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Women in ICT – Retain and Sustain: An Overview of the ACS-W Survey

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Abstract:

Many attempts have been made to retain women in the ICT industry but a high level of attrition persists. A perceived lack of data about the actual needs, experiences and challenges of women in the Australian sector prompted the Australian Computer Society's Women's Board (ACS-W) to undertake a survey of all female members of the ACS. This paper gives a brief summary of the literature, an outline of the methodology and an overview of the results of the survey highlighting the primary concerns of respondents: remuneration; the male dominated working culture; and work-life balance. An overview is also given of some specific issues from some cohorts that emerged from the data, in particular, older women, non-Australian citizens, the unemployed and rural women. The paper summarise "what women want" on the basis of the survey results and concludes with some suggestions on how some of these issues can be addressed.

Keywords:

Organisational Behaviour, IS culture, Gender, Survey, Staff Satisfaction,

INTRODUCTION

It has long been acknowledged that there is a dearth of women in the Information, Communications and Technology (ICT) industry in Australia and other Western countries. Estimates of the ratio of men to women in the industry have ranged from 10:1 to 3:1, as discussed below. Many attempts have been made to provide programs which attract women into computing courses and retain them in ICT, but few such efforts have resulted in sustained outcomes.

In its submission to the Australia 2020 summit the Australian Computer Society (ACS) referred to the poor retention of women in ICT and suggested the ACS and the Government develop programs to retain women in the sector (ACS 2008b). However, a perceived lack of data about the actual needs, experiences and challenges of women in the Australian sector prompted the ACS-Women's Board (ACS-W) to undertake a survey of all female members of the ACS (ACS 2008c). The survey was conducted in May through to June 2008. The Australia-wide online survey sought to obtain both quantitative and qualitative data concerning the career experience of women engaged in the ICT sector. Whilst it is known that women are under-represented in ICT, little is known of the personal experiences, professional needs and the challenges faced by women employed in the industry. The survey sought to obtain comprehensive data that would provide a female perspective, an insight into the life of women working in the ICT sector, and an indication of what might facilitate their long term commitment to the industry.

The survey incorporated questions concerning the demographics, age, experience and qualifications of respondents. Respondents were also asked to identify the factors that had an adverse impact on their career, the challenges they faced as well as their current professional needs.

This paper gives a brief summary of the relevant literature, an outline of the methodology and an overview of the results of the survey highlighting the primary concerns of respondents as a whole, including: remuneration; the male dominated working culture; and work-life balance. An overview is also given of some specific issues from some of the cohorts that emerged from the data, in particular, older women, non-Australian citizens, the

unemployed and rural women. Furthermore, this paper tries to summarise “what women want” and concludes with some suggestions on how some of these issues can be addressed.

LITERATURE REVIEW

A review of the available literature revealed that the gender imbalance in the Australian ICT sector is well documented (Alcorso and Ho 2006; Byrne and Staehr 2005; Hammond 2003; Hellens and Nielsen 2001). According to the ACS:

“...female participation rates in ICT roles are around, 21 per cent at the professional level, 18 per cent when electronics and communications workers are included, and drop to 15 per cent when all the relevant trades assistants are included. Within the ICT sector itself, women account for just under 30 per cent of the total workforce.” (ACS 2008a:4)

As Byrne and Staehr indicated, the current research “...reveals a fairly negative picture ...It is shown that women participate in the IT industry at much lower rates than women in many other industries...” (2005:1)

The predominance of males in the ICT sector is however, not confined to the Australian workplace. Evidence indicates that, internationally, the ICT sector is a very male dominated work environment. Whilst the experiences of women working in the ICT sector is well documented in Europe (Adam et al. 2006; Epodoi 2003:1), the United Kingdom (Griffiths et al. 2007), New Zealand (Trauth 2002) and the United States (Quesenberry et al. 2006), little is known about the experience of women in the Australian ICT sector.

The literature search also revealed that there is no evidence indicating the workplace is the principle cause of the under-representation of women in the ICT industry. The reason for the gender imbalance in ICT is, in fact, considered to be multi dimensional. According to Anderson et al (2008), the perception by female secondary school students that ICT is “...boring and irrelevant...” has resulted in low participation rates in education pathways leading to professional level ICT careers. The under-representation of women in tertiary ICT courses has also been well documented (Craig and Fisher 1998; Craig et al. 2008). O’Sullivan reported that women and girls often had misconceptions about their ability to engage with technology and this has also led to curriculum choices which precluded them from a career in ICT (1995). Sociological issues, perceptions of gender and identity, and stereotypical images of ICT workers were also cited as reasons why young women and girls choose a career path other than ICT (Gannon 2008; Kekelis et al. 2005; Roddick 2008).

