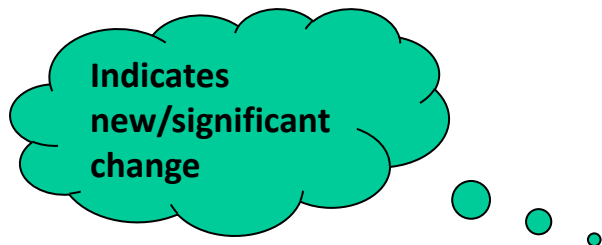


New Zealand ICT Tertiary Education & Job Series December 2011

garry.roberton@wintec.ac.nz

Note:



Insights

➤ Tertiary ICT Education:

- Enrolments increased approx. 10% on 2010 EFTS for the Institutes of Technology & Polytechnics [ITPs] [based on data collected by CITRENZ]

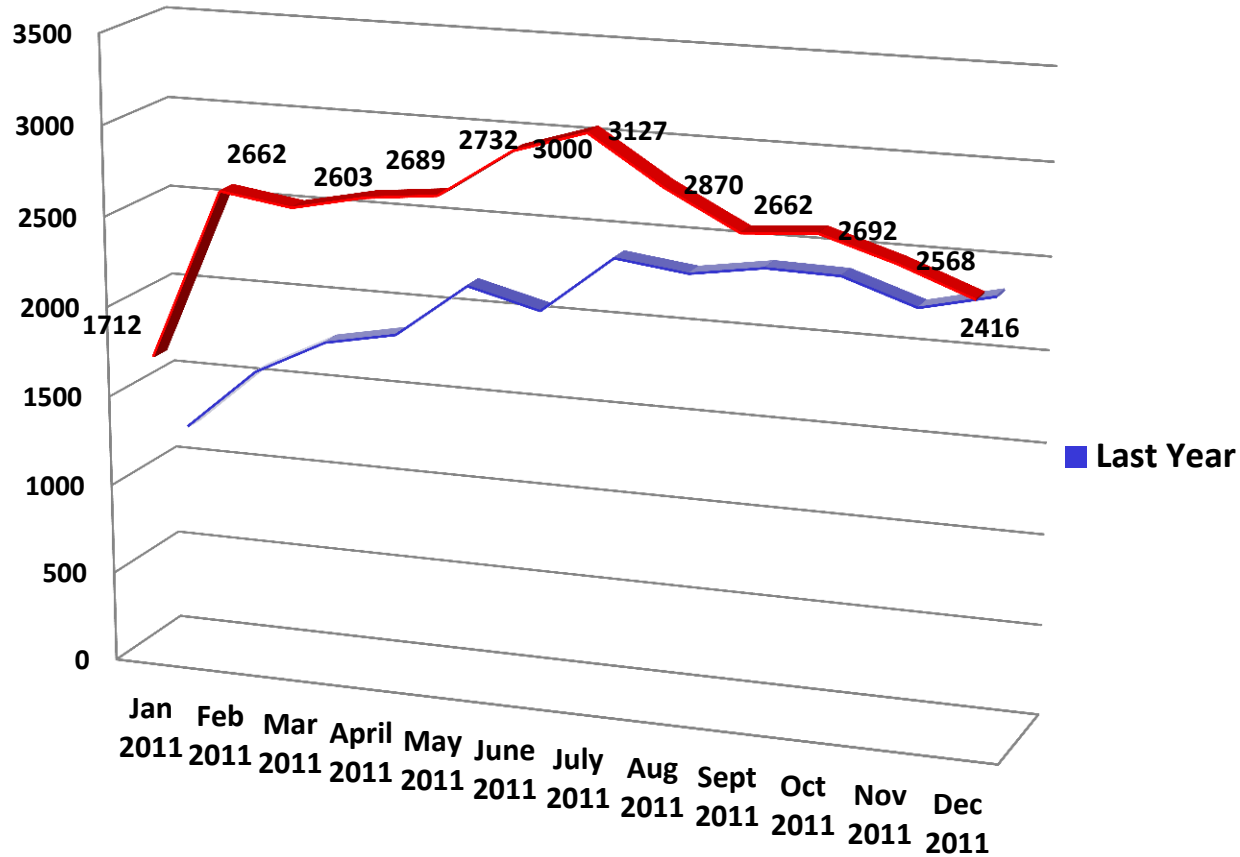
➤ Jobs [Last month ()]:

- NZ Seek ICT jobs adverts for the month of December;
 - All NZ fell by 6% (-5%) (Up just 3.4% on December 2010)
 - Auckland down 9.4% (-2%), Wellington down 7.4% (-1%) and Canterbury up a significant 13.3% (-30%)
 - Waikato experienced a 58% increase (-58%)
- Trademe (all NZ) no change (-6%) (Up 12.4% on December 2010)

