E-Commerce Data Analysis:

Data Description:

there are exactly 6 table and 1 is a fact table and the rest of them are dimension tables:

**Fact Table:**

payment\_key:

Description: An identifier representing the payment transaction associated with the fact.

Use Case: This key links to a payment dimension table, providing details about the payment method and related information.

customer\_key:

Description: An identifier representing the customer associated with the fact.

Use Case: This key links to a customer dimension table, providing details about the customer, such as name, address, and other customer-specific information.

time\_key:

Description: An identifier representing the time dimension associated with the fact.

Use Case: This key links to a time dimension table, providing details about the time of the transaction, such as date, day of the week, and month.

item\_key:

Description: An identifier representing the item or product associated with the fact.

Use Case: This key links to an item dimension table, providing details about the product, such as category, sub-category, and product name.

store\_key:

Description: An identifier representing the store or location associated with the fact.

Use Case: This key links to a store dimension table, providing details about the store, such as location, store name, and other store-specific information.

quantity:

Description: The quantity of items sold or involved in the transaction.

Use Case: Represents the amount or number of items associated with the transaction.

unit:

Description: The unit or measurement associated with the quantity (e.g., pieces, kilograms).

Use Case: Specifies the unit of measurement for the quantity.

unit\_price:

Description: The price per unit of the item.

Use Case: Represents the cost or price associated with each unit of the item.

total\_price:

Description: The total price of the transaction, calculated as the product of quantity and unit price.

Use Case: Represents the overall cost or revenue generated by the transaction.

**Customer Table:**

customer\_key:

Description: An identifier representing a unique customer.

Use Case: Serves as the primary key to link with the fact table, allowing for easy and efficient retrieval of customer-specific information.

name:

Description: The name of the customer.

Use Case: Captures the personal or business name of the customer for identification and reference purposes.

contact\_no:

Description: The contact number associated with the customer.

Use Case: Stores the phone number or contact details for communication or outreach purposes.

nid:

Description: The National ID (NID) or a unique identification number for the customer.

**Item Table:**

item\_key:

Description: An identifier representing a unique item or product.

Use Case: Serves as the primary key to link with the fact table, enabling retrieval of detailed information about specific items in transactions.

item\_name:

Description: The name or title of the item.

Use Case: Captures the descriptive name of the item, providing a recognizable label for the product.

desc:

Description: A description of the item.

Use Case: Contains additional details about the item, such as features, specifications, or any relevant information.

unit\_price:

Description: The price per unit of the item.

Use Case: Represents the cost or price associated with each unit of the item.

man\_country:

Description: The country where the item is manufactured.

Use Case: Captures the origin or manufacturing location of the item.

supplier:

Description: The supplier or vendor providing the item.

Use Case: Stores the name or identifier of the supplier, facilitating tracking of item sources.

unit:

Description: The unit of measurement associated with the item (e.g., pieces, kilograms).

**Store Table:**

store\_key:

Description: An identifier representing a unique store or location.

Use Case: Serves as the primary key to link with the fact table, allowing for easy retrieval of information about transactions associated with specific stores.

division:

Description: The administrative division or region where the store is located.

Use Case: Captures the broader geographical area in which the store operates.

district:

Description: The district where the store is situated.

Use Case: Specifies a more localized geographical area, providing information about the district where the store is located.

upazila:

Description: The upazila or sub-district where the store is situated.

Use Case: Represents a more granular geographical location, providing details

**Time Table:**

time\_key:

Description: An identifier representing a unique time or timestamp.

Use Case: Serves as the primary key to link with the fact table, allowing for easy and efficient retrieval of information about transactions based on time.

date:

Description: The specific date associated with the timestamp.

Use Case: Captures the calendar date corresponding to the time key, providing information about when a transaction occurred.

hour:

Description: The hour component of the timestamp.

Use Case: Represents the specific hour of the day when a transaction took place, allowing for time-based analysis.

day:

Description: The day of the week associated with the timestamp.

Use Case: Provides information about the day of the week for more granular time-based analysis.

week:

Description: The week number associated with the timestamp.

Use Case: Captures the week in the calendar year when a transaction occurred, facilitating weekly analysis.

month:

Description: The month associated with the timestamp.

Use Case: Represents the calendar month when a transaction took place, enabling monthly analysis.

quarter:

Description: The quarter of the year associated with the timestamp.

Use Case: Captures the quarter in the calendar year when a transaction occurred, facilitating quarterly analysis.

year:

Description: The calendar year associated with the timestamp.

**Payment Table:**

payment\_key:  
 Description: An identifier representing a unique payment transaction.  
 Use Case: Serves as the primary key to link with the fact table, allowing for easy and efficient retrieval of information about transactions based on payment.

trans\_type:

Description: The type or method of payment used for the transaction.

Use Case: Captures the specific payment method employed, such as credit card, cash, or other forms of payment.

bank\_name:

Description: The name of the bank associated with the payment transaction.

Use Case: Specifies the financial institution or bank involved in processing the payment, providing additional details about the transaction.