2013 Australian Computer Society
Employment Survey Report
INTRODUCTION

THE AUSTRALIAN COMPUTER SOCIETY

The Australian Computer Society (ACS) exists to advance professional excellence in Information and Communications Technology (ICT). Over 20,000 ACS members work in business, education, government and the community. Its objectives are to further the study, science and application of people and organisations; maintain and promote a Code of Ethics for members of the ACS; define and promote standards of knowledge of ICT for members; promote the formulation of effective policies on ICT and related matters; extend the knowledge and understanding of ICT in the community; promote the benefits of membership of the Society; and promote the benefits of employing members of the Society.

www.acs.org.au

ABOUT THE EMPLOYMENT SURVEY REPORT

The 2013 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 5,113 responses received from survey participants. Invitations to participate in the 2013 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 2013 ACS Employment Survey, at a response rate of about 20% provides a sound basis for assessing employment-related information affecting ICT professionals in Australia presently.

PO Box Q534
Queen Victoria Building
Sydney NSW 1230

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

Website: www.acs.org.au
TABLE OF CONTENTS

Introduction ........................................................................................................................................... 2
Section 1 – Unemployment & Retrenchment .......................................................................................... 4
  ▪ Retrenched from a computing industry position ........................................................................... 4
  ▪ Unemployed during the last 12 months .......................................................................................... 4
  ▪ Unemployed during the last 5 years ............................................................................................... 6
  ▪ Retrenched from a computing industry position by country of qualification ......................... 9
  ▪ Which years was retrenchment experienced ................................................................................. 10
Section 2 – Employment ....................................................................................................................... 11
  ▪ Employment status ...................................................................................................................... 11
  ▪ Job by gender ............................................................................................................................. 12
  ▪ Industry by gender ....................................................................................................................... 13
  ▪ Job group by gender .................................................................................................................... 14
  ▪ Age by employment status .......................................................................................................... 14
  ▪ Employment status by industry .................................................................................................... 15
Section 3 – Hours of Work .................................................................................................................... 16
  ▪ Distribution of hours of work ........................................................................................................ 16
  ▪ Full-time average hours by industry ............................................................................................ 16
  ▪ Full-time average hours by job .................................................................................................... 17
  ▪ Full-time average hours by sector ............................................................................................... 18
  ▪ Full-time average hours by job group .......................................................................................... 18
Section 4 – Professional Experience .................................................................................................... 19
  ▪ Distribution of professional experience held ............................................................................. 19
  ▪ Years of professional experience held by industry ................................................................... 19
  ▪ Years of professional experience held by job ............................................................................. 20
  ▪ Years of professional experience held by sector ....................................................................... 21
  ▪ Years of professional experience held by job group .................................................................. 21
Section 5 – Age Profile .......................................................................................................................... 22
  ▪ Distribution of age ....................................................................................................................... 22
  ▪ Age by industry ........................................................................................................................... 22
  ▪ Age by job .................................................................................................................................... 23
  ▪ Age by sector ............................................................................................................................... 23
  ▪ Age by job group ........................................................................................................................ 24
  ▪ Age by gender ............................................................................................................................. 24
Section 6 – Discrimination ..................................................................................................................... 25
  ▪ Forms of discrimination encountered ......................................................................................... 25
  ▪ Forms of discrimination encountered by gender ....................................................................... 25
  ▪ Forms of discrimination encountered by age .............................................................................. 26
  ▪ Forms of discrimination encountered by where qualified ......................................................... 26
Section 7 – Training & Development .................................................................................................. 27
  ▪ Training undertaken in last 12 months ......................................................................................... 27
  ▪ Responsibility for determining training needs ........................................................................... 28
  ▪ Partial or total employer payment for training ........................................................................... 29
  ▪ Main challenges to undertaking further training ....................................................................... 30
  ▪ Perceived frequency of required further training .................................................................... 32
Section 8 – Various Characteristics of Survey Group ......................................................................... 33
Survey Questionnaire ............................................................................................................................ 38
SECTION 1 – UNEMPLOYMENT & RETRENCHMENT

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

24.7% 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

10.5% 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

14.9% 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.

5.5% of survey respondents from the Tasmania reported having been unemployed at some time in the preceding 12 months, the lowest rate of Australian states and territories.
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 had only recently entered the job market after having completed their studies.

Those aged 45-54 appeared to have had the lowest incidence of unemployment in the preceding 12 months at 9.1%.

The rates at which ICT professionals had experienced unemployment in the last 12 months varied significantly between industries. Those currently working in the Mining industry (16%) reported a relatively high incidence of unemployment within the previous 12 months. Those working in the Defence industry (1.9%) reported a relatively low incidence of unemployment within the previous 12 months.
The median duration of unemployment amongst those who had been unemployed at some time in the preceding 12 months was reported to be 9 weeks (8 weeks in 2012); the arithmetic mean duration was 13.7 weeks (11.5 weeks in 2012).

The 2013 median and mean weeks of unemployment were somewhat higher than those reported a year earlier, suggesting that, while the overall rate of unemployment in the preceding 12 months appeared to have remained quite static (10.5 in 2013 v 10.2 in 2012), the typical duration of unemployment has risen.

Also, as was the case in previous surveys, a number of respondents had been unemployed for much longer than the median, as the mean was skewed significantly upwards away from the median.

25% of survey respondents reported they had been unemployed at some time during the previous 5 years.

The result compares to 24.7% reported in 2012 and 24.2% in 2011 suggesting that despite varying economic conditions, the rate at which ICT professionals suffer job loss remains relatively constant over the medium term.
28.9% of respondents from Victoria and 28.5% of respondents from South Australia reported having been unemployed for some time in the preceding 5 years, the highest of any state or territory.

21.7% of respondents from Western Australia reported having been unemployed at some time in the preceding 5 years, the lowest of any state or territory (excluding the NT due to small sample size volatility).

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

Those aged 45-54 appeared to have had the lowest incidence of unemployment in the preceding 5 years at 19.8%.
The rates at which ICT professionals had experienced unemployment in the last 5 years varied considerably between industries.

Those currently working in the Business Services industry (37.9%) and the Communications industry (33.8%) reported relatively higher incidence of unemployment within the previous 5 years.