Insights

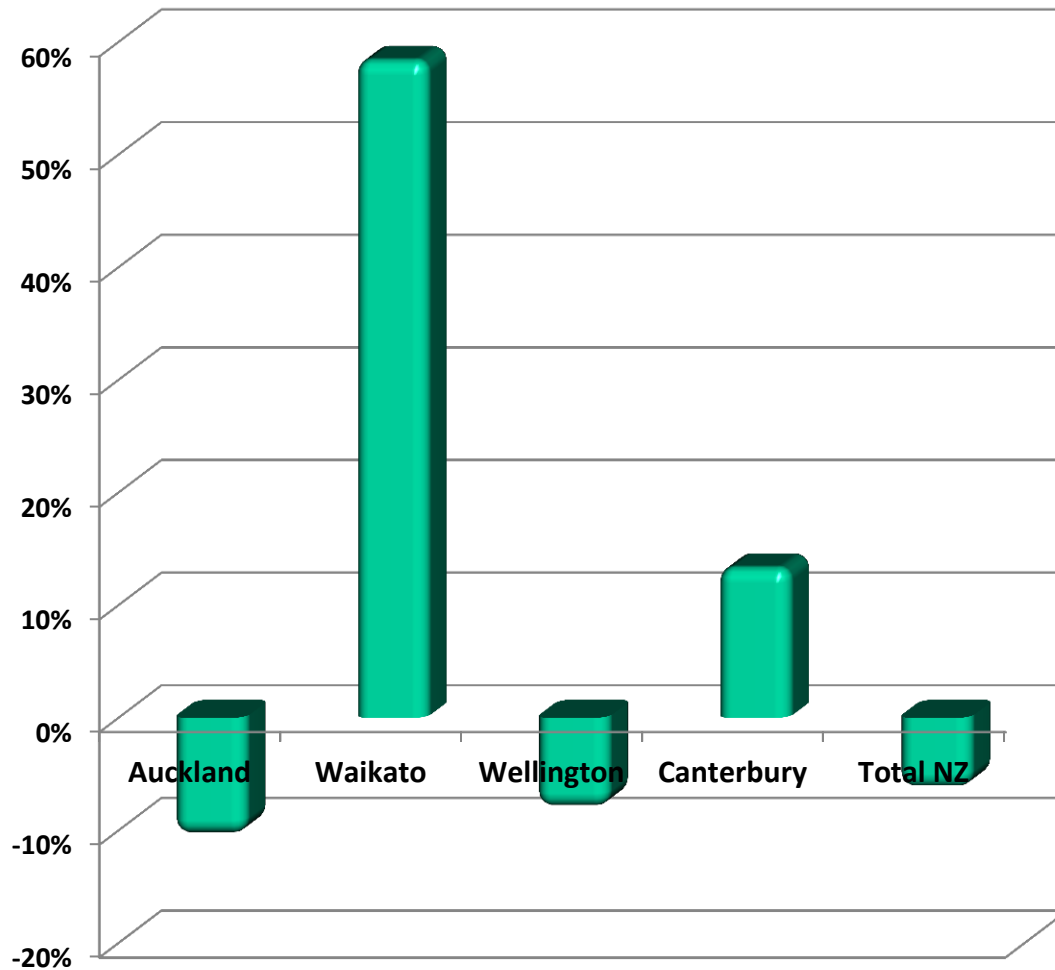
- **Seek ICT job adverts for December 2011 have decreased 23% from a peak of 3,127 in July this year**
- **However, Seek ICT job advert trends for January to December 2011;**
 - Increased **41%** for all NZ
 - Increased **49%** for Auckland
 - Increased **24%** for Wellington
 - Increased **67%** for Canterbury
 - Increased **36%** for Waikato

Seek IT Job Trends NZ 2011



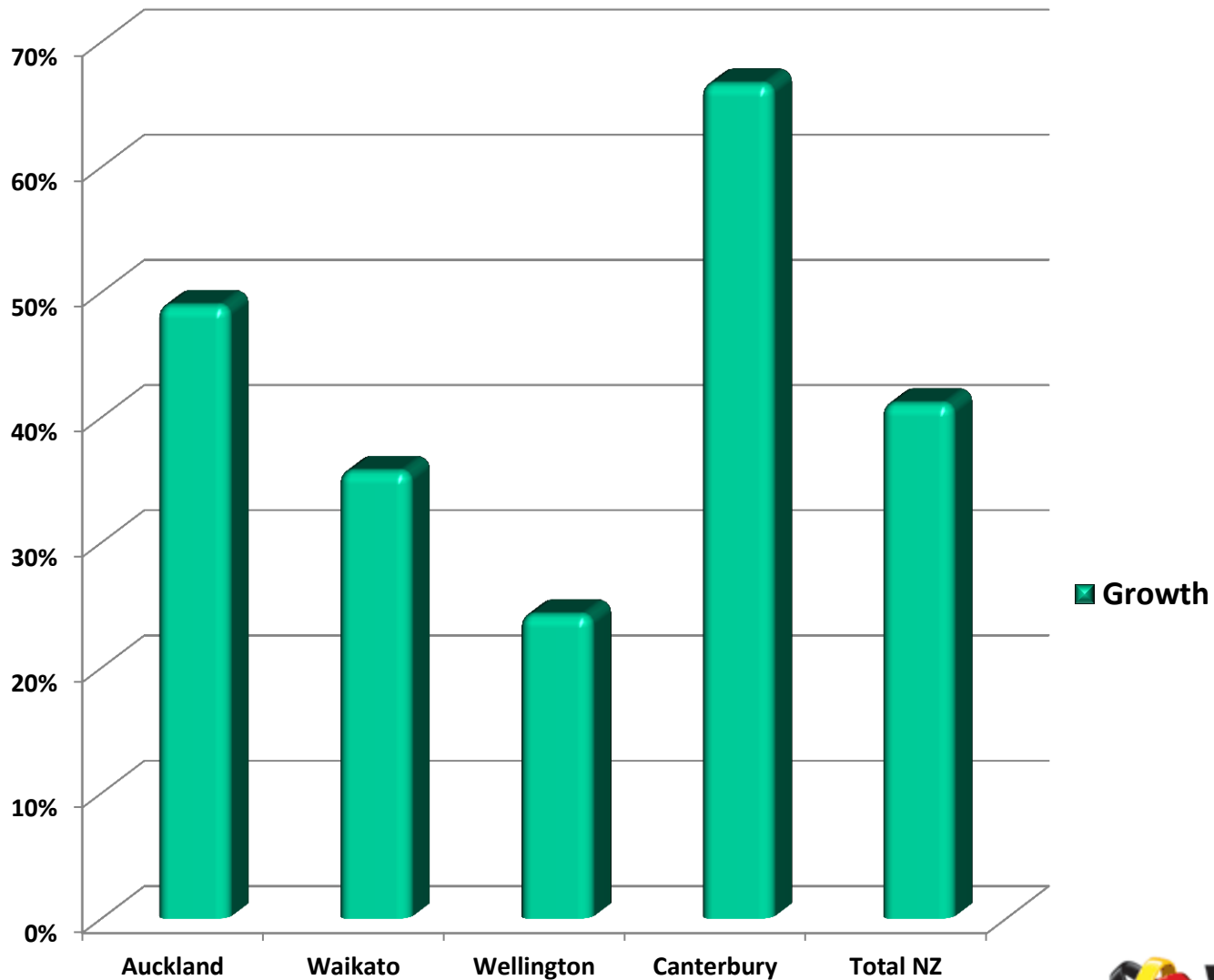
Source: [Seek ICT](#) (Accessed December 2011)

