

DATA ENGINEER CASE SCENARIO

Ver 1.0



Prepared for

Nawatech

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Table of Contents

1	Case 1	4
2	Case 2	5



1 Case 1

From the **motorcycle.csv** file there are 8 columns of summarized dummy data transactions in motorcycle sale and distribution in Indonesia:

Sale_id	ID of individual rows / transactions
Purchase_date	The date of transactions
Motorcycle_name	The name of motorcycle
Motorcycle_group	The group of motorcycle
Dealer_origin	Origin city of dealer of transactions
Price	Motorcycle pricing
Qty	The quantity of unit
Total	Total payment of transactions per unit

Task 1

Analyze the data, is there any anomalies in the data? How do you analyze it?

Task 2

If there are any anomalies in the data, remove them. Then, create Power BI Dashboard that represents:

1. Comparison between each motorcycles type
2. Comparison between each motorcycle group
3. Trend of sales each motorcycles type
4. Trend of sales each motorcycle group
5. Create your own reports based on the data, what insights that you can build?

2 Case 2

Create a high level architecture flow/diagram of ETL/ Pipeline Data Ingestion consists of:

Data sources: Database (SQL Server or Oracle or MySQL or else..), Files (CSV, XLSX, JSON, AVRO, ORC, PARQUET, or ELSE)

Data warehousing: SQL Server or Cloudera or Big Query or else..

Data visualization: Power BI, Tableau, Looker Studio, or else...

You can create it within on-premises environments or cloud environments or even hybrid environments (both on-premises and cloud In a single flow/diagram). Please give your explanation about the flow/diagram.

