LinkedIn

2020 Emerging Jobs Report Singapore

About The Report

Over two million people in Singapore 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 dataset to establish the fastest growing jobs in the country. Though they're not necessarily brand new roles, these emerging jobs have seen tremendous growth over the past five years. 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 that holds this job yet, but the large, sustained year-over-year growth of professionals being hired signals a long-term trend.

Singapore's top emerging jobs are dominated by tech, which is not really surprising. What is interesting is how diverse the roles being thrown up by the local tech sector now are. The labour market in Singapore now clearly values both hard, technical skills as well as soft skills.

2020 Job Trends

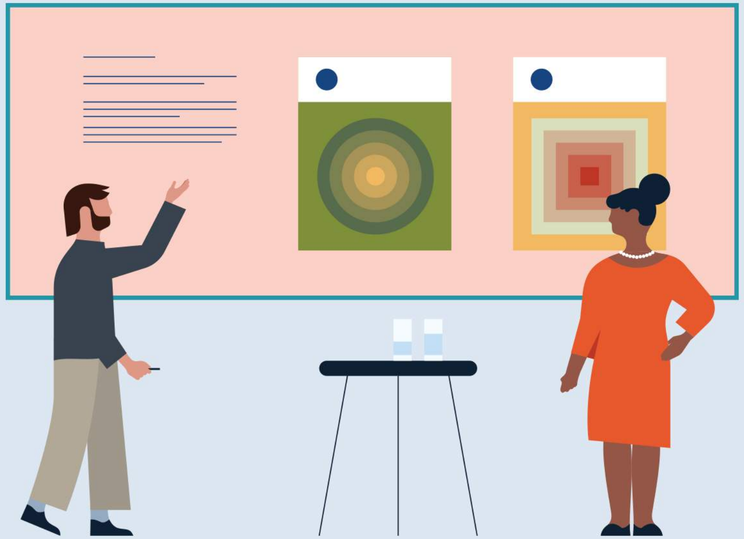
Singapore is a hub for digital innovation.

Singapore government's investment in digitalisation through the Smart Nation initiative has created a fertile ground for innovation. In addition to this, the country is a hub for tech start-ups with also big enterprise organisations investing in digital transformation. LinkedIn's emerging jobs list now clearly reflects the country's commitment to becoming a digital nation. Jobs in the field of artificial intelligence, robotics, data science and cybersecurity has been growing rapidly over the last 5 years.

Digitisation and automation are fuelling demand for creativity.

Fears of automation taking over the workforce are giving way to an understanding that the rise of robots will actually free up human talent to be more human—through creativity. Singapore's emerging jobs list can be fairly evenly split between those constructing and maintaining digital realms and those making them well-suited to human activity. The flourishing of tech jobs has brought with it growing demand for creativity and human interactions. Community specialists, customer success specialists and creative copywriters, all reflect the need for a personal touch in tech.

2020 Job Trends



The rise of the E-commerce specialist.

The e-commerce sector has seen unprecedented growth in Singapore and is estimated to expand by 48% to US$7.4 billion by 2022.[1] Contribution of online retail to overall retail has also been growing steadily.[2] This has fueled demand for professionals who sit between the realm of digital technology and marketing. These e-commerce specialists are responsible for increasing online sales by creating a digital and mobile ecosystem to acquire and grow the customer base.

Singapore's health industry demands more talent.

An ageing population, combined with medical tourism, is driving more demand for healthcare in the country. This has in turn fueled demand for healthcare workers and jobs like clinical speclialist.

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 need to know:
A national programme called AI Singapore (AISG) is focusing on: deep research in the field, investing & growing local talent and putting Singapore on the global map. It has also launched an apprenticeship program to groom local talent.[3] By 2035, AI is expected to add up to US$215 billion to businesses, according to a report by Accenture.[4]

Top industries:
Computer Software, Information Technology and Services, Internet, Research, Higher Education, Financial Services

Skills you need:
TensorFlow, Machine Learning, Deep Learning, Python (Programming Language), Computer Vision, PyTorch

Top LinkedIn Learning courses:
Python for Data Science Essential Training, Python: Design Patterns, Machine Learning and AI Foundations: Recommendations, Python: Programming Efficiently, Python: Data Analysis, Learning Hadoop

#2

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, Industrial Automation, Banking, Telecommunications, Research

Skills you need:
Robotic Process Automation (RPA), UiPath, Robot Operating System (ROS), Blue Prism, Robotics, Python (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.

