Emerging Jobs: Australia

The fastest growing jobs in the country

in Talent Solutions

Getting a signal through the noise of the job market

Of all the bright-eyed kids who started primary school this year, two thirds are predicted to start their working lives in a job that does not currently exist.¹

In fact, new jobs are emerging more rapidly than at any other time in history. It's not just a case of old jobs dying and fresh jobs being born, traditional roles are mutating and evolving into new hybrids before our eyes.

Jobs that sounded obscure a few years back – like customer success manager and experience designer – are suddenly commonplace today. As technology rockets forward so goes the job market, although often in ways we might not expect.

For HR and talent acquisition professionals this poses significant challenges. How do you hire for jobs that did not exist five years ago? How can you predict where the gaps in your workforce will be? How do you upskill and reskill your existing workforce to rise to the challenge?

Understanding the macro trends and how they shape the world is key to understanding what your own workplace may soon be looking for.

This is where LinkedIn data can help. Over nine million people in Australia have a LinkedIn profile – some three quarters of the working-age population. This enormous dataset evolves in real-time, giving organisations a powerful source of insight as they plan the future of their workforce.

The top five emerging jobs:

- 1 Customer Success Manager
- 2 Data Scientist
- ³ Full Stack Engineer
- 4 Cyber Security Specialist
- 5 Experience Designer

¹ Source: World Economic Forum: The Future of Jobs

This report has crunched LinkedIn's unique data from the last five years to identify the top up-and-coming roles and the skills needed for each.

It looks at what roles are on the rise, where the talent has come from, and where it resides today.

We hope this report will serve as a helpful resource that HR and TA teams can use to:

- Educate hiring managers and business leaders about the challenges and opportunities that exist in the Australian jobs market
- Reference in executive discussions to give a bird's eye view of the hiring marketplace
- Understand what skills to look for instead of job titles
- Glean insights into the nature of emerging roles and the individuals that occupy them



OUR METHODOLOGY FOR THIS REPORT:

How LinkedIn data reveals what's emerging

We looked at all LinkedIn members in Australia who included work experience on their profile.

We then grouped together the millions of unique, user-input job titles based on common job roles. This involved clustering job titles together.

For example, our category of 'machine learning engineer' includes user input titles such as 'machine learning software engineer' and 'machine learning engineer II.'

We then counted the frequencies of job titles that were held in 2013 and compared the results to job titles that were held in 2017.

Our 'emerging jobs' are the top five job titles that saw the largest growth in frequency over the five-year period.

Key Takeaways

01



LINKEDIN EMERGING JOBS REPORT AUSTRALIA

At a glance: Top takeaways from the data

Tech roles are bursting out of their silos

Tech roles are dominating the emerging jobs market, but not in the ways you might expect. Globally, tech talent is in hot demand, not just in the tech industry, but across all industries. In Australia, more and more businesses are shifting focus and resources to big data and digital products.

The rapid rise of roles like full stack engineer – the Swiss Army knife of the engineering world – makes sense as organisations try to fill their ranks with multi-skilled engineering professionals. Similarly, as more and more organisations look to make sense of the mountain of information they are creating, data scientists find themselves in growing demand. And while customer success managers are currently tightly associated with Software as a Service (SaaS) products, more sectors seem to be identifying this model of customer interaction as one worth emulating.

A shortage of talent means HR needs to continually innovate

The top five emerging jobs are all in extremely high demand and when talent is thin on the ground, the 'perfect candidate' will be highly discerning and very expensive. But if necessity is the 'mother of invention,' then scarcity must be a favourite aunt. HR and TA teams are inventive by nature and now need to increasingly hire for skills over job titles, offer opportunities to learn and train on the job, and develop bespoke strategies to retain top talent.

² Source: <u>Australian Financial Review (8 June 2018)</u>

There was a time when if you needed a data scientist there were limited jobs and so the vacancies got filled. Now every organisation needs data scientists. Law firms are an example.²

Anthony Salcito

Worldwide vice-president for public sector education, Microsoft.

I think the skills in demand today will still be prevalent in five years time, but new technologies will change how these roles evolve over time.

We tend to hire a mix of specialists and people with diverse skill sets as we find both have different strengths for helping our business grow. Specialists are acutely aware of new and emerging technologies in their area so help us to be early adopters, whereas people with diverse skill sets are nimbler when it comes to moving between different projects or areas.



Katie Noakes

Talent Acquisition and Employer Brand lead, The Iconic.