Those working in the industries of Defence (7.1%) and Transport and Storage (14.8%) reported a relative low incidence of unemployment within the previous 5 years.
The median duration of unemployment amongst those who had been unemployed at some time in the preceding 5 years was 5 months, whilst the arithmetic mean was 9.5 months, indicating a number of respondents had been unemployed for a period significantly longer than the median.

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.
19% of all respondents indicated they had been retrenched from a computing position prior to 2010.

Subsequent to the deterioration of global economic conditions after the global financial crisis of 2008, the incidence of retrenchment could be seen to have slowed.

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

The majority of those who had experienced retrenchment indicated they had been retrenched from a position prior to 2010.
82% of respondents were employed on a full-time basis (working 35 hours or more per week). Relatively few respondents (4.4%) were engaged on a part-time basis.

The remainder of respondents were divided between self-employed proprietors/directors (7.2%) and those engaged on an hourly basis as employees (6.4%).

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

The proportion of females engaged in part-time work was significantly higher than for males (11.1% v 3.2%).

Whilst the proportion of males that were self-employed was higher than that for females, (7.9% v 3.3%), the difference was not considered statistically significant due to the relatively small number of female respondents.
When analysed by current job, 85.2% of all respondents were male and 14.8% female.

The greatest proportion of females was found in the roles of ICT Business Analyst (28.9%) and Academic (26.7%).

The greatest proportion of male respondents was found in the roles of ICT Support Engineer (96.1%) and ICT Architect (95%).
Analysed by industry, the greatest proportion of females was found in the Insurance industry (23.1%) and Education industry (20.2%).

The greatest proportion of male respondents was found the industries of Research and Development (90.7%) and Communications (89.8%).
When analysed by job group, the greatest proportion of females was found in the groups of Management and Administration (16.4%) and Service Delivery (16%).

The greatest proportion of male respondents was found in the groups of Sales and Marketing (87.6%) and Technical Support and Maintenance (89.9%).

The median age of a self-employed respondent was 48, very much higher than that of full-time employees (40) and part-time employees (34).
### TABLE 2.1 – EMPLOYMENT STATUS BY INDUSTRY

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>Full-time salaried</th>
<th>Part-time salaried</th>
<th>Self-employed proprietor/director</th>
<th>Hourly contract employee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Consulting &amp; tech services</td>
<td>399</td>
<td>73.9</td>
<td>12</td>
<td>2.2</td>
</tr>
<tr>
<td>Mining or quarrying</td>
<td>74</td>
<td>82.2</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Electricity &amp; gas supply</td>
<td>59</td>
<td>77.6</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Communications inc Telstra</td>
<td>112</td>
<td>81.8</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Defence</td>
<td>142</td>
<td>92.2</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Public admin</td>
<td>360</td>
<td>84.1</td>
<td>17</td>
<td>4.0</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>52</td>
<td>89.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Education</td>
<td>275</td>
<td>78.1</td>
<td>29</td>
<td>8.2</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>46</td>
<td>83.6</td>
<td>3</td>
<td>5.5</td>
</tr>
<tr>
<td>Insurance</td>
<td>44</td>
<td>84.6</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>415</td>
<td>90.0</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td>Health</td>
<td>98</td>
<td>77.2</td>
<td>10</td>
<td>7.9</td>
</tr>
<tr>
<td>Retail</td>
<td>65</td>
<td>80.2</td>
<td>12</td>
<td>14.8</td>
</tr>
<tr>
<td>Computer services</td>
<td>93</td>
<td>75.0</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Business services</td>
<td>31</td>
<td>68.9</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>Food, beverage &amp; tobacco</td>
<td>55</td>
<td>94.8</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Basic metal products</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Printing/Publishing</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Computer equip manufacture</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Computer software manufacture</td>
<td>92</td>
<td>80.0</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Other</td>
<td>281</td>
<td>84.9</td>
<td>12</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>2693</td>
<td>82.0</td>
<td>137</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Full-time employment was almost the exclusive form of employment in the Food, Beverage and Tobacco industry (94.8%) and the Defence industry (92.2%).

By contrast, 77.2% of those working in the Health industry were employed on a full-time basis.
The greatest proportion of respondents (37.1%) were working 40 to 45 hours per week.

The arithmetic mean of weekly hours worked reported by all respondents combined as a single group was 43; the median hours reported was 40.

Amongst full-time respondents, the mean hours of work per week was reported to be 44, whilst the median number of hours was 41.

81.2% of full-time respondents work 40 hours or more per week, 41% work 45 hours or more per week and 22.9% work 50 hours or more per week.

Full-time ICT respondents working in the Food, Beverage and Tobacco industry reported working the longest hours on average, at 47.4 hours per week. Full-time ICT respondents working in the Insurance industry reported working the shortest working week on average, at 41.9 hours per week.
Graph 3.3 – Full-Time Average Hours by Job

- General Manager: 51.3 hours
- Chief Information Officer: 50.9 hours
- ICT Business Development Mgr: 47.1 hours
- ICT Account Manager: 46.6 hours
- ICT Manager: 46.1 hours
- ICT Project Manager: 45 hours
- ICT Consultant: 44.8 hours
- Academic: 44.8 hours
- ICT Architect: 44.6 hours
- ICT Security Specialist: 44.3 hours
- Web Developer: 43.1 hours
- Computer Network/Sys Engineer: 42.8 hours
- Network Administrator: 42.8 hours
- ICT Business Analyst: 42.6 hours
- ICT Systems Test Engineer: 42.5 hours
- Other: 42.1 hours
- Software Engineer: 42 hours
- Database Administrator: 42 hours
- Systems Administrator: 41.9 hours
- Telecommunications Engineer: 41.9 hours
- Systems Analyst: 41.6 hours
- ICT Support Engineer: 41.6 hours
- Software & Apps Programmer: 41.3 hours
- Analyst Programmer: 40.7 hours
- Developer Programmer: 40.5 hours
- ICT Support Technician: 40.1 hours
- ICT Customer Support Officer: 39.2 hours
- ALL: 44 hours

Full-time ICT respondents working in General Manager roles were seen to be working the longest hours, reporting an average working week of 51.3 hours.

Full-time ICT respondents working in ICT Customer Support roles were seen to be working the shortest hours, reporting an average working week of 39.2 hours.
The longest weekly hours were worked by self-employed respondents who reported an average working week of 47.3 hours.

