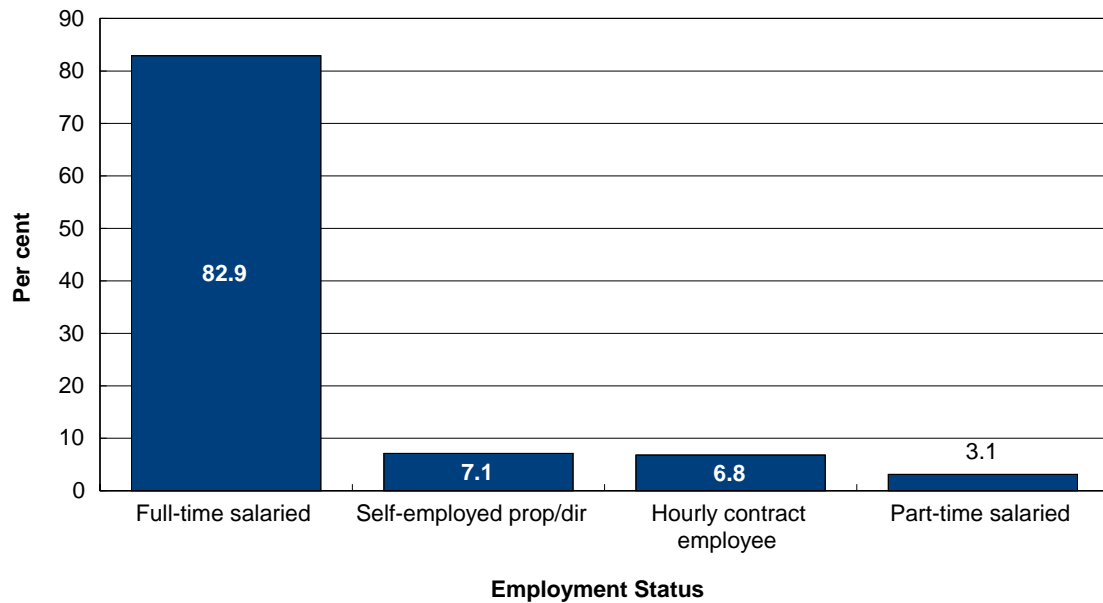
Those respondents who had experienced retrenchment from a computing position during their working lives were asked to indicate the year the retrenchment took place.

Whilst the majority indicated they had been retrenched from a position prior to 2008, it was of interest to note the significant increase in the incidence of retrenchments subsequent to the economic decline after the global financial crisis of 2008.

The survey results further suggest the incidence of retrenchments peaked in 2009, declined as at May 2011 and would further decline later in 2011.

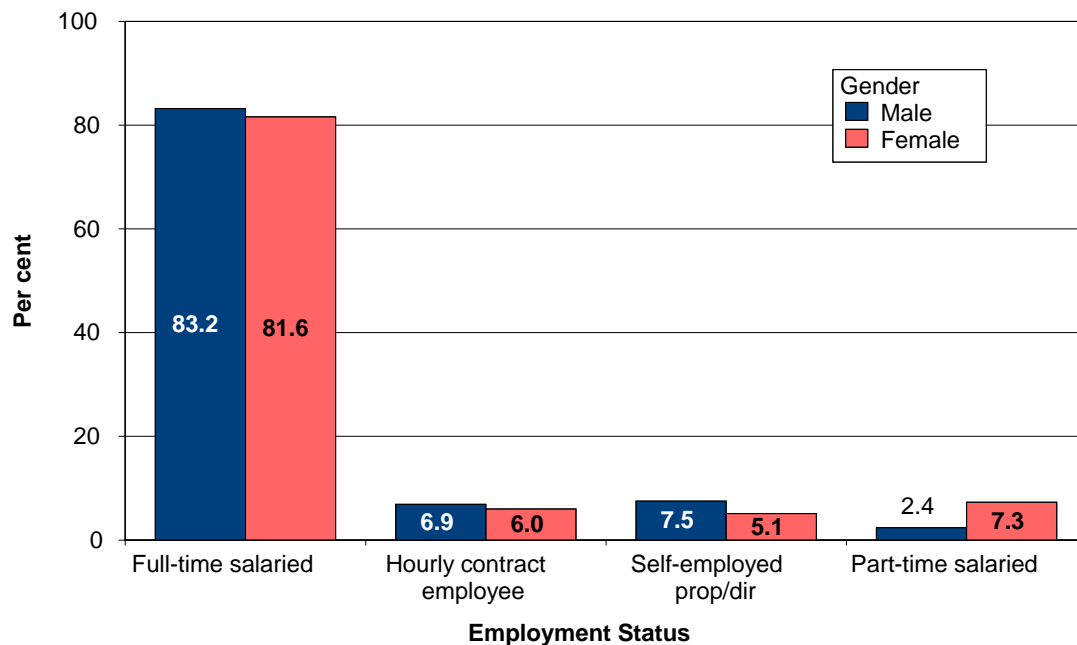
SECTION 2 – EMPLOYMENT

GRAPH 2.1 – EMPLOYMENT STATUS



82.9% of respondents were employed on a full-time basis (working 35 hours or more per week). Relatively few respondents (3.1%) were engaged on a part-time basis. The remainder of respondents were divided on a virtually equal basis between self-employed proprietors/directors (7.1%) and those engaged on an hourly basis as employees (6.8%).

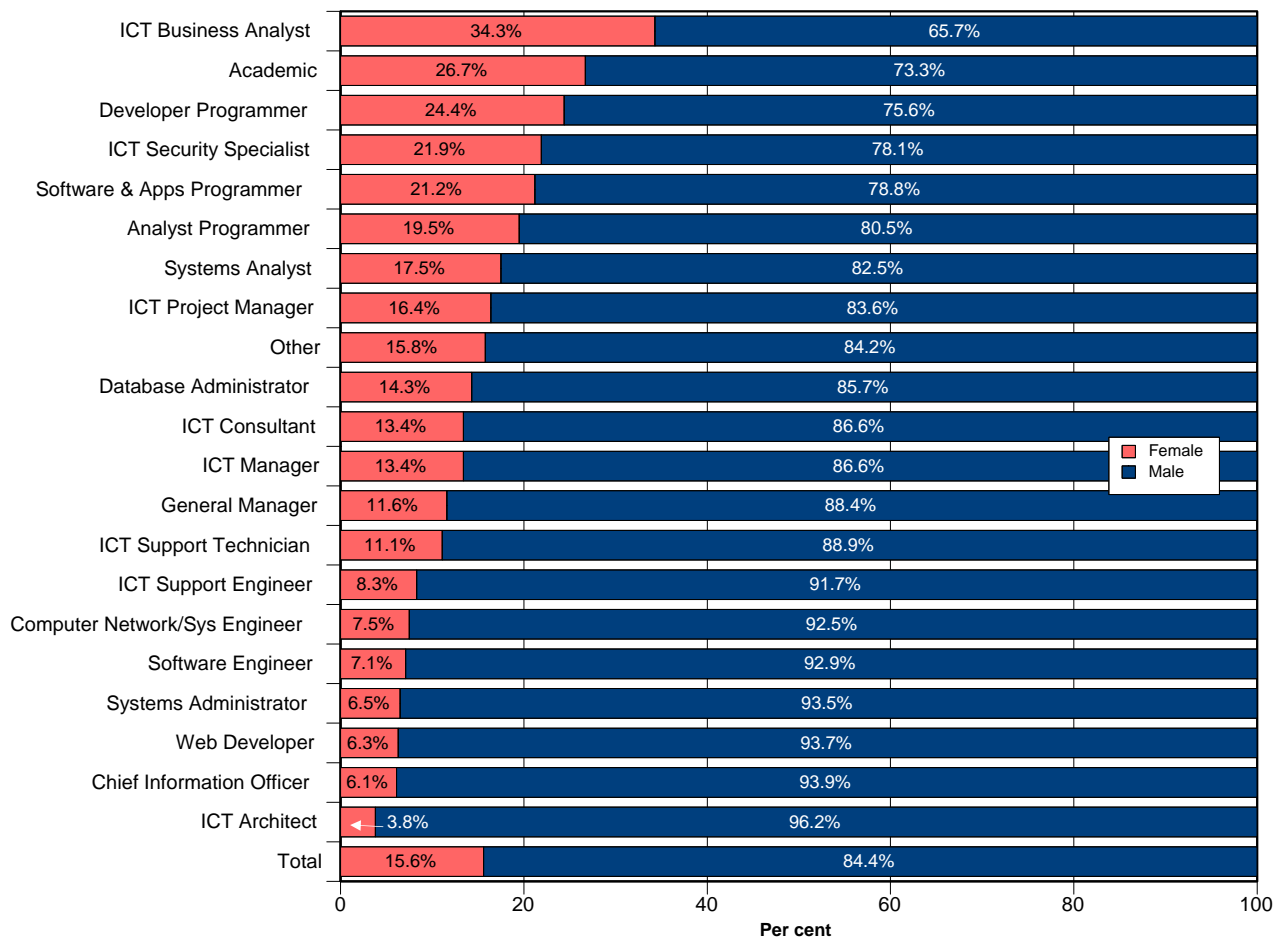
GRAPH 2.2 – EMPLOYMENT STATUS BY GENDER



No significant difference emerged in the rates of full-time salaried employment between males and females, or the rates of hourly contract employees.

The proportion of females engaged in part-time work was significantly higher than for males (7.3% v 2.4%).

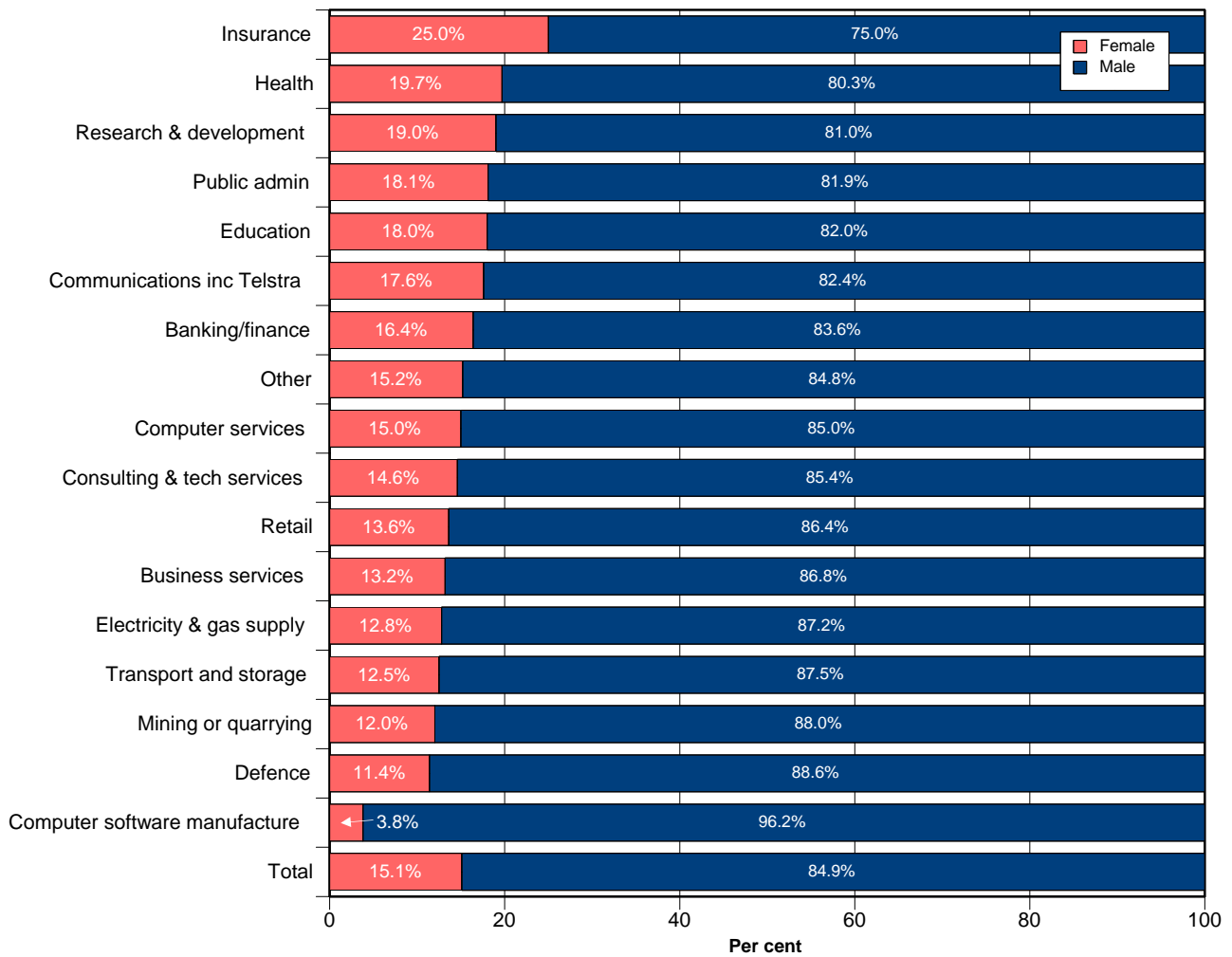
Whilst the proportion of males that were self-employed was higher than that for females, (7.5% v 5.1%), the difference was not considered statistically significant due to the relatively small number of female respondents.

GRAPH 2.3 – JOB BY GENDER


When analysed by current job, **84.4% of all respondents were male and 15.6% female.**

The greatest proportion of females was found in the roles of ICT Business Analyst (34.3%) and Academic (26.7%).

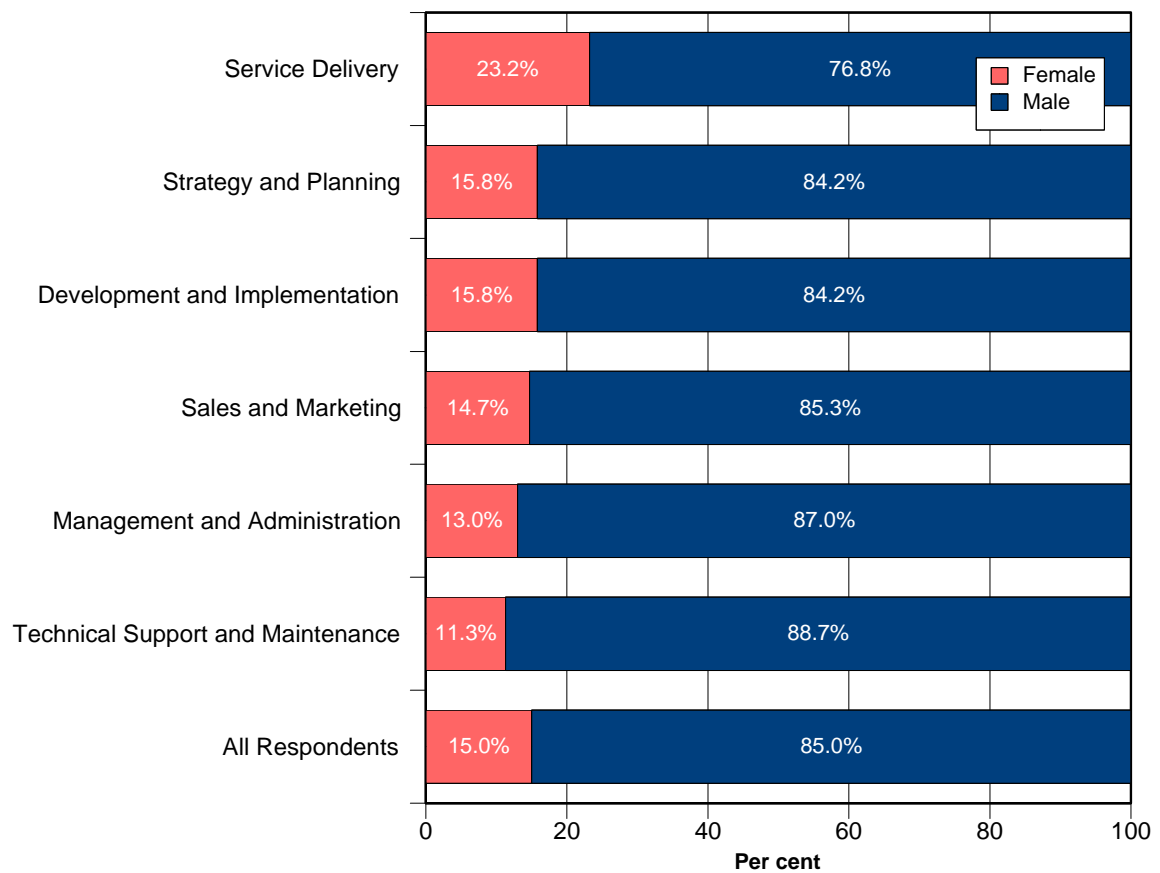
The greatest proportion of male respondents were found in the roles of ICT Architect (96.2%) and Chief Information Officer (93.9%).

GRAPH 2.4 – INDUSTRY BY GENDER


When analysed by industry of current job, **84.9% of all respondents were male and 15.1% female.**

The greatest proportion of male respondents was found the industries of Computer Software Manufacture (96.2%) and Defence (88.6%).

The greatest proportion of females was found in the Insurance industry (25%) and the Health industry (19.7%).

