



Report on Industrial Talk:

# Analystic & System Development

with Credence



Description & History  
of Credence



History of System  
Development



Description of  
System Development



Analytics Roles



Technology Used



Careers in Analytics

## GROUP MEMBERS:

OW YEE HAO  
A23CS0261

LEE LAI QUEEN  
A23CS0100

THANG WEI JIE  
A23CS0280

JABAR ARYA LOKANANTA  
A23CS4011

# System Development @ Credence (TM Subsidiary)



Process of systematic analysis of data, Ms Qistina Batrisyia Binti Azman Shah

## Careers in Analytics

### Business Analyst



- Collaborates with clients to gather information and acts as a bridge between clients and the technical teams
- Facilitates the transfer of project requirements to the development team.

### Data Architect



- Designs project processes, and selects appropriate databases, visualization tools and more.
- Creates project architectures that are adaptable based on client feedback.

### Data Scientist



- Conducts research on emerging technologies and evaluates feasibility of integrating new technologies into projects.

### Data Analyst



- Combines data from multiple sources to derive meaningful insights and provides actionable information to support decision-making.

### Data Engineer



- Gathers and prepares data from external sources and ensures data is ready for use by data analysts.



### BI Developer

- Focuses on data visualization by creating meaningful dashboards.
- Works closely with stakeholders to understand their needs and iterates on dashboards based on feedback for maximum stakeholder satisfaction.

## Analytics Roles & Process

Analytics refers to the process of analysing data to produce meaningful insight and use them to make informed decisions. It involves examining large sets of data to identify patterns, trends, correlations and other useful information.

Data usually comes from a database (structured data), external data or social media data. These data will then be collected, stored and transformed to extract useful data. Analytics and modelling of these data will be done to make predictions for the future. These data will also be visualised so it is understandable by others.

The insights produced from the data will be used to make decisions at the strategic, tactical and operational level.

## Description & History of Credence

Credence was founded in 2022. With its specialization in Cloud, SaaS, Managed Services, Digital Upskilling, Analytics, App Modernization, Consulting, and Software, Credence helps customers understand the current technology landscape and align it to their business priorities, at the same time, highlighting the risks and profits associated.

## Technology Used in Credence

- ✓ **Database/OLAP**
  - PostgreSQL, ClickHouse, Druid
- ✓ **Visualization tools**
  - Tableau, PowerBI, Metabase, Superset
- ✓ **ETL/ELT**
  - Airflow, Spark
- ✓ **Programming language**
  - SQL, Python, Bash Syntax



## Description of System Development

System development is the process of designing, building, or programming, and completing a program or a system.

Computer systems developers collaborate with companies, institutions, and independent clients. They survey and diagnose database program issues, evaluate existing systems, identify system requirements, engage with users for additional requirements, and advise management about system innovations to improve productivity.



## History of System Development

The history of system development can be traced back to the manual processes of electronic computers, followed by the evolution of programming languages. The development of a system is then advanced by integrated circuits, client-server model and the internet. Subsequently, mobile and cloud computing also further fleshed out the concept of system development. In the 2010s, DevOps and continuous integration was further advanced in the process. Currently, system development process is focusing on artificial intelligence, machine learning and the IoT.

## Reflection

### LEE LAI QUEEN

I am very inspired by Ms Qistina's talk. Her valuable insights in this talk have educated me on the role an analyst and the tasks that they would have to undertake. As of the topic of system development, this talk certainly sparked my interest in further learning about it. I plan to deepen my understanding of it and refine my skills in system development methodologies in the next four years.

### OW YEE HAO

The Credence talk sparked my ambition as a Software Engineering student. I'm keen to explore roles like Data Scientist and BI Developer, focusing on mastering tools like Tableau and PostgreSQL. Inspired by Credence's emphasis on culture, continuous learning, and empowerment, I plan to pursue certifications, engage in collaborative projects, and navigate the evolving landscape of system development with resilience and a thirst for knowledge over the next four years.

### THANG WEI JIE

I have learnt a lot from this talk because I was always curious about what it takes for a system to be developed and implemented. Through Ms. Qistina's talk, I am now interested to learn more about how to do system development and take part in a development project myself. Ms. Qistina also mentioned about the various technology and tools that she uses in her field of work, I will definitely familiarise myself with those tools and be efficient in them so I can be a better developer myself.

### JABAR ARYA LOKANANTA

From the discussion program Analytic & System Development, which To tackle complicated challenges, you need a team of people with different experiences and skill sets. and the most crucial stage in developing a successful analytics practice is learning how to solve problems practically without the use of the data at our disposal. Conversely, our attention is not limited to data and technology; we also consider the human factor and the best ways to connect with both technical and non-technical audiences.

## References:

- [1.https://www.computerhope.com/jargon/s/systdeve.htm#:~:text=System%20development%20is%20the%20overall,computer%2C%20hardware%2C%20or%20software.](https://www.computerhope.com/jargon/s/systdeve.htm#:~:text=System%20development%20is%20the%20overall,computer%2C%20hardware%2C%20or%20software.)
- [2.https://resources.workable.com/system-analyst-job-description](https://resources.workable.com/system-analyst-job-description)