Those respondents employed on a full-time basis by State Public Services worked fewest weekly hours on average of 41 hours per week.

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

Full-time respondents engaged in Sales and Marketing roles reported the longest average working week of 47.7 hours.

Full-time respondents engaged in Technical Support and Maintenance roles reported the shortest average working week of 41.7 hours.
68.8% of respondents had worked for 10 or more years in the ICT industry, whilst 51.8% had worked for 15 years of more in the ICT industry.

The greatest levels of professional ICT experience were found in the Health industry at 19 years on average.

The least experienced industry group was found in the Retail group, with 12.1 years of professional experience on average.
Incumbents in the role of Chief Information Officer were reported to hold the greatest levels of ICT professional experience, with an average of 24 years. The average years of ICT professional experience held by incumbent Web Developers was 7 years.
Respondents who were self-employed and engaged as independent contractors held the highest levels of professional ICT experience, reporting an average of 22 years.

Those respondents working in the Australian Public Service reported the lowest average levels of professional ICT experience at 14.6 years.

Respondents engaged in Sales and Marketing roles were seen to be the most experienced, possessing an average of 20.4 years of professional ICT experience.

Those respondents engaged with the Technical Support and Maintenance job group typically held the least ICT experience, with an average of 12.4 years.
ICT respondents engaged in the Health industry were typically older, reporting an average age of 44.8 years. ICT respondents engaged in the Retail industry were typically younger, reporting an average age of 35 years.
Respondents engaged in Chief Information Officer roles were typically older, reporting an average age of 48.4 years.

Respondents engaged in Web Developer roles were typically younger, reporting an average age of 32.3 years.

Respondents engaged by State Government Instrumentalities were typically older, reporting an average age of 46.7 years.

Respondents engaged in local government and the private sector were typically younger, reporting an average age of 39.6 years and 39.7 years respectively.
Those respondents engaged in positions grouped under the umbrella of Management and Administration were the oldest group, with an average age of 44.2 years.

The Technical Support and Maintenance group was seen to be the youngest group, with an average age of 37.8 years.

Virtually no difference was apparent in the mean age of survey respondents based on gender.
Over one-third (34%) of respondents reported having experienced discrimination when applying for ICT positions.

The most prevalent form of discrimination reported was discrimination based on age (17.4%).

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

42.5% of female respondents indicated they had encountered some form of discrimination when applying for ICT positions compared to 32.3% of males.

24.9% of female respondents reported having experienced some form of discrimination based on their sex.

17.8% 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

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>No discrimination experienced</th>
<th>Age discrimination</th>
<th>Sex discrimination</th>
<th>Racial discrimination</th>
<th>Other discrimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>74.0</td>
<td>12.5</td>
<td>1.5</td>
<td>7.9</td>
<td>10.2</td>
</tr>
<tr>
<td>25 to less than 35</td>
<td>65.9</td>
<td>10.7</td>
<td>4.2</td>
<td>17.3</td>
<td>11.7</td>
</tr>
<tr>
<td>35 to less than 45</td>
<td>67.5</td>
<td>11.8</td>
<td>6.0</td>
<td>14.7</td>
<td>10.5</td>
</tr>
<tr>
<td>45 to less than 55</td>
<td>69.2</td>
<td>18.7</td>
<td>5.1</td>
<td>6.2</td>
<td>9.7</td>
</tr>
<tr>
<td>55 or more</td>
<td>54.1</td>
<td>39.1</td>
<td>4.9</td>
<td>4.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Total</td>
<td>66.2</td>
<td>17.1</td>
<td>4.8</td>
<td>11.3</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Nearly 4 in 10 (39.1%) of all respondents aged 55 or older reported having experienced aged-based discrimination when applying for ICT positions.

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 nearly twice the rate than those qualified in Australia (10.7% v 19.4%).

These figures may well understate the level of race or ethnic based discrimination, as respondents from ethnic minority groups may be included in the Australian qualified group.
78.9% 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 (37.9% of respondents).

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

<table>
<thead>
<tr>
<th>Job Group</th>
<th>ICT-related training</th>
<th>Business-related training</th>
<th>Personal development</th>
<th>No training undertaken</th>
<th>Training in another discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development &amp; Implementation</td>
<td>40.8</td>
<td>12.2</td>
<td>20.0</td>
<td>24.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Management &amp; Administration</td>
<td>31.4</td>
<td>24.3</td>
<td>22.1</td>
<td>17.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>26.0</td>
<td>34.4</td>
<td>18.8</td>
<td>17.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Strategy &amp; Planning</td>
<td>32.1</td>
<td>27.5</td>
<td>21.4</td>
<td>14.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>40.2</td>
<td>13.9</td>
<td>23.4</td>
<td>18.4</td>
<td>4.1</td>
</tr>
<tr>
<td>Technical Support &amp; Maintenance</td>
<td>46.5</td>
<td>10.0</td>
<td>14.7</td>
<td>25.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38.7</td>
<td>17.0</td>
<td>19.3</td>
<td>21.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Female</td>
<td>33.5</td>
<td>18.6</td>
<td>24.4</td>
<td>18.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consulting &amp; Technical Services</td>
<td>41.4</td>
<td>19.1</td>
<td>17.7</td>
<td>17.5</td>
<td>4.2</td>
</tr>
<tr>
<td>Mining or Quarrying</td>
<td>37.0</td>
<td>14.1</td>
<td>22.8</td>
<td>25.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Electricity &amp; Gas Supply</td>
<td>33.3</td>
<td>25.6</td>
<td>14.1</td>
<td>24.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Communications inc Telstra</td>
<td>37.8</td>
<td>21.0</td>
<td>18.2</td>
<td>19.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Defence</td>
<td>37.4</td>
<td>20.0</td>
<td>18.7</td>
<td>18.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Public Administration</td>
<td>39.6</td>
<td>18.3</td>
<td>17.6</td>
<td>20.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>30.0</td>
<td>20.0</td>
<td>16.7</td>
<td>30.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Education</td>
<td>39.8</td>
<td>13.8</td>
<td>23.0</td>
<td>17.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>53.8</td>
<td>9.2</td>
<td>15.4</td>
<td>20.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Insurance</td>
<td>56.9</td>
<td>7.8</td>
<td>13.7</td>
<td>19.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>34.5</td>
<td>18.8</td>
<td>27.1</td>
<td>18.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Health</td>
<td>33.1</td>
<td>21.5</td>
<td>20.8</td>
<td>22.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Retail</td>
<td>33.3</td>
<td>11.9</td>
<td>17.9</td>
<td>29.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Computer Services</td>
<td>42.3</td>
<td>16.9</td>
<td>13.4</td>
<td>25.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Business Services</td>
<td>37.0</td>
<td>20.4</td>
<td>24.1</td>
<td>16.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Food, Beverage &amp; Tobacco</td>
<td>29.7</td>
<td>12.5</td>
<td>25.0</td>
<td>29.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Computer Software Manufacture</td>
<td>30.3</td>
<td>16.4</td>
<td>22.1</td>
<td>31.1</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>35.8</td>
<td>14.0</td>
<td>19.8</td>
<td>25.7</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37.9</strong></td>
<td><strong>17.3</strong></td>
<td><strong>20.1</strong></td>
<td><strong>21.1</strong></td>
<td><strong>3.5</strong></td>
</tr>
</tbody>
</table>
Employees were generally heavily involved in determining their training requirements, with only 6.7% of survey respondents having their training needs determined solely by their employer.