Despite the often negative and stereotypical images of the sector, many women do choose to pursue a career in ICT. However, little is known or understood about the reality of their experience. The literature that does exist in relation to the working lives of women engaged in ICT, is limited and confined to discrete areas. For instance, a study by Alcorso and Ho (2006) examined experiences of female 457 visa holders working in the ICT sector in New South Wales; Byrne and Staehr studied the representation of women at senior management levels in the IT industry (2005); Hellens and Nielson researched the declining participation of women in IT education and employment (2001); and Timms (2008) sought to identify aspects of the work environment that contributed to women's comfort or discomfort within the ICT industry (2008).

Very little qualitative or quantitative data exists in regard to the career cycle of women employed in Australia in the ICT sector. Anecdotal evidence indicates that the career path for women is often punctuated, discontinuous and fraught with competing priorities. As Bandias noted:

“Childbirth, family responsibilities and the lack of career priority often afforded to second income earners, are not unique to women working in the ICT industry; these factors impact on the working life and career path of women in every industry... [However,] negotiating flexible working arrangements, achieving a satisfactory work-life-balance and having a realistic appreciation of the worth of their labour can, for women in the ICT sector, be a [daunting] task.”(2007)

Employment trends in the ICT sector are a contemporary issue and, as a consequence, the topic is often in the popular press. A review of newspapers and magazine articles revealed that the gender imbalance in the ICT sector was a reoccurring theme in many articles (Head 2006; Prabhu 2007; Thorp 2002). Contemporary issues also included the benefits of a diverse IT workforce (Yelland 2002); unlocking the potential contribution of women in the IT sector (Yelland 2003); the benefits of the “softer skills women could take to the IT department” (Bretherton 2005); and strategies to overcome the negative attitudes women hold towards the ICT sector (The Mercury 2002). However, the anecdotal evidence contributed little to our understanding of the actual experiences of women in the IT workplace.

The literature review revealed that little is known of the experiences of different cohorts of women such as rural women, women nearing retirement, and non Australian citizens employed in the ICT sector. There is no qualitative or quantitative evidence in relation to the experiences of the unemployed in the sector, the experiences of young women engaged in ICT, or women in different age ranges or stages of life. Similarly the

work-life balance issues, the industrial issues and workplace cultural issues experienced by women working in IT have not been researched or reported on. Consequently, a comprehensive Australia wide study of women employed in the Australian ICT sector was clearly warranted.

METHODOLOGY

Given the large population that was to be surveyed (there are over 2400 female members of the ACS), a web survey was considered to be the best methodology to use for data gathering. Whilst the use of online survey research is considered to be “young and still evolving” (Wright 2005), the advantages and disadvantages of employing an online survey methodology are well documented (Andrews et al 2003; Birnbaum 2004; Couper 2000; Kaye and Johnson 1999; Wright 2005).

Research by Wright indicates that the advantages of online surveys include “...access to individuals in distant locations, the ability to reach difficult to contact participants, and the convenience of having automated data collection, which reduces researcher time and effort.”(2005). However, as Andrews et al noted, “Using the Internet to conduct quantitative research presents challenges not found in conventional research.” (2003:185). According to Andrews:

“Electronic surveys have distinctive technological, demographic, and response characteristics that affect their design, use, and implementation. Survey design, participant privacy and confidentiality, sampling and subject solicitation, distribution methods and response rates, and survey piloting are critical methodological components.”(2003:185)

The survey, which was designed by the authors, underwent a hard copy and an online trial before it was made available to prospective respondents. The hard copy trial assisted in identifying typing and spelling errors, duplicated questions, as well as the internal reliability and validity of the survey. An online pre-test of the survey enabled formatting errors to be corrected and ensured that the questions were presented in a logical and accessible manner.

The online pre-test also enabled the survey authors to explore and exploit the design options such as links, defaults and menus that are available in the online environment. As Andrews et al commented, “The Web-based survey designer has a wide range of textual options, format control and graphics sophistication not attainable with [other] surveys...” (2003:4). However, the authors concur with Andrews in that, “Web-based surveys are more challenging to design and more technically difficult to implement because of these options.”(2003:4).

