



MySkill | *#RintisKarirImpian*

**Portfolio - Intensive Bootcamp**

# Importance of Data and Case Study

**Owner:** Cornelia Riasdita Valentina



# Based on my understanding...

- Why do companies need data?

**Short answer:** Make maximized profit

**Long answer:**

- To understand better what the customers really need
- To make products that matched customers' needs
- To improve the quality of the products offered to the customers
- Knowing the trends then making products based on those trends



# Based on my understanding...

- What's the difference between data engineer, data analyst, and data scientist?

Data Engineer	Data Analyst	Data Scientist
<ul style="list-style-type: none"><li>- Prepares the data so that it will be ready to be used by DA and DS</li><li>- Make pipelines from the source of data to the users</li></ul>	<ul style="list-style-type: none"><li>- Finding reasons behind the things happened based on the data</li><li>- Make suggestions based on the data</li></ul>	<ul style="list-style-type: none"><li>- Making predictions from the data, usually using machine learning as tools</li></ul>



Things to think if you become a **data analyst**.

- **What** data do you need?
- **Why** do you need the data?
- And **how** to get the data?



# Let's study these cases (1)

- Raphael is a mobile vegetables seller (*tukang sayur*). Everyday he sells a lot of veggies to the moms in many housing complex. Can Raphael step up his game to be a data-driven vegetables seller? If yes, how can he do it?

Yes, by recording sales data daily, including buy and sell prices. Customer profiles and their purchase history can also be recorded. A survey can also be done (the easiest way is by asking each customer directly everytime they buy something) to know what kind of other vegetables or spices or other goods that are needed but not yet sold. From those data, the supply can be optimized depends on customer needs. Supplier data is also needed to support prediction of demands that are compatible with the harvest seasons of each vegetable.

## Let's study these cases (2)

- Shaenette loves baking so much that she considers to sell her pastries online. Do you think she needs to be data-driven? What are your advices to her?

She really needs to be data-driven because she will compete with other patisseries that also sell their goods online. She needs to know what kind of pastries that are preferred by the customers. She also needs to know the demands of certain kinds of pastry during some events (for example, nastar is popular during Eid Al-Fitr and mooncakes are popular during lunar new year) so that she can make optimized production plan to maximize profit. Prices data of other pastry sellers is also needed so that the price of her products can compete in the online market. She also need data of ingredient suppliers, so that her product can be produced cost-effectively and with excellent quality.

# Let's study these cases (3a)

- Haji Endo is the head chief of one of the largest charity in Yokohama. Fundraising and distribution in traditional fashion have been running for years, but Haji Endo wants to do a breakthrough: to serve the donors and recipients more personally. What can he do?

He can make a platform that can connect between what goods are donated with what the needs and preferences of recipients. All users need to make an account inside that platform.

- When a donor wants to donate his clothes, he needs to input all things about the clothes he wants to donate, such as purchase/obtained date, type of item (*yukata* or other type of traditional clothing or only the accessories), what items are included (for example, is it a full set or it's missing the *obi*), colors, pattern, reason of donating, etc.
- When a recipient needs a certain kind of traditional clothes, he needs to input what he needs, such as type of clothes, or only an item, what color does it needs to be, etc.

# Let's study these cases (3b)

- Haji Endo is the head chief of one of the largest charity in Yokohama. Fundraising and distribution in traditional fashion have been running for years, but Haji Endo wants to do a breakthrough: to serve the donors and recipients more personally. What can he do?
- Then according to collected data, the platform helps the recipient to find which donors has the item needed. Recipient then must contact the donor to discuss things about the items that will be donated (the platform needs to provide a chat/call system, for privacy reasons). When the items has arrived, recipient can send gratitudes via in-platform chat and/or send back a gratitude gift. (Needs a partnership with shipping agencies to make shipment and gratitude gift more convenient. Both parties can track their items during the shipment process.)

This way, the platform helps to connect donors and recipients, and also make those connection more personal by making gratitudes available to express, because gratitude is an important part of Japanese culture.



# Course Summary



- Data in a nutshell is factual information.
- Big Data contains a huge amount of data. Big Data has different formats from many sources. Useful data can be extracted from Big Data. The data accumulated for Big Data is really fast. Big Data still has some inconsistencies and uncertainty because how big it is.
- Why learn about Big Data: to keep track of certain useful informations; make informed decisions; thus minimizing assumptions; to serve customers better through the products; and maximize the opportunities that arise.



# Course Summary



- Data certainly impacts many kinds of industry, from ICT, finance, trade, until agriculture and even tourism. Certain kind of industry also influenced more by data.
- Data is correlated with how it is stored. Physical documents with physical storage are used in the 1900s, floppy disk is used in the 1990s, internal data warehouse is used in the 2010s (and quite expensive, so usually only big companies use them), and cloud, the latest one, is used in the present times.



# Course Summary



- There are many roles that correlate with data, but only 3 of them that are more involved: data analyst, data engineer, and data scientist.
- The main differences between the 3 of them: Data engineers prepares the data needed for analysis by data analysts and scientists; Data analysts analyzes data and announce the results to other departments so that the best decisions can be made; Data scientist uses data to solve problems and make predictions.
- From those differences, all those 3 roles need different skillset, requirements, and person with different interests.
- Those 3 roles probably will combine to become more specialized. So, it's better to learn more than one current roles.



# Follow me!

LinkedIn :

<https://www.linkedin.com/in/cornelia-riasdita-757123227/>

Bootcamp Data Analysis  
by @myskill.id

