



# 2020 Emerging Jobs Report Australia



# About The Report



Over 10 million professionals in Australia have a LinkedIn profile. As this enormous living, breathing dataset evolves in real time, it creates powerful insights organisations can use as they plan the future of their workforce.

LinkedIn has crunched its unique data set to establish the fastest growing jobs in the country. These emerging jobs have seen tremendous growth over the past five years. They're not necessarily brand-new roles though. An emerging job may have grown out of a more traditional job, or it may be a completely new job that has been created to address business needs. There may not be a large pool of talent who hold this job yet, but the large, sustained year-over-year growth of professionals being hired signals a long term trend.

The powerful growth of tech innovation across Australia is fueling the emerging job market in predictable—and not so predictable—ways. While jobs like cybersecurity specialist could be reasonably expected during a tech boom, the economic evolution is also throwing up some strong demand for non tech talent, capable of bridging the gap between digital innovation and customer.

# 2020 Job Trends



## **AI has arrived.**

All of Australia's top five emerging jobs feature automation or Artificial Intelligence (AI) skills. Emerging jobs, like AI specialist, marketing automation specialist, robotics engineer and automation consultant, show how pervasive this trend is. AI is spreading to all organisational areas, from IT to finance and marketing. AI may not be deeply integrated into everything yet, but the trajectory is becoming clear.

## **Tech is driving demand for a plethora of new jobs.**

We now have a clear picture of how the explosive growth in the tech industry has resulted not just in heavy demand for core tech and engineering jobs, but also jobs like customer success specialist in the tech sector that require expertise in skills like relationship management. The idea of a tech job automatically equating to a hard skill job is one that needs to be put to bed.

# 2020 Job Trends



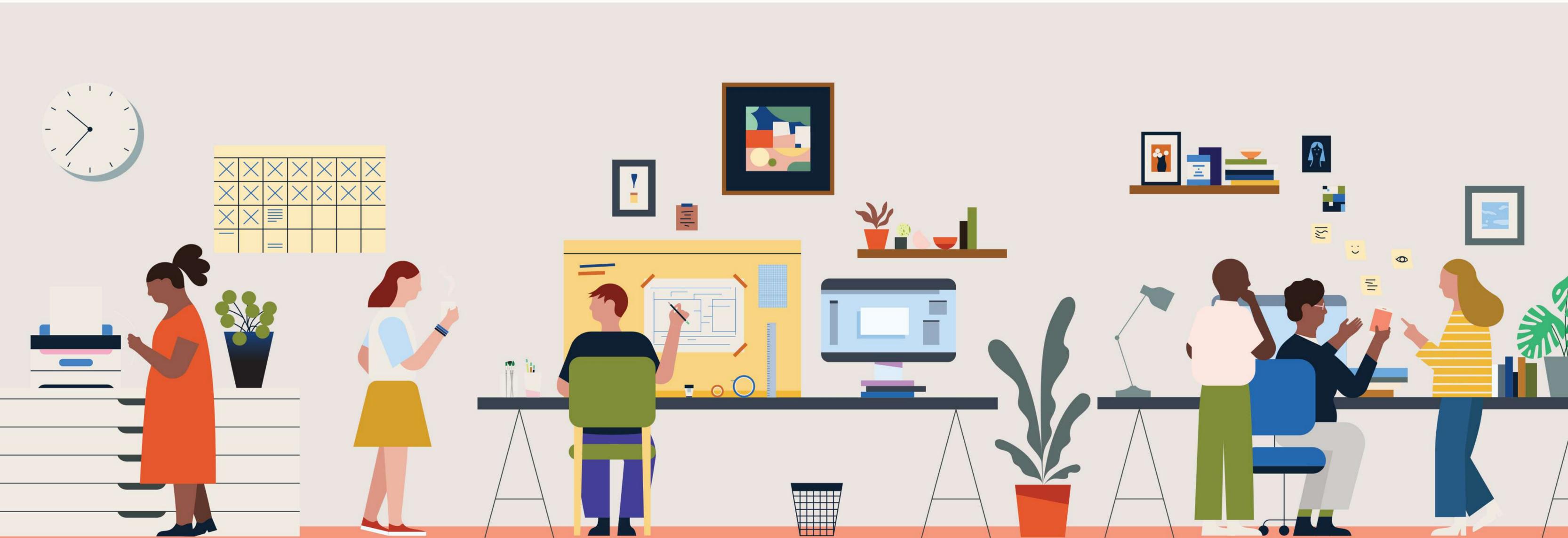
## **Emerging jobs show how industries are transforming.**

Emerging jobs aren't just a pointer for talent trends, but also show how industries are evolving and adopting new technologies. Take the meteoric and well-spread rise of data scientist and data engineer. These roles signal how a diverse range of industries are now trying to understand their data, generate insights and thereby, make better decisions.