In order to maximise the survey response rate, respondents were offered an incentive to complete the survey. According to a number of sources the use of incentives can have a significant effect on a survey response rate (Kessler et al. 1995; Yammarin et al. 1991). Research by Yammarin et al indicates that, on average, the use of incentives increases a survey response rate by 6.5 per cent. According to Yammarin, “Repeated contact in the form of preliminary notification and follow-up appeals...[are also] effective in increasing survey response rates.” (1991:613).

The incentive, a bouquet of flowers delivered to an address nominated by the survey respondent, was specifically chosen because of its potential appeal to women. The incentive was offered to the first 20 survey respondents and the last 10 survey respondents. The inclusion of the latter incentive was designed to encourage stragglers to complete the survey. All respondents had the opportunity to opt in or out of the incentive offer. The overwhelming majority of women who commented on this incentive were very positive about it. Only one respondent gave negative feedback suggesting it was patronising and sexist.

The survey designers, mindful of the privacy issues surrounding data collection methods took precautions to ensure that the survey respondents remained anonymous. However, the use of an online survey compounded the issues of data confidentiality, privacy and anonymity. As Cho et al has acknowledged:

“Online surveyors commit multiple violations of physical, informational, and psychological privacy that can be more intense than those found in conventional survey methods. Internet surveys also invade the interactional privacy of online communities, a form of privacy invasion seldom encountered with traditional survey methods.”(1999:421)

In order to minimise any privacy issues that may have arisen, to preserve the integrity of the survey and to mitigate the concerns of respondents, personal data such as names and contact details were disaggregated from the survey data and stored separately.

The survey was uploaded onto the ACS website for members to complete from the 14th May to the 3rd June 2008. The survey consisted of 35 questions that explored members’ demographics, qualifications, ACS membership, remuneration, time spent and roles in the ICT industry. The survey also asked participants to identify the factors that influenced their career choices. The questions were both quantitative and qualitative in nature and were designed to obtain statistical as well as descriptive responses. The women were asked to

describe the challenges they face in the industry and what support ACS could provide to address these challenges.

Potential survey respondents were contacted, via email prior to the release of the survey. This initial contact was to alert potential respondents to the survey. All female members of the ACS were subsequently contact three times whilst the survey was live. This follow up contact was initiated in order to maximise the response rate.

Six hundred and seventy eight women completed the survey. This response rate represented 28 per cent of the female ACS membership. A review of the respondent's demographic data, age and job role indicated that the respondents were representative of the female membership of the ACS. The high response rate was also indicative of the survey's external validity (Cook et al. 2000).

SURVEY DEMOGRAPHICS

The states that were most highly represented in the survey responses were NSW and VIC followed by QLD, WA, ACT, SA and Tasmania. There was one participant from NT. One in five of the participants were not Australian citizens.

An analysis of the responses indicated that the respondents were representative of both the females membership of the ACS and the women engaged in the ICT industry as a whole. The diversity of ICT roles in the industry was also well represented; however, the survey did not include women working in ICT in the trades areas.

As Figure 1 indicates, the age range of respondents was evenly spread, with twenty two per cent of the 678 women who participated in this survey aged less than 30 years, 23 per cent aged 30-39 years, 29 per cent aged 40-50 years and the remaining 27 per cent were aged over 50 years.

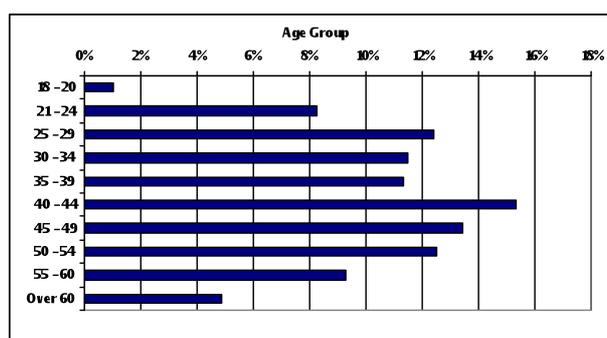


Figure 1: Age of respondents

An analysis of the survey results revealed that the survey respondents had considerable Information Technology (IT) experience, as the follow table indicates.