At a glance: Top takeaways from the data

Soft skills are a key part of the tech evolution

For over a generation, Australia has been evolving into a service economy. The advancement of technology has created a range of new business models, like Software as a Service (SaaS) which, in turn demand new models of customer engagement.

This helps explain the rise of Customer Success Manager as the top emerging job in Australia over the past five years. CSM is a role reliant on soft skills and a terrific example of how job candidates don't need to be tooled-up with hard STEM skills to be part of a tech-driven economy. In fact, research by the Department of Jobs and Small Business found that around 70 per cent of employers place as much or more emphasis on soft skills as they do on technical skills.³

Yet the problem with desirable soft skills – like adaptability, collaboration, and leadership – is they can be tough to identify. Candidates will often either oversell, or undersell, what they bring to the table.

With the need for workforces that are change-adaptable, responsive and engaged, the challenge for HR and talent acquisition teams is to find reliable ways to identify individuals with soft skills at scale, rather than waiting for the interview process.

The soft skills in demand

In the US, LinkedIn recently surveyed more than 1,200 hiring managers to find out the most desirable soft skills they are looking for in a candidate. The top six:

- Adaptability
- Culture fit
- Collaboration
- Leadership
- Growth potential
- Prioritisation

The top tool hiring managers are using to evaluate soft skills is the behavioural interview question – think: "tell me about the time when..."

02

Deep Dive: The top 5 emerging jobs

LinkedIn has crunched its enormous stack of data from the past five years to identify the top **emerging jobs in Australia**.

Our data shows us the career paths most people have taken into these roles, as well as the skills most commonly associated with the jobs.

Identifying these leading emerging jobs gives HR and talent acquisition teams a unique insight into where the jobs market is heading.

GROWTH IN THE TOP 5 EMERGING JOBS



Rate of Growth (2013 – 2017)

Customer Success Manager

The CSM role is relatively new in Australia, and its rise over the past five years has been explosive. It can be thought of as an evolution from an account manager or sales person to someone who helps customers realise success on every level.

The global rise of Software as a Service (SaaS) has been felt acutely in Australia in recent years. Because SaaS products run on an annual renewal basis, more and more companies are hiring customer success managers to help their clients use the software successfully and secure the annual renewal revenue.

As more companies shift to cloud-based SaaS, demand for the CSM role is likely to grow and spread into a range of areas that might once have been dominated by more traditional marketing and sales roles. Organisations now understand the cost to acquire new business far outweighs the cost of keeping existing customers happy, so maintaining positive engagement with customers is key.

The boom in Customer Success Managers is proof that the economic boom in tech is no longer purely about attracting and retaining hard STEM skills. The difference between a great CSM and an ordinary one is all in the soft skills.



1 Customer Success Manager

Customer success is a peopleoriented role. You have to understand and like people to understand customers. The face-to-face is also really important. I like it because it's a blend of a strategic and a trusted adviser role.

The model of servicing your customers is different to sales. You're starting from 'I'm here to help advise and help you be successful.' It's a different starting point than 'I'm here to sell you something.



Mark Woodrow Client Success Manager, Isentia.

WHAT IS SaaS?

Software as a Service, better known as SaaS, is likely already part of your everyday. They are typically cloud-based systems, offering services for document and content management, accounting, human resources, invoicing, and other tasks within a business.

SaaS products are typically provided on a subscription basis, meaning customer satisfaction is essential to retention.

TOP PREVIOUS JOBS FOR CUSTOMER SUCCESS MANAGERS:





Modern business is driven by data. Whether it's financial insights or understanding customer behaviour, people who can reason over enormous amounts of data are in high demand.

Today, data scientists have excellent career opportunities across the globe. In Australia, data scientists in the private sector often come out of academia. 44 per cent have a PhD, which contrasts markedly with a market like India, where 43 per cent have a bachelor degree only. This academic history poses challenges for HR and talent acquisition teams. Will these candidates be the right fit for the company and its commercial objectives? How can companies convince them to want to work for the organisation?

However, given the tight restrictions on hiring overseas candidates to fill roles, Australian HR and talent acquisition teams will need to understand what makes homegrown data scientists tick, and what kind of pitch might convince them to move.

Qualitative research by LinkedIn indicates data scientists coming from academia can be motivated by the lure of working on stimulating or influential projects with large data sets. The promise of engaging work, and the scope to drill down into interesting data, can be powerful drawcards for curious candidates, and should be highlighted in employer branding pitched at this talent pool.





Data Scientist

The hardest part to learn (when switching from a university to a corporate role) was not the data science, but how to be a consultant. I had to change my mode of operating to be a consultant – to win business and run teams in a profitable way.