Exclusive employer control of determining training needs was most common amongst those employed in the Technical Support and Maintenance job group (12%). Employer control was most common amongst those in the Retail industry and the Food, Beverage and Tobacco industry with 14.1% of respondents working in these industries reporting exclusive employer control in determining training needs.
GRAPH 7.3 – PARTIAL OR TOTAL EMPLOYER PAYMENT FOR TRAINING

Nearly three quarters (72.9%) 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

<table>
<thead>
<tr>
<th>Job Group</th>
<th>Employer Partially or Totally Pay for Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Development &amp; Implementation</td>
<td>68.2</td>
</tr>
<tr>
<td>Management &amp; Administration</td>
<td>78.3</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>74.2</td>
</tr>
<tr>
<td>Strategy &amp; Planning</td>
<td>80.2</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>74.8</td>
</tr>
<tr>
<td>Technical Support &amp; Maintenance</td>
<td>68.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Employer Partially or Totally Pay for Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Male</td>
<td>72.9</td>
</tr>
<tr>
<td>Female</td>
<td>72.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employer Partially or Totally Pay for Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Consulting &amp; Technical Services</td>
<td>71.9</td>
</tr>
<tr>
<td>Mining or Quarrying</td>
<td>64.5</td>
</tr>
<tr>
<td>Electricity &amp; Gas Supply</td>
<td>76.6</td>
</tr>
<tr>
<td>Communications inc Telstra</td>
<td>67.1</td>
</tr>
<tr>
<td>Defence</td>
<td>94.2</td>
</tr>
<tr>
<td>Public Administration</td>
<td>81.2</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>74.6</td>
</tr>
<tr>
<td>Education</td>
<td>66.5</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>70.3</td>
</tr>
<tr>
<td>Insurance</td>
<td>80.4</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>81.5</td>
</tr>
<tr>
<td>Health</td>
<td>69.8</td>
</tr>
<tr>
<td>Retail</td>
<td>45.2</td>
</tr>
<tr>
<td>Computer Services</td>
<td>65.7</td>
</tr>
<tr>
<td>Business Services</td>
<td>64.8</td>
</tr>
<tr>
<td>Food, Beverage &amp; Tobacco</td>
<td>75.0</td>
</tr>
<tr>
<td>Computer Software Manufacture</td>
<td>59.0</td>
</tr>
<tr>
<td>Other</td>
<td>69.2</td>
</tr>
</tbody>
</table>

Those respondents employed in the Defence industry were in receipt of total or partial payment of training costs by the employer in 94.2% of cases, whilst less than half (45.2%) of employers in the Retail industry contributed to the cost of ICT Training.
Clearly the most significant impediment to undertaking further training and professional development is finding the available time to do so. 41.3% of respondents declared this to be the main challenge to overcome.

The financial cost of courses was also a significant factor, nominated by 26.9% of respondents as the main challenge to undertaking further training.
TABLE 7.4 – MAIN CHALLENGE TO UNDERTAKING FURTHER TRAINING BY ICT GROUP, GENDER AND INDUSTRY

