

Information Communication and Technology (ICT) Market Insights

A Manpower Market Insights Paper



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Australia

What do you do?



Manpower®

The Australia economy is facing its biggest challenge in the current economic environment thus impacting the ICT industry in various degrees...

Although the economic downturn in Australia is considered “mild” compared to other OECD countries, the outlook for the Australian ICT industry in 2009 is much less favourable than in recent years, with economic conditions deteriorating, business and consumer confidence falling sharply, projections for ICT spending have declined steeply. Taking this into account, Australian businesses are certainly reassessing how they spend their money on ICT products, services and employment.

In the latest OCED Information Technology Outlook report, it suggests that ICT growth is likely to be zero for the OECD countries during the current economic downturn. A general upturn cannot be expected before the end of 2009 in parallel with renewed GDP growth¹.

Industry Trends in Current Economic Climate

Various research and industry experts indicate that-

Hardware will be the main casualty of the recession: Slower sales and refresh cycles will get longer. As CIOs are under pressure on budget and spending- PCs, servers and storage will definitely be heavy scrutinised to ensure that costs are kept to a minimum².

Software spending will generally grow....but slow: Spending on software such as database, ERM and CRM is expected to continue with a slower growth rate. Similarly, investment in virtualisation will continue as buyers will be looking at minimising hardware purchase.

IT Services are partly recession proof and will benefit from the crisis: Spending on outsourcing services is expected to increase in the short term, especially in the mid-market. The recession will also further boost demand for offshore outsourcing to low cost countries like India and China, specifically for infrastructure management and applications services.

Telecommunications will be mostly immune to the recession: Businesses will revert to more telecommunication services (reduce travel costs through conference calls and video conferencing) and the spending on mobile voice will continue to grow slowly as mobile phones have tangible business benefits and competition on the Australian market has maintained prices to levels that warrant extensive business usage³.

Demand for ICT professionals will remain solid: Suggested by industry experts, companies see the slowdown in the economy as time to upskill with quality professionals to address the challenges of increasing efficiencies.

¹ OECD: Information Technology Outlook 2008

² IDC Research: The Economic Recession in Australia: What does it mean for the ICT industry? Oct, 2008

³ IDC Research: The Economic Recession in Australia: What does it mean for the ICT industry? Oct, 2008

ICT contributes 4.9% to Gross Value Add, boasting a larger contribution than mining, education, defence, agriculture and the individual manufacturing sectors.

(Source: ABS and The Australian Computing Society)

ICT as a major driver of economic growth

Market Size

ICT is a major driver of Australia's economic growth and a key productivity enabler for other industries. The Australian ICT market is worth over A\$120 billion⁴ and employs around 393,900 people across some 30,300 ICT businesses and other sectors of the economy⁵. Estimated to be the fifth largest ICT market in the Asia Pacific and the 14th largest in the world, Australia has continued to enjoy a strong compound annual growth rate of 12.8% between 2003-2008- faster than Japan, Hong Kong, Singapore, South Korea and Taiwan⁶.

Key figures and facts:

- ICT industries in Australia earned a total revenue of \$120 billion in 2007. ICT specialist firms accounted for 89.1 per cent of this total. Telecommunications services accounted for \$34.9 billion, computer wholesaling for \$20.7 billion and computer consultancy services for \$19.5 billion;⁷
- The ICT industry directly accounts for some 4.6 per cent of Australia's GDP⁸ and enhances the contribution to GDP made by every sector;
- Australian exports of ICT amounted to \$5.175 billion (\$3.02 billion in goods and \$2.155 billion in services). Major export markets include the USA, UK and ASEAN. Australia's imports of ICT were \$26.1 billion (\$22.89 billion in goods and \$3.209 billion in services). Major sources of imports include China, ASEAN and the USA⁹;
- Australia led all other OECD countries with the contribution of ICT capital to GDP averaging 0.68 per cent per annum between 2001 and 2006¹⁰;
- 19% of professional migrants arriving in Australia during 2004-05 were computing professionals.
- According to the ABS and DEEWR there were approximately 393,900 people¹¹ were employed in ICT related positions in August 2008. Nearly 90 per cent of these people were employed full time. Of this, males represented 80%.