## **The customer is at the centre of every business.**

Brands and businesses can now be in touch with their customers across multiple channels. But that also means customers expect quick solutions to problems and ready answers to their questions. The rise of emerging jobs, like marketing automation specialist, site reliability engineer, service designer and customer success manager, all reflect the different ways in which companies are making sure the customers are coming first.

# The top 15 emerging jobs



#1

# Artificial Intelligence Specialist

Artificial Intelligence specialists work on getting machines to learn. This means machines don't just retain information and automate processes, but actually perceive the environment and take autonomous action to achieve goals. Basically, when a machine mimics human thought, including learning and problem solving, that's the realm of AI and AI specialists.

**What you should know:**

Australia's own AI research is well recognised, with CSIRO's (Australia's national science agency) research cited 89 percent more than the global average.<sup>1</sup> This suggests Australia is generating AI talent ready to fuel uptake across industries. Recognising the enormous potential of AI to the economy, the department of Industry, Innovation and Science released a discussion paper in April 2019 on how AI should be designed, developed and deployed. In response to submissions the government developed a set of AI Ethics Principles to guide innovation in Australia.<sup>2</sup>

**Top industries:**

Information Technology and Services, Computer Software, Higher Education, Research, Internet, Telecommunications

**Skills you need:**

Machine Learning, Deep Learning, TensorFlow, Python (Programming Language), Computer Vision

**Top LinkedIn Learning courses:**

Python for Data Science Essential Training, Python: Design Patterns, Machine Learning and AI Foundations: Recommendations, Python: Programming



#2

# Cybersecurity Specialist

The role of a cybersecurity specialist is to keep computer information systems secure, primarily against cyber crime which includes phishing, denial-of-service attacks, malware, viruses and hacking. Cybersecurity specialists develop security programs and implement them across organisations.

**What you need to know:**

Cybersecurity is a global priority. According to a Norton report, A\$2.3 billion was stolen from Australian consumers by cyber criminals in 2017.<sup>3</sup> It's an issue the government has backed—in 2016, it invested A\$230 million into a cybersecurity plan.<sup>4</sup> With private money also flowing fast into cybersecurity, it's not hard to see why this role is on the rise.

**Top industries:**

Information Technology and Services, Computer and Network Security, Financial Services, Telecommunications, Accounting, Higher Education

**Skills you need:**

Information Security, Network Security, Splunk, Penetration Testing, Security Information and Event Management (SIEM)

**Top LinkedIn Learning courses:**

Cybersecurity Foundations, Learning Kali Linux, IT Security Careers and Certifications: First Steps, Troubleshooting Your Network with Wireshark, Ethical Hacking: Exploits, IT Security Foundations: Core Concepts



#3

# Marketing Automation Specialist

A marketing automation specialist is a great example of an emerging job that requires both technical and creative skills. Marketing automation specialists are expected to use traditional marketing acumen, combined with digital technology, to generate and nurture leads, analyse workflow and identify tactics for improvement.

**What you need to know:**

First it was social media disrupting marketing, now automation is heralding more change. The ever-growing number of channels available for connecting with customers has made marketing increasingly complex. Marketing automation streamlines this process by identifying potential customers and providing them with relevant information to help convert leads into sales. Marketing automation specialists are able to unleash the full potential of the data collected, turn it into meaningful pitches and strategy for the business.

**Top industries:**

Marketing and Advertising, Higher Education, Information Technology and Services

**Skills you need:**

Marketo, Salesforce Marketing Cloud, Email Marketing, Digital Marketing, CRM Marketing

**Top LinkedIn Learning courses:**

Building Your Marketing Technology Stack, HTML Essential Training, Managing Email Marketing Lists and Campaigns, Content Marketing Foundations, Advanced Lead Generation, Creating a Responsive HTML Email



## #4

# Robotics Engineer (Software)

Emerging robotics engineers build and deploy software known as Robotics Process Automation (RPA), which is used to automate tasks like expense reporting. This software automates mundane rules-based business processes and replicates those actions.

### What you need to know:

The traditional idea of robots replacing human work has centred around factories. However, digital robots or bots are used to replicate the actions of a person in creating digital operations. Aside from the obvious cost reduction benefits, RPA can bolster customer experience, revenue growth and risk mitigation.