<table>
<thead>
<tr>
<th>CHALLENGES TO UNDERTAKING TRAINING</th>
<th>Finding out they are available</th>
<th>The cost of these courses</th>
<th>Sparing the time to attend these courses</th>
<th>Getting to the places where this training is held</th>
<th>Unsure if the courses will enhance my skill sets and enable me to improve my employment prospects</th>
<th>I do not need more training</th>
<th>Getting time off work</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Development &amp; Implement.</td>
<td>8.8</td>
<td>26.4</td>
<td>39.2</td>
<td>4.3</td>
<td>12.4</td>
<td>6.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Management &amp; Admin</td>
<td>4.6</td>
<td>22.6</td>
<td>48.4</td>
<td>4.2</td>
<td>8.6</td>
<td>8.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Sales &amp; Marketing</td>
<td>10.3</td>
<td>16.5</td>
<td>48.5</td>
<td>2.1</td>
<td>16.5</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Strategy &amp; Planning</td>
<td>5.1</td>
<td>25.1</td>
<td>50.2</td>
<td>2.9</td>
<td>8.3</td>
<td>5.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>8.9</td>
<td>28.4</td>
<td>37.7</td>
<td>3.2</td>
<td>13.1</td>
<td>7.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Techn Support &amp; Maint.</td>
<td>9.3</td>
<td>36.1</td>
<td>30.4</td>
<td>4.0</td>
<td>10.8</td>
<td>8.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Male</td>
<td>7.6</td>
<td>26.7</td>
<td>41.4</td>
<td>3.9</td>
<td>10.9</td>
<td>7.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Female</td>
<td>6.5</td>
<td>28.2</td>
<td>40.8</td>
<td>4.1</td>
<td>11.2</td>
<td>7.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Consulting &amp; Tech Services</td>
<td>6.2</td>
<td>23.4</td>
<td>49.8</td>
<td>2.6</td>
<td>8.6</td>
<td>7.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Mining or Quarrying</td>
<td>6.5</td>
<td>18.3</td>
<td>48.4</td>
<td>3.2</td>
<td>14.0</td>
<td>8.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Electricity &amp; Gas Supply</td>
<td>7.8</td>
<td>14.3</td>
<td>46.8</td>
<td>5.2</td>
<td>9.1</td>
<td>11.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Comms inc Telstra</td>
<td>8.5</td>
<td>26.1</td>
<td>43.7</td>
<td>1.4</td>
<td>12.0</td>
<td>7.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Defence</td>
<td>10.3</td>
<td>35.5</td>
<td>34.8</td>
<td>6.5</td>
<td>8.4</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td>Public Administration</td>
<td>7.0</td>
<td>29.0</td>
<td>39.0</td>
<td>5.3</td>
<td>11.1</td>
<td>6.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>6.9</td>
<td>25.9</td>
<td>44.8</td>
<td>3.4</td>
<td>10.3</td>
<td>8.6</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>6.3</td>
<td>36.4</td>
<td>34.5</td>
<td>5.2</td>
<td>8.2</td>
<td>7.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td>7.9</td>
<td>36.5</td>
<td>27.0</td>
<td>3.2</td>
<td>11.1</td>
<td>9.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Insurance</td>
<td>5.9</td>
<td>29.4</td>
<td>45.1</td>
<td>-</td>
<td>13.7</td>
<td>3.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>9.6</td>
<td>21.0</td>
<td>43.5</td>
<td>1.9</td>
<td>13.8</td>
<td>8.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Health</td>
<td>2.3</td>
<td>26.9</td>
<td>39.2</td>
<td>6.2</td>
<td>13.1</td>
<td>10.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Retail</td>
<td>4.8</td>
<td>28.9</td>
<td>38.6</td>
<td>3.6</td>
<td>9.6</td>
<td>13.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Computer Services</td>
<td>10.6</td>
<td>28.9</td>
<td>40.1</td>
<td>1.4</td>
<td>8.5</td>
<td>6.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Business Services</td>
<td>3.7</td>
<td>22.2</td>
<td>42.6</td>
<td>7.4</td>
<td>16.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Food, Beverage &amp; Tobacco</td>
<td>4.7</td>
<td>15.6</td>
<td>45.3</td>
<td>6.3</td>
<td>17.2</td>
<td>10.9</td>
<td>-</td>
</tr>
<tr>
<td>Comp Software Manuf.</td>
<td>8.8</td>
<td>24.6</td>
<td>37.7</td>
<td>6.1</td>
<td>11.4</td>
<td>7.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Other</td>
<td>8.7</td>
<td>29.5</td>
<td>37.1</td>
<td>4.8</td>
<td>12.1</td>
<td>4.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>7.4</td>
<td>26.9</td>
<td>41.3</td>
<td>3.9</td>
<td>11.0</td>
<td>7.3</td>
<td>2.3</td>
</tr>
</tbody>
</table>

The issue of the cost of further training was of greatest concern to those engaged in the Research and Development industry (36.5%).

Those respondents employed in Strategy and Planning roles nominated time constraints as the greatest impediment to further training in 50.2% of cases.
Respondents were clearly of a view that further training was desirable at a frequency of every 1-2 years, with 74.3% nominating this as the preferred interval.

Respondents held generally similar views on the desirable frequency of training, based on job group and gender.

Respondents from the Communications industry were most adamant in their attitude, responding in 83.8% of cases that training should be undertaken every 1-2 years.
SECTION 8 – CHARACTERISTICS OF SURVEY SAMPLE

GRAPH 8.1 – EMPLOYMENT STATUS – ALL RESPONDENTS

- Full-time salaried: 76.4%
- Self-employed prop/dir: 6.7%
- Hourly contract employee: 6.0%
- Part-time salaried: 4.1%
- Studying full-time: 2.7%
- Unemployed: 2.2%
- Other: 1.8%

GRAPH 8.2 – GENDER – ALL RESPONDENTS

- Male: 84.6%
- Female: 15.4%

GRAPH 8.3 – STATE OR TERRITORY – ALL RESPONDENTS

- NSW: 33.1%
- VIC: 25.6%
- QLD: 12.9%
- ACT: 10.5%
- WA: 10.1%
- SA: 5.2%
- TAS: 1.5%
- NT: 1.1%
GRAPH 8.4 – LOCATION WITHIN STATE OR TERRITORY – ALL RESPONDENTS

Capital city/suburb: 90.1%
Regional: 9.9%

GRAPH 8.5 – TERTIARY-QUALIFIED – ALL RESPONDENTS

Yes: 80.5%
No: 19.5%

GRAPH 8.6 – HIGHEST COMPUTING QUALIFICATION – ALL RESPONDENTS

- Bachelor (Pass): 30.4%
- Masters Degree: 26.8%
- Bachelor (Hons): 11.6%
- Diploma: 9.4%
- Graduate Diploma: 8.6%
- Vendor Accreditation: 5.0%
- Other: 3.9%
- Doctorate/PhD: 2.9%
- None in computing: 1.4%
**GRAPH 8.7 – DISCIPLINE OF HIGHEST COMPUTING QUALIFICATION – ALL RESPONDENTS**

- Information Technology: 36.5%
- Computer Science: 26.2%
- Information Systems: 14.6%
- Other: 9.8%
- Business Systems: 5.0%
- Computer Systems Engineering: 4.4%
- Not applicable: 2.2%
- Data Processing: 1.2%

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

- Australia: 82.7%
- Overseas: 17.3%

Where obtained highest computing qualification
GRAPH 8.9 – HAS EVER BEEN EMPLOYED IN A PROFESSIONAL NON-ICT ROLE – ALL RESPONDENTS

