Comparing XVI’s Ideal Jobs and Needed Skills to Jobs in Demand.

Industry Report

Team XVI

Prepared by Natalie Cursio, Vanessa Cotterell, Oliver Black, Corbin Peever and Connor Dendle.

Summary:

This report discusses the demand of skills both specialised and generic and how they compare the Australian and New Zealand employers demands. We will also look at how Team XVI’s group members ideal jobs compare to Australian and New Zealand employer demands. We will be comparing our team’s jobs and skills to a research done by Labour Insight Jobs (Burning Glass Technologies).

The information presented in this report has been gathered from secondary sources including Labour Insight Jobs (Burning Glass Technologies).

Contents:

1: Groups Ideal Jobs.

1.1: Introduction.

1.2: Groups Ideal Jobs.

1.3: Jobs Ranked by Demand.

2: Required Skills.

2.1: Generic.

2.2: Specialised.

3: How Do the Skills and Ideal Job Rank by Demand?

3.1: Generic.

3.2: Specialised.

3.3: Top Generic Skills.

3.4 Top Specialised Skills.

4: Our View on Ideal Jobs.

4.1: Has Our Ideal Jobs Changed.

4.2: Why/Why Not.

5: References.

**1:**

**1.1: Introduction:**

**1.1.1 Purpose:**

The purpose of this report is to investigate how Team XVI’s current ideal jobs and the required skill sets both generic and specialised rank by demand from employers around Australia and New Zealand. This report will analyse data from secondary sources and a study done by Labour Insight Jobs (Burning Glass Technologies) and will discuss whether our ideal jobs have been impacted by the research done and how many of the skills needed for our jobs are in demand.

**1.1.2 Background:**

With the rise of IT specialised jobs it’s important to have the right skills necessary to be a better candidate for any job you may find ideal, with the findings in this report we can see what skills we will need and how our skill we have rank by demand from employers. We can also see how our ideal jobs are ranked by demand. The research used was gathered by Labour Insight Jobs (Burning Glass Technologies). Secondary sources were also used to gather information on the required skills recommended by employers for our ideal jobs.

**1.2 Groups Ideal Jobs:**

Despite it being the most demanded job withing the last 12 months in the IT industry, Solutions Architect has not been chosen as an ideal job by any group members.

The most common within the group was Software Engineer. Oliver, Vanessa and Connor all chose Software Engineer or some branch of it. Corbin selected Systems Administrator and Natalie chose UX Designer.

**1.3 Jobs Ranked by Demand:**

Out of the top 25 jobs demanded the highest demanding Job on our team was Systems Administrator. Systems Administrator came at the 8th most demanded job with over 681 job openings in Australia and New Zealand during the Labour Insight Jobs (Burning Glass Technologies) research done between Mar. 24, 2017 – Mar. 23, 2018. The most common ideal job within the team.

Software Engineer was the 11th most demanded job.

UX Designer was 21st most demanded job during the research period while IT Specialist was not featured on the top 25 demanded jobs.

**2:**

**2.1 Generic Skills:**

Generic skills are mostly similar between jobs whether it is in the IT industry or something like Fast Food. The most common generic skill was communication. Communication skills were featured as a generic skill across all the ideal jobs within the group.

Software Engineers required both strong communication skills and the ability to work effectively with a team. Software Engineers also need to have excellent time management, be passionate and be logical and able to problem solve. (Indeed 2020)

UX Designers also need to have strong communication skills. Curiosity and empathy also allow UX Designers to create products that appeal to the customers’ needs. UX Designers need research skills to help improve their appeal to the consumers to create more attention to their product.

Systems Administrators need to feature the ability to work great under pressure, have good attention to detail and strong teamworking skills. Organisation and time management skills are essentials in most IT jobs but are needed specially here as well as good leadership.

**2.2 Specialised Skills:**

Specialised skills are a big factor in the IT industry. The required skills can create easy entry level jobs but also creates jobs only available to the best of the best, creating a massive but hard to get into industry. It can take decades to get to a high position in the IT world as many jobs require years of experience in big companies.

Software Engineer is a broad title. Many companies hire different engineers who have different skills. Software Engineers are required to have an extensive knowledge in usually multiple coding languages to appeal to more employers. C++ or similar languages is one of the common skills looked for in Software Engineers, but other languages also include HTML, PHP, Java, JavaScript, Perl and Python. (Indeed 2020)

UX Designers need to possess strong C/C++ Programming skills, and Object-Oriented design skills. UX Designers also need to feature a good understanding of common UI design patterns such as MVC and MVVM.

Systems Administrators need to feature strong technical skills as well as analytical and problem-solving skills. System Administrators should also have Networking Skills, the ability to make and keep contacts is vital for a system admin. Tertiary qualification in Information Technology or Engineering discipline is desirable.

