

1. Data Fundamentals

By Pritey Mehta

About this session

- Define and explain key concepts involved in data analytics including data, data analysis, and data ecosystem
- Conduct an analytical thinking self assessment giving specific examples of the application of analytical thinking



Data Analytics. What and Why?

- Do you know the similarities between large corporations and small businesses?
Yes, it's **Data**.
Data is important to running a business and increasing sales for every organization.
- Nowadays, data may be found almost anywhere. Whether you're using your phone, doing a Google search, or sharing something on social media. As a result, the amount of data available globally is growing by the day. But that's not all; data is valuable when it's organized and managed properly. So, by conducting data analysis, you will be able to obtain the necessary information and make an informed decision.
- Reference:
<https://medium.com/@priteymehta9/data-analytics-what-and-why-932941274cd1>

Data Analysis Process



Ask



Prepare



Process



Analyse



Share



Act



Case Study

- **how can the organization improve the retention rate for new employees?**

1. Ask

First, the analysts needed to establish what the project would involve and what would define a successful outcome.

As a result, they asked effective questions and engaged with managers and leaders who were interested in the outcome of their people analysis to determine these things. They asked the following kind of questions:



Do you believe managers with higher retention rates provide something additional or special to new employees?



What do you believe is the primary source of unhappiness among new employees?



What do you believe new employees should learn in order to be successful in their first year on the job?



Have you ever collected information from new employees? If this is the case, may we have access to the historical data?

2. Prepare

During this step, the analysts determined what data they needed to achieve the successful outcome identified in the previous step; in this example, the analysts chose to collect the data using an online survey of new employees.

The analyst can also collect the historical data to compare the statistics.

3. Process

Great analysts understand how to respect their data as well as the people who offer it. Because employees provided the data, it was critical that all employees gave their agreement to participate.

The data analysts also ensured that employees were aware of how their data would be collected, kept, handled, and protected. One of the tasks of data analysts is to collect and use data ethically.

They took the following actions to guarantee confidentiality and effectively protect and store the data:

- They restricted data access to a small group of analysts.
- They cleaned the data to ensure that it was complete, accurate, and useful.
- Certain data was aggregated and summarized in order to protect individual responses.
- To provide an extra layer of protection, they uploaded raw data to an internal data warehouse.



4. Analyse

The data analysts discovered that an employee's experience with certain processes was a significant predictor of overall work satisfaction.

Their findings were as follows:

- Employees who went through a lengthy and complex hiring process were more likely to depart the organization.
- Employees who had a positive evaluation and feedback experience were more inclined to stay with the organization.

5. Share

The data analyst share the report about findings, as below:

- They provided the findings to the managers to ensure that they had a complete picture.
- They asked the managers to deliver the results to their teams in person.

Sharing reports/findings in visual format is a better choice for helping clients understand the findings.

The most important thing to keep in mind is that the client should understand the analysis within 5 seconds of viewing the visualization.

6. Act

The team of analysts' final stage of the process was to collaborate with company management to determine how best to implement changes and take actions based on the results.

Their recommendations were as follows:

- Standardize the staff hiring and evaluation process based on the most efficient and transparent methods.
- Conduct the same survey every year and compare the results to the prior year's.



Next Session

Data and gut instinct