Yes: 57.1%
No: 42.9%

GRAPH 8.10 – INDUSTRY – ALL RESPONDENTS

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulting &amp; technical services</td>
<td>16.5%</td>
</tr>
<tr>
<td>Banking/Finance</td>
<td>13.6%</td>
</tr>
<tr>
<td>Public administration</td>
<td>12.5%</td>
</tr>
<tr>
<td>Education</td>
<td>10.7%</td>
</tr>
<tr>
<td>Other</td>
<td>10.4%</td>
</tr>
<tr>
<td>Defence</td>
<td>4.5%</td>
</tr>
<tr>
<td>Communications inc Telstra</td>
<td>4.1%</td>
</tr>
<tr>
<td>Computer services</td>
<td>4.1%</td>
</tr>
<tr>
<td>Health</td>
<td>3.8%</td>
</tr>
<tr>
<td>Computer software manufacture</td>
<td>3.6%</td>
</tr>
<tr>
<td>Mining or quarrying</td>
<td>2.7%</td>
</tr>
<tr>
<td>Retail</td>
<td>2.5%</td>
</tr>
<tr>
<td>Electricity &amp; gas supply</td>
<td>2.2%</td>
</tr>
<tr>
<td>Food, beverage &amp; tobacco</td>
<td>1.9%</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>1.9%</td>
</tr>
<tr>
<td>Business services</td>
<td>1.7%</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>1.7%</td>
</tr>
<tr>
<td>Insurance</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
GRAPH 8.11 – COMPUTING SKILL POSSESSED – ALL RESPONDENTS

<table>
<thead>
<tr>
<th>Computing Skill</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win 7/8</td>
<td>41.1%</td>
</tr>
<tr>
<td>SQL</td>
<td>39.2%</td>
</tr>
<tr>
<td>HTML</td>
<td>29.1%</td>
</tr>
<tr>
<td>Win XP/Vista</td>
<td>27.3%</td>
</tr>
<tr>
<td>XML</td>
<td>23.2%</td>
</tr>
<tr>
<td>Scripting</td>
<td>21.7%</td>
</tr>
<tr>
<td>Linux</td>
<td>20.0%</td>
</tr>
<tr>
<td>Other</td>
<td>20.0%</td>
</tr>
<tr>
<td>Javascript</td>
<td>19.7%</td>
</tr>
<tr>
<td>Oracle</td>
<td>17.5%</td>
</tr>
<tr>
<td>Java</td>
<td>17.0%</td>
</tr>
<tr>
<td>Unix</td>
<td>15.5%</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>14.0%</td>
</tr>
<tr>
<td>C#</td>
<td>12.6%</td>
</tr>
<tr>
<td>OO</td>
<td>12.0%</td>
</tr>
<tr>
<td>ASP.Net</td>
<td>11.8%</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>11.3%</td>
</tr>
<tr>
<td>MS.Net</td>
<td>11.0%</td>
</tr>
<tr>
<td>Win NT</td>
<td>10.8%</td>
</tr>
<tr>
<td>PHP</td>
<td>9.6%</td>
</tr>
<tr>
<td>SAP</td>
<td>9.1%</td>
</tr>
<tr>
<td>C/C+</td>
<td>8.3%</td>
</tr>
<tr>
<td>VB.Net</td>
<td>8.2%</td>
</tr>
<tr>
<td>J2EE</td>
<td>7.0%</td>
</tr>
<tr>
<td>Lotus</td>
<td>5.7%</td>
</tr>
<tr>
<td>ASP</td>
<td>5.5%</td>
</tr>
<tr>
<td>JSP</td>
<td>4.6%</td>
</tr>
<tr>
<td>CGI/Perl</td>
<td>3.7%</td>
</tr>
<tr>
<td>Novell</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
1. Gender
   - Male
   - Female

2. Age (in years) ________

3. In which state or territory are you based?
   - NSW
   - VIC
   - QLD
   - SA
   - WA
   - TAS
   - ACT
   - NT
   - Overseas (please specify country) _____________

4. Location
   - Capital city / suburb
   - Regional

5. 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) _______________

6. Have you been unemployed during the last 5 years?
   - Yes (If yes, please specify duration in months) ______
   - No

7. Have you been unemployed during the last 12 months?
   - Yes (If yes, please specify duration in weeks) ______
   - No

8. In applying for ICT positions, which of the following forms of discrimination do you believe you have encountered? (Tick any you have experienced)
   - □ Have never experienced any discrimination
   - □ Discrimination against your age
   - □ Discrimination against your sex
   - □ Discrimination against your religion
   - □ Discrimination against your race or ethnicity
   - □ Other (please specify) _______________

9. Have you ever accepted a voluntary redundancy package or been retrenched from a computing industry position?
   - Yes
   - No

10. If so, please indicate when the redundancy(s) / retrenchment(s) took place (tick where applicable)
    - □ 2013
    - □ 2012
    - □ 2011
    - □ 2010
    - □ Prior to 2010

11. Do you hold formal ICT-related qualifications?
    - □ Yes (if yes, go to Q12)
    - □ 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 country) _______________

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. Which professional certifications do you hold?
    - □ ACS Certified Professional (CP)
    - □ ACS Certified Technologist (CT)
    - □ Vendor certification, e.g. Microsoft, Cisco, SAP, etc
    - □ None
    - □ Other (please specify) _______________
18. Which professional certifications do you intend to obtain?
- ACS Certified Professional (CP)
- ACS Certified Technologist (CT)
- Vendor certification, e.g. Microsoft, Cisco, SAP, etc
- None
- Other (please specify) ____________________

19. Have you ever worked in a non-ICT professional or non-ICT technical role during your career?
- Yes
- No

20. Do you consider yourself to be currently employed in the ICT industry?
- Yes (if yes, go to Q21)
- No (if no, go to Submit)

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

22. What is your job title? ____________________________

23. Number of years in current position _________

24. Thinking about your ICT career to date, has your specialisation been mostly that which you are currently engaged in?
- Yes
- No

25. Which of the following best describes your current main ICT job responsibility?
- Development and Implementation (go to Q26)
- Management and Administration (go to Q27)
- Sales and Marketing (go to Q28)
- Strategy and Planning (go to Q29)
- Service Delivery (go to Q30)
- Technical Support and Maintenance (go to Q31)

26. 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

27. 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

28. If working in Sales and Marketing, which of the following is your main specialisation?
- Account Management
- Marketing
- Sales and Support
- Selling

29. 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

30. 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
31. What is your responsibility level?
- SFIA Level 3 (Prof. Employees Award Level 1) (go to Q32)
- SFIA Level 4 (Prof. Employees Award Level 2) (go to Q33)
- SFIA Level 5 (Prof. Employees Award Level 3) (go to Q34)
- SFIA Level 6 (Prof. Employees Award Level 4) (go to Q35)
- SFIA Level 7 (Prof. Employees Award Level 5) (go to Q36)
- Above SFIA Level 7 (Above Prof. Emp. Award L 5) (go to Q37)