⁴ ABS, Cat No 8126.0: Information and Communication Technology 2006-2007, Oct 2008

⁵ Roy Morgan Research, Single Source Data, Sep 2008

⁶ <http://www.austrade.gov.au>

⁷ <http://www.innovation.gov.au>: A proposal to create an ICT economic studies institute

⁸ Australian Bureau of Statistics (ABS) – Cat. No.5259.0: ICT Satellite Account 2002–03; released March 2006.

⁹ Department of Foreign Affairs and Trade (DFAT) ICT Trade Data, analysis consistent with ABS Cat. 5368.0, August 2008.

¹⁰ OECD, Compendium of Productivity Indicators, 2008, Table A6

¹¹ ABS and DEEWR Trend data- 2008

Verticals anticipated to enjoy 6-7% CAGR over 2008-2011 includes Educational Services, Healthcare, Transportation, with Energy & Utilities and Communications also estimated to grow at CAGR of 5-6% over the period.

(Source: WITSA, Digital Planet, 2008)

Market Environment

Australian ICT sector remains diverse and fragmented. It can be characterised as follows:

- Large players (mostly multi-national, excluding the carriers) who are generating the bulk of revenues;
- Smaller companies (mostly domestic) who are generating innovation and exports;
- A broad (and becoming broader) product spectrum from software and media content to electronics to electronics manufacturers;
- Telecommunications generating > 40% of the ICT industry's revenues;
- Many industry stakeholders, with numerous industry associations, state & federal policy formation groups and research institutions.

Strong Demand in Vertical Markets Driving Growth of ICT

ICT is a major contributor to the Australian economy as illustrated by the data set out above, the growth of the industry is directly/indirectly affected by or dependent on the key industry verticals.

- **Healthcare**- Spent \$2.06 billion on ICT in 2007, Australia is amongst the most progressive countries in the eHealth sector, this has facilitated significant advancements through the development and application of products and services in areas such as management software, telemedicine and online data services.
- **Banking and Finance**- The use of ICT and the internet in particular, has had a substantial influence on the finance sector and reshaped the competitive scenario. Financial institutions tend to adopt the most advanced technological solutions and use it to improve the quality of service for their customers¹².
- **Education**- The Australian e-learning market is totally relying on ICT products and services. Online courses are being provided more widely in the tertiary sector and ICT is central to research as well as online teaching of domestic and international students. International education is a major export industry for Australia, with economic benefits estimated at more than \$4 billion per year.
- **Transport and Logistics**- Australia has realised the need to manage traffic and make better use of existing road infrastructure and is now an exporter of traffic management systems. Recent advances in transport and logistics include the use of e-business applications to enhance customer expectations of reliable delivery, and there is now greater emphasis on tracing and tracking loads.
- **Mining and Resources**- The mining industry is becoming increasingly more efficient by using developments in technology. Software developed for the mining industry is a particular strength, with over 60 per cent of the world's mining operations utilising software developed by Australian companies¹³.
- **Government**- The government is now adapting a more connected approach to service delivery which means they will become more efficient and will deliver an even more coordinated and citizen-driven focus to the government's e-government initiatives.

¹² <http://www.asocio.org>

¹³ <http://www.asocio.org>

Building and maintaining a sustainable and world-class ICT workforce and ICT skills base is necessary to meet the current and future needs of the economy and ensure that Australia continues to achieve strong productivity, economic and social benefits from the ICT sector

More than 15 million people were employed in the ICT sector in OECD countries in 2006, 5.5% of total OECD business sector employment. In Australia, ICT employment accounts for nearly 5.5% of total Full Time Equivalent employment, more than many other Australian industry sectors, including Mining; Electricity, Gas and Water Supply; Banking and Finance; and TV, Radio, Media¹⁴.

ICT skills are an important contributor to growth and they are spread widely across the economy. However, a decrease in skilled workers in key industry sectors remains a real threat to Australia's economic prosperity.