GRAPH 2.5 – ICT JOB GROUP BY GENDER


When analysed by current job group, **85% of all respondents were male and 15% female.**

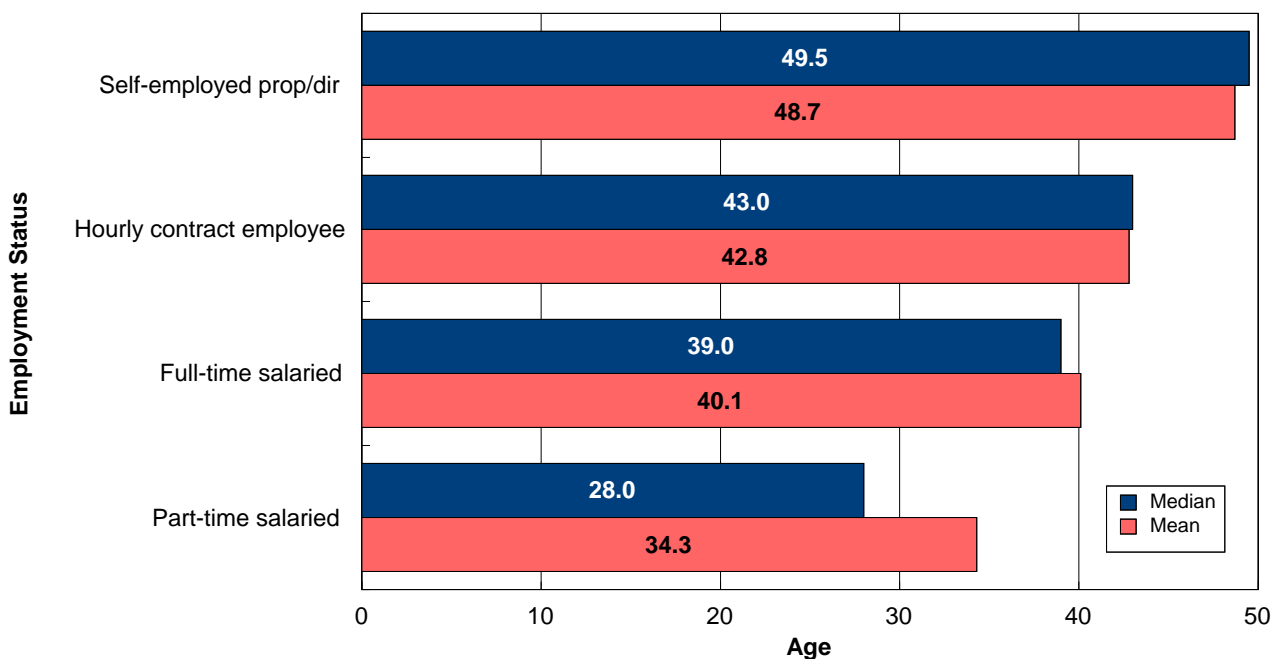
The greatest proportion of male respondents was found in the groups of Technical Support and Maintenance (88.7%) and Management and Administration (87%).

The greatest proportion of females was found in the groups of Service Delivery (23.2%) and equally Development and Implementation (15.8%) and Strategy and Planning (15.8%).

TABLE 2.1 – EMPLOYMENT STATUS BY INDUSTRY

INDUSTRY	EMPLOYMENT STATUS							
	Full-time salaried		Part-time salaried		Self-employed proprietor/director		Hourly contract employee	
	n	%	n	%	n	%	n	%
Consulting & tech services	191	77.0	4	1.6	41	16.5	12	4.8
Mining or quarrying	41	82.0	-	-	5	10.0	4	8.0
Electricity & gas supply	32	82.1	1	2.6	1	2.6	5	12.8
Communications inc Telstra	59	86.8	2	2.9	3	4.4	4	5.9
Defence	73	92.4	-	-	2	2.5	4	5.1
Public admin	153	81.0	5	2.6	6	3.2	25	13.2
Transport and storage	35	87.5	-	-	1	2.5	4	10.0
Education	106	86.9	6	4.9	4	3.3	6	4.9
Research & development	16	76.2	4	19.0	-	-	1	4.8
Insurance	23	95.8	-	-	1	4.2	-	-
Banking/finance	141	85.5	5	3.0	9	5.5	10	6.1
Health	56	84.8	-	-	4	6.1	6	9.1
Retail	17	77.3	3	13.6			2	9.1
Computer services	45	75.0	1	1.7	10	16.7	4	6.7
Business services	31	81.6	-	-	4	10.5	3	7.9
Food, beverage & tobacco	14	93.3	1	6.7	-	-	-	-
Computer software manufacture	69	88.5	-	-	8	10.3	1	1.3
Other	140	81.4	11	6.4	9	5.2	12	7.0
Total	1242	83.0	43	2.9	108	7.2	103	6.9

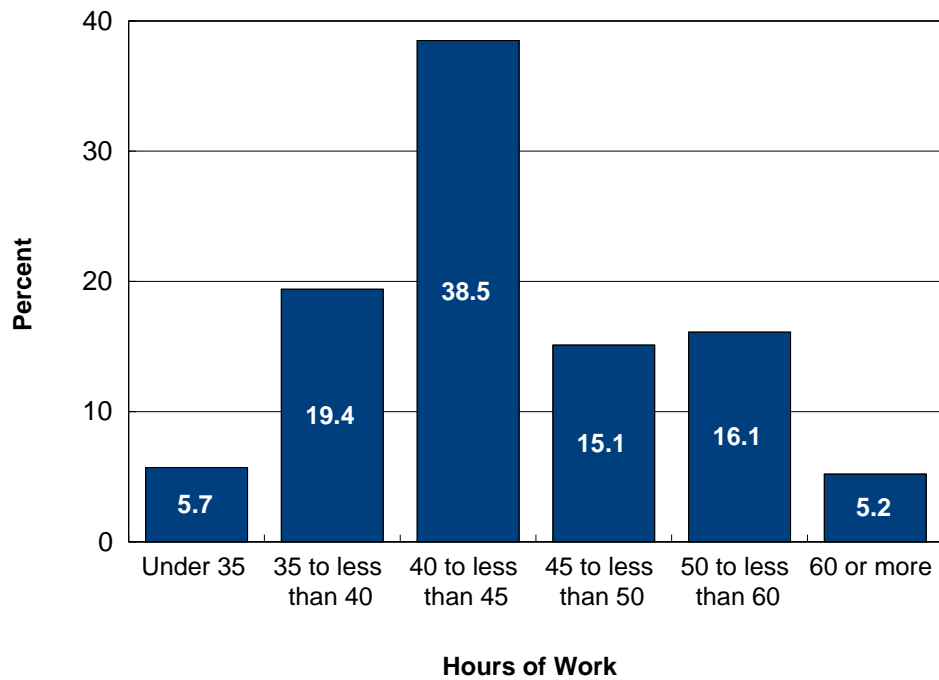
Full-time employment was almost the exclusive form of employment in the Defence industry (92.4%).

GRAPH 2.6 – AGE BY EMPLOYMENT STATUS


The median age of a self-employed respondent was 49.5, very much higher than that of full-time employees (39) and part-time employees (28).

SECTION 3 – HOURS OF WORK

GRAPH 3.1 – DISTRIBUTION OF HOURS OF WORK

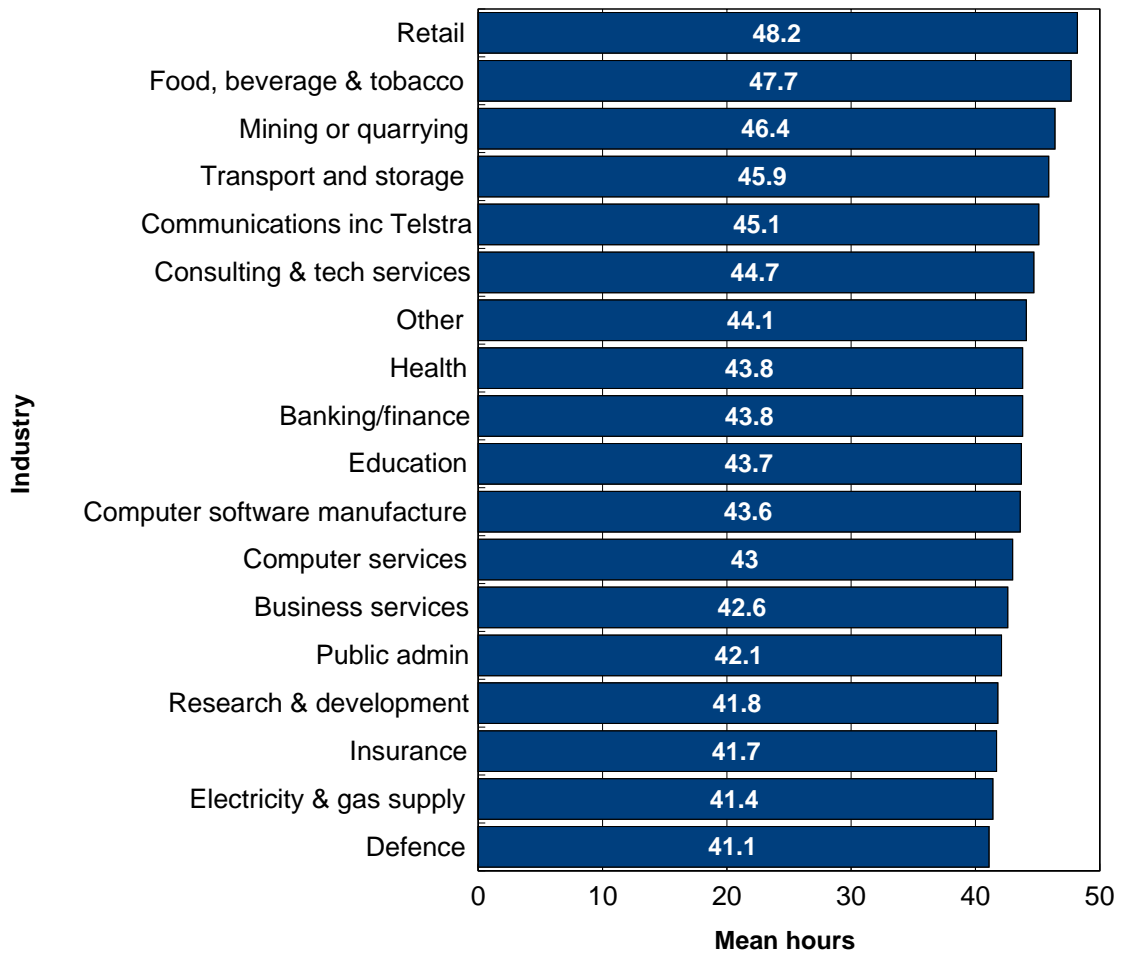


The greatest proportion of respondents (38.5%) was working 40 to 45 hours per week.

The mean average number of weekly hours worked reported by all respondents combined as a single group was 42.4; the median hours reported by this group was 40.

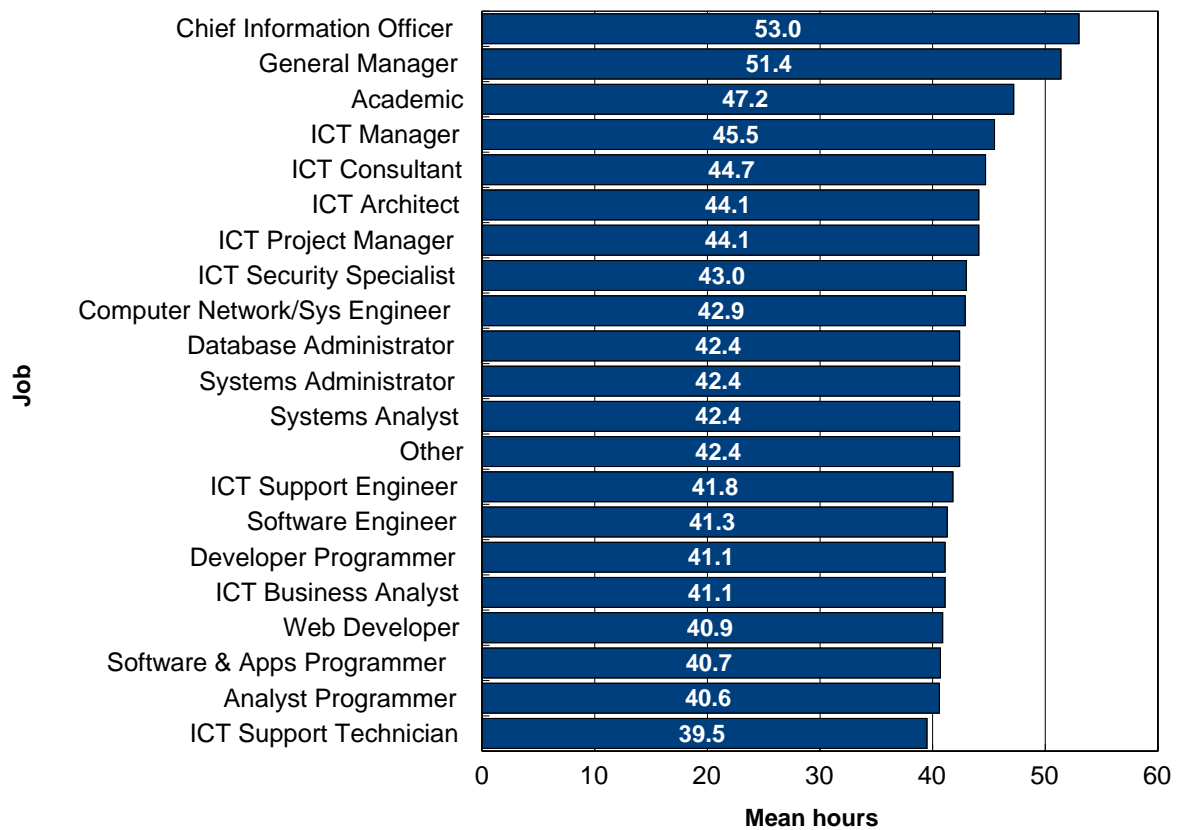
Amongst full-time respondents, the mean hours of work per week was reported to be 43.7, whilst the median number of hours was 40.

74.9% of respondents work 40 hours or more per week, 36.4% work 45 hours or more per week and 21.3% work 50 hours or more per week.

GRAPH 3.2 – FULL-TIME AVERAGE HOURS BY INDUSTRY


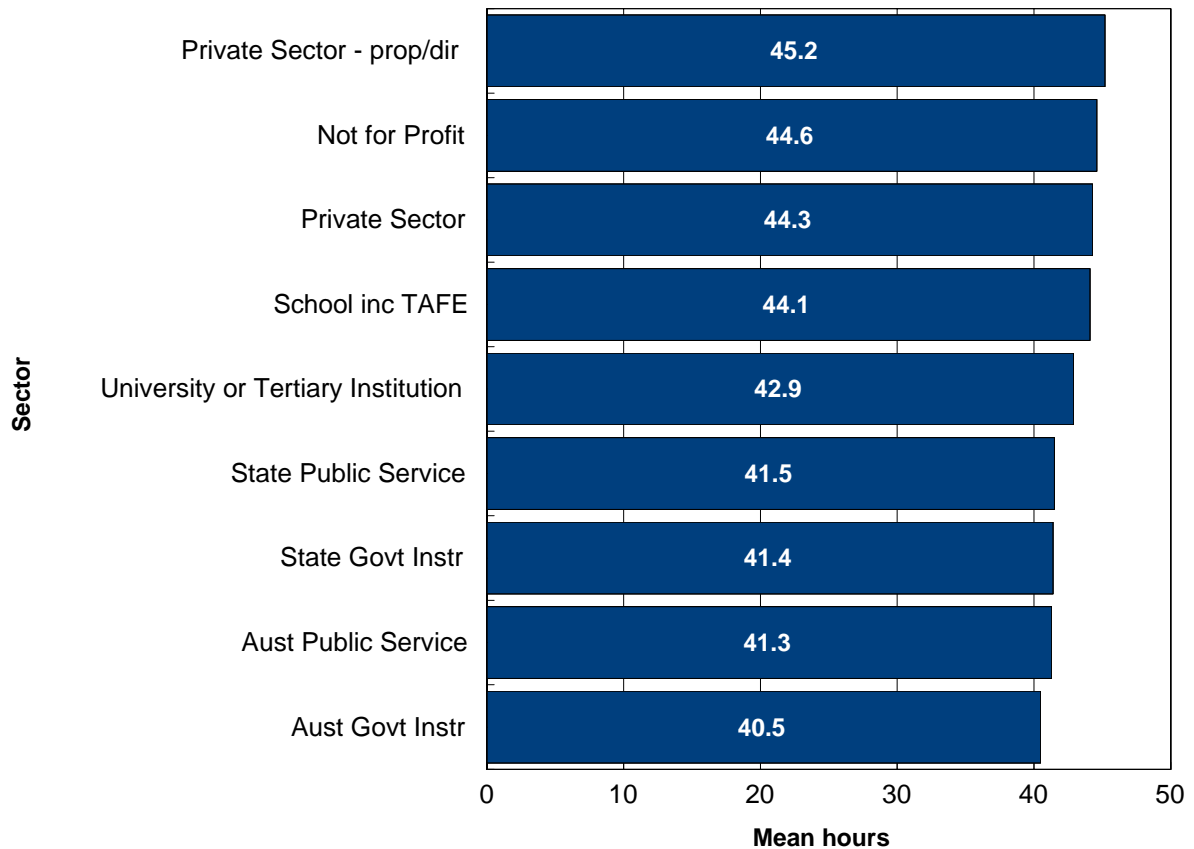
Full-time ICT respondents working in the Retail industry reported working the longest hours on average, at 48.2 hours per week.