32. If you selected SFIA Level 3, please select up to four skills that you use most in your current role:
- Information security
- Information analysis
- Information content publishing
- Research
- Portfolio, programme and project support
- Business analysis
- Requirements definition and management
- Business modelling
- Learning and development management
- Learning and development assessment
- Learning delivery
- Data analysis
- Systems design
- Database/repository design
- Programming/software development
- Animation development
- Safety engineering
- Information content authoring
- Testing
- User experience analysis
- Ergonomic design
- User experience evaluation
- Systems integration
- Porting/software integration
- Systems installation/decommissioning
- Service level management
- Configuration management
- Change management
- Release and deployment
- System software
- Security administration
- Radio frequency engineering
- Applications support
- IT Operations
- Database administration
- Storage management
- Network support
- Problem management
- Service desk and incident management
- IT estate management
- Supplier relationship management
- Quality assurance
- Quality standards
- Conformance review
- Marketing
- Sales support
- Client services management

33. If you selected SFIA Level 4, please select up to four skills that you use most in your current role:
- Information management
- Information security
- Information analysis
- Information content publishing
- Technical specialism
- Research
- Business risk management
- Emerging technology monitoring
- Continuity management
- Data management
- Methods and tools
- Project management
- Portfolio, programme and project support
- Business analysis
- Requirements definition and management
- Business process testing
- Business modelling
- Sustainability assessment
- Stakeholder relationship management
- Learning and development management
- Learning and development assessment
- Learning design and development
- Learning delivery
- Professional development
- Data analysis
- Systems design
- Database/repository design
- Programming/software development
- Animation development
- Safety engineering
- Sustainability engineering
- Information content authoring
- Testing
- User experience analysis
- Ergonomic design
- User experience evaluation
- Systems integration
- Porting/software integration
- Systems installation/decommissioning
- Service level management
- Service acceptan
- Configuration management
- Change management
- Release and deployment
- System software
- Security administration
- Radio frequency engineering
- Applications support
- IT Operations
- Database administration
- Storage management
- Network support
- Problem management
- Service desk and incident management
- IT estate management
34. If you selected SFIA Level 5, please select up to four skills that you use most in your current role:
- IT governance
- Information management
- Information security
- Information assurance
- Information analysis
- Information content publishing
- Consultancy
- Technical specialism
- Research
- Innovation
- Business process improvement
- Enterprise and business architecture development
- Business risk management
- Sustainability strategy
- Emerging technology monitoring
- Continuity management
- Software development process improvement
- Sustainability management for IT
- Network planning
- Solution architecture
- Data management
- Methods and tools
- Portfolio management
- Project management
- Portfolio, programme and project support
- Business analysis
- Requirements definition and management
- Business process testing
- Change implementation planning and management
- Organisation design and implementation
- Benefits management
- Business modelling
- Sustainability assessment
- Stakeholder relationship management
- Learning and development management
- Learning and development assessment
- Learning design and development
- Learning delivery
- Teaching and subject formation
- Resourcing
- Professional development
- Systems development management
- Data analysis
- Systems design
- Network design
- Database/repository design
- Programming/software development
- Animation development
- Safety engineering
- Sustainability engineering
- Information content authoring
- Testing
- User experience analysis
- Ergonomic design
- User experience evaluation
- Human factors integration
- Systems integration
- Porting/software integration
- Systems installation/decommissioning
- IT management
- Financial management for IT
- Capacity management
- Availability management
- Service level management
- Service acceptance
- Configuration management
- Asset management
- Change management
- Release and deployment
- System software
- Security administration
- Radio frequency engineering
- Applications support
- Database administration
- Storage management
- Network support
- Problem management
- Service desk and incident management
- IT estate management
- Procurement
- Supplier relationship management
- Contract management
- Quality management
- Quality assurance
- Quality standards
- Conformance review
- Safety assessment
- Technology audit
- Marketing
- Selling
- Account management
- Sales support
- Client services management

35. If you selected SFIA Level 6, please select up to four skills that you use most in your current role:
- IT governance
- Information management
- Information systems co-ordination
- Information security
- Information assurance
- Information analysis
- Information content publishing
- Consultancy
- Technical specialism
- Research
- Innovation
- Business process improvement
36. If you selected SFIA Level 7, please select up to four skills that you use most in your current role:

- IT governance
- Information management
- Information systems co-ordination
- Information assurance
- Information analysis
- Consultancy
- Business process improvement
- Enterprise and business architecture development
- Business risk management
- Software development process improvement
- Portfolio management
- Programme management
- Project management
- Stakeholder relationship management
- Learning and development management
- Systems development management
- Human factors integration
- IT management
- Service level management
- Procurement
- Supplier relationship management
- Quality management
- Technology audit

37. If you selected SFIA Above Level 7, please select up to four skills that you use most in your current role:

- IT governance
- Information management
- Information systems co-ordination
- Information assurance
- Information analysis
- Consultancy
- Business process improvement
- Enterprise and business architecture development
- Business risk management
- Software development process improvement
- Portfolio management
- Programme management
- Project management
- Stakeholder relationship management
- Learning and development management
- Systems development management
- Human factors integration
- IT management
- Service level management
- Procurement
- Supplier relationship management
- Quality management
- Technology audit
38. How many hours per week do you normally work, including any paid or unpaid overtime? ________

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

40. How are you normally compensated for overtime worked?
   o Monetary payment at hourly rate (single/double time, etc.)
   o Overtime allowance in base salary
   o Time off in lieu of payment (single time, double time, etc.)
   o No compensation received
   o Other (please specify) _________________