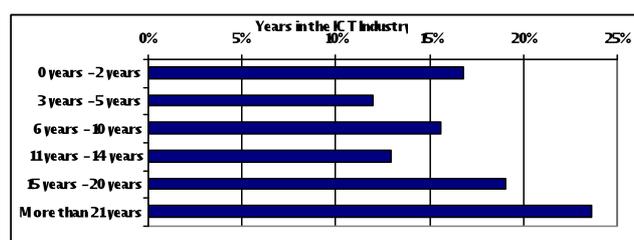


Figure 2: Experience of respondents

All respondents, except one, were living in Australia. The overwhelming majority of women resided in cities. The participants were well-qualified with half of the women holding post graduate qualifications. Twenty eight percent had a Masters degree, 16 per cent had completed a post-graduate degree/diplomas and six per cent held a doctorate qualification.

The survey respondents were employed in a range of roles. As Figure 4 indicates, 12 per cent of respondents were employed as consultants, 10 percent were Project Managers, nine percent were Programme Analysts, 12 percent were in IT Management and 10 percent were employed as a Business Analysts. The employment areas of Research and Development, Document/report Writer, LAN Management and Administration, Computer Graphics Designer and IT security had the least number of respondents

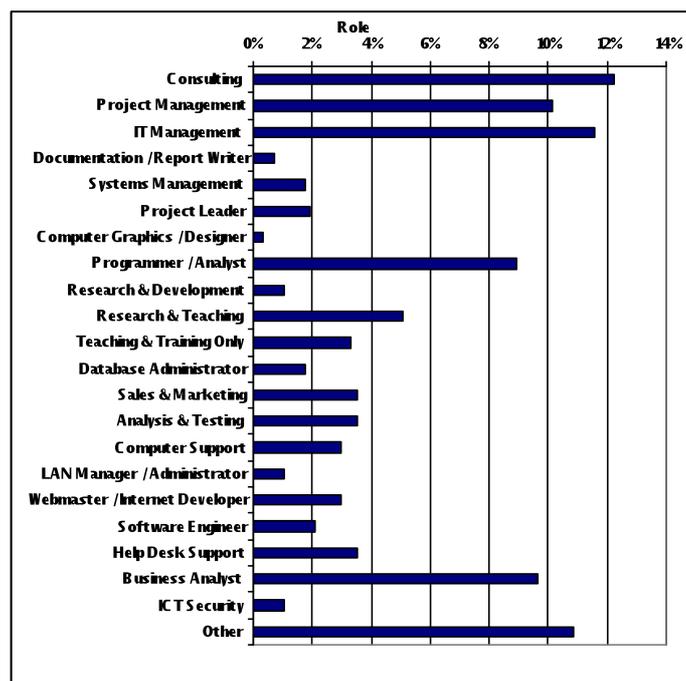


Figure 3: Role of respondents

Approximately 11 per cent of respondents were employed in roles other than those mentioned above. The women who responded using the 'Other' option had a number of diverse roles, expressed in a number of ways, including: Hardware, Hardware engineer, Technical Analyst/Consulting, Procurement, System engineer, Technical Analyst/Consulting, Legal, Senior Risk Specialist, Systems Architect, Multi-skilled role in SME, Writer/analyst/manager as required, Product Management, HR Organisation Development, Teaching and Management, Accountant, Executive Chairman, Company Director, ICT Education Manager, Chief Information Officer, ITSC Management, Teaching and Research, Administration, Supply Chain, Test Leader, Finance, Policy development, Information management, I.T, and Account Manager.

FINDINGS

A number of dominant themes arose from the survey data as common issues for the majority of respondents. The survey found that some women in the Australian IT industry receive less remuneration for equivalent work, fewer opportunities for challenging work and promotion and, less recognition. The factors that members thought contributed to these inequities included; the predominance of males in IT; traditional views of gender; the higher value placed on men within the industry; and, differences between men and women in their approach to salary negotiations. These issues are discussed below.

Remuneration

Whilst almost 70 per cent of the women reported that they receive equal remuneration, as would be expected, a surprisingly large 31 per cent of respondents reported they do not have access to the same level of remuneration as their male colleagues. To illustrate, in the voices of the respondents themselves, women reported that:

"Equivalent male salaries average 20 per cent higher for same level and output of work."

"A male member of my team who reports to me is on a higher salary level."

"I took over from the previous IT manager (3 years ago) and I am still payed at least \$10,000 less than he was at the time of leaving."