Full-time ICT respondents working in the Defence industry reported working the shortest working week on average, at 41.1 hours per week.

GRAPH 3.3 – FULL-TIME AVERAGE HOURS BY JOB


Full-time ICT respondents working in Chief Information Officer roles were seen to be working the longest hours, reporting an average working week of 53 hours.

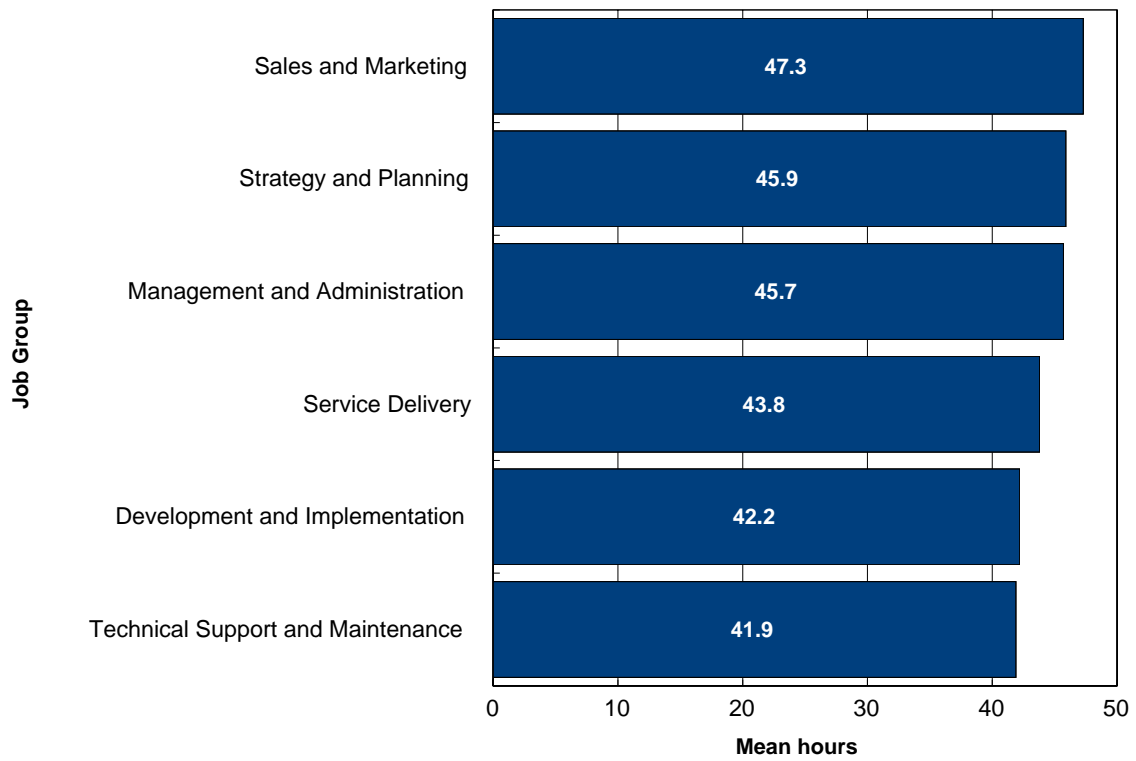
Full-time ICT respondents working in ICT Support Technician roles were seen to be working the shortest hours, reporting an average working week of 39.5 hours.

GRAPH 3.4 – FULL-TIME AVERAGE HOURS BY SECTOR


The longest weekly hours worked on average were by those employed on full-time arrangements for entities that they owned. Those working in the not-for-profit sector could also be seen to be working comparatively long hours.

Those respondents employed on a full-time basis by an Australian Government Instrumentality or GBE worked fewest weekly hours on average at 40.5 hours per week.

It was interesting to note these averages were well above the prescribed standard working week of 38 hours.

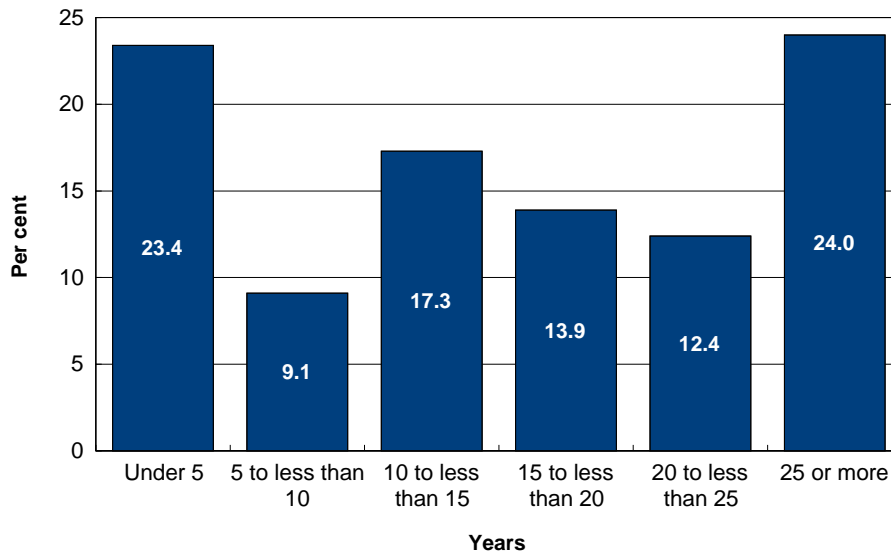
GRAPH 3.5 – FULL-TIME AVERAGE HOURS BY JOB GROUP


Full-time respondents engaged in Sales and Marketing roles reported the longest average working week of 47.3 hours.

Full-time respondents engaged in Technical Support and Maintenance roles reported the shortest average working week of 41.9 hours.

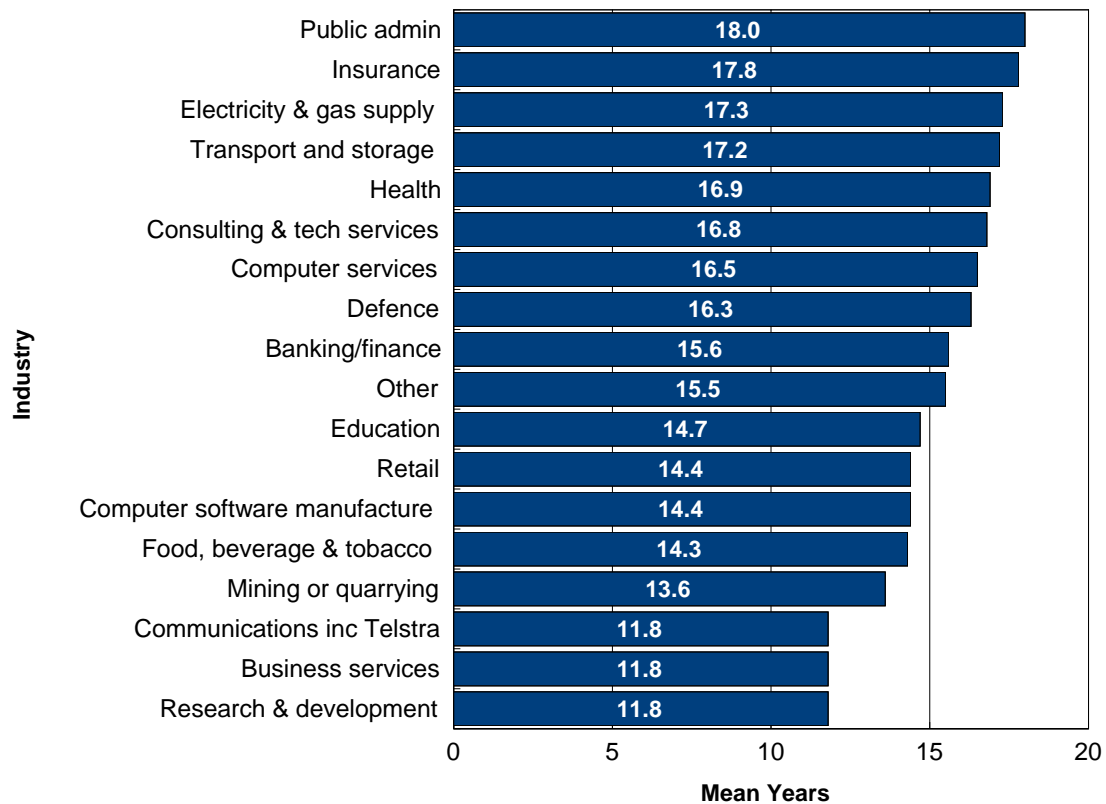
SECTION 4 – PROFESSIONAL EXPERIENCE

GRAPH 4.1 – DISTRIBUTION OF PROFESSIONAL EXPERIENCE HELD

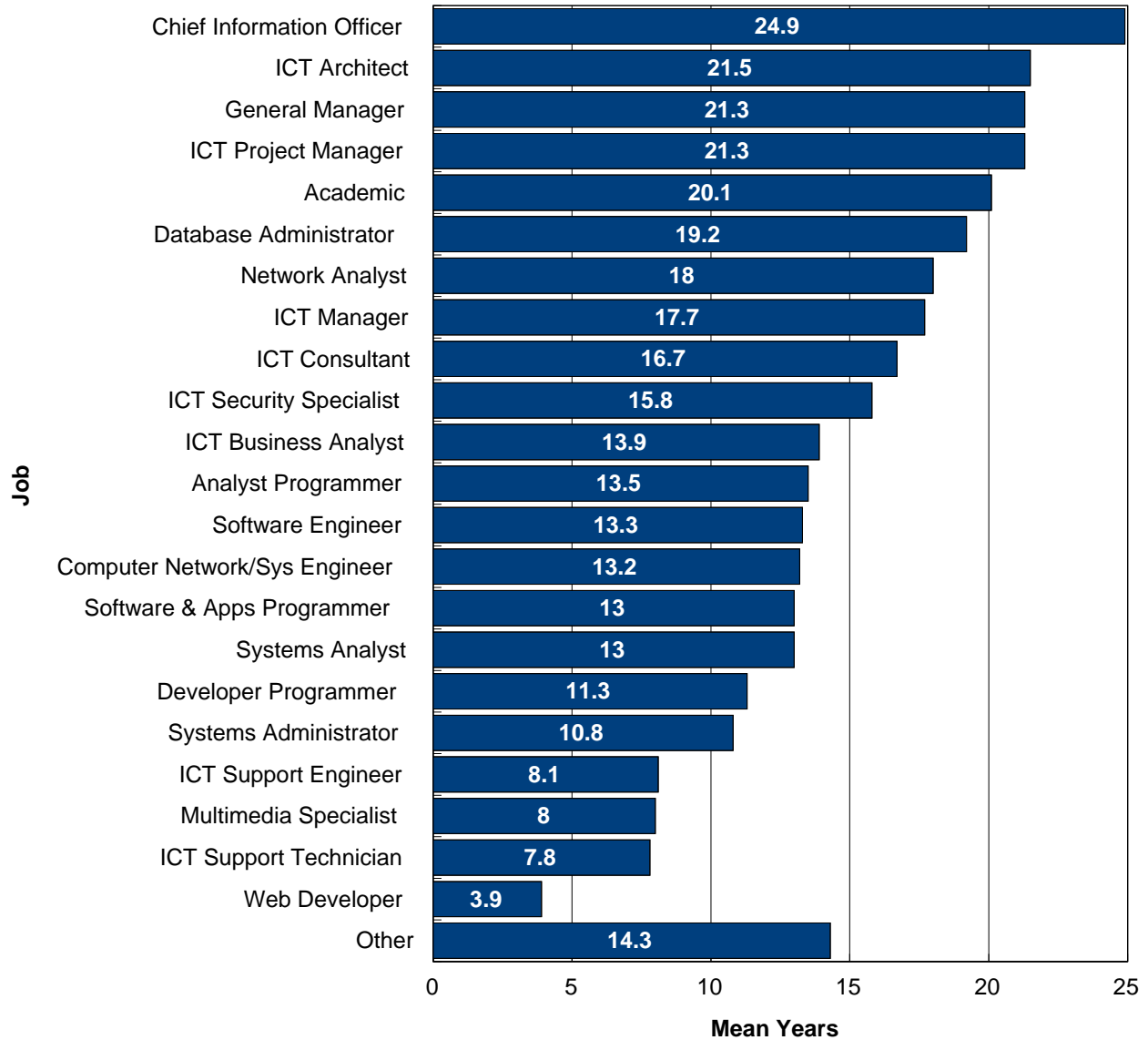


67.6% of respondents had worked for 10 or more years in the ICT industry, whilst 50.3% had worked for 15 years or more in the ICT industry.

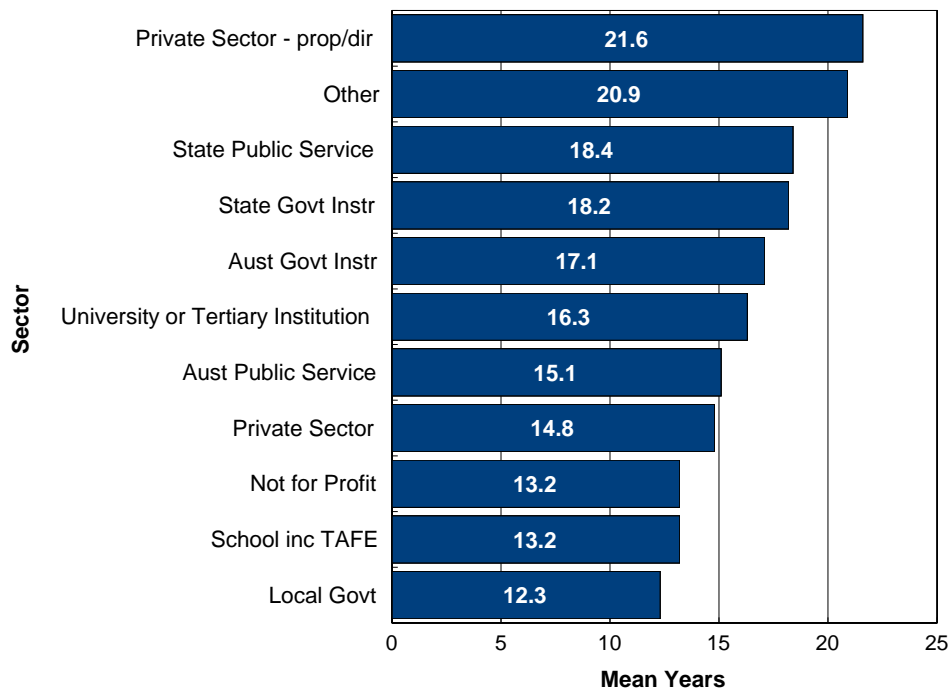
GRAPH 4.2 – YEARS OF PROFESSIONAL EXPERIENCE HELD BY INDUSTRY



The greatest levels of professional ICT experience were found in the Public Administration industry, at 18 years. The least experienced industry group was found in the Business Services group, with 11.8 years of professional experience.

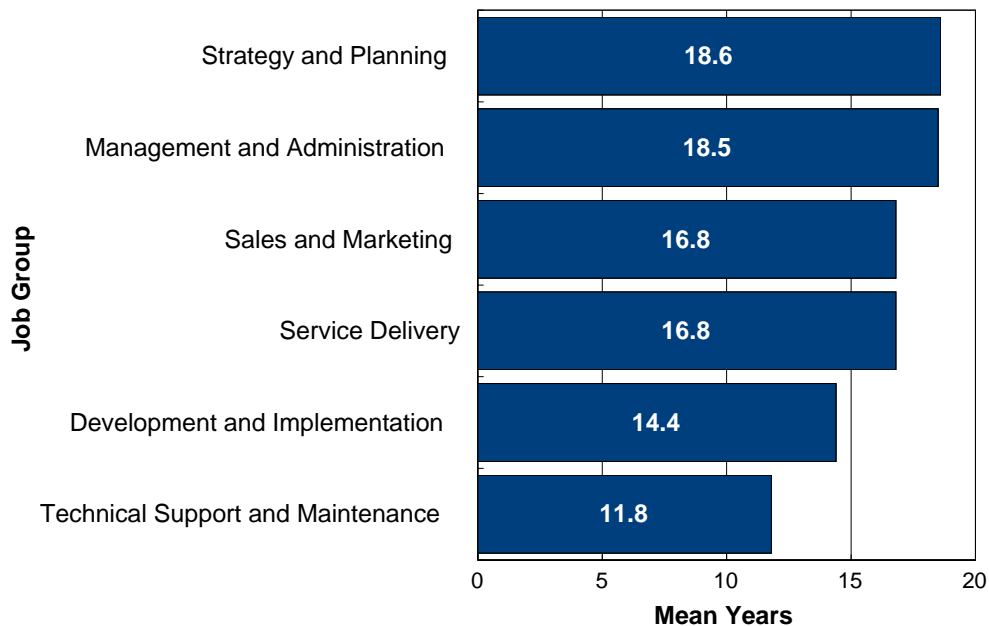
GRAPH 4.3 – YEARS OF PROFESSIONAL EXPERIENCE HELD BY JOB


Incumbents in the role of Chief Information Officer were reported to hold the highest levels of ICT professional experience, with an average of 24.9 years. The average years of ICT professional experience held by incumbent Web Developers was 3.9 years.