#3

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 demand across a broad 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 competency 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, Banking, Marketing and Advertising

Skills you need:
React.js, Node.js, AngularJS, JavaScript, MongoDB, Amazon Web Services (AWS)

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

#4

Backend Developer

The backend of a website is the part the user never sees—the guts and brain that make it work. A backend developer's job is to build the technology needed to power the parts that make the website work—the server, the application and the database.

What you need to know:
According to We Are Social and Hootsuite, 84 percent of the country is using the internet.[5] So ensuring that websites can respond to requests, log data and load on any device is vital in Singapore. Backend developers are the behind-the-scenes operators, making sure when someone lands on their website, everything runs smoothly.

Top industries:
Information Technology and Services, Internet, Computer Software, Financial Services, Computer Games

Skills you need:
Git, Laravel, Node.js, MySQL, MongoDB, PHP

Top LinkedIn Learning courses:
PHP: Design Patterns, Advanced PHP, Python: Design Patterns, Learning Full-Stack JavaScript Development: MongoDB, Node, and React, Learning Spring with Spring Boot, PHP 7 New Features

#5

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:
Singapore's Economic Development Board (EDB) states that the data analytics industry contributes an estimated US$730 million to the economy annually.[6] Both global & Asian firms have all invested significantly in their Singaporean data hubs, to capitalise on the city state's excellent connectivity and ease of doing business. Academia is also investing in building this talent. NTU launched their new Data Science and Artificial Intelligence Research Centre last year. It has S$8 million (US$5.85 million) in funding over three years.[6]

Top industries:
Information Technology and Services, Internet, Computer Software, Banking, Financial Services, Higher Education

Skills you need:
Machine Learning, Python (Programming Language), Data Science, R, Apache Spark, Deep Learning

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

#6

DevOps Engineer

DevOps engineers are the perfect example of a hybrid engineer. They bring together a deep engineering knowledge, along with hands-on experience. Using a variety of open source technologies, they link them together with code to deliver new software, services and applications.

What you need to know:
The rise of DevOps engineers has essentially been driven by the often clashing demand for developers and operations teams. Resting on the shoulders of the modern DevOps engineer, is the responsibility of creating the software, deploying it and generating revenue from it.

Top industries:
Information Technology and Services, Banking, Computer Software, Financial Services, Internet, Insurance, Telecommunications

Skills you need:
Ansible, Jenkins, Amazon Web Services (AWS), Docker Products, Kubernetes

Top LinkedIn Learning courses:
DevOps Foundations, Learning Ansible, Linux: Bash Shell and Scripts, Learning Bash Scripting, Advanced Linux: The Linux Kernel, Linux: Multitasking at the Command Line

#7

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:
Singapore has among the world's fastest internet, which is what has made it such a global data hub. Because of the speed, insights can be delivered much more quickly. But data is only as good as the database it is retrieved from, so a data engineer is constantly building, testing and maintaining the processing systems.

Top industries:
Information Technology and Services, Internet, Banking, Semiconductors, Financial Services, Computer Software

Skills you need:
Apache Spark, Python (Programming Language), Hadoop, Scala, Hive, Data Engineering

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

#8

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:
Businesses in Singapore lost some US$42 million due to cybercrime in 2018, according to the Cyber Security Agency of Singapore.[7] A QBE Insurance survey of Singapore's small and medium enterprises found that while 90 percent are aware of potential cyber risks, one in four did not have any process to protect themselves.[8] Cybersecurity specialists are emerging as key members of any organisation to help avoid the damage from cyber crime.

Top industries:
Information Technology and Services, Computer and Network Security, Financial Services, Accounting, Banking, Telecommunications

Skills you need:
Information Security, Vulnerability Assessment, Network Security, Penetration Testing, Malware Analysis

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

#9

Community Specialist

A community specialist is a new multifaceted role with responsibility for managing the community in both online and offline forums with the goal of driving loyalty and engagement. Online their job is to turn organisational social media spaces into true places of 'community' where authentic communication meets the projection of company values. Offline the same principle applies, but think spaces like organising events, roadshows, corporate social responsibility events, and meetings with stakeholders.

What you need to know:
Singapore has 4.6 million active social media users, roughly 79 percent of the population (report by We are Social & Hootsuite).[9] On these platforms, exist thousands of online communities, which are fueling demand for community specialists. Whether it is maintaining standards on a forum or bringing people together offline for a special cause, a community specialist helps coordinate groups and promote the organisation's mission.