Seek ICT Job Adverts Monthly Change for December 2011



Source: [Seek ICT](#) (Accessed December 2011)

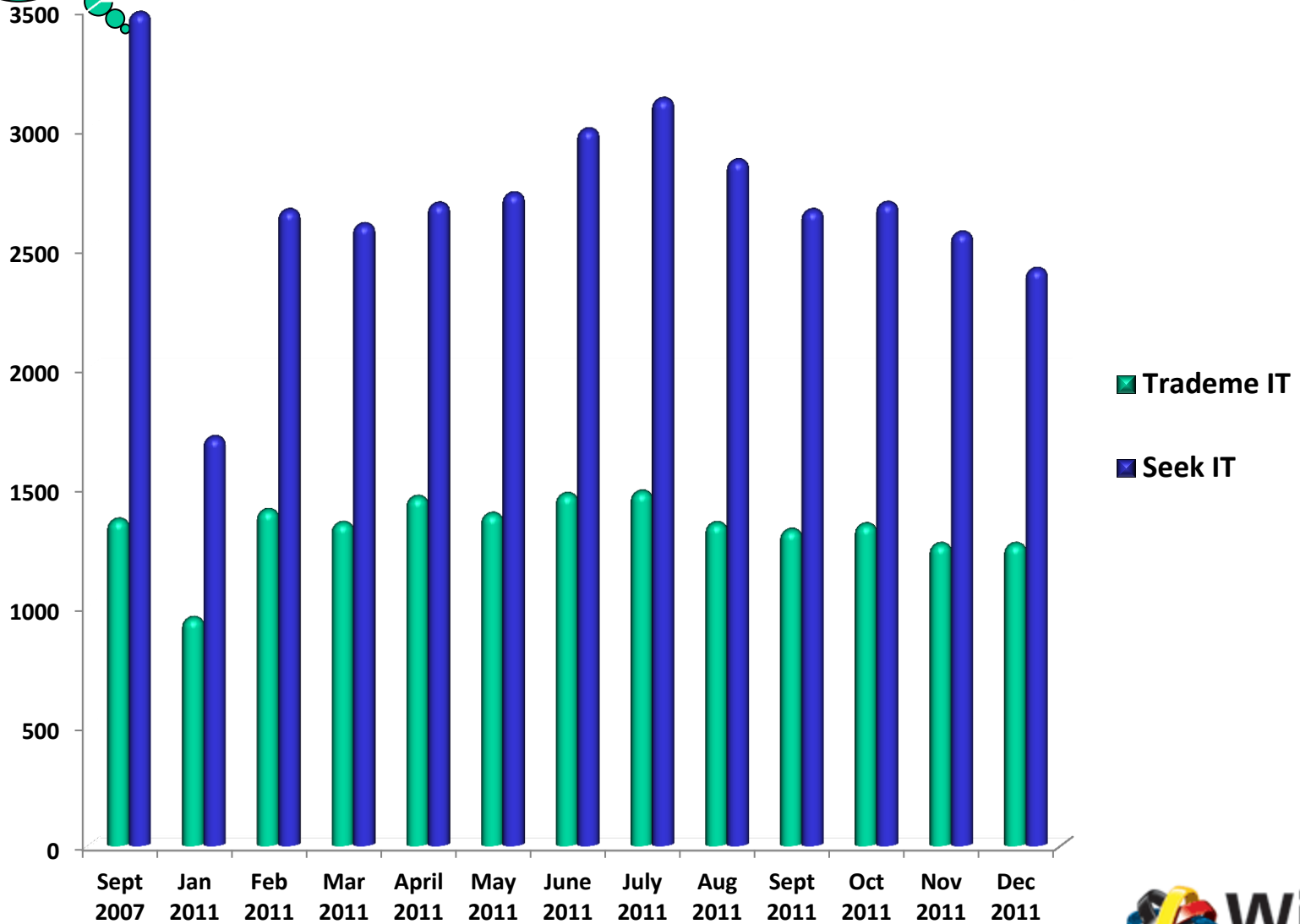
Seek ICT Job Advert Trends Year to December 2011



Source: [Seek ICT](#) (Accessed December 2011)