GRAPH 4.4 – YEARS OF PROFESSIONAL EXPERIENCE HELD BY SECTOR


Respondents who were self-employed and engaged as independent contractors held the highest levels of professional ICT experience, reporting an average of 21.6 years.

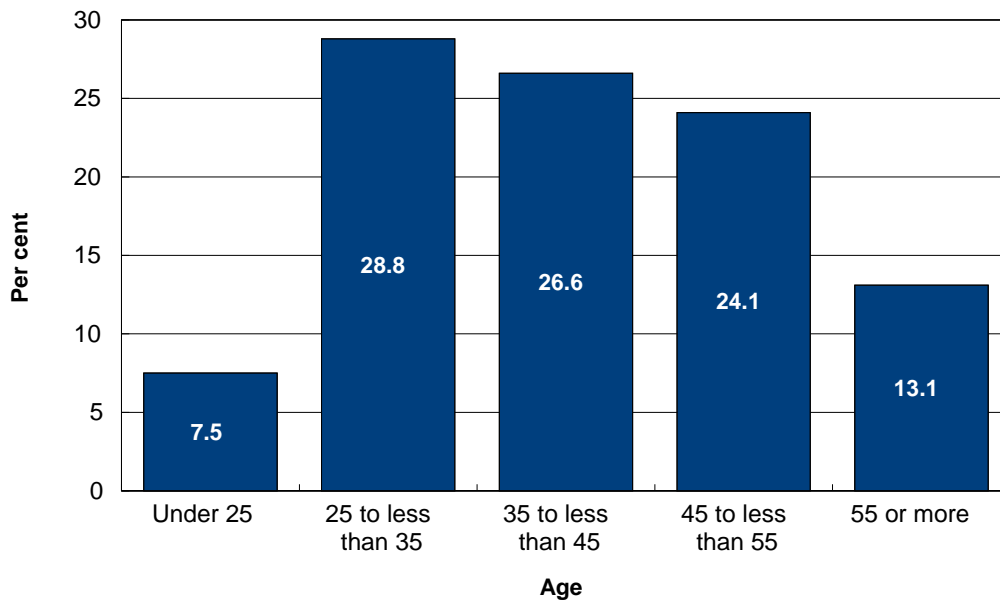
Those respondents working in Local Government reported the lowest average levels of professional ICT experience at 12.3 years.

GRAPH 4.5 – YEARS OF PROFESSIONAL EXPERIENCE HELD BY JOB GROUP


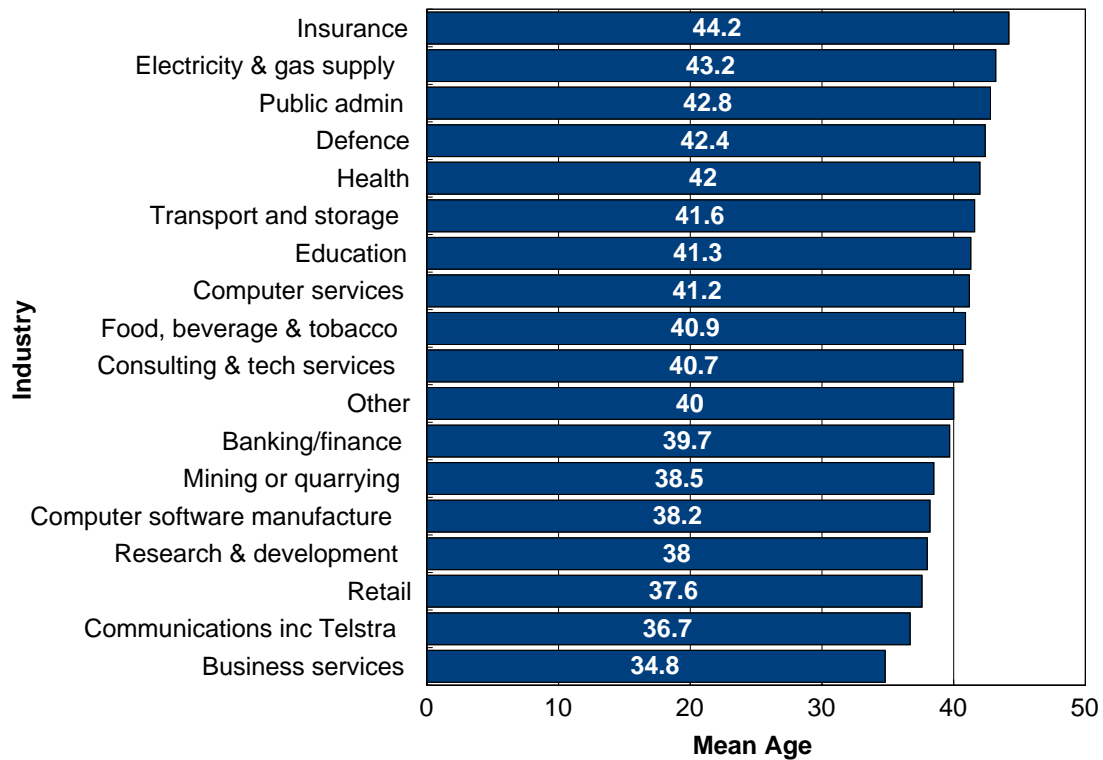
Respondents engaged in Strategy and Planning roles, as well as respondents working in Management and Administration were seen to be the most experienced, possessing an average of 18.6 and 18.5 years of professional ICT experience respectively. Those respondents engaged with the Technical Support and Maintenance job group typically held the least ICT experience, with an average of 11.8 years.

SECTION 5 – AGE PROFILE

GRAPH 5.1 – DISTRIBUTION OF AGE

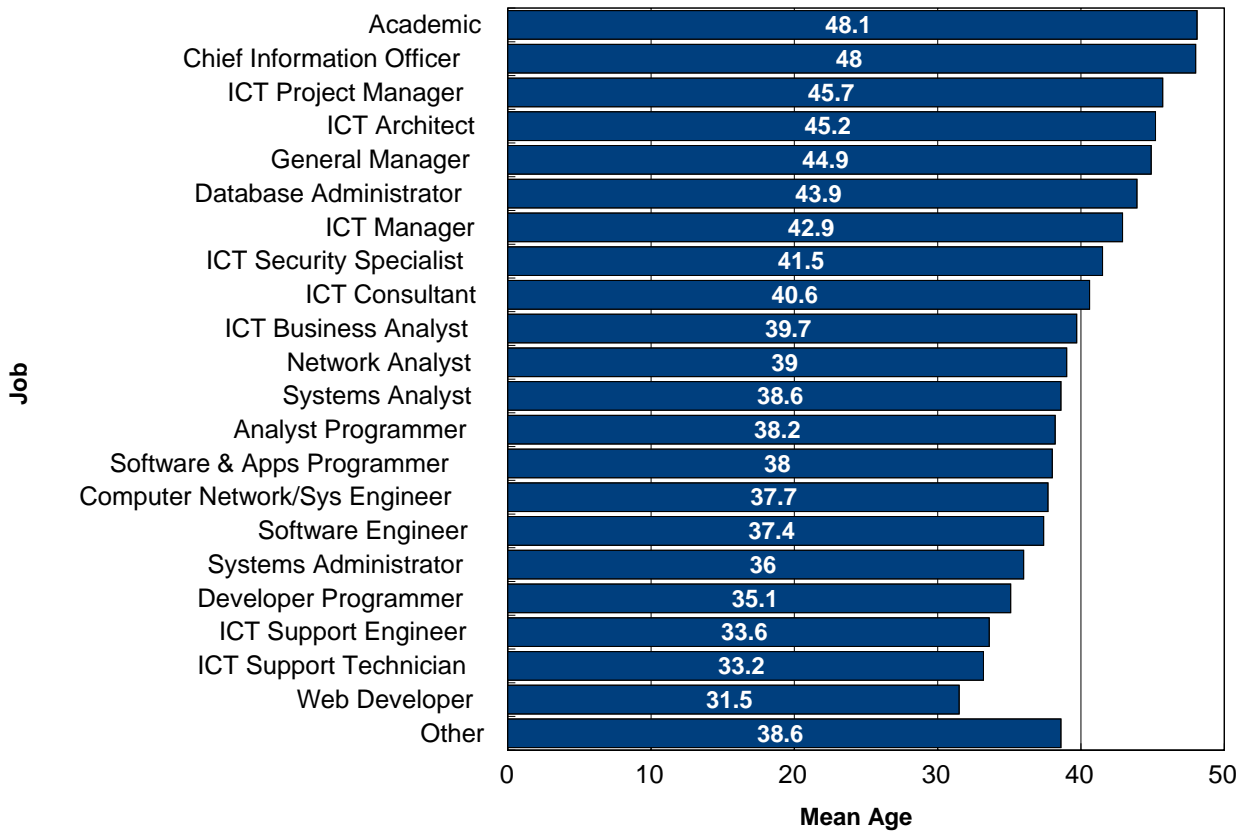


GRAPH 5.2 – AGE BY INDUSTRY

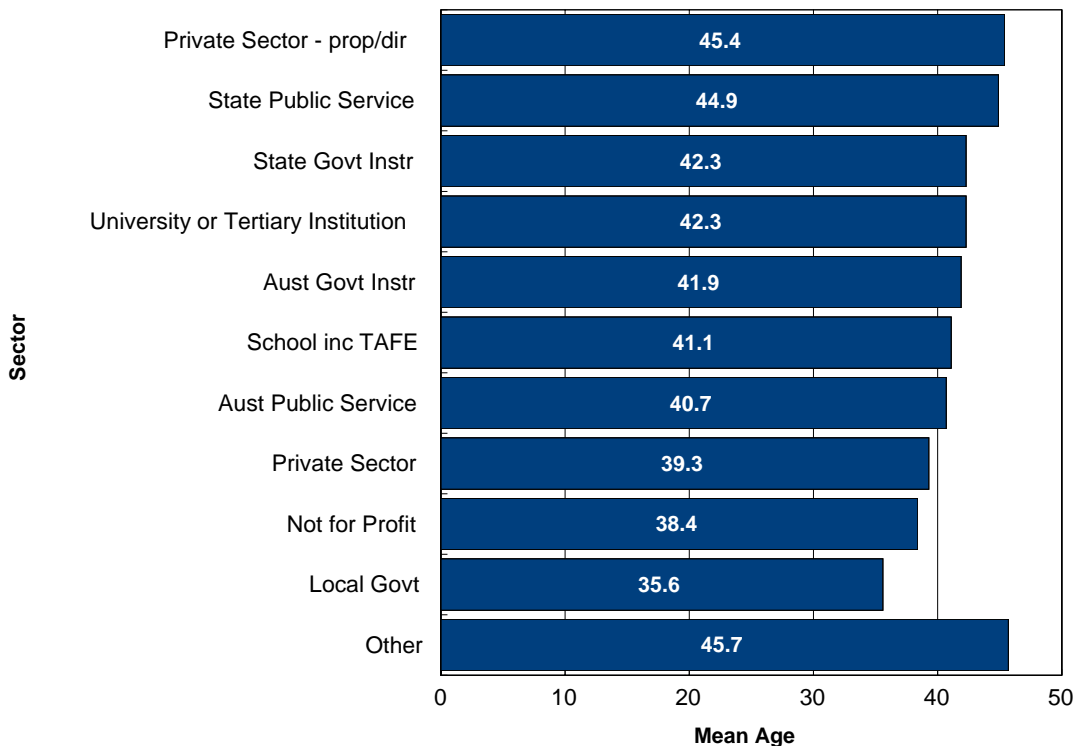


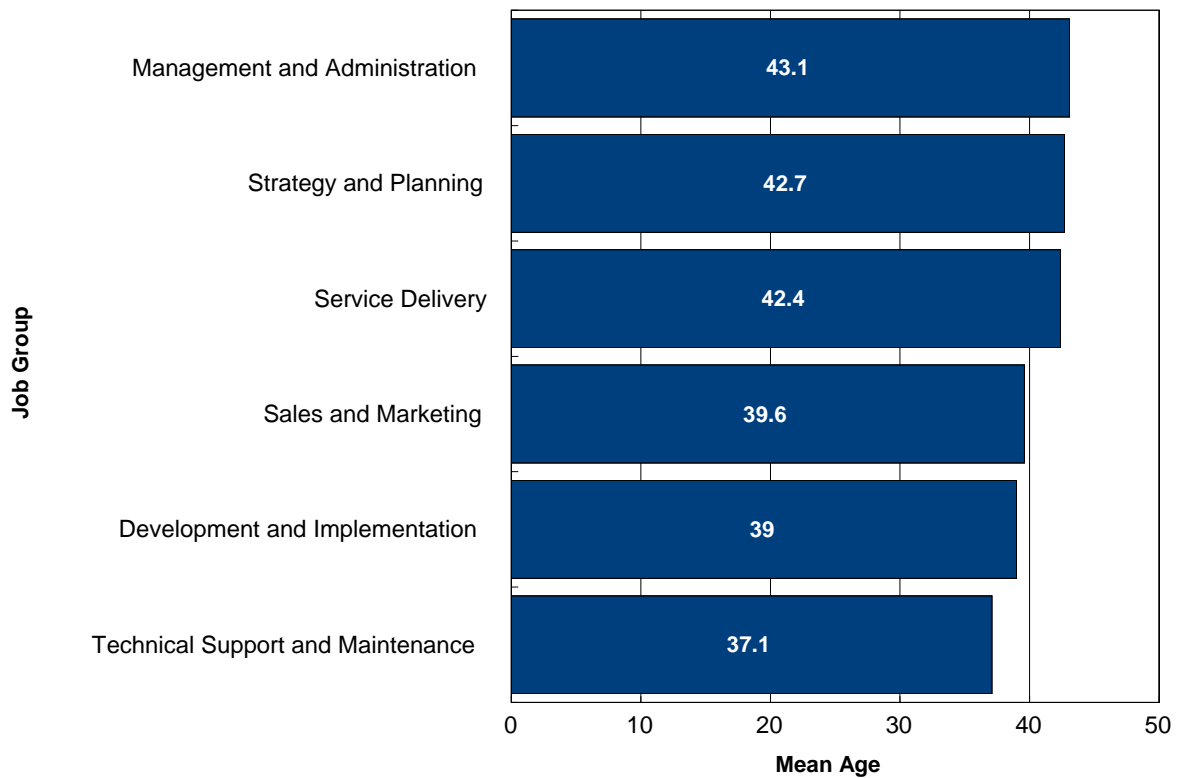
ICT respondents engaged in the Insurance industry were typically older, reporting an average age of 44.2 years.

ICT respondents engaged in the Business Services industry were typically younger, reporting an average age of 34.8 years.

GRAPH 5.3 – AGE BY JOB


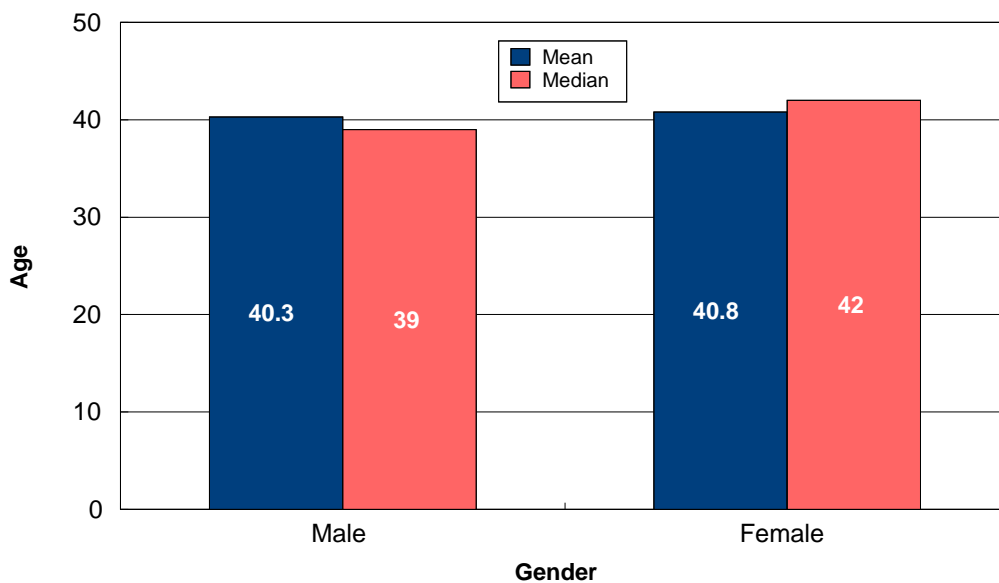
Respondents engaged in Academic roles were typically older, reporting an average age of 48.1 years. Respondents engaged in Web Developer roles were typically younger, reporting an average age of 31.5 years.

GRAPH 5.4 – AGE BY SECTOR


GRAPH 5.5 – AGE BY JOB GROUP


Those respondents engaged in positions grouped under the umbrella of Management and Administration were the oldest group, with an average age of 43.1 years.

