**Data Dictionary:**

**Customer:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Description** | **Type** | **Unit** |
| **customer\_id** | Unique ID of the customers. | STRING | - |
| **first\_name** | First name of the customer. | STRING | - |
| **last\_name** | Last name of the customer. | STRING | - |
| **gender** | Gender of the customer. | STRING | - |
| **age** | Age of the customer. | INT | YEARS |
| **country** | The country names the customer is from. | STRING | - |
| **income** | Income of the customer | INT | - |
| **Bucket\_Age** | Classify Age into separate bucket | STRING |  |
| **Bucket\_Income** | Classify Income into separate bucket | STRING |  |

**Customer - Additional column**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Description** | **Formula** | **Type** |
| Bucket\_Age | Classify Age into separate bucket | Age =< 34 is "Junior" Age between 35-54 is "Adult" Age > 55 is "Senior" | STRING |
| Bucket\_Income | Classify Income into separate bucket | Income =< 60k is "Low" Income =< 100k is "Medium" Income > 100k is "High" | STRING |

**Purchase:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Column Name** | **Description** | **Type** | **Unit** |
| **order\_id** | Unique order id of the order placed. | STRING | **-** |
| **customer\_id** | Unique ID of the customer. | STRING | **-** |
| **product\_name** | Product name. | STRING | **-** |
| **description** | The description about the product. | STRING | **-** |
| **price** | Price of the product. | DECIMAL | **-** |
| **tax** | Applicable tax on the product. | PERCENTAGE | **-** |
| **order\_date** | The date on which order was placed. | DATE | **-** |
| **quantity** | Quantity of the product being ordered. | INT | **-** |
| **shipping\_cost** | The cost of shipping. | DECIMAL | **-** |
| **shipping\_date** | The date of shipment. | DATE | **-** |

**Purchase – Additional Column**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table** | **Column Name** | **Description** | **Formula** | **Type** |
| purchase | Sales | Duplicate from Price Column | Sales = Price | Decimal |
| purchase | Bucket\_Discount | Classify discount amount into separate bucket | 10, 20, 30, 40 and 50 | STRING |
| purchase | ShipCostRatio | Compute the shipping cost over the sales | shipment cost / sales | Decimal |
| purchase | Bucket\_Shipcost | Claissify shipment cost into separate bucket | 10, 20, 30, 40, 50 and >50 | STRING |
| purchase | LeadTimeDelivery | Compute the number of day needed to ship the product | Shipment Date minus Order Date | STRING |
| purchase | Bucket\_DeliveryLeadTime | Classify Delivery Lead Time into separate bucket | =< 3 days, "Pass within 3 Days" Between 4-7 days, "Unreasonable 4-7 Days" > 7 days, "Fail > 7 Days" | STRING |

**DATE (NEW)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table** | **Column Name** | **Description** | **Formula** | **Type** |
| DATE | Date | Date range from 01/01/2019 to 31/01/2023 | DATE = Calendar(“01/01/2019”,”31/01/2023”) | Date |

**PRODUCT (NEW)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table** | **Column Name** | **Description** | **Formula** | **Type** |
| PRODUCT | Product\_name | Extract from purchase[product\_name] |  | STRING |
| PRODUCT | Category | Classify product\_name into separate bucket | See below on classification | STRING |

See product\_name being tag to different Category below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **product\_name** | **Category** |  | **product\_name** | **Category** |
|  |  |  | Appliance Set | Fixtures |
| Rugs | Décor |  | Lighting | Fixtures |
| Curtains | Décor |  | Kitchen Appliances | Fixtures |
| Wall Art | Décor |  | Furniture | Furniture |
| Home Decor | Décor |  | Dining Set | Furniture |
| Dress | Fashion |  | Bedding | Furniture |
| Shoes | Fashion |  | Virtual Reality Headset | Technology |
| Formal Shirt | Fashion |  | Tablet | Technology |
| Skirt | Fashion |  | TV | Technology |
| Sports Shoes | Fashion |  | Camera | Technology |
| Activewear Set | Fashion |  | Smart Watch | Technology |
| Jacket | Fashion |  | Laptop | Technology |
| T-Shirt | Fashion |  | Headphones | Technology |
| Sweater | Fashion |  | Wireless Speaker | Technology |
| Jeans | Fashion |  | Gaming Console | Technology |
|  |  |  | Smartphone | Technology |