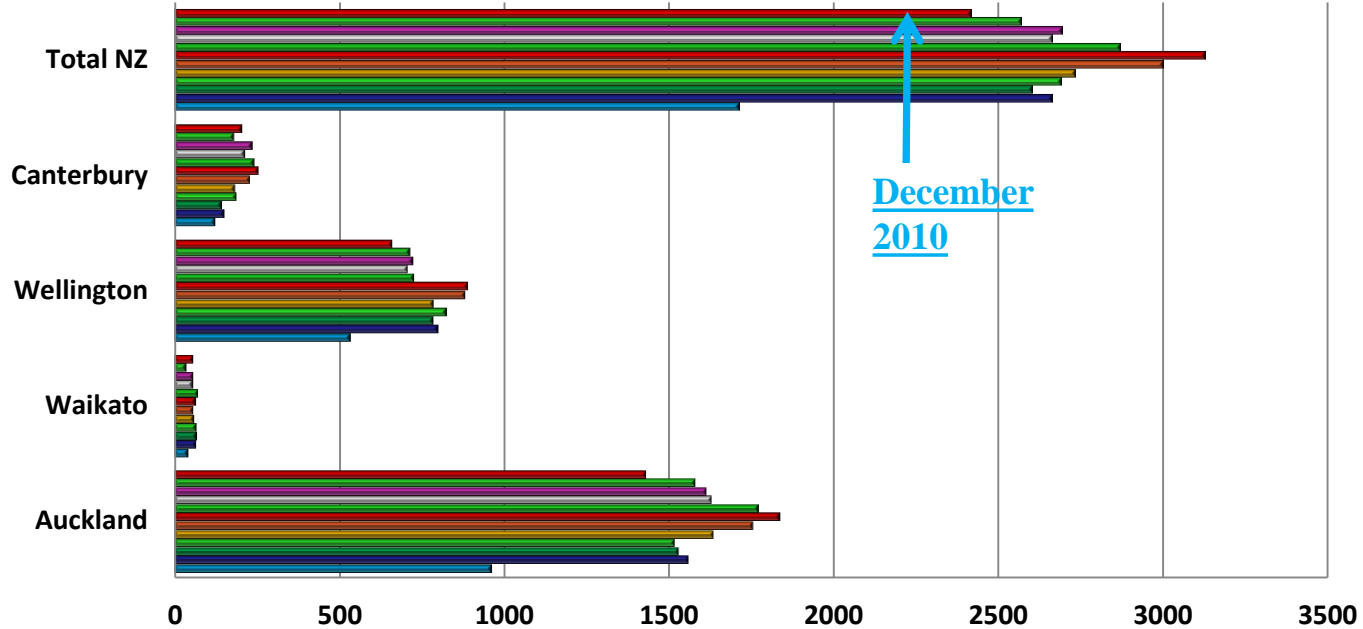
ICT Job Adverts NZ Seek & Trademe

2007 Peak
before
recession



Source: [Seek ICT](#) (Accessed December 2011)

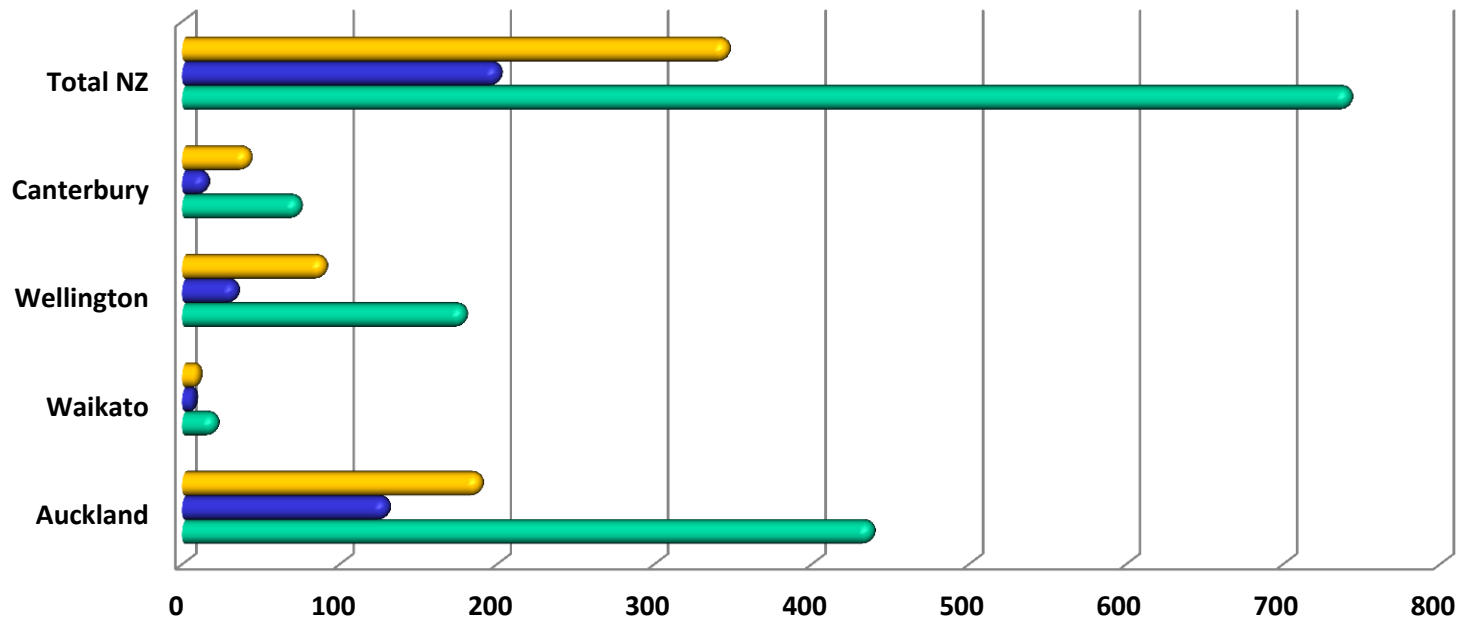
Seek ICT Job Adverts Year to December 2011



	Auckland	Waikato	Wellington	Canterbury	Total NZ
■ Dec-11	1430	57	661	205	2416
■ Nov-11	1579	36	714	181	2568
■ Oct-11	1612	57	723	236	2692
■ Sep-11	1629	56	707	214	2662
■ Aug-11	1772	72	727	242	2870
■ Jul-11	1837	65	891	255	3127
■ Jun-11	1751	57	880	229	3000
■ May-11	1635	59	785	184	2732
■ Apr-11	1516	67	825	188	2689
■ Mar-11	1530	68	785	144	2603
■ Feb-11	1559	66	800	151	2662
■ Jan-11	960	42	532	123	1712