"There is a girl in our IT Department who has not had a pay review in 6 years. However her male colleagues have all had pay reviews, pay increases and offers of other forms of remuneration."

"When the AWAs were handed out, the men were given more money and more perks by the national manager."

Gender differences were reported to influence the salary negotiation process. It was reported that women were more reluctant to ask for a salary increase, whereas male employees were perceived to be more proactive. To illustrate:

"Women are not so skilled in salary/packaging negotiations and not as confident in their abilities."

“Women aren’t as aggressive as men in negotiations.”

Male-dominated Working Culture

Not surprisingly, most of the women in the survey reported that the Australian IT industry is predominantly male and this is reflected in the workplace culture and senior management positions. For example,

“Very male dominated workforce- most of the senior executive, board and senior managers are male.”

“All males except two in a staff of about forty are in a management role. The remainder are female staff “assistants” except one who is a manager.”

“Women are not holding major positions in many organizations.”

“Promotions are more likely to go to males.”

As a result of the gender imbalance and the predominantly male culture many women reported not receiving the same opportunities, promotions and recognition as their male counterparts and feeling less valued. For example, one member who had worked overseas in a senior management role stated that:

“I found it very difficult to get a job of a similar calibre-whether this was from being away too long or being female I am not sure, but the end result was taking a demotion to middle management. It was, however, curious that I was runner-up to a male for five different senior management IT jobs (after a long process with multiple interviews for each position).”

Some women believed that some organizations and managers perceive men to be more valuable, reliable and knowledgeable and more technically competent. Members reported that male managers frequently gave the more challenging and interesting work to male colleagues. As a result of these opportunities, male colleagues were more likely to receive a pay rise or promotion.

Work Life Balance

Many women reported that the greatest challenge in their career is managing their work-life balance. In particular, juggling the long hours expected in some roles with their out-of-work commitments was a significant issue. Over 57 per cent of women reported working more than 38 hours per week and more than 18 percent worked between 45 – 60 hrs a week.

As the follow graph indicates, unpaid overtime appeared to be the norm with 60 percent of women reporting that they worked at least two hours or more unpaid overtime per week. Approximately 27 percent worked more than five hours of unpaid overtime each week.

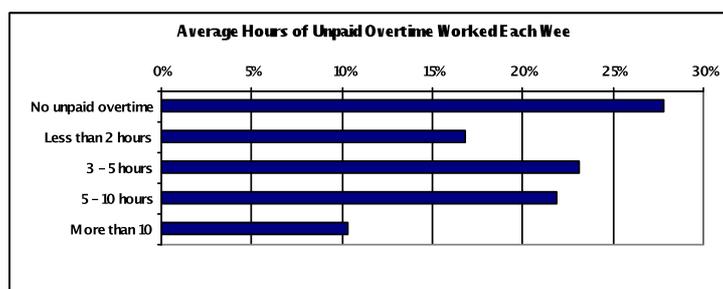


Figure 4: Unpaid overtime

The following comments were indicative of the respondents concerns in regard to work- life balance:

“I need to learn to say NO, and limit the number of hours I work.”

“I had an 11 yr break while I got my five kids into school and I have never recovered my career since then. Also in the 15 years while my kids have been at school I have chosen jobs that gave me flexibility...and that is a career killer. Now I’m too old. I chose this, so I’m not having a whinge, but it is the way it is for women...in the end you have to choose.”

“Just finding enough hours in the day to do everything...as a contract PM I find it hard to take a holiday. I have not had a holiday in 4.5 years and have had the one contract... If someone else is put in charge and then they may not need me, so lately I have just been doing less hours per week to try and catch up with the things at home. Even as a permanent it was still hard to get leave...Even giving 6 months notice...I would have to reschedule my leave because of an urgent project.”

In addition to maintaining a home, caring for children and extended family, many women had other responsibilities outside of work. These included; volunteering, leadership roles in community organizations,

studying, maintaining a farm, positions on Boards, involvement in sport, assisting in a family business, and, tutoring.

If women wanted to take a more balanced approach to their work and family life, they indicated that there were insufficient opportunities for challenging part-time, job sharing or flexible work. To illustrate,

“When I do start a family I don’t see how I could stay in IT, as the work tends to require resources who are 100 per cent available. There are not many opportunities for working 2-3 days a week.”

