## Linked in

## 2020 Emerging Jobs Report Malaysia



## About The Report



Over five million people in Malaysia 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 talent market. 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. 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.



2020 Job Trends



## Big data dominates Malaysia's emerging jobs.

Data scientist is again the top emerging job, while data engineer is in the top five and data analyst comes in at 12. This reflects the government's commitment to secure Malaysia as a leader in big data. Initiatives include plans to increase the number of data scientists from 100 to 1,500, while boosting the number of those dealing with data from about 4,000 to 16,000, by 2020.<sup>1</sup>

## E-commerce is fuelling demand for hard and soft skilled talent.

Malaysia's internet economy has grown some 21 percent since 2015, to be worth US\$11 billion, according to the e-Conomy SEA 2019 report by Google, Temasek and Bain & Company.<sup>2</sup> A significant factor in that growth has been the surge in e-commerce, which has tripled in size to be worth US\$3 billion.<sup>3</sup> Online platforms need technical talent to build apps and online sales portals, including the likes of Android developers, full stack engineers and DevOps engineers. But they also need people who are able to harness the platforms and engage online customers, such as digital marketing specialists, digital specialists, content writers and even community managers if they want to build a brand community.

## Expected construction boom reflected in emerging jobs.

Malaysia's mega rail project, the 640km East Coast Rail Link (ECRL), is just one factor in why 2020 is forecast to see the construction sector grow 3.7 percent to be worth US\$16.7 billion.<sup>4</sup> BIM specialist and environmental officer are two construction related jobs which are both featured on the emerging jobs list and likely reflect the infrastructure boom underway in Malaysia, as the government also invests US\$382 million in building more hospitals in 2020.<sup>5</sup>



# The top 10 emerging jobs



## Data Scientist

The modern data scientist is part computer scientist, part mathematician. The best ones are also excellent trend spotters. The rise of the data scientist has largely mirrored the rise of big data as a phenomenon. As organisations are delivered more and more 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. Education organisations have data scientists researching learning trends and educational outcomes. Today, they are spreading across industries, with organisations like retailers now employing data scientists to analyse client and market data.

## Top industries:

Information Technology And Services, Telecommunications, Oil & Energy, Financial Services, Airlines/Aviation

## Skills you need:

Machine Learning, Python (Programming Language), R, Tableau

#### Top LinkedIn Learning courses:

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





Unlike customer service, which typically helps customers when they have a question or issue, customer success specialists are expected to work proactively to understand core client needs and meet those needs.

#### What you need to know:

Also fuelled by the growth of technology services that require hands-on support, Customer Success roles are on the up-and-up. These professionals typically have a hybrid of soft and hard skills, as they're responsible for both understanding the technology and managing the customer relationship.

#### Top industries:

Information Technology And Services, Computer Software, Internet, Marketing & Advertising, Telecommunications

#### Skills you need:

Salesforce.com, Customer Retention, Customer Relationship Management (CRM), Enterprise Software

#### Top LinkedIn Learning courses:

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







# BIM Specialist

Building information modelling, or BIM, is used over the lifecycle of a project, particularly in construction. A BIM specialist is able to model the project's design using BIM software, oversee organisation wide implementation and incorporate new changes.

## What you need to know:

Across Malaysia there is a construction boom underway, with a particular focus on modernisation.<sup>6</sup> New technology, including BIM, means any changes can be modelled and incorporated throughout the life of the project.

## Top industries:

Construction, Civil Engineering, Architecture & Planning, Information Technology & Services, Design

## Skills you need:

Navisworks, Revit, Building Information Modeling (BIM), AutoCAD, Computer-Aided Design (CAD)

## Top LinkedIn Learning courses:

Dynamo 1.x Essential Training, BIM Manager: Managing Revit, Revit: Tips, Tricks, and Troubleshooting, Revit: View Range, Dynamo: Revit Workflow



# Full Stack Engineer

Full stack engineer is a combination of front-end web development and software development skills. Their versatility means 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 competency across the full suite are likely to find themselves batting off great job offers regularly.

## Top industries:

Information Technology & Services, Computer Software, Internet, Financial Services, Telecommunications

## Skills you need:

React.js, Node.js, Laravel, JavaScript, MySQL

## 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



# 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. While a data scientists focus more on the modeling and analysis of extracting insights, patterns and predictions from data.

## 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 & Services, Oil & Energy, Financial Services, Telecommunications, Airlines/Aviation

## Skills you need:

Python (Programming Language), Hadoop, Apache Spark, Extract, Transform, Load (ETL)

## 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,



# Cyber Security Specialist

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

## What you need to know:

A recent study by Cisco found that Malaysian organisations are taking the threat of cyber crime seriously.<sup>7</sup> In 2019, 44 percent of threat alerts were investigated, up from 40 percent in 2018. Of those alerts found to be real, 46 percent were remediated. However, down time from a threat was significantly longer in Malaysia than in the region, with 27 percent of companies down for 24 hours or more, compared to just 4 percent globally and 23 percent in Asia Pacific.

