

FACULTY OF COMPUTING

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Industry Talk 2: System Development at Credence (TM Subsidiary)



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GROUP: TIC TECH TOE **SECTION:** Section - 04

SUBJECT: SECP1513 - Technology & Information System LECTURER: Ts. Dr. Muhammad Igbal Tarig bin Idris (P)

TOPICS:

- 1. Description of the system development
- 2. History of Credence
- 3. Technology and tool use in Credence's system development
- 4. Reflection



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Description of the system developement

Analytic basically means extracting certain data into an meaningful insight to make informed decision. This meaningful insight can be form of pattern, trend, etc. It also can be implement in various field such as business, sport, etc.

Analytics has 4 process: data collection, data transformation, modelling & analysist, and visualization & predicting, data collection is where gathering data from various source can be done. Data transformation is where sampling data can be done. data modelling & analysist is where the analysist and make model if necessary can be done, and lastly, visualization & predicting is where predicting can be done and visualize into an understandable form. This visualized data then result into 3 categorize insight: strategy, tactical, and operation.

Carrer in Analytics

- 1. Business Analyst: Gathering all the information
- 2. Data Architect: construct the whole analyst system (setting up the database, etc)
- 3. Data Scientist: Learn the cutting-edge of technology in analyst
- 4. Data analyst: analyst the data, need strong understanding of SQL and python
- 5. Data Engineer:
 - 5.1 do all the data gathering
 - 5.2 get all the external data if there is any
 - 5.3 give it to the data analyst
- 6. BI Developer: Construct the visualization

History about system development

Credence is a new cloud and digital services company that just launched by TM on 6 of July 2022. It was powered by TM and TM act as a corporate start-up. Credence focused on expanding the capabilities of enterprises and the public sector in their digital transformation journey. It is led by Krish Datta, an experienced technology leader who joined TM in late 2021 to shape its new digital services arm. Leveraging TM's established resources, infrastructure, and its strong links to enterprises and the public sector, Credence is well-positioned to accelerate Malaysia's digital transformation journey. In conjunction with its debut, Credence announced significant collaborations with VMware, AWS, and Huawei. These partnerships enable Credence to provide a diverse customized solutions to businesses, meeting their specific growth needs.

Technology and tools use in system development

There are many Technologies and tools used in Credence's system. The following are the most common technologies used by their teams to assist their work. For Database/OLAP, Credence used PostgreSQL, ClickHouse and Druid. Next, Tableau and PowerBI would be the two most popular choice of Visualization Tools used by them followed by two open source tools like Metabase and Superset for customers with limited budget. Credence's tools of choice for ETL/ELT Processing are Airflow and Spark that helps in collecting data and transforming them. It also pushes the data into the database for further use. Lastly, Programming Languages used by Credence's teams are SQL and Python which is the most important and cruicial where it is required to have strong understandings and skills. Also, Data Engineer will have an extra programming language that is Bash Syntax which helps in dealing with data in the backend. They also have the opportunity to use cloud platforms such as Microsoft Azure, AWS, and VMware.



Ch'ng Seng Hong:

As the speaker said, she didn't just sit and wait for the spoon feeding from the boss. She curious everything and learn many thing in the internship in TM. This allowed her supervisor to see that she is a very potential worker. This very enlighten me to take action to discover new thing, not only sit there and curious. Beside that, from the talk I also learn that we have to improve ourselves and explore new things. As the speaker say that, in the future most of us will work in technology field and maybe today is one trend and tomorrow there will be another trend. Thus, we alway have to keep update ourselves with the trend.

Michael Partogi Siahaan:

As a System Developer in the next four years, being eager to learn and a curious individual is a very important trait to have because technology will always evolve and produces new kinds of technologies that we need to learn and understand to stay relevant in this Industry. Having a good understanding and tolerance with each other is also important when working in teams. Be confident to take opportunities that are presented otherwise others will take it.

Chang Wen Xuen:

It is important to stay updated on the latest technologies, frameworks and programming languages because tech industry evolves rapidly. We also need to cultivate a mindset of continuous learning, both within and outside of job responsibilities. Other than that, developing strong communication skills in working field is important so that we will gain more new opportunities to try more challenging tasks. We need to embrace them as opportunities to learn and grow. Being able to express your ideas clearly and work effectively in a team is essential as well.

Muhammad Nur Miftahul Rahman:

In order for me to become a system developer in the next 4 years, It is essential to become a live long learner, meaning that I always have to study a new thing every day, wheter it is learning a cutting-edge technology or acquire new skill, in order to enhance my competency as a system developer. Thus, it is important for me to have a habit that can promote me to become a lifelong learner and ultimately become a system developer. For example, a habit where I always allocate a few hours in my week to learn new thing or try to become a problem solver for your own problem using skill you acquire.

Razqa Muhammad Harits:

As a learner in the IT world, the value that is most valuable and important to have is the feeling curiosity to learn about new things. As we know, technology has been advancing extremely quickly, especially in the past couple of years. If we don't have the drive to learn about the newer and the most up to date technology, we will be left behind. Same goes for the opposite however. If you master or even just learn the state-of-art technology faster than others, you will undeniably thrive above anyone else.

Tan Qing Qing:

The speaker made me understand that, as a student who wants to become a system developer in the next four years, I must have the strength and determination to face my faults and difficulties while studying and at my internship, and I also must refrain from being scared to ask questions when I don't understand something. Not only that, but we need to grab all opportunities that occur; this will help us become more professional and effective. A variety of opportunities can assist us in improving our values. In addition, I discovered that I should never stop improving my communication skills. Good communication skills can help us handle various interpersonal connections more effectively and seek help when we face troubles.