### Top industries:

Information Technology and Services, Higher Education, Management Consulting, Financial Services, Telecommunications, Industrial Automation

### Skills you need:

Robotic Process Automation (RPA), UiPath, Automation Anywhere, Python (Programming Language), C (Programming Language)

### Top LinkedIn Learning courses:

Python for Data Science Essential Training, Machine Learning and AI Foundations: Recommendations, Machine Learning and AI Foundations: Value Estimations, Visual Basic Essential Training, C# & .NET: Programming



#5

# Site Reliability Engineer

Site Reliability Engineers (SRE) are another fascinating example of a hybrid style emerging job. An SRE is expected to bring a software engineering approach to system administration topics. Organisations put SREs in roles that were traditionally performed by an operations team member, with the expectation that the SRE will identify opportunities for automation.

**What you need to know:**

As industries become digital first, reliability of networks is a core business need. A site reliability engineer keeps apps and websites online and running smoothly, so that a consumer's interaction with the service they need is as seamless and hassle free as possible.

**Top industries:**

Computer Software, Internet, Information Technology and Services, Financial Services, Telecommunications, Banking

**Skills you need:**

Amazon Web Services (AWS), Linux, Go (Programming Language), DevOps, Docker Products

**Top LinkedIn Learning courses:**

DevOps Foundations, Learning Ansible, Advanced Linux: The Linux Kernel, Learning Go, Python: Design Patterns, Linux: Bash Shell and Scripts, Python: Programming Efficiently



#6

# Customer Success Specialist

Unlike customer service which is largely reactive (e.g. responding to complaints), customer success specialists are expected to work proactively to understand core client needs and what an organisation needs to do to meet those needs.

**What you need to know:**

Australian consumers have some of the highest service expectations in the world. So, it is not surprising that Australian companies have been early adopters of customer relationship management tech. According to Gartner, in 2018, local companies spent a record A\$2.3 billion on CRM technologies, up 20 percent on the previous year and outpacing global growth of 15 percent.<sup>5</sup> The rise of Software as a Service (SaaS) business has been a big contributor to the growth in this job. Product adoption & utilization and customer retention and growth are key success factors for this job.

**Top industries:**

Computer Software, Information Technology and Services, Internet, Marketing and Advertising, Financial Services, Telecommunications

**Skills you need:**

Customer Relationship Management (CRM), Account Management, Customer Retention, Strategy, Salesforce.com

**Top LinkedIn Learning courses:**

Project Management Foundations, Giving Your Elevator Pitch, Body Language for Leaders, Developing Executive Presence, Excel 2016 Essential Training, Change Management Foundations



#7

# Data Scientist

A modern data scientist is both a computer scientist and a mathematician. The best ones are also excellent trend spotters. The rise of data scientists has largely mirrored the rise of big data as a phenomenon. As organisations get swamped in data, they need data scientists to help them generate meaningful and actionable insights.

## What you need to know:

Data scientists mine insights from data, in order to inform various business decisions across sales, operations and strategy. They can be found across a wide range of industries. Banks are hiring data scientists for financial projections and fraud detection. Educational organisations have data scientists to research on learning trends and educational outcomes. Today, they are spreading across industries, with organisations like retailers now employing data scientists to gather and analyse client and market data.

