

# Data Directory for Gold Layer

## Overview

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The Gold Layer is the business level data representation, structured to support analytical reporting use case. It contains 'dimension tables' and 'fact tables' for specific business metrics.

#### 1. gold.dim\_customers

- Purpose: Stores customer details enriched with demographic and geographic data.
- Columns:

| Column Name     | Data Type | Description  |
|-----------------|-----------|--|
| customer_key    | INT       | Surrogate key uniquely identifying each customer record in the dimension table.      |
| customer_id     | INT       | Unique numerical identifier assigned to each customer.                               |
| customer_number | VARCHAR   | Alphanumerical identifier representing the customer used for tracking and referring. |
| first_name      | VARCHAR   | The customer's first name as recorded in the system.                                 |
| last_name       | VARCHAR   | The customer's last name or family name.   |
| country         | VARCHAR   | The country of residence for the customer (e.g., "Australia").                       |
| marital_status  | VARCHAR   | The marital status of the customer (e.g., 'Married', 'Single').                      |
| gender          | VARCHAR   | The gender of the customer (e.g., 'Male', 'Female', 'n/a').                          |
| birthdate       | DATE      | The date of birth of the customer, formatted as YYYY-MM-DD (e.g., 1971-10-06).       |
| created_date    | DATE      | The date and time when the customer record was created in the system                 |

#### 2. gold.dim\_products

- Purpose: Provide information about the products and their attributes.
- Columns:

| Column Name    | Data Type   | Description  |
|----------------|-------------|--|
| produc_key     | INT         | Surrogate key uniquely identifying each product record in the product dimension table.                 |
| product_id     | INT         | A unique identifier assigned to the product for internal tracking and referencing.                     |
| product_number | VARCHAR(50) | A structured alphanumerical code representing the product, often used for categorization or inventory. |
| product_name   | VARCHAR(50) | Descriptive name of the product, including key details such as type, color size.                       |
| cateogory_id   | VARCHAR(50) | A unique identifier for the product's category, linking to its high-level classification.              |
| category       | VARCHAR(50) | The broad classification of the product (e.g., Bikes, Components) to group related items.              |
| subcategory    | VARCHAR(50) | A more detailed classification of the product within the category, such as product type.               |

|                      |             |  |
|----------------------|-------------|--|
| maintenance_required | VARCHAR(50) | Indicates whether the product requires maintenance (e.g., 'Yes', 'No').                  |
| cost                 | INT         | The cost or base price of the product, measured on monetary units.                       |
| product_line         | VARCHAR(50) | The specific product line or series to which the product belongs (e.g., Road, Montaine). |
| start_date           | DATE        | The date when the product became available for sale or use, stores.                      |

### 3. gold.fact\_sales

- Purpose: Stores transactional sales data for analytical purposes.
- Columns:

| Column Name   | Data Type   | Description   |
|---------------|-------------|---|
| order_number  | VARCHAR(50) | A unique alphanumeric number for each sales order (e.g., 'SO54496').                            |
| product_key   | INT         | Surrogate key linking the order to the product dimension table.                                 |
| customer_key  | INT         | Surrogate key linking the order to the customer dimension table.                                |
| order_date    | DATE        | The date when the order was placed.   |
| shipping_date | DATE        | The date when the order was shipped to the customer.  |
| due_date      | DATE        | The date when the order payment is due.   |
| sales_amount  | INT         | The total monetary values of the sale for the line item, in the whole currency unit (e.g., 25). |
| quantity      | INT         | The number of units of the products ordered for the line item (e.g., 1)                         |
| price         | INT         | The price per unit of the product for the line item, in the whole currency unit (e.g., 25)      |