Top industries:
Information Technology and Services, Internet, Non-profit Organization Management, Higher Education, Civic & Social Organization, Financial Services, Education Management

Skills you need:
Community Engagement, Public Speaking, Leadership, Event Management, Event Planning, Strategy, Social Media Marketing

Top LinkedIn Learning courses:
Project Management Foundations, Leadership Foundations, Managing Your Time, Developing Business Acumen, Critical Thinking, Giving Your Elevator Pitch

#10

Partnership Specialist

A partnership specialist is a modern account management role, which includes coordinating an organisation's relationship with its partners. This might include managing and implementing campaigns, generating new commercial partnerships and generally driving growth.

What you need to know:
A blend of stakeholder management and marketing, a partnership specialist fosters productive relationships internally and externally. Whether it is managing franchises, engaging customers through loyalty programs or working with external stakeholders on campaigns, a partnership specialist keeps projects on track.

Top industries:
Information Technology and Services, Internet, Non-profit Organization Management, Marketing and Advertising, Financial Services

Skills you need:
Strategic Partnerships, Business Development, Marketing Strategy, Marketing, Business Strategy

Top LinkedIn Learning courses:
Giving Your Elevator Pitch, Project Management Foundations, Shane Snow on Storytelling, Excel Essential Training, Strategic Planning Foundations

#11

Clinical Specialist

Similar to a customer success specialist, but specific to the medical industry, clinical specialists help introduce medical devices into hospitals, providing training and advice on use. Clinical specialists may also be required to look after patients, supporting nurses, physicians, surgeons in their patient-facing roles.

What you need to know:
An aging population and medical tourism is fueling the growth in health and medical device industries thus leading to growth in demand for clinical specialists.

Top industries:
Hospital & Healthcare, Medical Device, Pharmaceuticals, Medical Practice

Skills you need:
Clinical Research, Medicine, Patient Safety, Psychotherapy, Healthcare Management

Top LinkedIn Learning courses:
Excel Essential Training, Project Management: Healthcare Projects, Giving Your Elevator Pitch, Project Management Foundations

#12

E-commerce Specialist

An e-commerce specialist is a specialist in online sales strategies. They monitor site activity and track that against goals, like increasing website traffic and sales, developing brand loyalty and improving the user experience. They execute digital marketing campaigns via search engines and social media.

What you need to know:
According to the annual e-Conomy report, average order values in Singapore are four times higher than those in its South East Asia region, as are its ride sharing and food delivery orders.[10] With very high internet penetration and growth in the app economy, ecommerce is full of potential in this tech-savvy nation.

Top industries:
Internet, Information Technology and Services, Consumer Goods, Retail, Marketing and Advertising, Logistics and Supply Chain

Skills you need:
Digital Marketing, Social Media Marketing, Marketing Strategy, Business Development, Microsoft PowerPoint

Top LinkedIn Learning courses:
SEO: Keyword Strategy, Content Marketing Foundations, SEO: Ecommerce, Building Your Marketing Technology Stack, Excel Essential Training

#13

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:
The importance of retaining and growing customers has led to the rise of customer success specialists, who foster lasting relationships with clients. They're particularly prevalent in software as a service industry which relies on retaining customers rather than a one-time sale.

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

Skills you need:
Customer Relationship Management (CRM), Account Management, Salesforce.com, Enterprise Software, Customer Retention

Top LinkedIn Learning courses:
Project Management Foundations, Giving Your Elevator Pitch, Body Language for Leaders, Developing Executive Presence, Excel Essential Training, Change Management Foundations

#14

Product Owner

Above the development team is the product owner, the leader responsible for the value of the products created. A product owner is the leader responsible for the value of the products created.

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 prescriptive approaches to tasks.

Top industries:
Banking, Information Technology and Services, Financial Services, Computer Software, Internet, Automotive

Skills you need:
Product Management, Agile Methodologies, Scrum, Agile Project Management, Business Analysis, JIRA

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

#15

Creative Copywriter

A creative copywriter delivers the words that accompany advertising concepts. They need to listen carefully to key stakeholders and translate what they want into language that engages and persuades.