## Top industries:

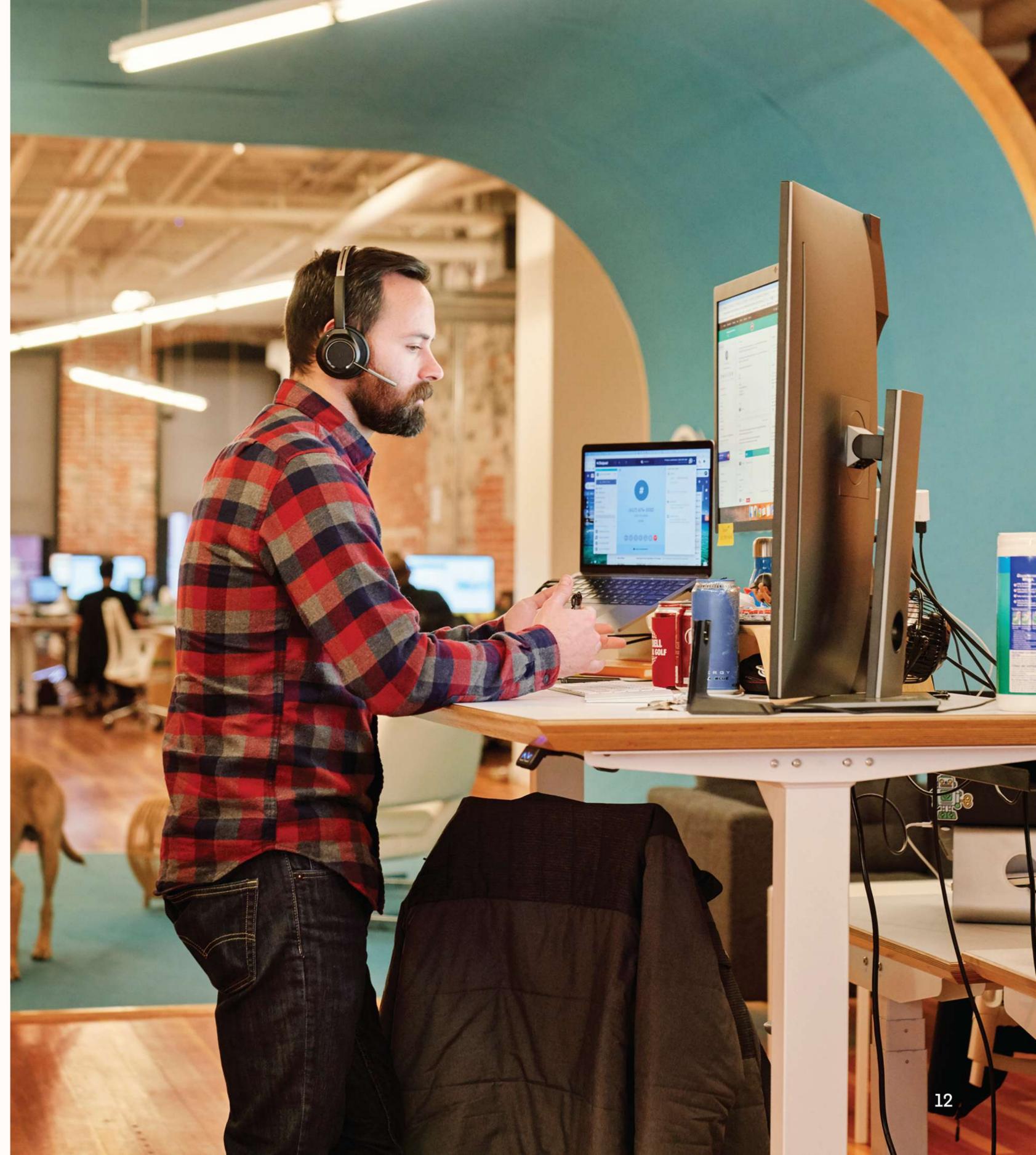
Information Technology and Services, Higher Education, Financial Services, Computer Software, Banking, Management Consulting

## Skills you need:

Machine Learning, R, Python (Programming Language), Data Mining, Apache Spark

## Top LinkedIn Learning courses:

Python for Data Science Essential Training, Statistics Foundations: 1, Python: Data Analysis, Data Science Foundations: Fundamentals, Apache Spark Essential Training, Python: Programming Efficiently



#8

# Data Engineer

What's the difference between a data scientist and a data engineer? Well, like all engineers, data engineers are concerned with the 'how to'—so they are in charge of things like pipelines, data workflow management and ETL (extract, transform, load) processes.

**What you need to know:**

While a data scientist might be mining for insights, the data engineer is building the mine for those insights to be found. Insights are only as good as the database behind it, so a data engineer is constantly building, testing and maintaining the processing systems.

**Top industries:**

Information Technology and Services, Financial Services, Banking, Computer Software, Telecommunications, Government Administration

**Skills you need:**

Apache Spark, Python (Programming Language), Amazon Web Services (AWS), Extract, Transform, Load (ETL), Scala

**Top LinkedIn Learning courses:**

Python for Data Science Essential Training, Apache Spark Essential Training, Data Science Foundations: Data Engineering, Learning Hadoop, Extending Hadoop for Data Science: Streaming, Spark, Storm, and Kafka, SQL Tips, Tricks, & Techniques



#9

# Growth Manager

Growth manager roles could be product roles or business development/marketing roles. The core focus is to use growth hacking techniques to get more buyers or users for their product at scale.

**What you need to know:**

Understanding and interpreting large subsets of data for insights is an important element of the success in this role. They use their business development skills to spot new product opportunities and their marketing skills to deliver them to consumers.

**Top industries:**

Financial Services, Real Estate, Law Practice, Internet, Marketing and Advertising, Computer Software

**Skills you need:**

Marketing Strategy, Business Development, Social Media Marketing, Business Strategy, Account Management

**Top LinkedIn Learning courses:**

Giving Your Elevator Pitch, The Data Science of Marketing, Sales Prospecting, Body Language for Leaders, Advanced Lead Generation, Creativity Bootcamp, Pitching to Investors, Product Management First Steps, Designing Growth Strategies



#10

# Chief Strategy Officer

A chief strategy officer is responsible for developing strategies that deliver growth across the business. They help bring together different sections of a larger business and typically advise the chief executive officer directly.