More than 18 percent of survey respondents cited “more money” as the most important factor when considering a career move. Almost 18 percent wanted more challenging work, 11 per cent per cent wanted flexible work hours and more than 11 percent cited opportunities for promotion as a significant consideration when contemplating a career move.

A further analysis of the survey revealed some aggregated groups with perceptions that were specific to their cohort. The needs and challenges faced by these groups were quite distinct. Four of these cohorts are discussed in the next section.

Specific Cohorts

Several cohorts emerged from the survey data. Many of these were age or stage- of- life related. The dominant issues for women from different age groups is discussed in more detail in a separate paper (Bandias and Warne, 2009).

Four of the cohorts: older women, Non-Australian Citizens, the unemployed, and rural women are discussed briefly below.

Older women

More than 26 per cent of the survey respondents were women over 50 years of age. Approximately 47 percent of respondents from this cohort cited the “male dominated environment” of the ICT sector as having an adverse affect on their career. According to their qualitative responses, some mature women not only felt discriminated against because of their gender but also because of their age. Typical comments from this cohort include:

“In a male dominated industry there is tolerance for younger women in support and technical roles but they don’t know how to cope with older experienced and competent women in management roles”

“The major challenge is growing older. Twenty years ago I publicly stated that ageism was more an issue than gender in the ICT industry. So lack of employment opportunities is a major challenge.”

Non Australian Citizens

Almost 21 per cent of the survey respondents indicated that they were not Australian citizens. This cohort also found work life balance one of the major challenges of working in the ICT sector. However, some respondents also reported that their lack of local experience was a major challenge. For example:

“Get into the IT industry without experience and residence [is a major challenge]”

“Having difficulty getting a job in this industry as I am lacking in relevant experience although I am IT tertiary-qualified.”

“BIG challenges: I am not Australian citizen as well as do not have enough opportunity and experience in IT industry.”

“I do not have enough work experience”

Cultural and language barriers were also cited as challenges that this cohort faced. For example:

“Interact[ing] with others with different culture and background learning new skills but still related with my background. New environment of work place”

“English is not my first language so I need to improve my communication skills”

“Language barrier, being a fresh grad without previous IT experience.”

“Culture Shock: it is the key to get along well with colleagues”

Unemployed

At the time of the survey, unemployment for women in the ICT sector, as represented by the survey results, was relatively low. Whilst only 2 per cent of the total survey respondents indicated they were unemployed more than 4 per cent of this cohort was under 35 years of age. However, the experiences of this cohort are worth noting because of the likelihood of increasing unemployment in Australia. The respondents also reported that the effect

of a “career break” included adverse consequences for their career, diminished employment prospects in the ICT sector; and difficulties in keeping knowledge and skills current. The following comments are indicative of their experiences:

“It left me behind in the latest technical and software skills in IT”

“Still on a 4-year break. Have had a long career in IT, and I still have plenty of skills and have picked up new ones while being a full-time mother. Definitely the break will affect my salary on return to work”

“Out of the industry for 5+ years - technology changes. Not sure if I will go back into the industry for another 5 years - who knows what changes in technology will have been made during that time”

“Lots of effect. e.g less chance of employment due to changes and new technology development. Inability to catch up with new development, because IT is not a career where you could take too long a break”

“Gaining employment in the IT area has been very difficult. I have now decided to change my career and I am studying for qualifications in child care. ”

Rural Women

Overwhelmingly the majority of survey respondents were from major urban areas. However, approximately 6.5 per cent of respondent lived in rural Australia. The survey responses of this cohort indicated that, whilst work life balance was an import issue for these women, the lack of networking, training, career and mentoring opportunities also significantly affected their capacity to engage in the ICT sector.

Approximately 47 per cent of this cohort was employed full time, nine percent were employed part time and 11 per cent were full time students. The remainder were either retired, unemployed or employed as hourly contractors. The majority of respondents were employed in State Government, Commonwealth Government or Education services. Approximately 9 percent were employed in “Consultant Technical Services.” Almost 48 per cent of respondents worked some hours from home.

For women living in rural Australia, the work-life balance issues that were common to the majority of survey respondents, were compounded by the additional demands of rural living. Approximately 46 percent of these respondents worked in excess of 38 hours per week. Over 22 per cent indicated that their working week was, on average, between 45 – 60 hours. Significantly, less then 10 per cent of respondents were paid overtime. Many respondents were also actively engaged in their local community through “voluntary community work” whilst others “shared the responsibility of running a ...farm”.

