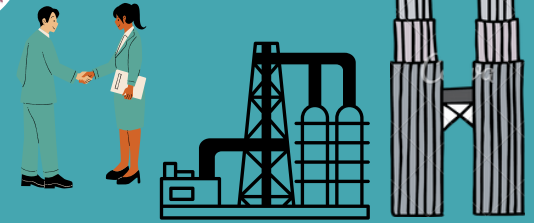


# INDUSTRY TALK: PETRONAS DIGITAL



## OVERVIEW

Petroleum Nasional Berhad (PETRONAS) is one of the biggest oil and gas companies. Petronas strategically integrates digital and sustainable technologies to optimize its operations, transition to cleaner energy, and meet future energy demands while maintaining profitability and environmental stewardship.

## PETRONAS ENRICHING LIFE

Petronas enriches our life by community service. WHY? to make sure we have a sustainable future, what we enjoy today we can enjoy in the future too. It's SUSTAINABLE.  
Example: KLCC park; free access to the community.



## INTRO TO YOUNG DIGITAL PROGRAMME

The purpose of this programme is to go through oil and gas to switch to digital. This programme is focusing on fresh graduates especially those who are talented in the ecosystem. This programme also provides job learning and coaching; will be undergoing 18 to 20 months structured upskilling journey.

Covers 3 specific areas:

- Software engineering
- Data engineering
- Data Scientists



## WHAT YOU WILL GAIN FROM TRAINING AND DEVELOPMENT BY YDP ???

1. Structured upskilling - will be onboarded to a specially curated role-based learning pathway
2. Learning buddy - partner with a mentor (buddy) who will supervise and guide, they will help along the journey and give you a confidence boost when you lost it.
3. Performance coaching
4. Build leadership capabilities - focusing on how you move your leadership
5. Immersion in digital projects - will be assigned in several projects, able to engage and work alongside with others' Petronas group company
6. Energy industry knowledge - give opportunity to understand digital and how it unlocks new capabilities



## SOFTWARE ENGINEERING

### WHY ?

- The jobs increase 22% from 2020-2030 to go to digital
- One of the highest paid professions
- Can operate from anywhere (work from home)

### WHAT ?

- Understand the concept of computers, how they work and communicate
- Knows how to create specific applications
- Understand to put something together, meaningful to customers

## DATA ENGINEERING

### WHY ?

- Play an important role in an organization's success
- Providing easier access to all users to consume data

### WHAT ?

- Like a building blocks - to collect or ingest all data from multiple sources across the group
- Manages ETL/ELT processes



## DATA SCIENTISTS

### WHY ?

- Study of data
- High demand and have high earning potential
- Have huge impact on company

### WHAT ?

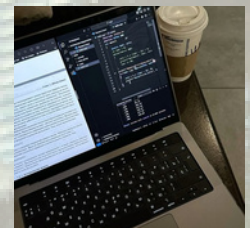
- Understand data and their sources
- Work with Data Engineer in ETL
- Verify data enabled in Data Warehouse
- Perform data testing with business



## APPLICATION PROCESS FOR YDP

- Malaysian citizen.
- Degree holder with minimum CGPA 3.0.
- Fresh graduate with <2 years working experience.

[APPLY NOW](#)



## EMPLOYMENT VALUE

### Engaging work culture

Provides opportunities for interns to not only work but participate in various programs that enhance personal and professional growth.

#1

### Establishing a supportive work culture within the organisation.

1. Trust - As a global organisation, respect individual difference and shared value
2. Growth - Provides a challenging and fulfilling career, fulfil one's passion
3. Reward - Besides monetary reward, also allows employees to develop and polish skills, as well as flexible working hours for work-life balance

2

### Interdepartmental Mobility

Support for interns wishing to change departments upon proving competencies within the organisation.

3

## REFLECTION

1. From this talk, I can see that they are trying to go through their concept of oil and gas by held a programme called "Petronas Young Digital Programme" to find young fresh graduates that can share their creativity and make changes.
2. This perspective emphasizes that, to be an effective data worker, conducting skill assessments is essential to understand our strengths and pinpoint areas for growth. Additionally, it highlights the importance of having a strong understanding of various data sources and collaborating with stakeholders to define clear and accurate data requirements.
3. One of the striking points from the talk was on digital transformation in the energy sector. We can see that ICT skills, specifically in software engineering, data engineering, and data science are crucial in enabling the energy sector to adapt to the digital age and optimise energy production.

## CONCLUSION

Petronas is using advanced technologies like AI, IoT, digital twins, and data analytics to improve efficiency, sustainability, and innovation in the energy sector. These tools help the company streamline operations, cut costs, enhance safety, and gain real-time insights, making Petronas a leader in digital energy solutions.



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