

To design dimensional data models for Global Super Store, we need to understand the business requirements, dimensions, and facts involved in the data. Here's a simplified example of how we can design dimensional data models for a retail business like Global Super Store:

1. **Sales Data Model:**

- **Fact Table:** `sales_fact`
 - Columns:
 - `order_id` (Primary Key)
 - `product_id` (Foreign Key)
 - `customer_id` (Foreign Key)
 - `order_date`
 - `quantity_sold`
 - `unit_price`
 - `total_sales_amount`
- **Dimension Tables:**
 - `product_dim`
 - Columns:
 - `product_id` (Primary Key)
 - `product_name`
 - `category`
 - `subcategory`
 - `customer_dim`
 - Columns:
 - `customer_id` (Primary Key)
 - `customer_name`
 - `customer_segment`
 - `date_dim`
 - Columns:
 - `date_id` (Primary Key)
 - `order_date`
 - `day_of_week`
 - `month`
 - `quarter`
 - `year`

2. **Inventory Data Model:**

- **Fact Table:** `inventory_fact`
 - Columns:

- `product_id` (Foreign Key)
- `warehouse_id` (Foreign Key)
- `quantity_on_hand`
- ****Dimension Tables:****
 - `product_dim` (Same as in Sales Data Model)
 - `warehouse_dim`
 - Columns:
 - `warehouse_id` (Primary Key)
 - `warehouse_name`
 - `location`

3. ****Customer Data Model:****

- ****Fact Table:**** None (Customer data is primarily descriptive)
- ****Dimension Tables:****
 - `customer_dim` (Same as in Sales Data Model)

4. ****Product Data Model:****

- ****Fact Table:**** None (Product data is primarily descriptive)
- ****Dimension Tables:****
 - `product_dim` (Same as in Sales Data Model)

5. ****Time Data Model:****

- ****Fact Table:**** None (Time data is primarily descriptive)
- ****Dimension Tables:****
 - `date_dim` (Same as in Sales Data Model)

These are simplified dimensional data models. In a real-world scenario, additional dimensions and facts may be required based on the specific business requirements of Global Super Store. Each dimension table provides descriptive attributes related to a specific aspect of the business (e.g., product, customer, time), while the fact table contains numerical measures (e.g., sales quantity, sales amount) associated with business events (e.g., sales transactions).