## Top industries:

Information Technology & Services, Computer & Network Security, Accounting, Telecommunications, Insurance

## Skills you need:

Penetration Testing, Vulnerability Assessment, Information Security, 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



## Digital Marketing Specialist

A digital marketing specialist is swiftly becoming a non-negotiable element of the modern marketing team. They are someone who uses data to identify target markets and generate digital and online marketing campaigns. Using digital products to track social media and online reach, these specialists help plan, develop and execute digital marketing strategies.

## What you need to know:

Although digital marketing specialists may work across a range of areas, some specialise in search engine optimisation (SEO), social media, or paid search (PPC).

## Top industries:

Marketing & Advertising, Information Technology & Services, Internet, Retail, Telecommunications

## Skills you need:

Google Ads, Social Media Marketing, Facebook Marketing, Google Analytics, Search Engine Marketing (SEM)

## Top LinkedIn Learning courses:

Project Management Foundations, Scrum: The Basics, Design Thinking: Understanding the Process, Excel Essential Training, J.T. O'Donnell on Making Recruiters Come to You



## Environmental Officer

An environmental officer enforces environmental standards, health and hygiene legislation. They keep workpaces up to code and safe, and are responsible for everything from water, air and noise quality, to managing and responding to pollution or other toxic incidents. They are responsible for everything from water, air and noise quality, to managing and responding to pollution or other toxic incidents.

## What you need to know:

Malaysia is committed to sustainable development, as part of its Shared Prosperity Vision 2030.<sup>8</sup> These goals are in part driving new environmental regulation and standards, which organisations are keen to comply with.

## Top industries:

Construction, Environmental Services, Civil Engineering, Oil & Energy, Renewables & Environment

## Skills you need:

Environmental Management Systems, Environmental Impact Assessment, Environmental Awareness, Environmental Compliance, Waste Management

## Top LinkedIn Learning courses:

Creativity Bootcamp, Sustainability Strategies, ArcGIS Essential Training, Communicating with Confidence, Human Resources Foundations



# DevOps Engineer

DevOps engineers are the perfect example of the hybrid engineer. They bring together a deep engineering knowledge, with hands-on experience as well. 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 the DevOps engineer has essentially been driven by the often clashing demands of developers and operations teams. Resting on the shoulders of the modern DevOps engineer is the responsibility of creating the software, deploying it, and generative revenue from it.

## Top industries:

Information Technology & Services, Financial Services, Telecommunications, Computer Software, Internet

## Skills you need:

Ansible, Amazon Web Services (AWS), Jenkins, Docker Products, Kubernetes

## Top LinkedIn Learning courses:

DevOps Foundations, Learning Ansible, Linux: Bash Shell and Scripts, Learning Bash Scripting, Advanced Linux: The Linux Kernel



## Community Manager

A community manager is a new multifaceted role responsible 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. Community managers also apply the same approaches to offline spaces like organising events, roadshows, corporate social responsibility events, and meetings with those who have an interest in the issue.

## What you need to know:

With 25 million active social media users, some 78 percent of Malaysia's population. On these platforms, there 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 causes, a community specialist helps coordinate groups and promote the organisations' mission so it resonates.

## Top industries:

Marketing & Advertising, Real Estate, Information Technology & Services, Facilities Services Financial Services

## Skills you need:

Social Media Marketing, Event Management, Social Media, Digital Marketing

#### Top LinkedIn Learning courses:

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



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 be a large pool of talent who hold this job, we have observed large, sustained year-over-year growth of professoonals 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 indurstry 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 Malaysia 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 unparalleled dataset. Of course, opportunities exist to go deeper and get more customised. In particular, LinkedIn Talent Insights can equip HR make data-driven decisions, while LinkedIn Learning Skills Insights allow you to benchmark and identify rising skills that existing talent needs.

It's not just organisations that can benefit, however.

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

For those serious about rising, LinkedIn Learning courses are among a number of online resources available for those who want to keep their skills up to date.

## 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



Diane Loo Insights Analyst



Pooja Chhabria Senior Marketing Manager



Carl Shan Senior Data Scientist



Brian Xu Data Scientist/ Economist



Wei Ting Goh Field Marketing Specialist



Jenny Ying Data Scientist/ Economist



## Joanne Liu Marketing Manager SEA



Alvin Kan Head of Insights APAC



John Hutchinson Insights Analyst



Candice Cheng Analytics and Data Science





## References



- <sup>1</sup> OpenGov Asia | Page 3 | <u>Source</u>
- <sup>2</sup> Temasek | Page 3 | <u>Source</u>
- <sup>3</sup> Temasek | Page 3 | <u>Source</u>
- <sup>4</sup> KHL | Page 3 | <u>Source</u>
- <sup>5</sup> KHL | Page 3 | <u>Source</u>
- <sup>6</sup> PR Newswire | Page 7 | <u>Source</u>
- <sup>7</sup> Digital News Asia | Page 10 | <u>Source</u>
- <sup>8</sup> Free Malaysia Today | Page 12 | <u>Source</u>