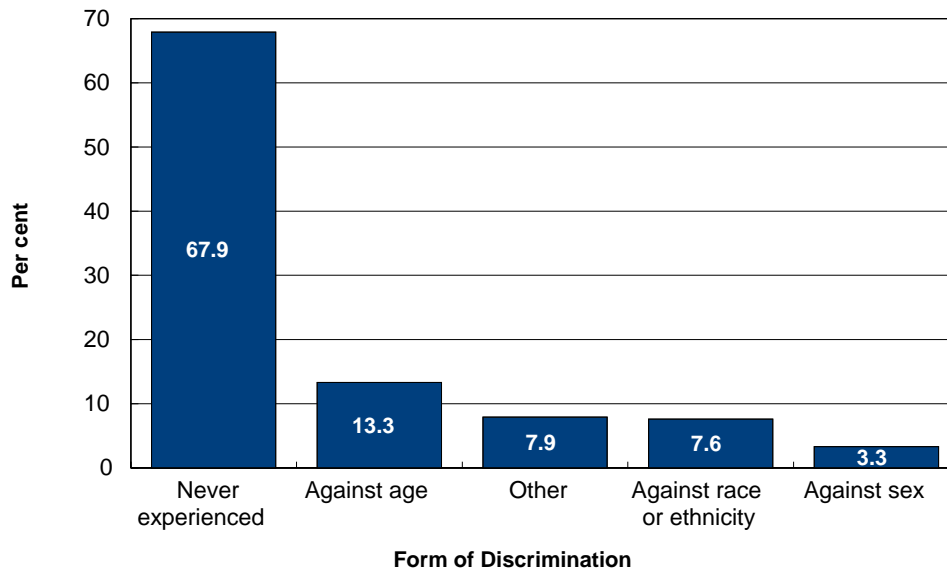
The Technical Support and Maintenance group was seen to be the youngest group, with an average age of 37.1 years.

GRAPH 5.6 – AGE BY GENDER


Virtually no difference was apparent in the mean age of survey respondents, however comparison with median age indicated a skewing of the distribution of males toward younger than average than males, while the converse was true of the female distribution.

SECTION 6 – DISCRIMINATION

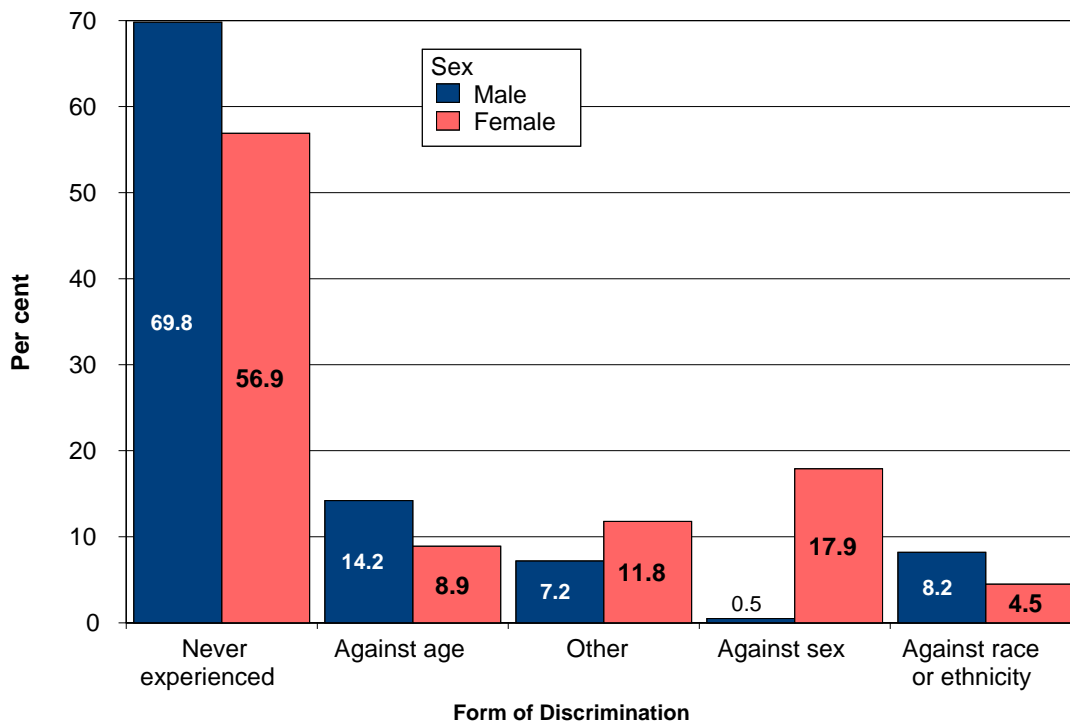
GRAPH 6.1 –DISCRIMINATION ENCOUNTERED WHEN APPLYING FOR ICT POSITIONS



The majority of respondents (67.9%) reported never having experience discrimination in applying for ICT positions. The most prevalent form of discrimination reported was discrimination based on age (13.3%).

Other forms of discrimination reportedly experienced when applying for ICT positions included discrimination based on being over-qualified, citizenship status, local work experience, medical conditions and disability.

GRAPH 6.2 – DISCRIMINATION ENCOUNTERED WHEN APPLYING FOR ICT POSITIONS BY SEX

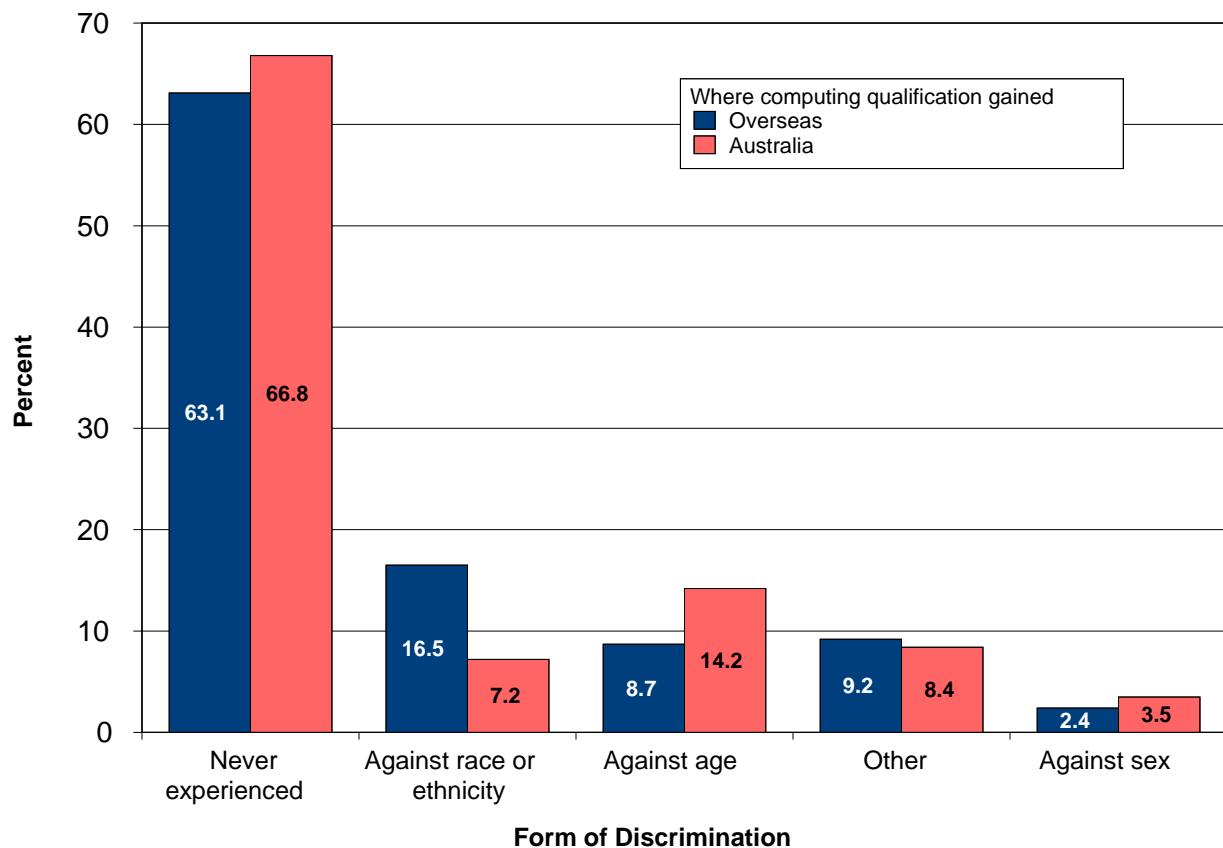


43.1% of female respondents indicated they had encountered some form of discrimination when applying for ICT positions compared to 30.1% of males. 17.9% of female respondents reported having experienced some form of discrimination based on their sex. 14.2% of male respondents reported they had experienced some form of discrimination based on their age.

TABLE 6.1 – DISCRIMINATION ENCOUNTERED WHEN APPLYING FOR ICT POSITIONS BY AGE

AGE GROUP	DISCRIMINATION				
	Never experienced	Against age	Against sex	Against race or ethnicity	Other
	%	%	%	%	%
Under 25	65.5	12.9	0.9	8.6	12.1
25 to less than 35	65.2	7.7	2.3	12.9	12.0
35 to less than 45	74.6	6.5	3.5	8.2	7.2
45 to less than 55	70.6	15.7	5.5	3.6	4.7
55 or more	55.2	36.6	3.1	1.0	4.1
Total	67.7	13.4	3.4	7.6	8.0

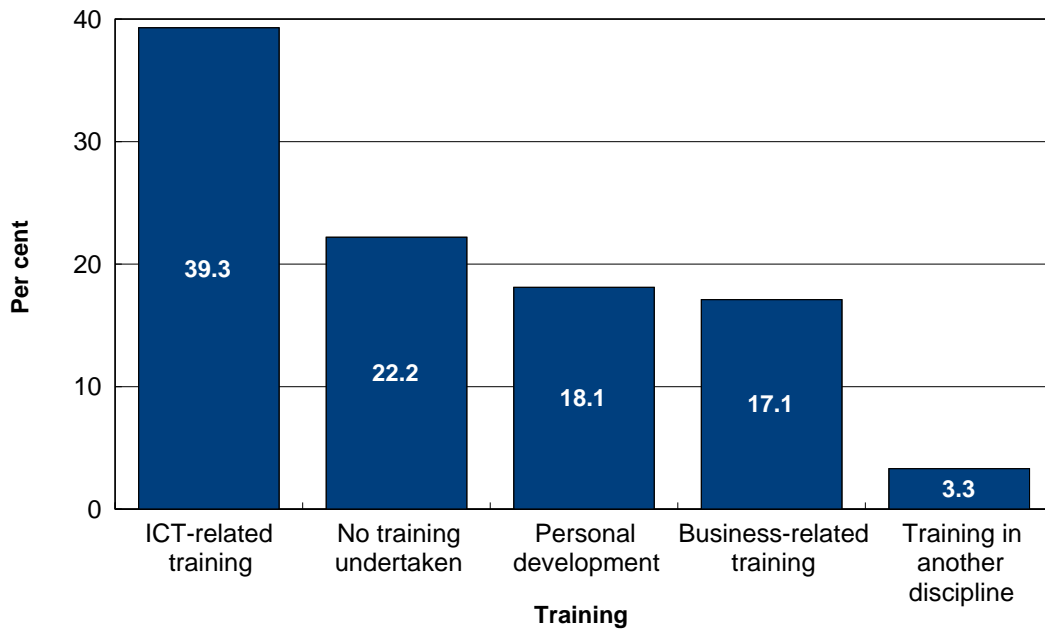
36.6% of all respondents aged 55 or older reported having experienced aged-based discrimination.

GRAPH 6.3 – DISCRIMINATION ENCOUNTERED WHEN APPLYING FOR ICT POSITIONS BY WHERE QUALIFIED


Those qualified overseas reported experiencing discrimination against their race or ethnicity at over twice the rate than those qualified in Australia (7.2% v 16.5%). These figures may well understate the level of race or ethnic based discrimination as respondents from ethnic minority groups may be included in Australian qualified group.

SECTION 7 – TRAINING & DEVELOPMENT

GRAPH 7.1 – TRAINING UNDERTAKEN IN LAST 12 MONTHS

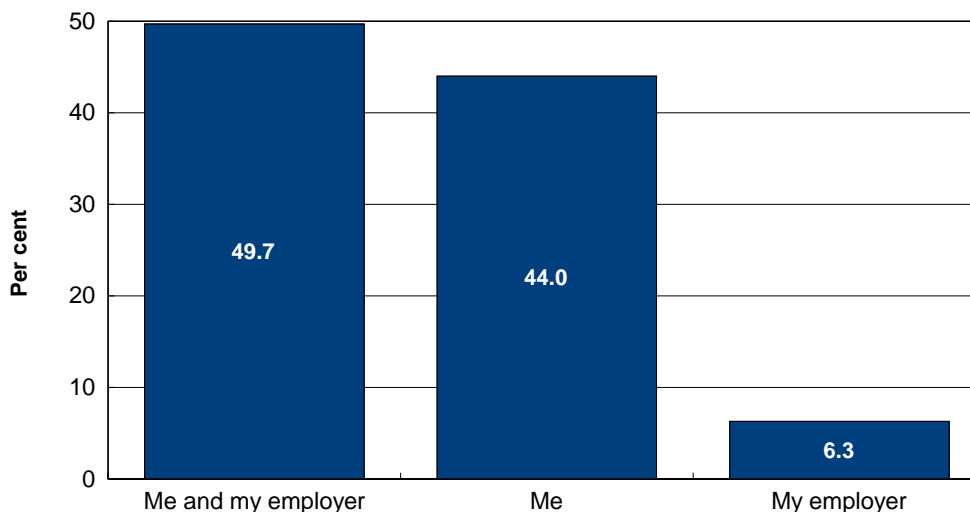


77.8% of respondents had undertaken some form of professional development training in the last 12 months.

The most common form of training undertaken was ICT-related (39.3% of respondents).

TABLE 7.1 – TRAINING UNDERTAKEN IN LAST 12 MONTHS BY ICT GROUP, GENDER AND INDUSTRY

		ICT-related training	Business-related training	Personal development	No training undertaken	Training in another discipline
		%	%	%	%	%
Job Group	Development and Implementation	42.1	12.5	16.1	25.8	3.5
	Management and Administration	30.4	26.1	21.0	20.0	2.5
	Sales and Marketing	25.0	25.0	21.9	21.9	6.3
	Strategy and Planning	37.6	24.8	20.1	13.4	4.0
	Service Delivery	36.0	18.0	23.7	17.3	5.0
	Technical Support and Maintenance	50.9	7.5	13.1	25.8	2.6
Gender	Male	39.1	17.5	18.3	22.1	3.0
	Female	39.8	15.4	17.0	22.8	5.0
Industry	Consulting & tech services	38.4	18.0	15.2	26.0	2.4
	Mining or quarrying	33.3	15.7	17.6	31.4	2.0
	Electricity & gas supply	23.1	28.2	15.4	25.6	7.7
	Communications inc Telstra	31.9	15.9	24.6	23.2	4.3
	Defence	55.1	17.9	11.5	10.3	5.1
	Public admin	44.6	17.1	14.5	20.7	3.1
	Transport and storage	29.3	9.8	24.4	31.7	4.9
	Education	38.3	14.8	25.0	17.2	4.7
	Research & development	41.7	16.7	25.0	12.5	4.2
	Insurance	56.0	20.0	12.0	12.0	-
	Banking/finance	35.1	14.3	27.4	17.9	5.4
	Health	39.1	14.5	18.8	23.2	4.3
	Retail	33.3	12.5	16.7	37.5	-
	Computer services	35.9	25.0	4.7	28.1	6.3
	Business services	45.0	17.5	20.0	15.0	2.5
	Food, beverage & tobacco	31.3	43.8	12.5	12.5	-
	Computer software manufacture	41.3	8.8	15.0	35.0	-
Other	41.2	19.4	17.6	20.6	1.2	
Total		39.3	17.1	18.1	22.2	3.3

GRAPH 7.2 – RESPONSIBILITY FOR DETERMINING TRAINING NEEDS


Employees were generally heavily involved in determining their training requirements, with only 6.3% of survey respondents having their training needs determined solely by their employer.

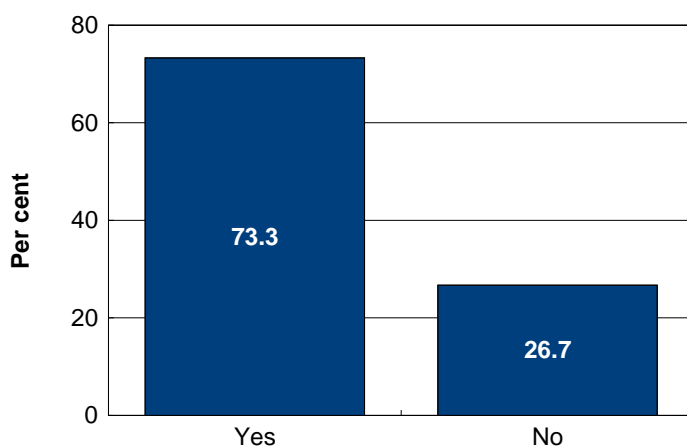
Responsibility for Determining Training Needs

**TABLE 7.2 – RESPONSIBILITY FOR DETERMINING TRAINING NEEDS
BY ICT GROUP, GENDER AND INDUSTRY**

		Me	My employer	Me and my employer
		%	%	%
Job Group	Development and Implementation	42.3	7.5	50.2
	Management and Administration	46.7	3.5	49.7
	Sales and Marketing	40.6	6.3	53.1
	Strategy and Planning	52.0	4.0	44.0
	Service Delivery	37.7	4.3	58.0
	Technical Support and Maintenance	41.8	10.4	47.8
Gender	Male	45.0	7.0	48.0
	Female	38.3	2.5	59.2
Industry	Consulting & tech services	45.6	6.3	48.0
	Mining or quarrying	35.3	2.0	62.7
	Electricity & gas supply	48.7	2.6	48.7
	Communications inc Telstra	40.6	10.1	49.3
	Defence	21.8	3.8	74.4
	Public admin	38.9	4.1	57.0
	Transport and storage	48.8	12.2	39.0
	Education	46.9	7.0	46.1
	Research & development	34.8	21.7	43.5
	Insurance	40.0	4.0	56.0
	Banking/finance	39.3	7.1	53.6
	Health	58.0	1.4	40.6
	Retail	62.5	12.5	25.0
	Computer services	35.5	3.2	61.3
	Business services	60.0	10.0	30.0
	Food, beverage & tobacco	37.5	12.5	50.0
	Computer software manufacture	51.3	6.3	42.5
	Other	51.4	6.9	41.6
Total		44.0	6.3	49.7

Exclusive employer control of determining training needs was most common amongst those employed in the Technical Support and Maintenance job group (10.4%). Employer control was most common amongst those in the Research and Development industry, with 21.7% of respondents working in this industry reporting exclusive employer control in determining training needs. Female employees were more likely to have their training needs determined in conjunction with their employer (59.2% for females v 48% for males).