As indicated in the following graph, the career issues identified by women living in the rural areas included the lack of training, job and promotion opportunities; the lack of mentoring and role models; work-life balance issues; adverse work culture, discrimination and an inflexible work environment.

Qualitative responses by survey respondents from the rural area support these statistics. For example:

“I live in a rural area and as such have access to limited resources which I would really love. This is also creating problems for connecting with other IT professionals.”

“Due to where I live, my husband’s job and his career, and my child-rearing responsibilities, I am stuck with my current employer, not going anywhere. The alternatives are a lot of commuting (3-4 hrs each day) that would negate the extra money...”

“Being a student in a technology degree while living in a remote locality means that I suffer from a lack of exposure to the industry itself.”

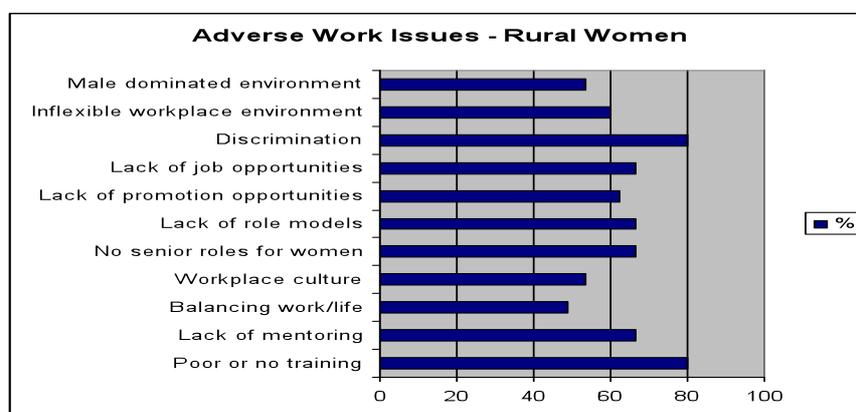


Figure 5: Rural women

A significant number of these respondents also articulated their ‘wish-list’ in relation to professional development, support and work-life balance:

“Instead of lobbying for "equality", I think it would be more successful to lobby for appreciation/promotion of the unique strengths of women, and for us to be remunerated for utilising these strengths for the benefit of the organisation”

“Deliver forums online outside the metropolitan areas. [Provide] Female mentors.”

“Send someone to do my dishes!”

“...having online events or more [events] in rural NSW”

“...road subsidies if travelling over certain kilometers.”

“Help teach us to be more confident and vocal about what we want and how to get it. - Negotiation skills”

“More support for part time IT roles for women. Even if you don’t have kids to look after you often have parents who need care and for those like myself who are single we have to do all the work around the home as well.”

Indicative of the professional isolation felt by many rural survey respondents, a number of women sought opportunities to be mentored and to network with other ICT professionals. For example :

“More networking opportunities, especially outside the city”

“more ways to network with other IT women... or hear about ways to network”

“Forums for mentoring and sharing experiences”

“Mentoring is the best”

“Mentoring (especially with those women who juggle work and family)”

For many rural women the lack of job and promotion opportunities, poor access to training and an inflexible work environment exacerbated the frustration of working in a predominately male environment. The professional isolation of rural women was also an identified issue

Many of these needs were echoed by urban women respondents. In the next section, the primary ‘wish-list’ requirements from the respondents, as a whole, are summarised.

WHAT WOMEN WANT

According to the survey respondents’ comments, the major issues facing women in the ICT profession are perceived to be: work-life balance, gender issues in the workplace, ageism, workloads, and remuneration. As indicated in Figure 6 respondents also identified the lack of mentoring, an adverse workplace culture, lack of promotion opportunities and the male dominated environment of the ICT sector as factors that significantly affected their career advancement.