Seek ICT Job Adverts by Industry Certification December 2011

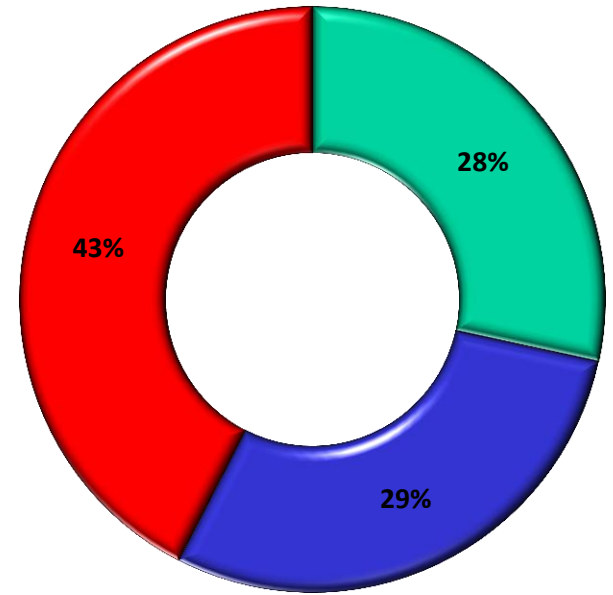
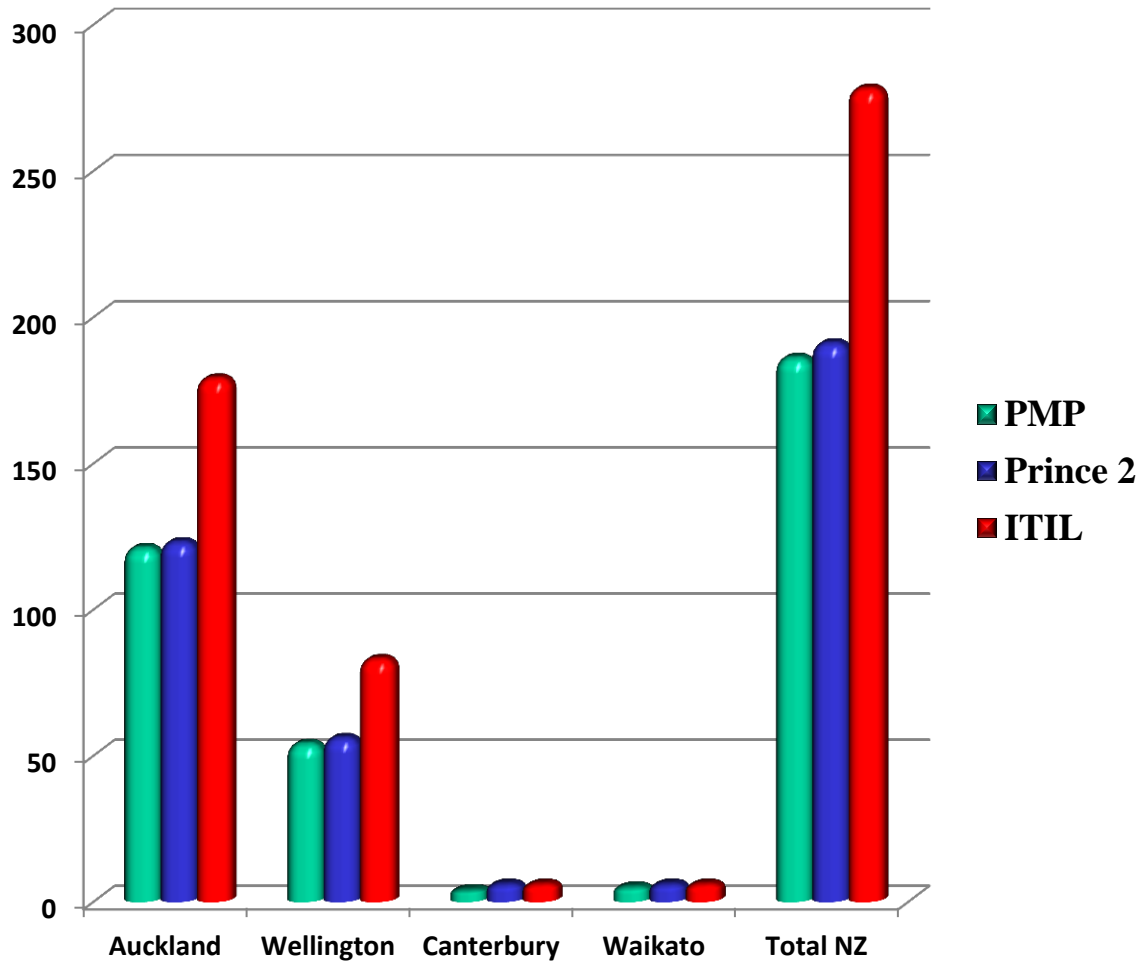


	Auckland	Waikato	Wellington	Canterbury	Total NZ
■ Microsoft	189	10	90	42	346
■ Cisco	130	7	34	15	201
■ Linux	438	21	179	74	742

Note: All 3 certifications decreased for all NZ, as follows:

