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What's what PSPM

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IS DATA SCIENTIST STILL THE SEXIEST JOB FOR 2024?

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WHAT IS DATA SCIENCE?

Data Science is a field that combines mathematics and statistic, specialised programming, advanced analytics, artificial intelligence, and machine learning with a specific domain to discover interesting, hidden patterns in an organisation's data. This pattern can be used in decisionmaking and strategic planning [1]. Data scientist plays a crucial role in organisations by extracting meaningful insights from complex datasets. Their effectiveness goes beyond technicalproficiency, encompassing a range of competencies. Understanding data scientist competencies is essential for understanding technical, analytical, and domain-specific skills [2]. Harvard Business in 2012 stated that data scientist is the sexiest job in 21th century [3].

Source:
https://dtsense.id/information/2/

Source: https://hbr.org/2012/10/data-scientist-the-sexiest-job-of-the-21st-century

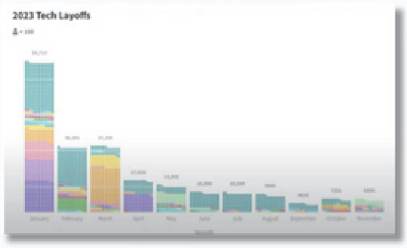

Figure 1: Technology Layoffs 2023
Source:
https://www.stratascratch.com/blog/data-science-in-2024-what-has-changed/

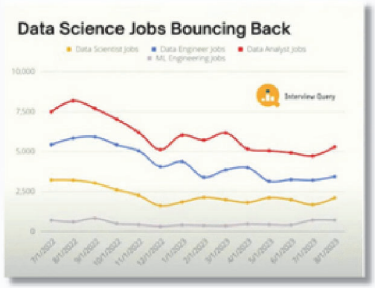

Figure 2: Increasing of Data Science in Job Market
Source: https://www.stratascratch.com/blog/data-science-in-2024-what-has-changed/

In 2020, as the world struggledwith the Covid-19pandemic, data scientists became a boom. Data sciencesaw a 50% growth in demand across all industries and marketplaces because of several itemsgoing online [4]. Industries were in desperate need of data scientists in this Covid-19 age. Nevertheless, the data science market experienced a sharp decline in 2022 and 2023 as the pandemic abated.A large number of tech companies reduce their job postings by ninety percent. More than 500,000 jobs have been eliminated, with more than 30% of these losses occurring in data science and engineering positions [4]. The technological layoffs in 2023 are shown in Figure 1.

The need for data scientists declined between 2022 and 2023, however over these two years, artificial intelligence's influence caused the position of data scientists to stabilise. It's because data science tasks are now more automated and efficient thanks to OpenAI tools. The data science careers that are making a comeback in the market are shown in Figure 2.

Harvard Business [5] in their article (2022) stated that data science role has gone through challenges and that the tasks of data scientists keep changing. [6-9] listed data scientists as one of the most in-demand jobs in 2024.

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HOW IS DATA SCIENCE MARKET IN MALAYSIA?

Multimedia Development Corporation (MDeC), Malaysia's national ICT agency, has revealed a proposal to raise the number of local data scientists from the current 80 to 2000 by the year 2030. The strategy is backed by seven public and private institutes of higher learning (IHLs). [10]. According to [11], a data scientist's monthly salary in Malaysia can range from RM2,250 to RM 27,416 based on their industry, experience, and skills. Data scientists are predicted to have high salaries and great demand in Malaysia in 2024 by [10], [12–14].

WHAT SKILLS NEEDED TO BECOME A DATA SCIENTIST?

Expertise and talent are not the only things that matter in data science. Nonetheless, it is about using storytelling to convey to your audience about your data and the insights you get from it. [5] outlined three competencies required to work as a data scientist. Three skills are shown in Figure 3 that are necessary to become a competent data scientist:

Figure 3: Skills to Become A Data Scientist

WHAT FIELD(S) OF STUDY YOU CAN CHOOSE TO BECOME A DATA SCIENTIST?

If you wish to work as a data scientist, you can pursue studies in Information Technology, Computer Science, or Statistics. These courses are offered by numerous Malaysian universities, including Universiti Teknologi MARA, Universiti Teknologi Petronas and Monash University Malaysia.

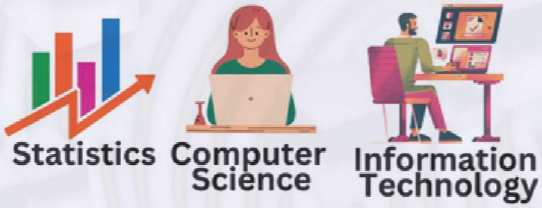

Figure 4: Fields of Study To Become A Data Scientist

CONCLUSION

Data science is a field that combines mathematics, statistics, programming, analytics, artificial intelligence, and machine learning to uncover hidden patterns in an organisation's data. Data scientists extract meaningful insights from complex datasets, and their effectiveness goes beyond technical proficiency. The Covid-19 pandemic in 2020 saw a 50% growth in demand for data scientists, but the market experienced a sharp decline in 2022 and 2023. However, artificial intelligence's influence has stabilised the position of data scientists due to OpenAI tools. In Malaysia, the MDeC proposes to increase the number of local data scientists from 80 to 2000 by 2030. To become a competent data scientist, one must possess expertise, talent, storytelling skills, and a focus on Information Technology, Computer Science, or Statistics. Malaysian universities offer courses in these fields. In conclusion, data scientist is still one of the sexiest jobs and is essential to the expansion of the economy and business.

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