**3:**

**3.1 Generic Skills Demand:**

The most prominent generic skill must be communication skills. Out of over 120,000 job listings, communication skills were the most common declared skill with almost 45,000 of the job listings including it in the skills. Since all the ideal jobs featured this skill it shows a high demand for it. Another common skill listed in our Ideal jobs was Problem solving which plays a big role in almost all the ideal jobs, problem solving is the 2nd most desired skill as many IT related jobs are just problem solving. IT companies are solving problems using the Technology available to them and creating their own technology and software to solve problems you may have not known even existed. Teamwork/Collaboration is an important skill, Software Engineers are often working in teams both small to large to create world changing applications. Teamwork is the combined action of a group, especially when effective and efficient. This can be useful as being able to co-operate with your team means work is done well and efficiently. UX Designers need to be creative, this allows them to create new original designs the appeal to the consumers, this can and will set the company apart from others giving another reason to use their product over others, this creates a high demand for this skill at 9th place out of the top 25 skills. Leadership skills are 11th on the most demanded skills and are required in a lot of jobs to gain promotions or high-level employment. Systems Administrators will find that Leadership skills would be a great bonus on their resume to gain employment. Troubleshooting is a skill would help any ideals job is it allows people to find and maybe solve most issues they may encounter. This skill is number 6 out of the top 25 making it a skill that would create more demand for you to any employer.

**3.2 Specialised Skills Demand:**

The most popular Specialised skill seen within the group is JavaScript, used by a lot of companies, it creates a high demand for its uses. Software Engineers can and should learn JavaScript as it is most used within web pages to create a dynamic and interactive experience for users on said web pages. Every company wants a website, and that means almost every company wants someone who knows how to use JavaScript to create a unique experience for its customers when going to that company’s front page JavaScript is the 2nd most demanded specialised skill making it a must know for a lot of Software Engineers. JAVA is another popular skill desired by companies, coming it at the 3rd most popular specialised skill. JAVA is most popular due to its platform independence; this means that Java programs can run on many different types of computers. Being able to create programs that can run on almost any machine creates an extremely open market to their consumers as they can be sure it will be able to run on their machines. A skill common in both UX Designers and Software Engineers is Microsoft C#, this language is common and like many other languages. The video game industry is extremely large and is only getting bigger, C# being one of the most popular video game coding languages it is a must know for any Software Engineers looking to get into the Video Game Industry. C# is at 12th out of the 25 most demanded skills and will increase along with the Gaming Industry. Project management is the 5th most demanded Specialised Skill, being a skill with such a large demand it creates many opportunities for employment as a Systems Administrator.

**3.3 Top Generic Skills:**

A lot of generic skills are ideal to almost any employer, the ability to almost do anything of these would be useful in many situations and create more demand for your skillset, but some of the top skills not mentioned in the current ideal jobs skillsets were writing, mentoring and presentation skills. Mentoring is less of a demanded skillset in there ideal jobs as employers are usually looking for employees with the skillset ready, this way it can be cheaper and faster to create projects as you don’t have to train or pay someone to train/mentor an employee. Writing skills are not as required by employees such as a software engineer, as they are more required to code and create software rather than write reports and analyse data. This is the same as presentation skills, this is not required by employers as they do not need their employees hired to create for them to suggest or repeat there or their customers ideas.

**3.4 Top Specialised Skills:**

SQL is the most demanded specialised skill by employers, despite this none of the previous ideal jobs require this a skill. SQL is a language mostly related the creating and analysing databases related to websites, apps and games. Every company wants a website and almost every website needs a database. This creates a high demand for SQL proficient employees. Microsoft Windows is a skill that almost everyone should know, and although it is listed highly in the top 25 at number 4, no job listings or employees have stated Microsoft Windows in their skillset for software engineers, UX designers or system administrators. Microsoft Windows skills would allow an employee to navigate the operating system at higher speeds due to the common knowledge of binds such as Windows Key + E to open Windows Explorer. An employee skilled in Microsoft windows would know binds for almost every action increasing the work speeds by a drastic amount. I believe employers just expect many potential employees to already have some knowledge of the OS. Business management is the 7th most demanded skill by employers. However, the ideal jobs listed by the group are not associated with running a business or assisting with monitoring an organisation.

**4:**

Refer to BurningGlass.docx

**5: References**

Systems Manager:

* Annas Jan, 2017, *The 5 Most Important Skills You Should Look For In System Administrators*, QuickStart, Viewed July 10th, 2020,

<<https://www.quickstart.com/blog/the-5-most-important-skills-you-should-look-for-in-systems-administrators/#:~:text=%205%20Crucial%20Skills%20for%20a%20System%20Administrator,repertoire%20of%20a%20system%20administrator.%20The...%20More%20>>

UI Programmer:

* Rockstar Games, Publish Date Not Listed, *UI Programmer at Rockstar Games,* Rockstar Games, Viewed July 10th, 2020,

<<https://boards.greenhouse.io/rockstargames/jobs/4057605003#:~:text=%20SKILLS%20%201%20Strong%20C%2FC%20programming%20skills%2C,creating%20cutting%20edge%20video%20game%20experiences.%20More%20>>

Software Engineer:

* Indeed, 2020, *Software Engineer Skills: Definition and Examples,* Indeed, Viewed July 10th, 2020,

<<https://www.indeed.com/career-advice/career-development/software-engineer-skills>>

Data Source: Labour Insight Jobs (Burning Glass Technologies)