GRAPH 7.3 – PARTIAL OR TOTAL EMPLOYER PAYMENT FOR TRAINING



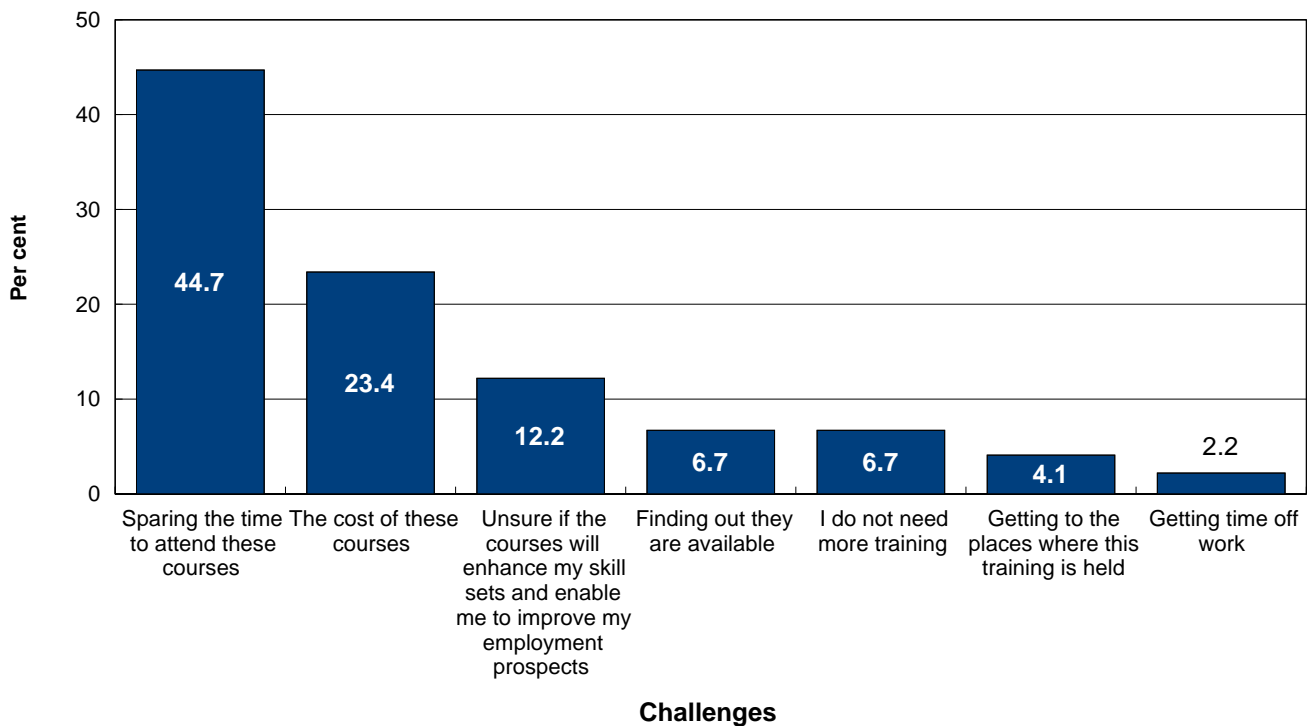
Nearly three quarters (73.3%) of employers contributed either fully or partially to cover the cost of employee training and development.

**TABLE 7.3 – PARTIAL OR TOTAL EMPLOYER PAYMENT FOR TRAINING
BY ICT JOB GROUP, GENDER AND INDUSTRY**

		Yes	No
		%	%
Job Group	Development and Implementation	68.2	31.8
	Management and Administration	79.0	21.0
	Sales and Marketing	75.0	25.0
	Strategy and Planning	83.1	16.9
	Service Delivery	84.2	15.8
	Technical Support and Maintenance	63.9	36.1
Gender	Male	73.7	26.3
	Female	71.1	28.9
Industry	Consulting & tech services	74.9	25.1
	Mining or quarrying	84.3	15.7
	Electricity & gas supply	79.5	20.5
	Communications inc Telstra	65.2	34.8
	Defence	91.0	9.0%
	Public admin	78.2	21.8
	Transport and storage	61.0	39.0
	Education	70.9	29.1
	Research & development	62.5	37.5
	Insurance	96.0	4.0
	Banking/finance	75.0	25.0
	Health	73.5	26.5
	Retail	58.3	41.7
	Computer services	65.1	34.9
	Business services	64.1	35.9
	Food, beverage & tobacco	80.0	20.0
	Computer software manufacture	55.1	44.9
	Other	72.7	27.3
Total		73.4	26.6

Respondents were generally similar in their views on the desirable frequency of training between job group and gender.

Respondents from the Insurance industry were most adamant in their attitude, responding in 88% of cases that training should be undertaken every 1-2 years.

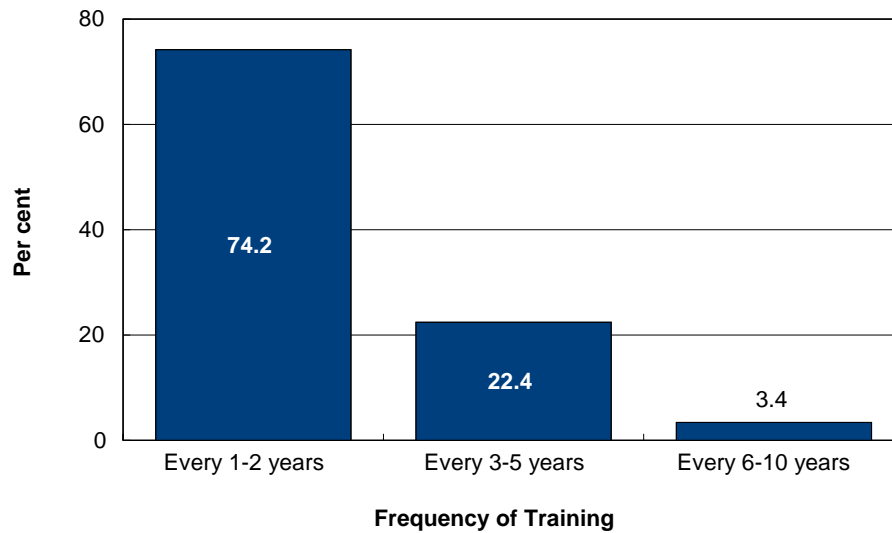
GRAPH 7.4 – MAIN CHALLENGE TO UNDERTAKING FURTHER TRAINING


Clearly the most significant impediment to undertaking further training and professional development is finding the available time to do so. 44.7% of respondents declared this to be the main challenge to overcome.

The financial cost of courses was also a significant factor, nominated by 23.4% of respondents as the main challenge.

**TABLE 7.4 – MAIN CHALLENGE TO UNDERTAKING FURTHER TRAINING
BY ICT GROUP, GENDER AND INDUSTRY**

		Finding out they are available	The cost of these courses	Sparing the time to attend these courses	Getting to the places where this training is held	Unsure if the courses will enhance my skill sets and enable me to improve my employment prospects	I do not need more training	Getting time off work
		%	%	%	%	%	%	%
Job Group	Development and Implementation	7.2	24.2	40.6	3.7	13.4	9.5	1.5
	Management and Administration	5.1	19.7	51.1	4.3	11.4	5.1	3.3
	Sales and Marketing	3.1	15.6	62.5	3.1	12.5	-	3.1
	Strategy and Planning	8.1	14.1	55.7	4.0	9.4	6.0	2.7
	Service Delivery	8.0	23.4	46.7	5.1	8.0	5.8	2.9
	Technical Support and Maintenance	7.1	33.8	33.1	4.1	15.0	5.3	1.5
Gender	Male	6.5	23.1	45.5	4.0	12.1	6.4	2.2
	Female	7.2	25.3	40.5	4.2	12.7	8.0	2.1
Industry	Consulting & tech services	6.0	19.0	50.4	2.8	11.1	8.7	2.0
	Mining or quarrying	9.8	13.7	51.0	9.8	9.8	3.9	2.0
	Electricity & gas supply	7.9	21.1	52.6	-	10.5	5.3	2.6
	Communications inc Telstra	2.9	29.4	44.1	2.9	10.3	8.8	1.5
	Defence	9.0	23.1	35.9	6.4	14.1	7.7	3.8
	Public admin	8.3	26.0	40.6	4.2	11.5	7.3	2.1
	Transport and storage	7.5	12.5	55.0	2.5	17.5	5.0	-
	Education	3.9	28.3	42.5	5.5	10.2	5.5	3.9
	Research & development	25.0	29.2	16.7	8.3	12.5	8.3	-
	Insurance	4.0	12.0	56.0	-	24.0	-	4.0
	Banking/finance	7.1	19.0	48.2	5.4	13.7	5.4	1.2
	Health	5.9	27.9	41.2	4.4	10.3	8.8	1.5
	Retail	8.3	29.2	41.7	-	12.5	4.2	4.2
	Computer services	11.1	30.2	41.3	3.2	7.9	6.3	-
	Business services	10.0	22.5	47.5		17.5	2.5	-
	Food, beverage & tobacco	-	18.8	43.8	6.3	18.8	12.5	-
Computer software manufacture	3.8	17.7	50.6	2.5	16.5	5.1	3.8	
Other	4.1	29.7	39.0	4.7	11.6	7.6	3.5	
Total		6.7%	23.3	44.7	4.1	12.3	6.8	2.2

GRAPH 7.5 – PERCEIVED FREQUENCY OF REQUIRED FURTHER TRAINING


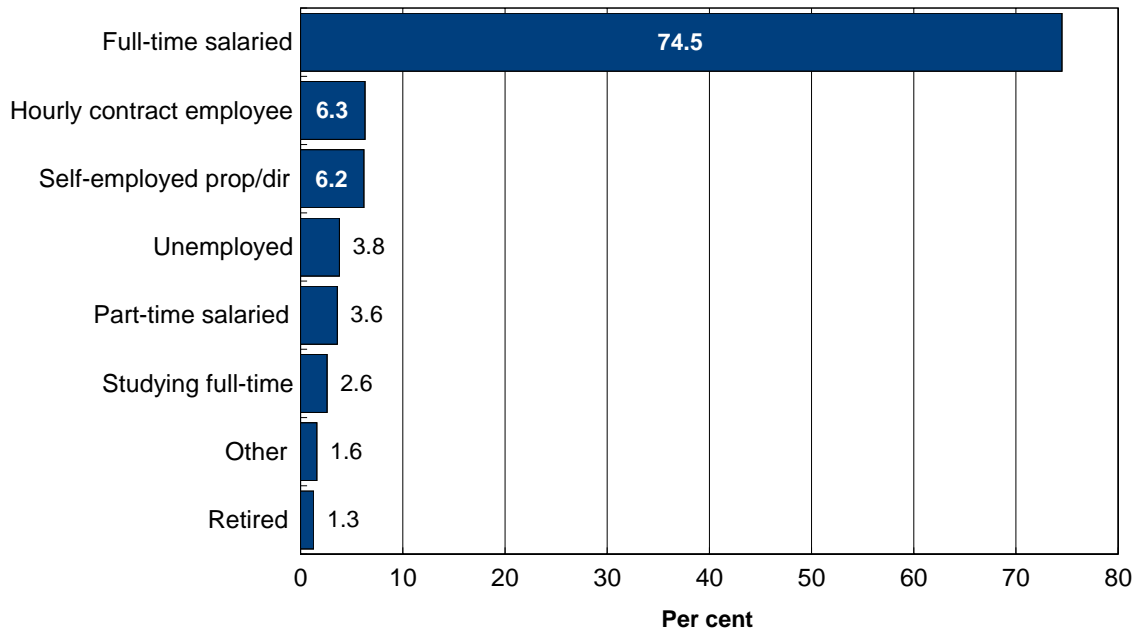
Respondents were clearly of a view that further training was desirable at a frequency of every 1-2 years, with 74.2% nominating this as the preferred interval.

TABLE 7.5 – PERCEIVED FREQUENCY OF REQUIRED FURTHER TRAINING BY ICT GROUP, GENDER AND INDUSTRY

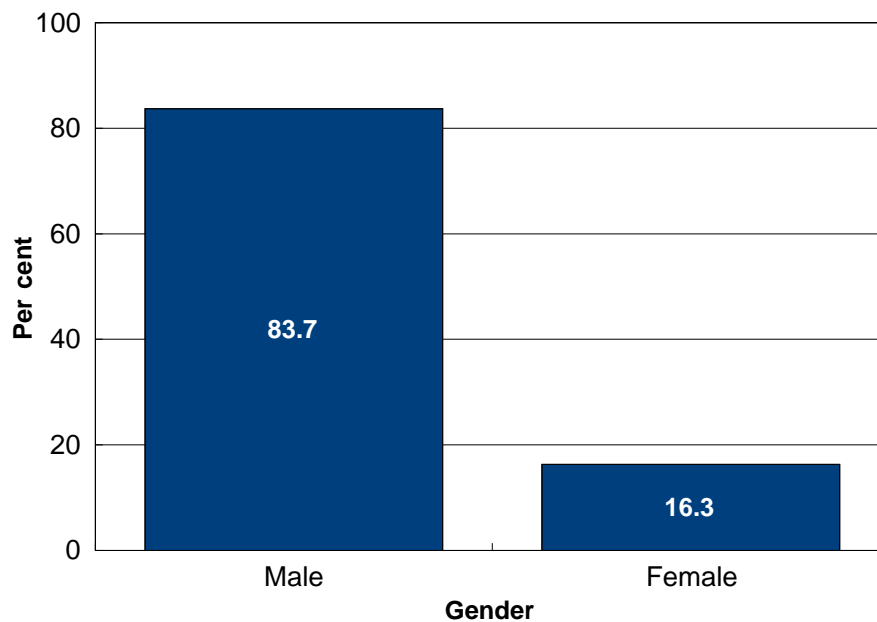
		Every 1-2 years	Every 3-5 years	Every 6-10 years
		%	%	%
Job Group	Development and Implementation	71.5	23.9	4.7
	Management and Administration	72.5	24.2	3.3
	Sales and Marketing	80.6	19.4	-
	Strategy and Planning	77.6	19.7	2.7
	Service Delivery	76.5	21.3	2.2
	Technical Support and Maintenance	78.2	19.5	2.3
Gender	Male	73.4	23.4	3.2
	Female	78.4	17.2	4.3
Industry	Consulting & tech services	77.6	20.7	1.6
	Mining or quarrying	76.5	23.5	-
	Electricity & gas supply	66.7	23.1	10.3
	Communications inc Telstra	75.0	20.6	4.4
	Defence	68.4	25.0	6.6
	Public admin	67.6	27.7	4.8
	Transport and storage	60.0	37.5	2.5
	Education	85.0	12.6	2.4
	Research & development	78.3	17.4	4.3
	Insurance	88.0	12.0	-
	Banking/finance	77.3	19.6	3.1
	Health	64.2	32.8	3.0
	Retail	73.9	26.1	-
	Computer services	67.7	25.8	6.5
	Business services	85.0	12.5	2.5
	Food, beverage & tobacco	75.0	25.0	-
	Computer software manufacture	70.1	26.0	3.9
	Other	75.3	21.2	3.5
Total		74.2%	22.4	3.4