**What you need to know:**

The chief strategy officer is a fascinating emerging position. Most organisations still don't have one. But those organisations which have this role, this person works directly with the CEO to make strategic decisions around investments, growth and acquisitions to name a few. With so many rapid changes around the business climate, regulations and digital transformation, it's difficult for CEOs to deal with all facets of the changing business environment. This is where this role can help partner and own some of the CEO's goals.

**Top industries:**

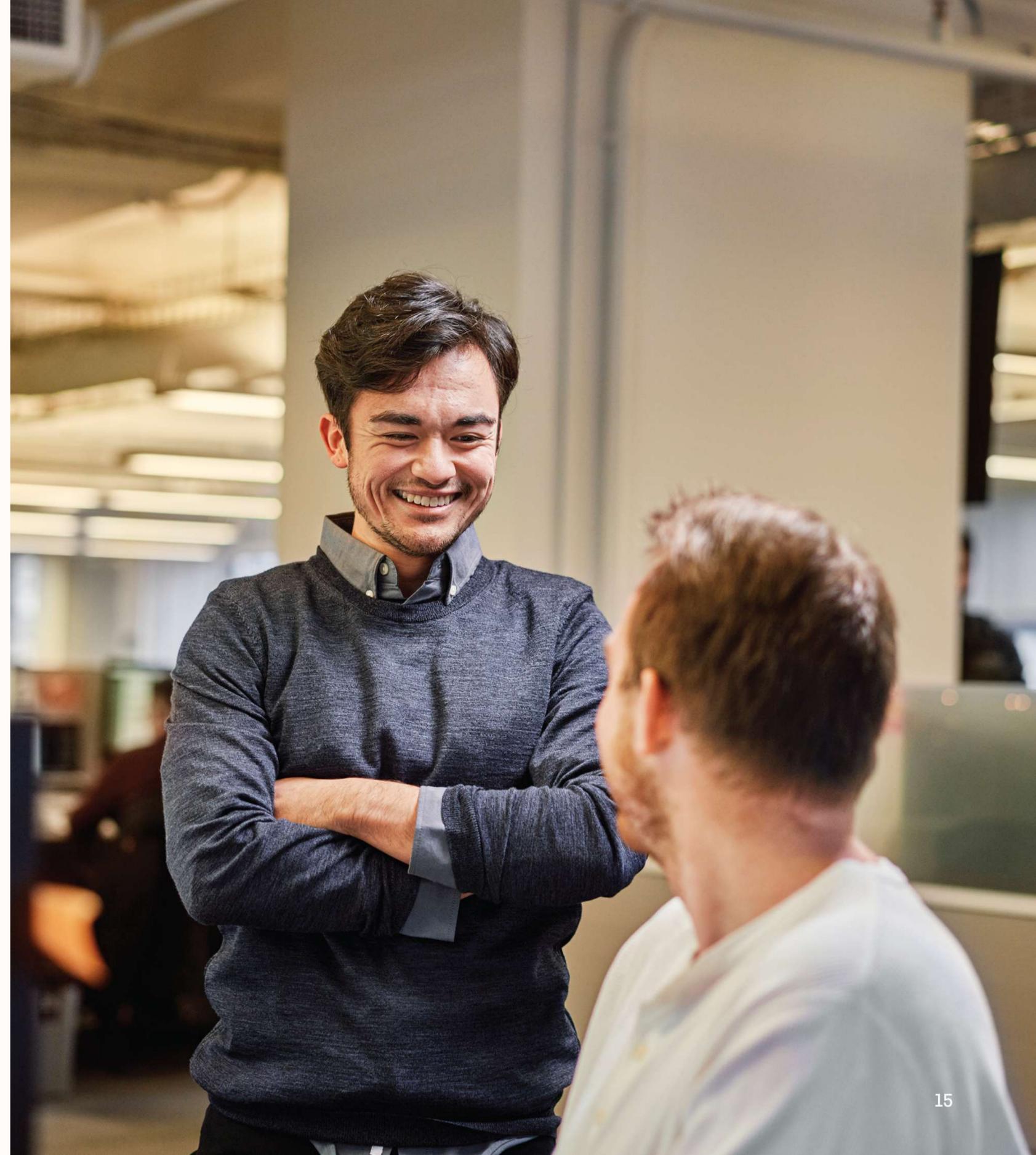
Marketing and Advertising, Information Technology and Services, Management Consulting, Financial Services, Higher Education, Computer Software, Hospital & Healthcare, Non-profit Organization Management

**Skills you need:**

Strategic Partnerships, Mergers & Acquisitions (M&A), Digital Strategy, Business Strategy, Management Consulting

**Top LinkedIn Learning courses:**

Giving Your Elevator Pitch, Body Language for Leaders, Entrepreneurship: Raising Startup Capital, Pitching to Investors, Shane Snow on Storytelling, Developing Executive Presence



## #11

# Anti-money Laundering Specialist

An anti-money laundering specialist spots the potential for money laundering activities and stops them from occurring. These financial professionals are expected to be experts in the anti-money laundering regulations of their jurisdiction and be familiar with other key jurisdictions. They train employees how to recognise and report fraud and establish compliance policies.