Despite current economic slowdown and hiring freezes, the demand for ICT professionals still remain solid. The recent research from the Australian Computing Society has estimated that the ICT shortage gap will grow to 14,000 by 2010 and will continue to reach 25,000 in 2020.

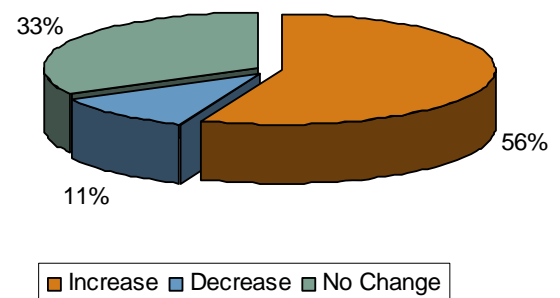
Three key measures to ease the growing skills gap and maintain economic prosperity of the ICT sector suggested by ICT industry experts:

- **Attract**→ Increasing or maintaining migration levels
- **Retain**→ Reducing ICT professionals migrating overseas for employment
- **Increase**→ local graduate numbers by 12.5 percent per annum¹⁵

Recent Trends

- A recent Manpower survey shows that 89% of ICT employers don't believe the current economic downturn is impacting their hiring plan¹⁶.
- Manpower research also shows 48% of ICT employers continue to find sourcing IT professionals difficult¹⁷.
- 80% of IT professionals are satisfied with their current job but 39% are intending to change jobs in the next 12 months*.

Hiring Intention- ICT Industry



* Please see [Insights into IT professionals \(Australia\)](#) for a detailed analysis on IT professionals

¹⁴ The Australian Computer Society: The ICT Industry Report, January 2008

¹⁵ <http://skillinfo.gov.au>

¹⁶ Raw data obtained from Manpower Employment Outlook Survey Q2 2009

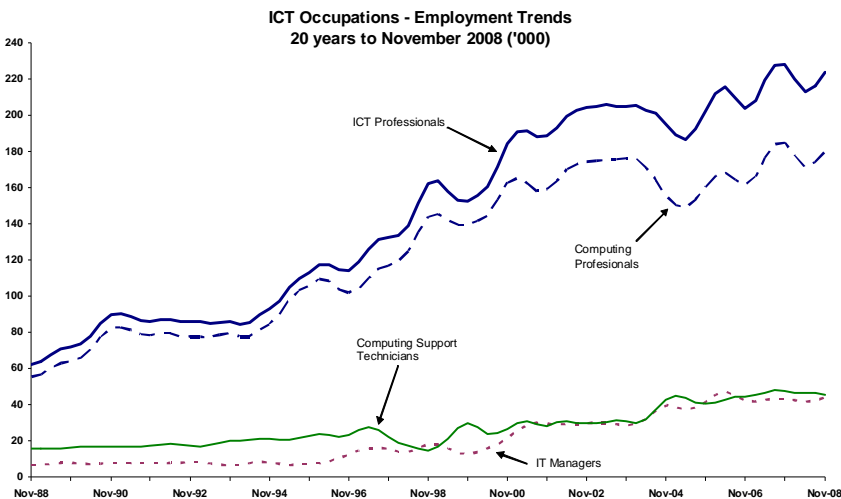
¹⁷ Raw data obtained from Manpower Global Talent Shortages Survey 2009

ICT Employment Trends

Over the past 20 years, employment in ICT occupations has shown long-term growth. In November 2008, approximately 393,900 workers were employed in ICT occupations¹⁸, representing 3.5% of the total Australian workforce. Strong long-term growth in employment of ICT Professionals is evident (see figure 1) – 61,600 new jobs or growth of 38% (3.3 per cent a year) in the ten years to November 2008 - even though there has been relatively modest growth in overall ICT over the past six years with most of the net growth occurring between 2006-2007. However, ICT professional employment fell over the last year- down by 4700 or 2.1 per cent¹⁹ resulted from the recent economic downturn.