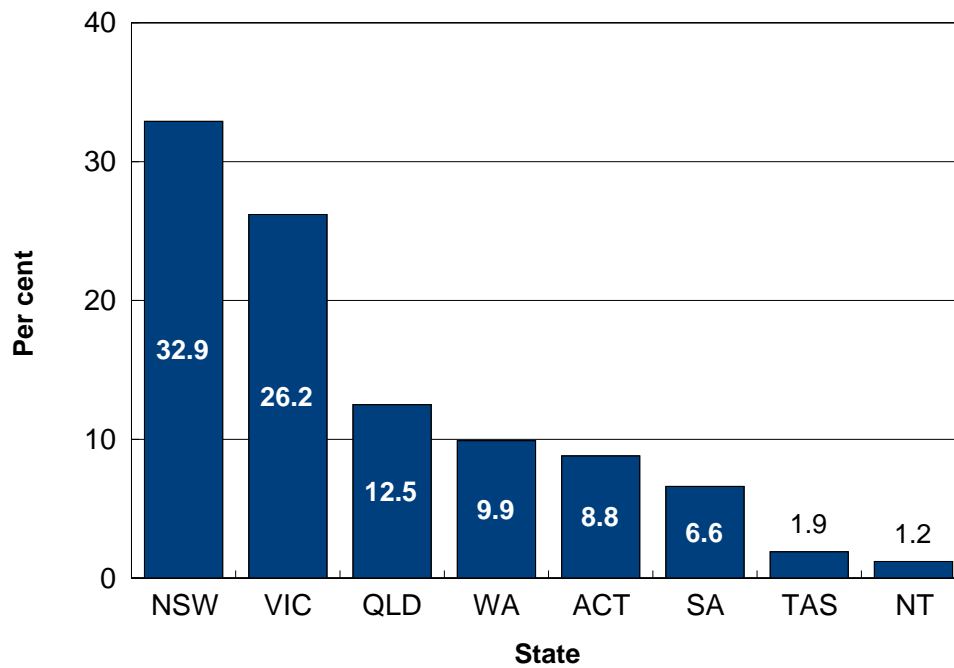
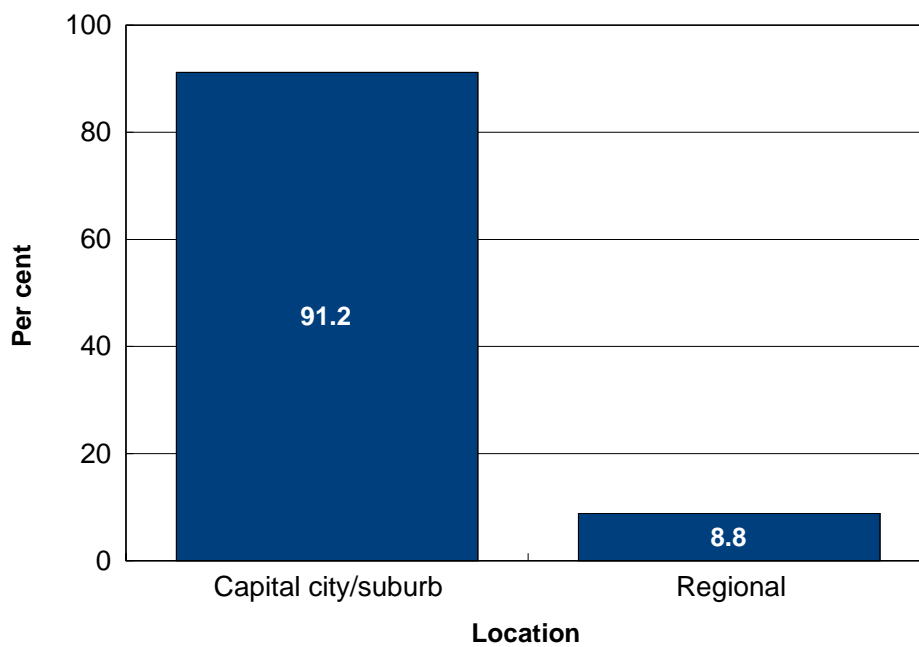
SECTION 8 – VARIOUS CHARACTERISTICS OF SURVEY GROUP

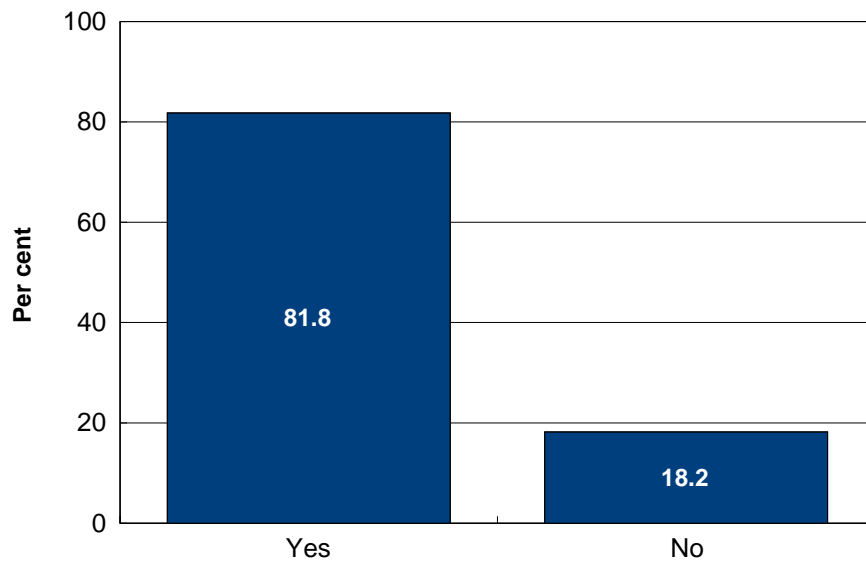
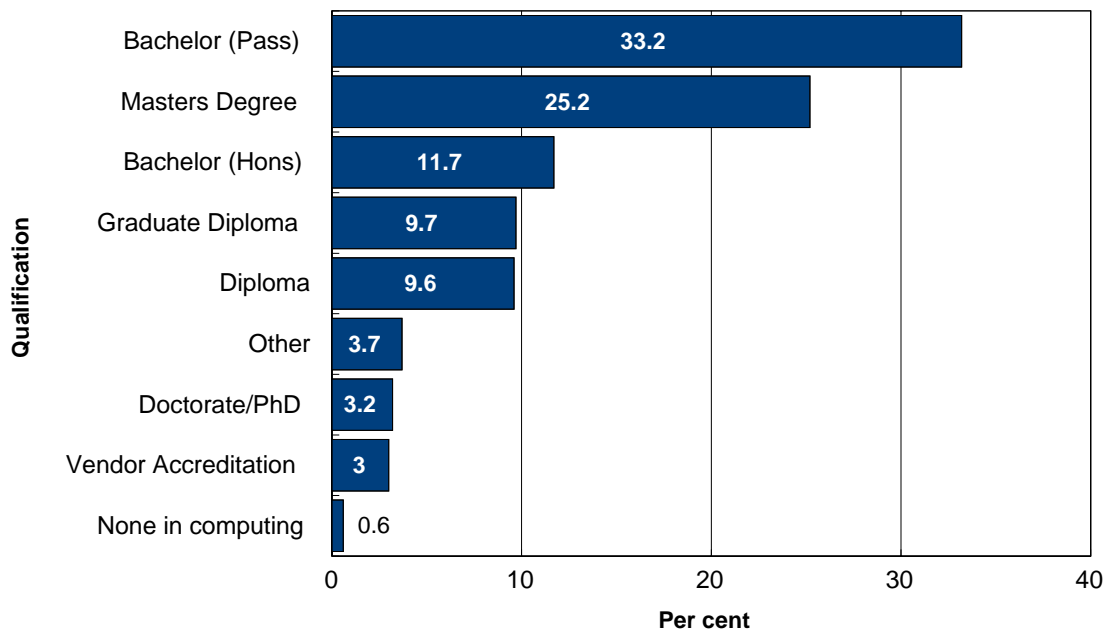
GRAPH 8.1 – EMPLOYMENT STATUS – ALL RESPONDENTS

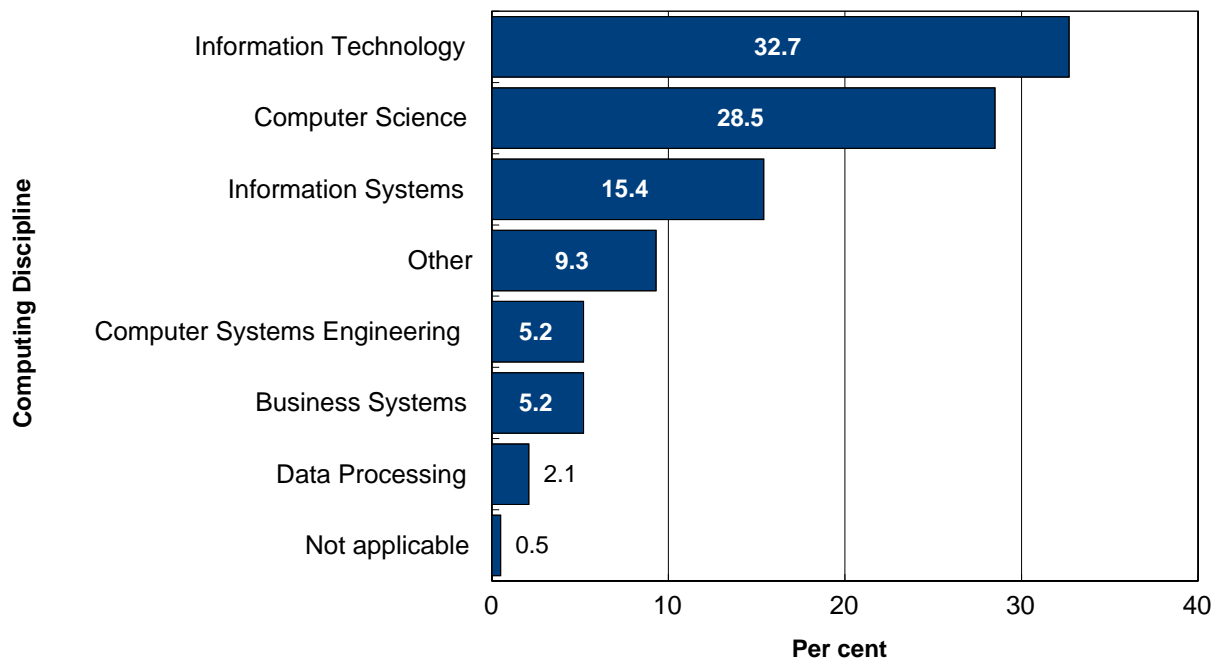
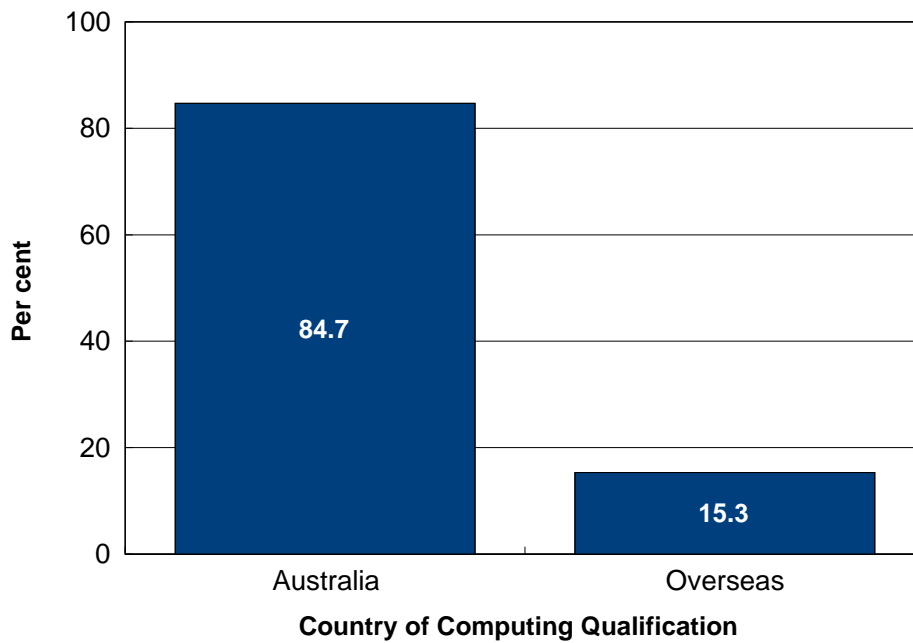


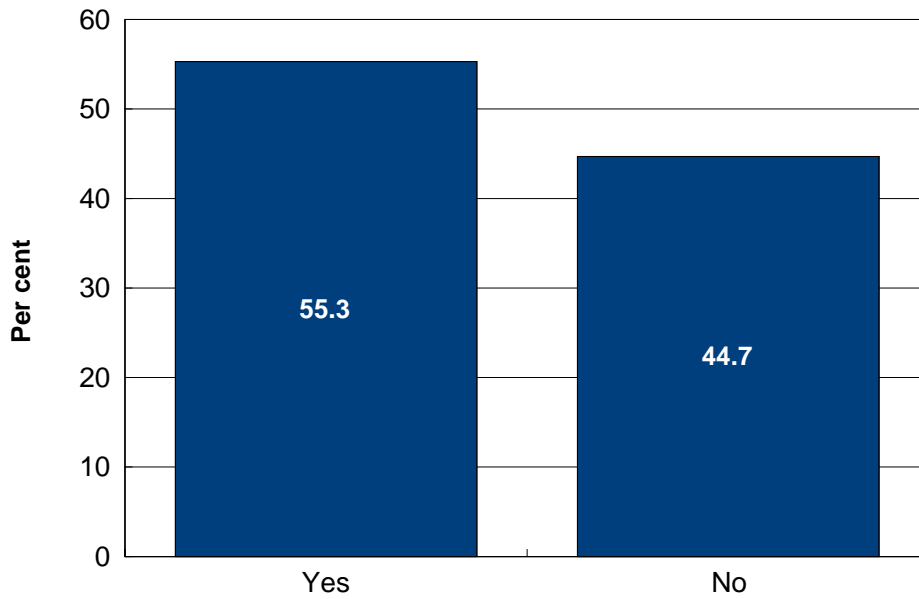
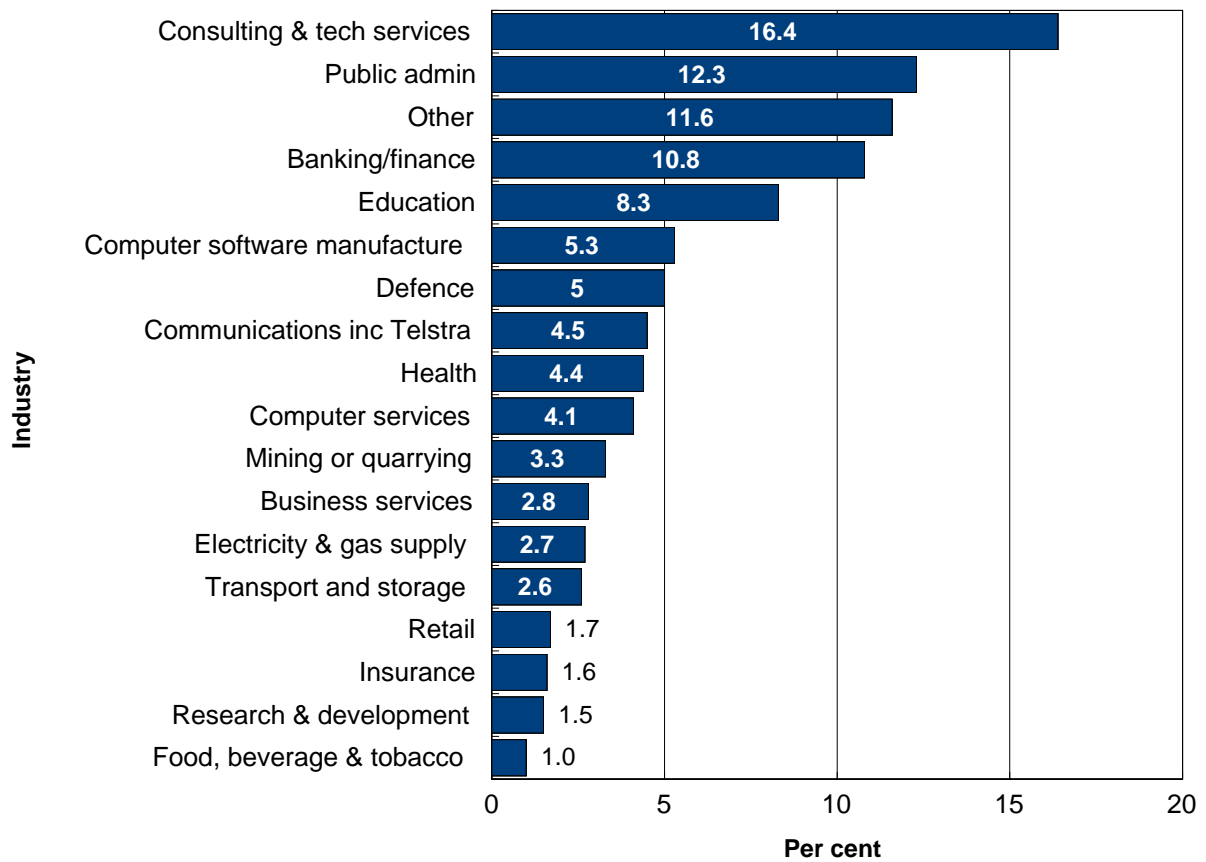
GRAPH 8.2 – GENDER – ALL RESPONDENTS