- Microsoft 15%
- Cisco 15%
- Linux 5%

Seek ICT Job Adverts Filtered by Management Certifications

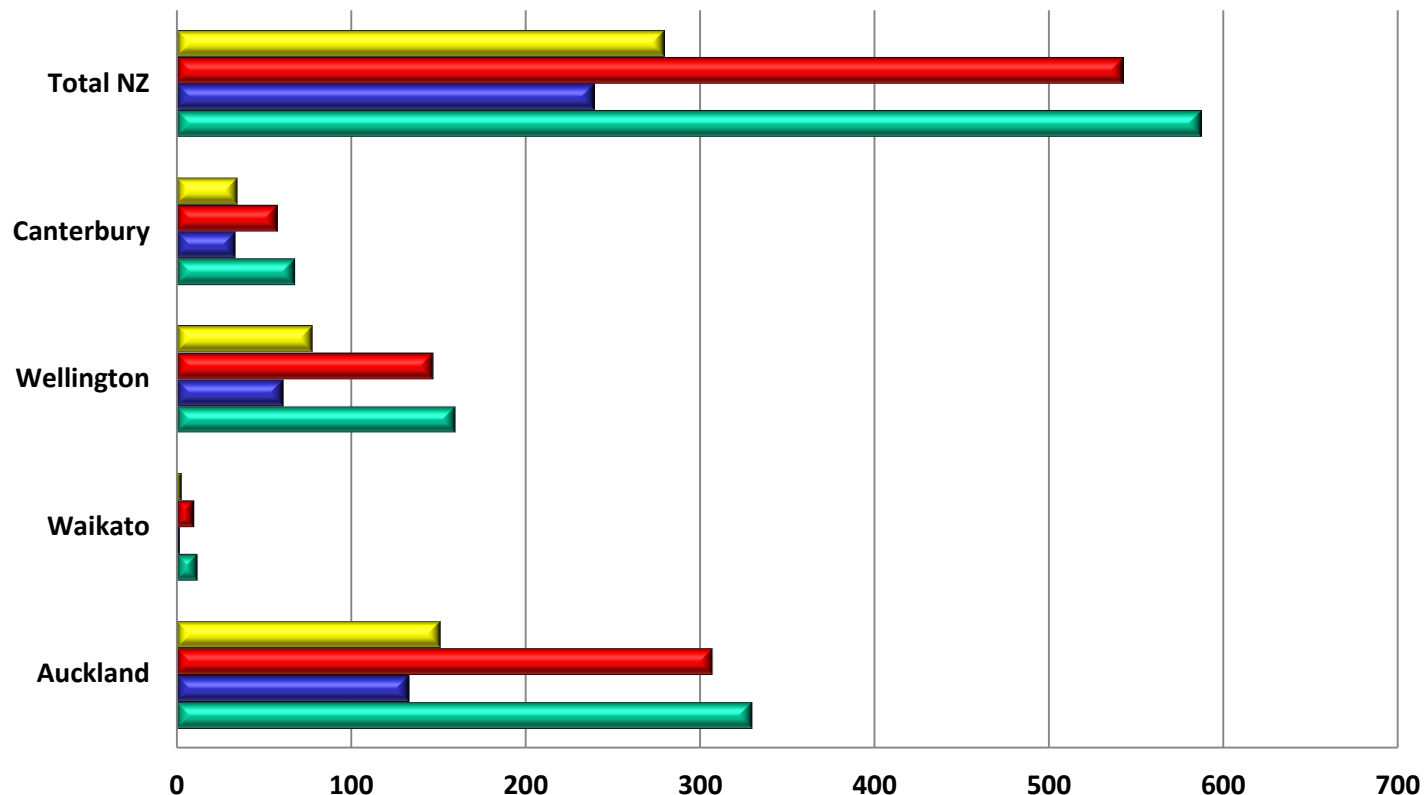


Note: All 3 certifications decreased for all NZ, as follows:

- PMP 10%
- Prince 2 2.7%
- ITIL 12.6%

Source: [Seek ICT](#) (Accessed December 2011)