Prospects for ICT labour market are linked to Australia's overall economic and employment growth prospects, Australia is facing a widening gap between the demand for ICT skills and the supply of qualified ICT professionals. Further growth in employment in ICT occupations is expected to continue in the next five years and this will increase the demand for ICT professionals- at a time when the supply of qualified graduates is expected to be considerably lower than at present.

Trends in ICT Employment- past 20 years



Source: ABS Labour Force Survey- DEEWR Trend Data



¹⁸ ABS Labour Force Survey- DEEWR trend data

¹⁹ DEEWR- ICT Labour Market Indicators, February 2009

Key ICT Labour Market Indicators

- Of total employment in ICT occupations, 223,700 workers were employed as ICT Professionals (Computing Professionals and IT Managers) and 43,900 were employed as Computing Support Technicians²⁰.
- ICT employment is strongly concentrated (over 70 per cent) in five industries: Property and Business Services (37.2 per cent); Communication Services (12.8 per cent); Government Administration and Defence (7.7 per cent); Finance and Insurance (6.7 per cent) and Manufacturing (6.7 per cent).
- New South Wales has a dominant position in the Australian ICT labour market. The state had 69,100 employed Computing Professionals, in annual average terms, over the year to November 2008, comprising 39.6 per cent of the total Australian Computing Professional workforce²¹.
- Net migration of ICT professionals increased sharply in the past decade, this was driven by the net migration of Computing Professionals, which reached 6380 in 2007-2008²². In contrast, net migration for IT Managers has been quite small at less than 500 throughout most of the past decade.
- Over the year to January 2009, the ICT Vacancy Index (DEEWR) fell by 53.6 per cent to around 13,900 vacancies. The recent sharp decline in the level of ICT vacancies is consistent with subdued demand for new recruitment in ICT by employers in the present environment.²³
- In January 2009, the largest number of ICT vacancies were in New South Wales (6,402 or 53.2 per cent of the Australian total of 12,024), followed by Victoria (2970) and Queensland (1458)²⁴. However, ICT vacancies fell markedly in all States of Australia between January 2008 and January 2009.
- Employment outcomes (percentage in full-time employment) for Electronic Engineering/Computing Engineering and Computing Science improved in 2007-2008 (89.1 per cent²⁵), but remain below the average for all graduates.

Conclusion

ICT is a major driver of Australia's economic growth and a key productivity enabler for other industries. In 2009, the outlook for the ICT industry has weakened with the turmoil in the world economy. However, no economic recession will last forever and general growth is still continuing in some markets and products, as well as demand for ICT professionals- companies should utilise slowdown in the economy as time to upskill with quality professionals to address the challenges of increasing efficiencies.

Over the past 20 years, employment in ICT occupations has shown long-term growth. Further growth is expected to continue in the next five years and it would not be heavily impacted by the economic downturn as the prospects for ICT are linked to Australia's overall economic and employment growth prospects.

²⁰ ABS Labour Force Survey- DEEWR trend data

²¹ ABS Labour Force Survey- DEEWR trend data

²² ABS Labour Force Survey- DEEWR trend data

²³ DEEWR Vacancy Report and trend ICT vacancy counts

²⁴ DEEWR Vacancy Report and trend ICT vacancy counts

²⁵ DEEWR- ICT Labour Market Indicators, February 2009

About Manpower Inc.

Manpower Inc. (NYSE: MAN) is a world leader in the employment services industry; creating and delivering services that enable its clients to win in the changing world of work. Celebrating its 60th anniversary in 2008, the US\$22 billion company offers employers a range of services for the entire employment and business cycle including permanent, temporary and contract recruitment; employee assessment and selection; training; outplacement; outsourcing and consulting. Manpower's worldwide network of 4,400 offices in 82 countries and territories enables the company to meet the needs of its 400,000 clients per year, including small and medium size enterprises in all industry sectors, as well as the world's largest multinational corporations. The focus of Manpower's work is on raising productivity through improved quality, efficiency and cost-reduction across their total workforce, enabling clients to concentrate on their core business activities. Manpower Inc. operates under five brands: Manpower, Manpower Professional, Elan, Jefferson Wells and Right Management. More information on Manpower Inc. is available at www.manpower.com or www.manpower.com.au.

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