The key to attracting intelligent people: create an environment where they're not just cogs in a wheel.



James Rabeau Principal Program Manager, Quantum Computing, Station Q at Microsoft.

Calvin Hung is a data scientist, now working full-time as a consultant at McKinsey & Company.

Calvin trained as an aeronautical engineer and briefly worked for the Airbus consortium in Germany before returning to Australia to take up a PhD offer in robotics. From there he moved into machine learning, then into data analysis, and science.

Calvin has worked as a data scientist at the Commonwealth Bank and EY, and he's consulted on major projects for the New South Wales Government, the Queensland Government, and Macquarie Bank.

When I was at university our lab was quite specialised. So, we focused mostly on mining, agriculture and, anything that's got to do with outdoor robotics. If I stayed at uni I never would have had any experience with banking or insurance or anything like that. I felt I really wanted to see what other industries are doing. That's the main reason I left university.



Calvin Hung Data Scientist, McKinsey & Company.

TOP PREVIOUS JOBS FOR DATA SCIENTISTS:



3 Full Stack Engineer

NKEDIN EMERGING JOBS REPORT AUSTRALIA

A combination of front-end web development and software development, full stack engineers are able to run a project from start to finish.

Their versatility means they are in hot demand across a huge swathe of industries looking to add tech capacity as efficiently as possible. **G** G Tech talent is becoming more rounded. They're learning different things and as a result, new roles are being formed out of these now multi-skilled individuals.

Full-stack engineers' never used to be a thing, but our back-end team started to learn more about front-end and wanted more responsibility for this area. Suddenly, the full-stack engineer was born and it's not just us seeking this sort of talent – all businesses want someone who can do both sides.



Katie Noakes

Talent Acquisition and Employer Brand lead, The Iconic.

TOP PREVIOUS JOBS FOR FULL STACK ENGINEERS:



Cyber Security Specialist

AUSTRALI

Our lives and workspaces are now digital by default. The Internet of Things further widens the digital landscape, but exposes our data to additional hacking risks.

Cyber security specialists are in rising demand as organisations become increasingly aware of the huge threat posed by cybercrime and cyber espionage.

A recent federal government report estimated Australia would need another 11,000 cyber security specialists over the next decade⁴, and has committed more than half a billion dollars over that period to boost cyber protection.⁵

One estimate suggests that globally there will be an extra 1.8 million positions needing to be filled.⁴ There are calls to make cyber security part of the school curriculum, and more and more TAFE and university courses are becoming available.

TOP PREVIOUS JOBS FOR CYBER SECURITY SPECIALISTS:



⁵ Source: <u>Australian Government: Australia's cyber security strategy</u>

Cyber Security Specialist



of Australian businesses experienced at least one disruptive security breach in the past year⁸



of businesses experienced a ransomware attack⁸

Cyber security: a global priority

The importance of cyber security rocketed to global public consciousness in May 2017, when the WannaCry ransomware attack affected 300,000 computers across 150 countries causing billions of dollars in damage.

Not only are cyber threats increasing, they're evolving. The shift has gone from tech-based attacks, such as hacking, malware, and remote access, to attacks which exploit the humans using the tech - such as phishing, social engineering and ransomware, like WannaCry. The US National Vulnerability Database estimates that between 500 and 1000 new vulnerabilities emerge every month, of which at least 25 per cent are critical and pose a risk for significant damage.⁶

By 2019, the average Australian home is expected to have 24 internet connected devices. Already, one in two small to medium sized businesses accept online payments. Exposure to a malicious cyber attacks is real for Australians both at home and at work.⁷

An annual survey by Telstra found 60 per cent of Australian businesses experienced at least one disruptive security breach in 2016, while 45 per cent of businesses experienced a ransomware attack. More than three quarters of businesses believed they had an undetected security breach. Properly managed security, especially when dealing with customer data, has become vital to businesses retaining consumer trust.⁸

Cybercrime is growing, with industry sources predicting that its global damages will rise to US \$6 trillion by 2021 – double the 2015 cost. Internationally, the adoption of data protection rules, including mandated notification of breaches, has driven a global push for cyber security experts.⁹

⁶ Source: <u>CSIROscope. Cybersecurity: we can hack it</u>

- ⁷ Source: <u>Australian Government: Australia's cyber security strategy</u>
- ⁸ Source: ABC News. Cybersecurity skills shortage putting public, private sectors at risk, experts say
- ⁹ Source: <u>CSO Online. Cybercrime damages expected to cost the world \$6 trillion by 2021</u>

Experience Designer

An experience designer makes a product easier to use and more accessible through continuous research and testing. Ultimately, they aim to boost the satisfaction the user gets from using a digital service.