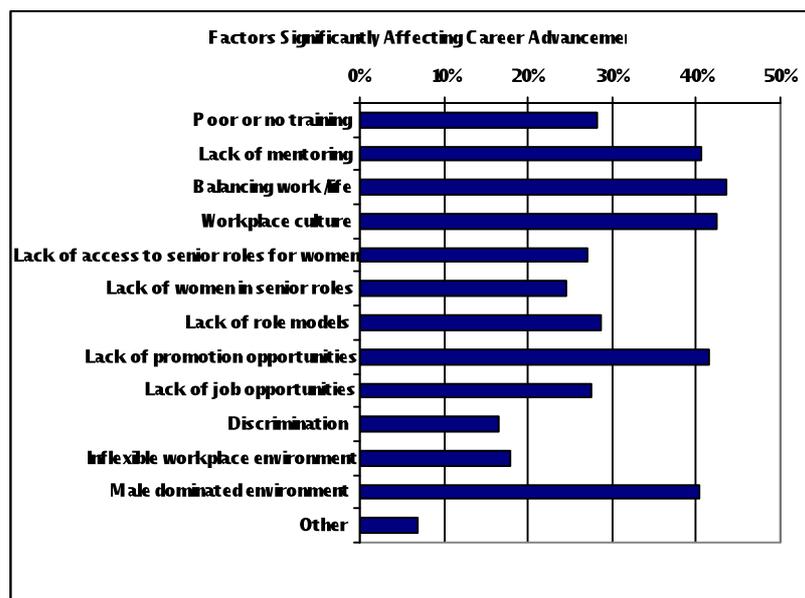


Figure 6: Factors Affecting Career Advancement

For many women “Juggling and prioritising family, work, voluntary work, studying and socialising” was a major career challenge. Whilst a significant number of respondents reported that “keeping up to date with technology” presented a major challenge; career stagnation, lack of recognition and lack of challenging work were also identified by respondents as career hurdles that women were experiencing.

The majority of survey respondents believed that ACS-W had an important role to play in providing affordable and accessible training, and retraining; developing and promoting successful and flexible working arrangements; facilitating mentoring; enhancing networking focused at women; developing partnerships, creating positive images of women in IT; and, developing initiatives targeted at new graduates, migrants and care-giving mothers and those who were nearing retirement as these groups were reported to face additional challenges.

According to the respondents the Women’s Board of the ACS could support women in the ICT sector by:

“holding more networking events - it’s very hard when there are so few of us amongst all the men. Encourage more women to get involved”

“[providing] career advancement advise/strategies for women who often have to balance carer/child rearing roles with paid work in Australian context.”

“providing ways for women in IT to meet”

“Be[ing] the voice for women in the IT industry. Support and promote IT careers particularly to young people. The current skills shortage is not going to improve unless the next generation, particularly girls, are encouraged to consider a career in IT.”

“continuing to increase the profile of women in the IT industry”

“promoting equality in the workplace”

“by educating and involving more women in the ICT industry”

“[providing] coaching in how to feel comfortable marketing own value/worth and achievements”

The authors of this paper believe that delivering on these identified needs is not only the responsibility of the ACS-W, but also all ICT organisations that employ women.

CONCLUSION

According to the ACS-W survey, women in ICT want remuneration, recognition and opportunities equal to that enjoyed by men doing the same work. It is an indictment of the Australian ICT industry that this perception of inequality still exists in any ICT organisation. To keep and support women in ICT, opportunities for family friendly work practices must become more widespread; ageism must be eradicated, and mentoring, coaching, networking and appropriate training programs must be increased. It should also be recognised that different cohorts have different priorities and needs, and there is not a ‘one size fits all’ solution.

The 2008 ACS-W survey has provided base line data that has helped inform and shape the role and direction of the Women’s Board. The survey has also provided a much needed insight into the experiences and needs of women in the ICT sector. Due to the downturn in the economy, the prospect that more women in the ICT sector may face unemployment is very real. Consequently, the authors intend to repeat the survey in 2010 to determine employment trends, monitor ongoing and emerging issues and to assist the ACS-W Board in the role they play in supporting women in the ICT sector.

However, supporting women in the ICT sector is not solely the responsibility of ACS-W. There is a role here for all interested in the ongoing viability of the ICT industry. Practitioners in positions of influence can ensure their organisations introduce more of the supporting structures and training required. Academics can ensure computing and IS students are taught negotiation and self promotion skills and can develop research programs exploring the most effective ways of producing networking and mentoring opportunities for rural or urban women through social technologies. Evaluation programs can be run to demonstrate to employers the value of fully integrating women into the ICT industry.

Sustaining, training and retaining women in ICT will benefit both employees and employers. If women feel they are sufficiently valued, rewarded and supported, they will commit to the ICT industry and attrition will diminish. If women stay in the industry, the number of highly placed women will grow, increasing the capacity for role models and mentoring. This capacity in turn, should attract more young girls into the industry, redressing the gender imbalance. Anything less is a waste of skills, expertise and potential.

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