**Overview**

The Gold Layer is the business-level data representation, structured to support analytical and reporting use cases. It consists of **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 | NVARCHAR(50) | Alphanumeric identifier representing the customer, used for tracking and referencing. |
| first\_name | NVARCHAR(50) | The customer's first name, as recorded in the system. |
| last\_name | NVARCHAR(50) | The customer's last name or family name. |
| country | NVARCHAR(50) | The country of residence for the customer (e.g., 'Australia'). |
| marital\_status | NVARCHAR(50) | The marital status of the customer (e.g., 'Married', 'Single'). |
| gender | NVARCHAR(50) | 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). |
| create\_date | DATE | The date and time when the customer record was created in the system |

**2. gold.dim\_products**

* **Purpose:** Provides information about the products and their attributes.
* **Columns:**

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Description** |
| product\_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 | NVARCHAR(50) | A structured alphanumeric code representing the product, often used for categorization or inventory. |
| product\_name | NVARCHAR(50) | Descriptive name of the product, including key details such as type, color, and size. |
| category\_id | NVARCHAR(50) | A unique identifier for the product's category, linking to its high-level classification. |
| category | NVARCHAR(50) | The broader classification of the product (e.g., Bikes, Components) to group related items. |
| subcategory | NVARCHAR(50) | A more detailed classification of the product within the category, such as product type. |
| maintenance\_required | NVARCHAR(50) | Indicates whether the product requires maintenance (e.g., 'Yes', 'No'). |
| cost | INT | The cost or base price of the product, measured in monetary units. |
| product\_line | NVARCHAR(50) | The specific product line or series to which the product belongs (e.g., Road, Mountain). |
| start\_date | DATE | The date when the product became available for sale or use, stored in |

**3. gold.fact\_sales**

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

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Description** |
| order\_number | NVARCHAR(50) | A unique alphanumeric identifier 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 was due. |
| sales\_amount | INT | The total monetary value of the sale for the line item, in whole currency units (e.g., 25). |
| quantity | INT | The number of units of the product ordered for the line item (e.g., 1). |
| price | INT | The price per unit of the product for the line item, in whole currency units (e.g., 25). |