The overwhelming majority of experience designers have traditionally been found in tech companies, where they improve apps and websites. However, they are now spreading out across all industries.

The experience designer is the perfect example of the modern blend between hard skills like UX design, prototyping and coding – and soft skills, like collaboration and prioritisation.

When Jessica Sechi reaches out to candidates, she tells prospects about the kind of technology Atlassian is getting into (mobile components, cloud development, etc.) and about the opportunity to build things from scratch.

For engineers that's very attractive, getting to be involved in a lot of greenfield work as well as stuff that hasn't been done before in a company.⁹



Jessica Sechi Senior technology recruiter, Atlassian

TOP PREVIOUS JOBS FOR EXPERIENCE DESIGNERS:



LINKEDIN EMERGING JOBS REPORT AUSTRALIA

03

Demand Intensity in Australia



Where the jobs are

The top three emerging jobs in Australia are also in the top six list of emerging jobs in North America.

They also appear in several LinkedIn lists around the globe. On the face of the LinkedIn data, there is simply not enough talent in the country to satisfy growing demand. For example, for every Full Stack Engineer who was hired in Sydney last year through LinkedIn, there are only 1.7 individuals in the local workforce with 'Full Stack Engineer' in their title. That's a tight pool of talent.

Demand for emerging jobs is focused on the east coast capitals, with Brisbane, Sydney, and Melbourne unsurprisingly leading. Demand for emerging jobs is undoubtedly high but the innovative TA leader can make their searches easier by:

- hiring for skill and not job title
- targeting top previous jobs as detailed in this report
- targeting the organisations with a large concentration of this talent
- reskilling with the added benefit of reducing attrition rates, so the TA team doesn't have to go on the search for this talent again!

Whichever approach you take, remember to reflect your points of difference over your competition in your employer brand, so candidates want to engage further in the hiring process. Finally, LinkedIn has supply and demand data for all roles and skills, so if there's a cohort you're particularly interested in please contact your Relationship Manager. **Brisbane** is the most competitive market for Cyber Security and Customer Success Managers. Whereas Melbourne is most competitive for Full Stack Engineers and Experience Designers.

Knowing the supply/demand balance in your city can help you decide whether you should aim to attract talent from other cities where competition is relatively lower.

Demand Intensity: Top Australian Cities



Demand Intensity

(Demand for the role based on hiring activity / Number of Professionals currently with that title in Australia)

o4 Skills matter



Hire for skills

As the blurring and melding of job titles picks up pace, the key to finding the best people will be to focus on a recruit's skills over their previous job titles.

The top skills for the five emerging jobs are generally foundational skills – like javascript, machine learning, and big data – which can always be built upon with on the job training.

Transferable skills such as adaptability, resilience, and entrepreneurial skills are much harder to screen for, but increasingly necessary in today's workforce and arguably better to search out than cookie-cutter resumes filled with previous job titles.

We've interviewed candidates that have extremely strong technical skills in their area of expertise, but decided against hiring them because they don't align with our values or have the 'soft skills' (such as stakeholder management) we need for them to excel in our business.

You need to be able to communicate well in our business because we move so quickly – we need to know what it is you're trying to do, why you're trying to do it and what your thought process is. It's so important for a business like ours.



Katie Noakes

Talent Acquisition and Employer Brand lead, The Iconic.

Top skills for the top 5 emerging jobs



The logical feeder skills for Customer Success Manager are things like customer on-boarding, anything that involves customer adoption. Change management is actually a really good skill as a lead-in as well.

As a soft skill, empathy is really good. You need good emotional intelligence to actually pick things up quite quickly. You generally are faced with some change management or product issues that need to be resolved quickly and those issues are often not the same.

Increasingly there's a skill in understanding data. That becomes a foundation, a bedrock for seeing how a customer journey has gone. If you really want to become involved in customer success you have to start understanding what the principles of the customer success journey are.



Mark Woodrow

Client Success Manager, Isentia.

Using these findings in your talent strategy

Savvy leaders believe that planning for the future workforce to meet technology and market demands, means being ready for change.

So the long-term challenge for HR and TA teams is to identify talent with agility, versatility, and the capacity for retraining. At the same time HR and TA needs to educate these same leaders and hiring managers about the real state of the market. When it comes to emerging jobs, realistic expectations need to be set and different attraction and retention strategies employed.