Seek ICT Job Adverts by Programming Language December 2011

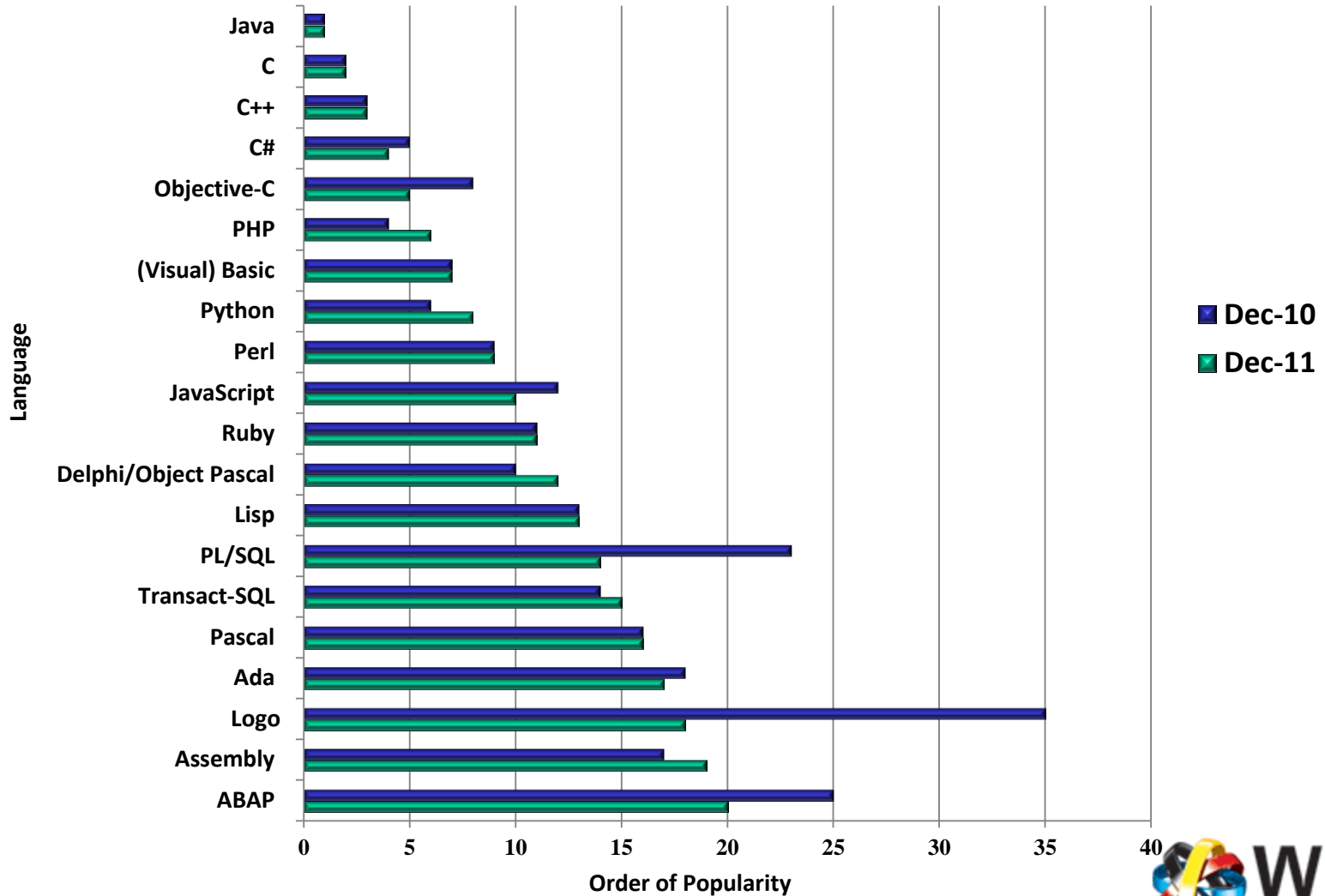


	Auckland	Waikato	Wellington	Canterbury	Total NZ
.NET	151	3	78	35	279
PHP	307	10	147	58	542
C#	133	2	61	34	239
Java	330	12	160	68	587

Source: [Seek ICT](#) (Accessed December 2011)

TIOBE [The Importance of Being Earnest] Programming Community Index for December 2011

*Java remains the No.1 programming language in the top 20



Source: [TIOBE](#) (Accessed December 2011)

TIOBE Programming Community Index Headline for December 2011

Headline: C++ about to be dethroned by C#?

- Observations [[TIOBE](#)]:
 - C++ consistently #3 since the beginning of the TIOBE index in 2001
 - Perl, Visual Basic and PHP have been at #3, but only for a few months in each case
 - C#, Microsoft's most active and evolving programming language, picked to become #3
 - However, Microsoft recently announced plans to revive C++ in favour of..... C#

Note: The TIOBE Programming Community index is an indicator of the popularity of programming languages. The index is updated once a month. The ratings are based on the number of skilled engineers world-wide, courses and third party vendors. The popular search engines Google, Bing, Yahoo!, Wikipedia, YouTube and Baidu are used to calculate the ratings

News Bytes

Top Nine Skill Sets IT Executives Hiring for in 2012 [\[IT Career News\]](#):


- **Programming and Application Development** - 61% plan to hire web and application developers, driven by continued explosive growth in the mobile market. Represents the largest year-over-year growth rate in a single skill set
- **Project Management [PM]** - demand greatest for PMs able to perform IT Business Analyst role [\[615 Project Management jobs currently advertised on Seek NZ\]](#)
- **Help Desk & Technical Support** - mobile devices add new dimension to IT help desk. Certifications that validate mobile computing skills in a popular operating system, like the MCTS; Windows 7 Configuration, can help leverage this demand to get hired
- **Networking** - increased demand for IT networking professionals fuelled in part by an uptick in virtualization and cloud computing projects. Looking to hire IT professionals with skills, certifications, and experience in VMware and Citrix [\[68 Citrix jobs currently advertised on Seek NZ\]](#)
- **Business Intelligence [BI]** - Increased demand for IT professionals with BI skills indicates investment in technology that provides access to real-time data for better business decisions. Noteworthy beneficiaries of the BI hiring increase include Microsoft SharePoint developers [\[76 Sharepoint jobs currently advertised on Seek NZ\]](#) and SQL Server BI Specialists [\[324 SQL jobs currently advertised on Seek NZ\]](#)
- **Data Centre Professionals** – increased demand for IT pros with skills in data centre ops & systems integration resulting from impact of organizations' increased focus on cloud and virtualization strategies in 2012.

News Bytes

Top Nine Skill Sets IT Executives Hiring for in 2012 [[IT Career News](#)]:

- **Web 2.0** – Web Developers set to capitalise as businesses look to engage consumers and gain a competitive advantage through online platforms and social networking campaigns. In demand skills include HTML, XML, CSS, Flash & JavaScript on front-end, and AJAX, PHP & .Net for back-end programming
- **Security** - Security remains top concern as the frequency, scope, and sophistication of cyber attacks continues to rise. IT execs. report actively seeking professionals with security and auditing skills, but finding it difficult to locate good talent
- **Telecommunication** - Increased demand for IT professionals with telecoms expertise as organizations continue to upgrade call centres and communication systems with the latest digital hardware and technology. Sought after telecoms skills include IP telephony, VoIP, and Cisco IP Call Centre

Computerworld – IT Job Space 2012? [[Monday Dec 12, 2011](#)]

- **Hottest skills** - Experienced software and web developers [.NET & Java developers] highly sought after in 2011 expected to continue next year
- Companies investing in SharePoint to improve internal collaboration and intranets, but demand for SharePoint experienced workers has outweighed the supply [Comrie, Potentia MD]
- Cont. next slide 

News Bytes

Software Product Growth [Computerworld – IT Job Space 2012? [Monday Dec 12, 2011]]

- Xero achieved a 185% growth in revenue in 2011 - hiring 50 to 100 new IT workers over the next two years
- Software product companies like Xero looking for NZ-based product managers, marketers, testers, and technical documenters - staff who have an understanding of technology, as well as business or marketing skills
- Xero sourcing much of its IT talent from the UK. due to shortage of candidates

[Rod Drury, CEO]



roddrury Rod Drury

Still desperate for mobile web and front end developers

[xero.com/about/careers/...](http://xero.com/about/careers/) Come learn some new stuff @Xero

[Tweeted 13 Dec]