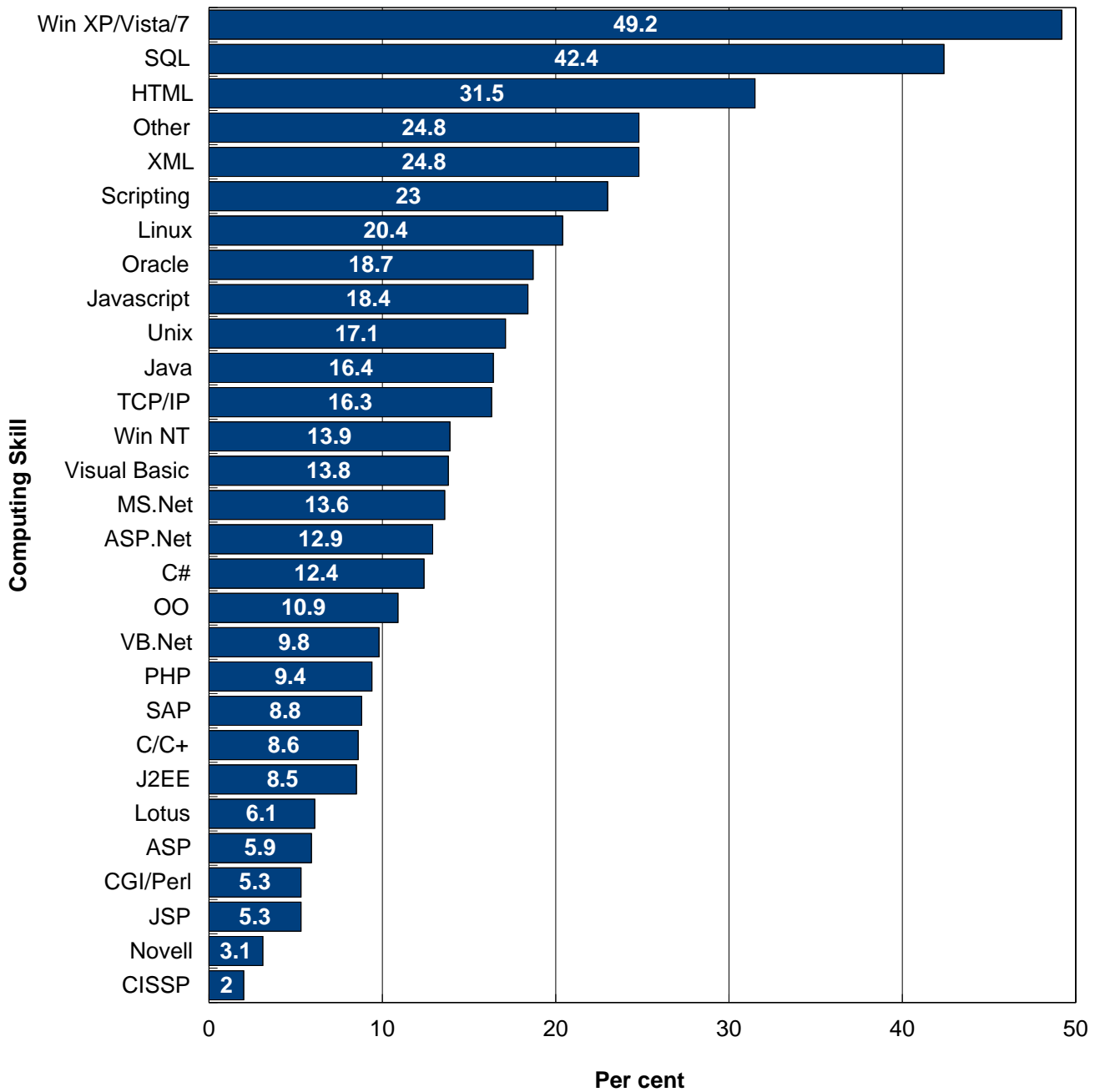


GRAPH 8.3 – STATE OR TERRITORY – ALL RESPONDENTS

GRAPH 8.4 – LOCATION WITHIN STATE OR TERRITORY – ALL RESPONDENTS


GRAPH 8.5 – TERTIARY-QUALIFIED – ALL RESPONDENTS

GRAPH 8.6 – HIGHEST COMPUTING QUALIFICATION – ALL RESPONDENTS


GRAPH 8.7 – DISCIPLINE OF COMPUTING QUALIFICATION – ALL RESPONDENTS

GRAPH 8.8 – COUNTRY WHERE OBTAINED HIGHEST COMPUTING QUALIFICATION – ALL RESPONDENTS


GRAPH 8.9 – HAS EVER BEEN EMPLOYED IN A PROFESSIONAL NON-ICT ROLE – ALL RESPONDENTS

GRAPH 8.10 – INDUSTRY – ALL RESPONDENTS


GRAPH 8.11 – COMPUTING SKILL POSSESSED – ALL RESPONDENTS


SURVEY QUESTIONNAIRE

1. What status is your current main occupation?

- Full-time salaried
- Part-time salaried
- Self-employed or prop/director
- Hourly contract employee
- Studying full-time
- Unemployed
- Retired
- Other (please specify) _____

2. Have you been unemployed during the last 5 years?

- Yes
- No

If yes, please specify duration (in months) _____

3. Have you been unemployed during the last 12 months?

- Yes
- No

If yes, please specify duration (in weeks) _____

4. In applying for ICT positions, which of the following forms of discrimination do you believe you have encountered?

- Have never experienced any discrimination
- Discrimination against your age
- Discrimination against your sex
- Discrimination against your race or ethnicity
- Other (please specify) _____

5. Have you ever been retrenched from a computing industry position?

- Yes
- No (if no, go to Q7)

6. Please indicate when the retrenchment(s) took place (tick where applicable)

- 2011
- 2010
- 2009
- 2008
- Prior to 2008

7. Gender

- Male
- Female

8. Age (in years) _____

9. In which state or territory are you based?

- NSW
- VIC
- QLD
- SA
- WA
- TAS
- ACT

- NT
- Overseas (please specify country) _____

10. Location

- Capital city / suburb
- Regional

11. Do you hold formal qualifications in computing?

- Yes
- No (if no, go to Q15)

12. What is your highest computing qualification?

- Diploma
- Bachelor Degree (Pass)
- Bachelor Degree (Honours)
- Graduate Diploma
- Masters Degree/MBA
- Doctorate/PhD
- Vendor accreditation
- None in computing
- Other (please specify) _____

13. In which discipline did you obtain this computing qualification?

- Computer Science
- Information Systems
- Information Technology
- Business Systems
- Data Processing
- Computer Systems Engineering
- Not applicable
- Other (please specify) _____

14. In which country did you gain your computing qualification?

- Australia
- Overseas (please specify) _____

15. What is your highest non-computing tertiary qualification?

- None
- Diploma
- Bachelor Degree (Pass)
- Bachelor Degree (Honours)
- Graduate Diploma
- Masters Degree (inc. MBA)
- Doctorate/PhD
- Other (please specify) _____

16. What tertiary study are you currently engaged in?

- None
- Degree (Computing)
- Bachelor Degree (Other)
- Graduate Diploma (Mgmt/Bus)
- Graduate Diploma (Computing)

- Graduate Diploma (Other)
- Masters (Mgmt/Business)
- Masters (Computing)
- Masters (Other)
- Doctorate/PhD
- Other (*please specify*)

17. Have you ever worked in a non-ICT professional or technical role during your career?

- Yes
- No

18. Do you consider yourself to be currently employed in the ICT industry?

- Yes
- No (*if no, thank you for your participation – please press Submit to complete the survey*)

19. How many years have you worked in the ICT industry? (enter 0 if you have never worked in ICT in Australia) _____

20. What is your job title?

21. Number of years in current position _____

22. Which of the following best describes your current main ICT job responsibility?

- Development and Implementation
- Management and Administration
- Sales and Marketing
- Strategy and Planning
- Service Delivery
- Technical Support and Maintenance

23. If working in Development and Implementation, which of the following is your main specialisation?

- Systems Installation / Decommissioning
- Documentation
- System Integration
- Business Analysis
- Data Analysis
- Database Design
- Media and Content
- Programming / Software Development
- Systems Design
- Systems Ergonomics / Design
- Systems Testing
- Technical Authority
- Web Design
- Analyst Programmer
- Enterprise Architecture

24. If working in Management and Administration, which of the following is your main specialisation?

- CIO
- ICT Director / Division Head
- Program Management
- Project Officer

- Compliance
- Quality Assurance
- Quality Management
- Asset Management
- Education & Training Management
- ICT Management
- Systems Integrator
- IS Coordination
- Service Delivery Management
- Systems Development Manager
- Contract Manager
- Procurement
- Other

25. If working in Sales and Marketing, which of the following is your main specialisation?

- Account Management
- Marketing
- Sales and Support
- Selling

26. If working in Strategy and Planning, which of the following is your main specialisation?

- Business Process Improvement
- Business Risk Management
- IS Strategy & Planning
- Consultancy
- Information Resource Management
- Technical Specialist
- Business Continuity Planning
- Change Control
- Emerging Technology
- Methods & Tools
- Network Planning
- Systems Architecture

27. If working in Service Delivery, which of the following is your main specialisation?

- Education and Training Delivery
- Communication & Network Engineer
- Hardware Engineer
- Systems Engineer
- Capacity Management
- Configuration Management
- Network Control
- Security Administration
- Application and Systems Support
- Database Administration
- ICT Operations
- Service Level Control
- Network and Administration Support
- User Support
- Enterprise Architecture

28. Thinking about your ICT career to date, has your specialisation been mostly that which you are currently engaged in?

- Yes
- No

29. What is your responsibility level?

- Level 1
- Level 2

- Level 3
- Level 4
- Level 5
- Above Level 5

30. How many hours per week do you normally work, including any paid or unpaid overtime?

31. On average, how many hours of overtime do you work each week? (enter 0 if none) _____

32. How are you normally compensated for overtime worked?

- Monetary payment at hourly rate (single time, double time, etc.)
- Overtime allowance in base salary
- Time off in lieu of payment (single time, double time, etc.)
- No compensation received
- Other (please specify) _____

33. Which of the following best describes your job function/title?

- ICT Consultant
- General Manager
- Chief Information Officer
- ICT Project Manager
- ICT Manager
- ICT Account Manager
- ICT Business Development Manager
- ICT Business Analyst
- Systems Analyst
- Analyst Programmer
- Developer Programmer
- Software Engineer
- Software & Applications Programmer
- Database Administrator
- ICT Security Specialist
- Systems Administrator
- Computer Network/Systems Engineer
- Network Administrator
- Network Analyst
- ICT Quality Assurance Engineer
- ICT Support Engineer
- ICT Systems Test Engineer
- ICT Support /Test Engineer
- Telecommunications Engineer
- Telecommunications Network Engineer
- Research & Development
- Hardware Technician
- ICT Customer Support Officer
- Multimedia Specialist
- Web Developer
- Web Administrator
- ICT Support Technician
- ICT Sales Representative
- Academic
- Other (please specify) _____

34. In which industry are you mainly engaged?

- Consulting & technical services
- Mining or quarrying

- Electricity and gas supply
- Communications (inc. Telstra)
- Defence
- Public Admin. (Federal, State, Local)
- Transport and storage
- Education
- Research and development
- Insurance
- Banking/Finance
- Health
- Retail
- Computer services
- Business services
- Food, beverage and tobacco
- Basic metal products
- Printing/publishing
- Computer equipment manufacture
- Computer software manufacturing
- Other (please specify) _____

35. In which sector are you employed?

- Private sector – employee
- Private sector – proprietor/director
- Australian Public Service
- Australian Government Instrumentality or GBE
- State Public Service
- State Government Instrumentality
- Local Government
- University or Tertiary Institution
- School including TAFE
- Other (please specify) _____

36. If you are employed in the private sector, what is the approximate turnover of your company?

- Less than \$5m
- \$5m to \$10m
- \$11m to \$20m
- \$21m to \$50m
- \$51m to \$100m
- Over \$100m
- Don't know

37. How many computer professionals are employed by your organisation?

- 10 or less
- 11 to 50
- 51 to 100
- Over 100

38. How many employees are employed by your organisation?

- 10 or less
- 11 to 50
- 51 to 100
- 101 to 500
- Over 500

39. Please tick those computing skills applied in your current position:

- ASP
- ASP.Net
- C#

- C/C+
- CGI/Perl
- CISSP
- HTML
- J2EE
- Java
- java script
- JSP
- Linux
- Lotus
- MS.Net
- Novell
- OO
- Oracle
- PHP
- SAP
- Scripting
- SQL/MySQL
- TCP/IP
- UML
- UNIX
- VB.Net
- Visual Basic
- WIN NT
- WIN XP/Vista/Windows 7
- XML
- Other (please specify) _____

40. What training, via courses / conferences / seminars have you undertaken in the past 12 months?

- ICT-related training
- Business-related training
- Personal development
- No training undertaken
- Training in another discipline (other than ICT)

41. Who is responsible for determining your training needs?

- Me
- My employer
- Me and my employer

42. Does your employer pay or contribute to your training?

- Yes
- No

43. What is the main challenge you face when undertaking training / courses to enhance your ICT skills?

- Finding out they are available
- The cost of these courses
- Sparing the time to attend these courses
- Getting to the places where this training is held
- Unsure if the courses will enhance my skill sets and enable me to improve my employment prospects
- Getting time off work
- I do not need more training

44. How often do you need to undertake training / retraining to keep your skills current?

- Every 1-2 years
- Every 3-5 years
- Every 6-10 years

45. Are you an independent contractor?

- Yes (if yes, go to Q51)
- No

46. If an employee, is your position included in an Enterprise Agreement?

- Yes
- No
- Don't know

47. Have you entered into an Australian Workplace Agreement (AWA)?

- Yes
- No

48. Have you received a promotion in the last 12 months?

- Yes
- No

49. Have you changed employers in the last 12 months?

- Yes
- No

50. If so, what was the percentage change in salary as a result of changing employers?

_____ (Go to Q55 after answering)

51. Is your current contract:

- Long term (12 months or longer)
- Short term

52. From what source did you obtain your current contract?

- Previous employer
- Previous contract
- Advertising
- Agency
- Associate
- Other (please specify) _____

53. What is the hourly rate charged? (\$ gross, excl GST) _____

54. What was the hourly rate charged twelve months ago? (\$ gross, excl GST) _____

(After answering, please press Submit to complete the survey. Thank you for your participation)

55. Annual base salary excluding allowances and performance pay and before salary sacrifice (\$ per annum) _____

56. Base salary 12 months ago (do not answer if you have changed jobs or graduated in the last 12 months) (\$ per annum) _____

57. If you are paid by the hour, what is the gross hourly rate received? (\$ per hour) _____

58. If you are a recent graduate and commenced work in the last 12 months, what was your commencing salary? (\$ per annum) _____

59. Is your salary subject to performance-based incentives?

- Yes
- No (if no, go to Q63)

60. What is the maximum percentage of your base salary offered as a performance-based incentive? _____

61. What percentage of your base salary do you reasonably expect to achieve? _____

62. Do you consider the performance target set to be fair and reasonable?

- Yes
- No

63. Car allowance (\$ per annum) _____

64. On-call/call back allowance (\$ per annum) _____

65. Annual leave loading (%) _____

66. Overtime paid (\$ per annum) _____

67. FBT exempt, e.g. home office, subscriptions, etc (\$ per annum) _____

68. Do you have access to remuneration packaging using a salary sacrifice arrangement?

- Yes
- No

69. Do you have access to an employer-provided vehicle?

- Yes
- No (if no, go to Q76)

70. On what basis is the vehicle provided?

- Full private use
- Restricted private use
- Commuter use

71. Original cost of vehicle provided (\$) _____

72. Total kilometres travelled by vehicle per annum _____

73. Percentage of private use of vehicle _____

74. After-tax contribution to vehicle costs (not salary sacrifice) (\$ per annum) _____

75. If you contribute to the cost of the vehicle via a salary sacrifice, what is the annual sacrifice amount? (\$ per annum) _____

76. Parking (where employer pays) (\$ per annum) _____

77. Other benefits subject to FBT (\$ per annum) _____

78. Are you covered by an employer-funded superannuation scheme, including the compulsory 9% Superannuation Guarantee levy?

- Yes
- No (if no, go complete the survey by pressing Submit. Thank you for your participation)
- Don't know (if don't know, go complete the survey by pressing Submit)

79. What type of superannuation scheme are you covered by in your employment?

- Accumulation (An accumulation scheme is one where your final entitlement is determined by the accumulated contributions and the rate of investment return)
- Defined Benefits (A defined benefit scheme is one where your final entitlement is determined by the years of service and your final salary. They are most often a feature of public sector employment)

80. Do you make contributions into this superannuation scheme in addition to the employer contribution?

- Yes
- No (if no, please press Submit to complete the survey. Thank you for your participation)

81. What percentage of salary do you contribute? (%) _____

82. If you contribute, are your contributions made via a salary sacrifice arrangement?

- Yes
- No

83. If you are covered by an accumulation scheme, what is your employer's total contribution to superannuation excluding any salary sacrifice amounts you contribute? (%) _____

You have reached the end of the 2011 Australian Computer Society Employment & Remuneration Survey.

Please press the 'Submit' button to forward your survey responses.

ABOUT APESMA

The Association of Professional Engineers, Scientists and Managers, Australia (APESMA) is the largest national non-profit organisation representing professional employees, including ICT professionals, in Australia. APESMA's 25,000+ members are found in all areas of public and private employment across Australia, and members range from senior managers, and employees of the largest enterprises, to the self employed and recent graduates.

APESMA has been conducting and publishing annual salary surveys on behalf of the Australian Computer Society since 1993. For more information about the Australian Computer Society Remuneration Survey Report, visit www.apesma.asn.au/surveys/acs.



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The Association of Professional Engineers, Scientists and Managers, Australia (APESMA)
ABN 99 589 872 974

GPO Box 1272
Melbourne VIC 3001

163 Eastern Road
South Melbourne VIC 3205

Phone: +61 3 9695 8839
Fax: +61 3 9695 8839

Email: survey@apesma.asn.au
Website: www.apesma.asn.au/surveys

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