Practically, hiring for these emerging jobs is difficult when demand is high and growing. Consider searching for people by top previous jobs, or those with experience at the organisations on LinkedIn that employ the most emerging job professionals. Hiring for actual and adjacent skills and not job role also makes sense.

Although tight regulation exists in Australia regarding the import of talent, the option exists in cases of genuine skills shortage, provided sufficient labour market testing has been conducted. Under recent legislative changes, advertising on LinkedIn can now form a key component of this labour market testing process. When a need arises at Atlassian for, say, Experience Designers, after conducting labour market testing the talent team uses LinkedIn data to pinpoint global markets where the supply of talent exceeds the demand. For organisations with the resources, another approach might be to open offices in global locations where talent can be identified.

Re-skilling is another logical option and a great contributor to employee engagement and retention. The key is to think beyond an employee's current role, to adjacent and current hard skills and their soft skill fit.

Whichever approach is taken, remember hiring is a competitive sport. You need to clearly articulate why candidates would want to join your organisation, whether it's programs that cater to wellness, flexibility, mobility or interesting data sets in the case of data scientists and make sure this is reflected in your employer brand. And bonus points if you have a rockstar CEO who lives and breathes your purpose or has a relevant career path that you can use as a talent magnet. I refuse to ask the question, 'Where do you think you're going to be in the next five years?' in a job interview, because I don't even know the answer myself. I think it's hard to ask the candidate that. I don't think anyone can say with any great certainty.

I just think we talk a lot about being flexible, adaptable, agile and responsive. I think that's all we can do, because we don't – hand on heart – know exactly what the mix of our business is going to look like in three, four or five years time.



Sam Chisholm Talent Manager, Cotton On Group 05

Talent Intelligence



LINKEDIN EMERGING JOBS REPORT AUSTRALIA

LinkedIn's vision is to create economic opportunity for every member of the global workforce. Executing on that vision begins with mapping the digital economy – or creating the world's first economic graph.

LinkedIn's Economic Graph is a digital representation of the global economy based on data generated from 575 million members, 50,000 skills, 26 million companies, more than 15 million open jobs, and 60,000 educational institutions. LinkedIn has created the world's largest talent marketplace where candidates and companies are interacting every single day. While 10 years ago we had a relatively small collection of profiles and some engagement, we now have a robust community where billions of interactions are taking place every day.

The insights generated from these billions of interactions can enable today's HR leaders to answer some of the most deep and complex questions raised by the CEO and senior business leaders.

This ammunition adds a data-driven foundation to your point of view, your experience, and your decisions. It can enable your team to marry their instincts with these insights to make the right decisions or elevate their position in the organisation, while also ensuring people are a competitive advantage for the business. In the next few pages, find out how organisations can use insights from LinkedIn to answer critical questions across the employee lifecycle. LinkedIn has created the world's largest talent marketplace where candidates and companies interact every day.



Final thoughts for HR and TA teams

As you build your organisation's talent, retention, and learning strategies, we hope the data and insights in this report can help

If you want more insights into where to target your recruitment efforts, or if you are seeking further information and assistance with the state of the Australian jobs market, we are here to help.

Contact your LinkedIn Relationship Manager.

1 KNOW THE SKILL NOT JUST THE JOB TITLE

> IT'S ABOUT SOFT AND HARD SKILLS

> > 3

GET READY

TO COMPETE

2

Finding candidates ready to move into one of the emerging jobs means looking beyond their current title, hiring for the future state of the business means hiring for potential – potential to learn, grow and adapt in a world of digital transformation.

Foundational or adjacent hard skills are table stakes, but no matter how technical the role, it's the soft skills that will show you who's good versus who's great.

It's about supply and demand, know your unique differentiators, preferably by job group and articulate consistently through your employer brand.

About LinkedIn's economic graph

LinkedIn's Economic Graph is a digital representation of the global economy based on data generated from 575 million members, 50,000 skills, 26 million companies, more than 15 million open jobs, and 60,000 educational institutions. In short: it's all the data on LinkedIn.

Through mapping every member, company, job and school, we're able to spot trends like talent migration, hiring rates and in-demand skills by region.

These insights help us connect people to economic opportunity in new ways. By partnering with governments and organisations around the world we help them better connect people to opportunities.

See full article

Authors









Data Scientist - Economic Graph and Public Policy











50K SKILLS



26M COMPANIES



15M OPEN JOBS



60K EDUCATIONAL INSTITUTIONS

LINKEDIN EMERGING JOBS REPORT AUSTRALIA

Linked in ... Talent Solutions