41. Which of the following best describes your job function/title?
   o ICT Consultant
   o General Manager
   o Chief Information Officer
   o ICT Project Manager
   o ICT Manager
   o ICT Account Manager
   o ICT Business Development Manager
   o ICT Business Analyst
   o Systems Analyst
   o Analyst Programmer
   o Developer Programmer
   o Software Engineer
   o Software & Applications Programmer
   o Database Administrator
   o ICT Security Specialist
   o Systems Administrator
   o Computer Network/Systems Engineer
   o ICT Architect Network Administrator
   o Network Analyst
   o ICT Quality Assurance Engineer
   o ICT Support Engineer
   o ICT Systems Test Engineer
   o ICT Support/Test Engineer
   o Telecommunications Engineer
   o Telecommunications Network Engineer
   o Research & Development
   o Hardware Technician
   o ICT Customer Support Officer
   o Multimedia Specialist
   o Web Developer
   o Web Administrator
   o ICT Support Technician
   o ICT Sales Representative
   o Academic
   o Other (please specify) _________________

42. In which industry are you mainly engaged?
   o Consulting & technical services
   o Mining or quarrying
   o Electricity and gas supply
   o Communications (incl. Telstra)
   o Defence
   o Public Admin. (Federal, State, Local)
   o Transport and storage
   o Education
   o Research and development
   o Insurance
   o Banking/Finance
   o Health
   o Retail
   o Computer services
   o Business services
   o Food, beverage and tobacco
   o Basic metal products
   o Printing/publishing
   o Computer equipment manufacture
   o Computer software manufacturing
   o Other (please specify) _________________

43. In which sector are you employed?
   o Private sector – employee
   o Private sector – proprietor/director
   o Australian Public Service
   o Australian Government Instrumentality or GBE
   o State Public Service
   o State Government Instrumentality
   o Local Government
   o University or Tertiary Institution
   o School including TAFE
   o Other (please specify) _________________

44. If you are employed in the private sector, what is the approximate turnover of your organisation?
   o Less than $5m
   o $5m to $10m
   o $11m to $20m
   o $21m to $50m
   o $51m to $100m
   o Over $100m
   o Don’t know

45. How many computer professionals are employed by your organisation?
   o 10 or less
   o 11 to 50
   o 51 to 100
   o Over 100

46. How many employees are employed by your organisation?
   o 10 or less
   o 11 to 50
   o 51 to 100
   o 101 to 500
   o Over 500

47. Please tick those computing skills applied in your current position:
   □ ASP
   □ ASP.Net
   □ C#
   □ C/C+
   □ CGI/Perl
   □ CISSP
   □ HTML
   □ J2EE
48. 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)

49. Who is responsible for determining your training needs?
   - Me
   - My employer
   - Me and my employer

50. Does your employer pay or contribute to your training?
   - Yes
   - No

51. 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

52. 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

53. Are you an independent contractor?
   - Yes (if yes, go to Q60)
   - No (if no, go to Q54)

54. Which industrial instrument determines your employment conditions?
   - Professional Employees Award
   - Enterprise agreement
   - Individual employment contract
   - Other (please specify) ____________________

55. Do you feel confident that appropriate levels of professional indemnity insurance are in place to safeguard both you and your employer?
   - Yes
   - No
   - Don’t know

56. Do you feel confident that your employer understands professional standards legislation?
   - Yes
   - No
   - Don’t know

57. Have you received a promotion in the last 12 months?
   - Yes
   - No

58. Have you changed employers in the last 12 months?
   - Yes
   - No

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

60. If you are employed as an independent contractor, is your current contract:
   - Long term (12 months or longer)
   - Short term

61. From what source did you obtain your current contract?
   - Previous employer
   - Previous contract
   - Advertising
   - Agency
   - Associate
   - Other (please specify) ____________________

62. What is the hourly rate charged? ($ gross, excl GST) ________

63. What was the hourly rate charged twelve months ago? ($ gross, excl GST) ________

64. Annual base salary excluding allowances and performance pay and before salary sacrifice ($ per annum) ________

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

66. If you are paid by the hour, what is the gross hourly rate received? ($ per hour) ________
67. If you are a recent graduate and commenced work in the last 12 months, what was your commencing salary? ($ per annum) ___________

68. Is your salary subject to performance-based incentives?
   o Yes (if yes, go to Q69)
   o No (if no, go to Q72)

69. What is the maximum percentage of your base salary offered as a performance-based incentive? %___________

70. What percentage of your base salary do you reasonably expect to achieve? %___________

71. Do you consider the performance target set to be fair and reasonable?
   o Yes
   o No

72. Car allowance ($ per annum) ___________

73. On-call/call back allowance ($ per annum) ___________

74. Annual leave loading (%) ___________

75. Overtime paid ($ per annum) ___________

76. Value of benefits supplied by your organisation ($ per annum)
   * Mobile phone ___________
   * PC / laptop / notebook ___________
   * iPad / tablet ___________
   * Internet access ___________

77. Other FBT-exempt items, e.g. home office, subscriptions, etc ($ per annum) ___________

78. Do you have access to remuneration packaging using a salary sacrifice arrangement?
   o Yes
   o No

79. Do you have access to an employer-provided vehicle?
   o Yes (if yes, go to Q80)
   o No (if no, go to Q86)

80. On what basis is the vehicle provided?
   o Full private use
   o Restricted private use
   o Commuter use

81. Original cost of vehicle provided ($) ___________

82. Total kilometres travelled by vehicle per annum ___________

83. Percentage of private use of vehicle ___________

84. After-tax contribution to vehicle costs (not salary sacrifice) ($ per annum) ___________

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

86. Parking (where employer pays) ($ per annum) ___________

87. Other benefits subject to FBT ($ per annum) ___________

88. Are you covered by an employer-funded superannuation scheme, including the compulsory 9% Superannuation Guarantee levy?
   o Yes (if yes, go to Q89)
   o No (if no, go to Submit)
   o Don’t know (if don’t know, go to Submit)

89. What type of superannuation scheme are you covered by in your employment?
   o Accumulation (An accumulation scheme is one where your final entitlement is determined by the accumulated contributions and the rate of investment return)
   o 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)

90. Do you make contributions into this superannuation scheme in addition to the employer contribution?
   o Yes
   o No

91. What percentage of salary do you contribute? (%) ___________

92. If you contribute, are your contributions made via a salary sacrifice arrangement?
   o Yes
   o No

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

94. Please provide any comments you may have on your experience working the ICT sector, the future for the ICT sector, or any other related issue:
   ___________________________________________________
   ___________________________________________________

Submit

You have reached the end of the 2013 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.com.au/workplace/market-salary-rates/survey-reports/it/