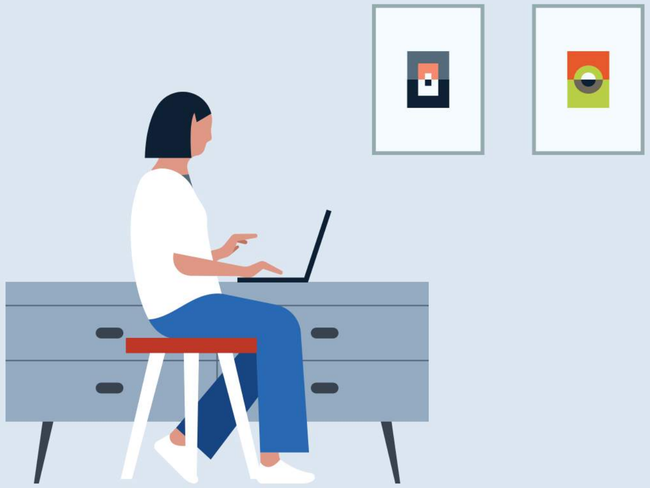
What you need to know:
Social media has brought brands close to its consumers, but it is a content-hungry medium. A creative copywriter is a blend of creative and strategist, who is able to write for different channels and audiences.

Top industries:
Marketing and Advertising, Information Technology and Services, Online Media, Internet, Broadcast Media, Publishing

Skills you need:
Content Strategy, Content Marketing, Digital Marketing, Social Media Marketing, Search Engine Optimization (SEO)

Top LinkedIn Learning courses:
UX Foundations: Content Strategy, Learning to Write Marketing Copy, Content Marketing Foundations, Shane Snow on Storytelling, SEO: Keyword Strategy, Content Marketing: Blogs

Emerging Jobs Definition

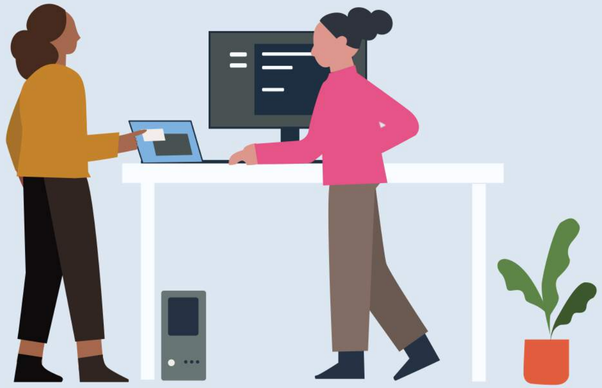


What is an emerging job?
We define an "emerging job" as a role that has seen tremendous growth within a region. This means, while there may not yet be a large pool of talent who hold this job, we have observed large, sustained year-over-year growth of professionals who are hired into the role and believe 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 Singapore 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.

About LinkedIn's Economic Graph

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

660
million members

36
thousand skills

30
million companies

20
million open jobs

90
thousand schools

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.

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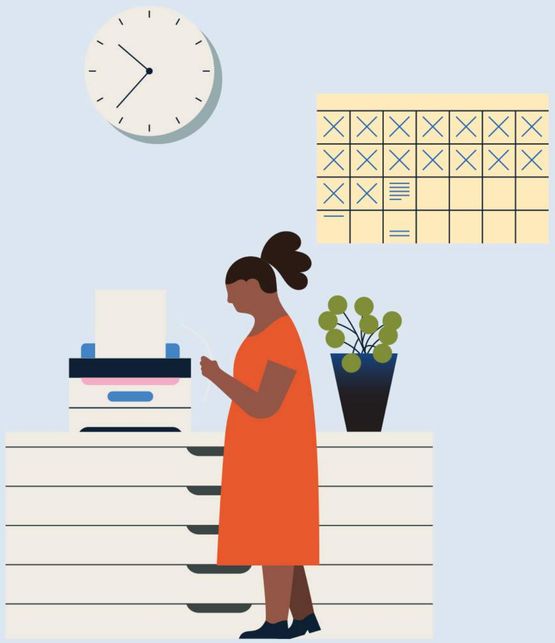
References



1 Payments company WorldPay | Page 04 | Source

2 Report by CIMB | Page 04 | Source

3 AI Singapore (AISG) | Page 06 | Source

4 Accenture | Page 06 | Source

5 We Are Social & Hootsuite | Page 09 | Source

6 EDB | Page 10 | Source

7 Cyber Security Agency | Page 13 | Source

8 QBE Insurance | Page 13 | Source

9 We Are Social & Hootsuite | Page 14 | Source

10 Annual e-Conomy report | Page 17 | Source