### What you need to know:

Australia introduced new anti-money laundering laws in 2018, which expanded the functions of the financial intelligence agency and the reporting requirements of businesses.<sup>6</sup> The expanded regulatory environment has increased demand for compliance expertise, with anti-money laundering specialist emerging as an in-demand role.

### Top industries:

Financial Services, Banking, Information Technology and Services, Accounting, Human Resources, Management Consulting, Entertainment

### Skills you need:

Know Your Customer (KYC), Capture the Flag (CTF), Fraud Investigations, Financial Services, Risk Management

### Top LinkedIn Learning courses:

Excel 2016 Essential Training, Body Language for Leaders, Critical Thinking, SQL: Data Reporting and Analysis, Excel 2016: Pivot Tables in Depth



#12

# Product Owner

The product owner is the leader responsible for the value of the products created. A product owner is yet another hybrid-style emerging job, combining roles like market analyst, project management, product designer, and business strategist.

**What you need to know:**

Using their blend of soft and hard skills, a product owner oversees every stage of a project's development. This emerging job reflects the rise of agile culture, which focuses on collaboration and allowing for evolving needs, rather than a prescriptive approach to tasks.

**Top industries:**

Banking, Financial Services, Telecommunications, Information Technology and Services, Computer Software, Retail

**Skills you need:**

Agile Methodologies, Stakeholder Management, Scrum, Product Management, Business Analysis, Requirements Analysis

**Top LinkedIn Learning courses:**

Agile Product Owner Role: Techniques, Agile Product Owner Role: Foundations, Scrum: The Basics, Agile at Work: Planning with Agile User Stories, Product Management First Steps, Transitioning from Waterfall to Agile Project Management



#13

# Service Designer

Understanding how people interact with services, whether it's a government provided service or a bank, is the core work of a service designer. They reflect the growing trend towards customer-centricity. Service providers—from government to banks and universities—are trying to zero in on the consumer's journey to improve their experience.

**What you need to know:**

Just as an industrial designer designs chairs and water bottles, a service designer designs experience. A good service designer can work with a broad sweep of the organisation to ensure that its service is designed to make life more enjoyable for its users.

**Top industries:**

Design, Government Administration, Financial Services, Construction, Information Technology and Services, Higher Education

**Skills you need:**

Design Thinking, UX Research, User-centered Design, User Experience (UX), Design Research, Customer Experience Design, Customer Journey Mapping

**Top LinkedIn Learning courses:**

Design Thinking: Understanding the Process, Learning Design Thinking: Lead Change in Your Organization, Design Thinking: Implementing the Process, Design Thinking: Venture Design, UX Design: 1 Overview, Planning a Career in User Experience



#14

# Full Stack Engineer

A full stack engineer has a combination of front-end web development and software development skills. Their versatility means that they can run a project from start to finish, and are in hot demand across a huge swathe of industries looking to add tech capacity as efficiently as possible.

**What you need to know:**

Known as the swiss army knife of tech roles, full stack engineers remain in incredibly hot demand. Developing the breadth of skills necessary to be recognised as a full stack engineer is demanding, but those who can honestly claim competence across the full suite are likely to find themselves batting off great job offers regularly.