2 hours ago

Retweeted by ComputerworldNZ

Skill Shortages

- Definitely no over supply of skilled workers this year
- Technology graduates with 2 to 3 years experience lured away, mostly to Australia and the UK, with the prospect of higher wages and more interesting work opportunities
- NZ companies need to engage technology graduates before they go overseas. Companies need to get more of a presence on campuses [Martin Barry, Absolute IT co-director]

NZ Department of labour

DoL Report - NZ's skill challenges over the next 10 years:

- Strong growth (averaging 6% each year) is forecast in the demand for people with higher-level vocational qualifications across a wide range of occupations
- However, the number of employed people with vocational qualifications is forecast to grow by only 0.7% per year
- This is because of four factors:
 - high levels of net outflows through migration (mostly to Australia)
 - people retiring are as likely to hold a vocational qualification as new entrants to the workforce
 - people tend to acquire their first vocational qualification at a relatively older age, with the median age being 25 to 29 years (compared to 20 to 24 years for degree-holders), and
 - the growth in vocational completions has come from a low base following the decline of vocational training from the mid-1980s to mid-1990s as the economy restructured
- Immigration is a significant component of NZ's labour supply. Migrants, who can add skills, innovation and capital to the economy, will be harder to attract as ageing in the OECD increases competition for the same migrants

NZ Department of labour

Immigration NZ Essential Skills in Demand Lists: Long Term Skill Shortage List (LTSSL) [Effective on and from 5 December 2011] [Search Result Truncated]

<u>Occupational Group</u>	<u>Occupation - Occupations are listed by ANZSCO (Australian and New Zealand Standard Classification of Occupations) code.</u>	<u>Long Term Skill Shortage List Requirements - Qualifications must be comparable to the standard of the New Zealand qualification listed. Also see Note 1 at the end of this list.</u>	<u>In order to claim bonus points for qualifications in an area of absolute skill shortage under the Skilled Migrant Category, applicants must meet the following specifications.</u>
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ICT, Electronics and Telecommunications	Multimedia Analyst (261211), Web Developer (261212), Analyst Programmer (261311), Developer Programmer (261312), Software Engineer (261313), Software Tester (261314), Software and Applications Programmers nec (261399), Database Administrator (262111), ICT Security Specialist (262112), Systems Administrator (262113), Computer Network and Systems Engineer (263111), Network Administrator (263112), Network Analyst (263113), ICT Quality Assurance Engineer (263211), ICT Support Engineer (263212), ICT Systems Test Engineer (263213), ICT Support and Test Engineers nec (263299), Telecommunications Engineer (263311),	Bachelor degree (Level 7) specialising in Information Technology (Computer Science, Information Systems or other Information Technology) OR Bachelor degree (Level 7) specialising in Electrical and Electronic Engineering and Technology.	Bachelor degree (Level 7) specialising in Information Technology (Computer Science, Information Systems or other Information Technology) OR Bachelor degree (Level 7) specialising in Electrical and Electronic Engineering and Technology.
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[Click here to search ITSSL & LTSSL](#)

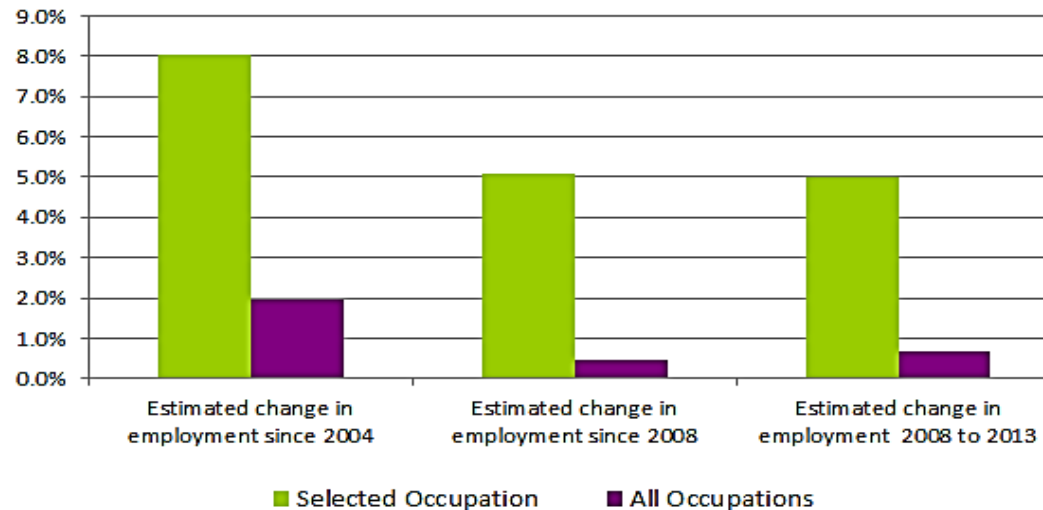
NZ Department of labour

SkillsInsight [SIT] Tool [Accessed 13 Dec 2011]

Link to SkillsInsight Tool (SIT) [XLS, 3MB]

Demand	Selected Occupation	All Occupations
Estimated employment 2009 (annual average)	36,784	2,187,625
Estimated change in employment since 2004	8.0%	1.9%
Estimated change in employment since 2008	5.1%	0.5%
Estimated change in employment 2008 to 2013	5.0%	0.7%

Employment of '213 Computing Professionals' reached 36,784 in 2009. Growth in employment over the past 5 years has been above average at 8.0%. Over the period 2008-2013, growth in this occupation is expected to be above average at 5.0%.



Conclusion

- Programming Languages
 - Java remains No.1 in the TIOBE top 20
- Education:
 - Numbers of suitably qualified and/skilled personnel not expected to meet NZ's growing demand in the foreseeable future
- Jobs:
 - Seek ICT job advert trends for January to December 2011 increased 41% for all NZ
 - Experienced software and web developers [.NET & Java developers] highly sought after in 2011 – top skill set sought by IT Executives next year, 2012

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