**Top industries:**

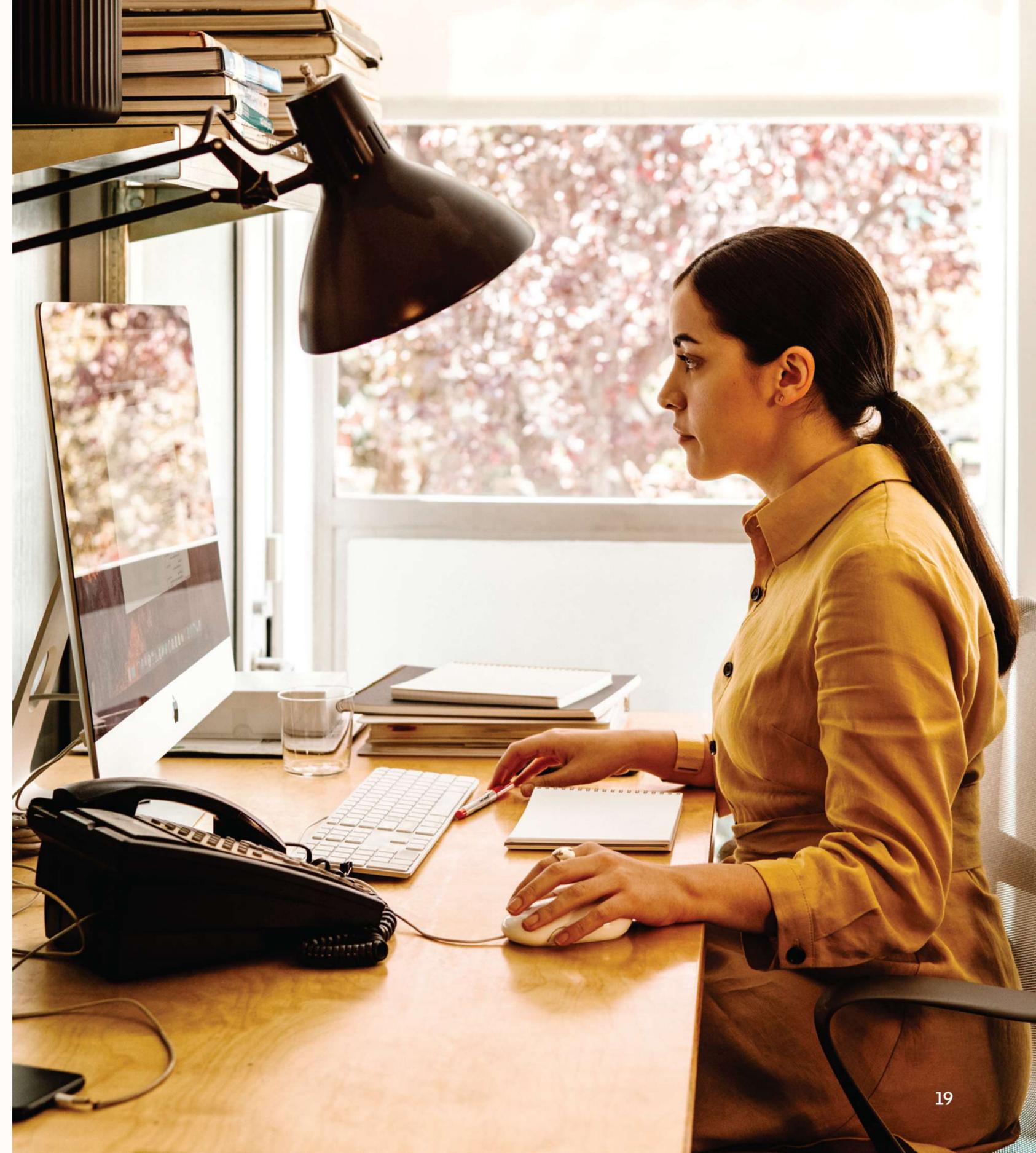
Information Technology and Services, Computer Software, Financial Services, Internet, Marketing and Advertising, Higher Education

**Skills you need:**

React.js, Node.js, AngularJS, Amazon Web Services (AWS), JavaScript, Git

**Top LinkedIn Learning courses:**

Learning Full-Stack JavaScript Development: MongoDB, Node, and React, Learning Spring with Spring Boot, PHP: Design Patterns, C# Design Patterns: Part 1, Learning Redux, Learning ECMAScript 6



#15

# Automation Consultant

The job of an automation consultant is to introduce software and digital process into organisations to allow functions to be completed more efficiently. As a consultant, the work involves liaising with stakeholders around what type of systems might be needed or potentially, what needs to be designed.

**What you need to know:**

Helping businesses automate repetitive tasks, an automation consultant is an expert in freeing up human talent to imagine and create. Things like software testing, which is required for building apps or writing code, can be automated. Similarly, basic customer queries can be managed by an automated bot, while talent can focus on more serious customer service.

**Top industries:**

Information Technology and Services, Banking, Industrial Automation, Management Consulting, Telecommunications, Computer Software

**Skills you need:**

Robotic Process Automation (RPA), UiPath, Selenium, JIRA, Test Automation, Automation

**Top LinkedIn Learning courses:**

Java: Build Automation with Maven, Project Management Foundations, Transitioning from Waterfall to Agile Project Management, Data Science Foundations: Fundamentals, DevOps Foundations, Python for Data Science Essential Training, Business Analysis Foundations: Business Process Modeling



# Emerging Jobs Definition



## **What is an emerging job?**

We define an “emerging job” as a role that has seen tremendous growth within a region. This means, while there may not yet be a large pool of talent who hold this job, we have observed large, sustained year-over-year growth of professionals who are hired into the role and believe these to be long-term trends.

## **Why do we publish the Emerging Jobs list?**

Often these roles are indicative of larger industry trends, or represent societal shifts that are increasing demand for a role.

## **These insights are meant to:**

- Help job seekers understand the types of jobs and skills that will be making up the jobs of the future.
- Guide employers to help them find talent, and identify areas to invest in.
- Highlight societal and industry trends and the impact of these trends on the global workforce.

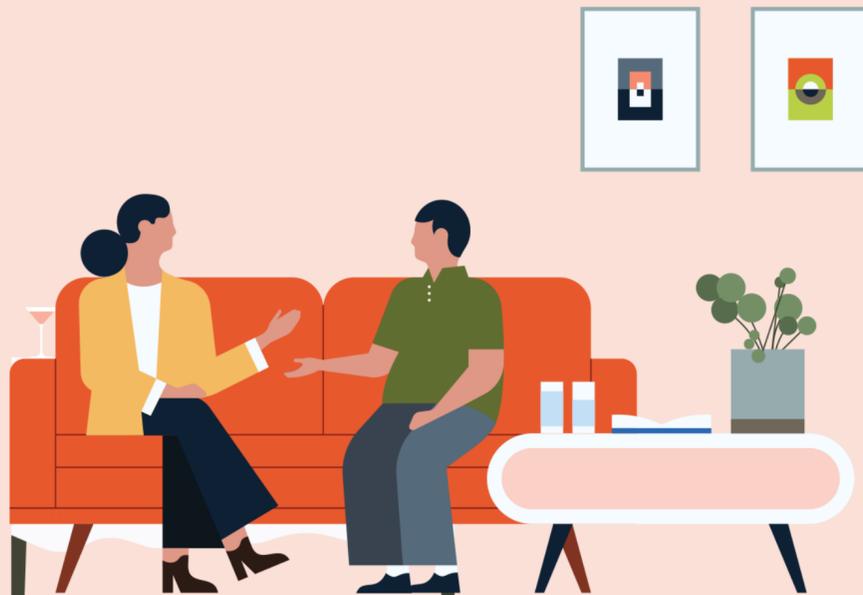
# Methodology



## Emerging Jobs

The Emerging Jobs analysis is done on all LinkedIn members with a public profile that have held a full-time position within Australia during the past five years. Once the talent pool has been identified, we then calculate the share of hiring and Compound Annual Growth Rate of this proportion for each occupation between 2015 and 2019 to identify the roles with the largest growth. These become our Emerging Jobs.

# Closing Note



Are other organisations navigating the same disruption to their talent as you? Has the rest of the market already identified and begun addressing their skills gap? Do you have the building blocks in your organisation to fill your future needs or will you have to go searching in the talent market?

This report is a useful example of the insights possible when you delve into LinkedIn's unique aggregated data set. Of course, opportunities exist to go deeper and get more customised. In particular, [LinkedIn Talent Insights](#) can equip HR and the business make data-driven decisions with real time insights, while [LinkedIn Learning Skills Insights](#) can help organisations understand their people's skills and development areas.

It's not just organisations that can benefit.

Just as it's important for companies to contextualise themselves, so too it is of enormous value to individuals. The benefits of this approach extend beyond simply identifying what jobs have leapt into high-demand. It's also about identifying the skills, career paths, and traditional roles that have led to these jobs breaking from the pack and assessing where there might be overlaps with individual experience and potential.

[LinkedIn Learning Courses](#) are among a number of online resources available for those who want to keep their skills up to date and transform their career.

# About LinkedIn's Economic Graph

The Economic Graph is a digital representation of the global economy based on



In short: it is all the data on LinkedIn.

Through mapping every member, company, job, and school, we are 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. And by partnering with governments and organisations around the world, we help them better connect people to opportunities.

# Contributors

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# References



- <sup>1</sup> InCites (Web of Science Articles & Reviews, 2014-2018) | Page 06 | [Source](#)
- <sup>2</sup> AI Ethics Principles | Page 06 | [Source](#)
- <sup>3</sup> Norton report | Page 07 | [Source](#)
- <sup>4</sup> Australia's 2020 Cyber Security Strategy | Page 07 | [Source](#)
- <sup>5</sup> Gartner | Page 11 | [Source](#)
- <sup>6</sup> PWC | Page 16 | [Source](#)