

# E-Commerce OLTP Data Dictionary

## Table: customers

- customer\_id (BIGINT) [PK]: Unique ID for each customer
- first\_name (VARCHAR(50)) []: First name of customer
- last\_name (VARCHAR(50)) []: Last name of customer
- email (VARCHAR(150)) []: Customer email address
- phone (VARCHAR(50)) []: Customer phone number (various formats)
- city (VARCHAR(50)) []: Customer city
- state (VARCHAR(50)) []: Customer state or region
- signup\_date (DATE) []: Date when customer signed up
- is\_active (BOOLEAN) []: True if customer is currently active
- external\_id (VARCHAR(100)) []: External system reference ID
- guest\_flag (BOOLEAN) []: True if customer used guest checkout

## Table: products

- product\_id (BIGINT) [PK]: Unique product identifier
- product\_name (VARCHAR(200)) []: Name or SKU of the product
- product\_category\_raw (VARCHAR(200)) []: Uncleaned raw product category name
- list\_price (DECIMAL(10,2)) []: Listed selling price
- cost\_price (DECIMAL(10,2)) []: Product cost to company
- is\_active (BOOLEAN) []: Whether product is active
- created\_at (DATE) []: Date product was first created

## Table: orders

- order\_id (BIGINT) [PK]: Unique order identifier
- customer\_id (BIGINT) [FK]: Foreign key to customers
- order\_date (DATE) []: Date when the order was placed
- status (VARCHAR(20)) []: Order status (NEW, COMPLETED, CANCELLED, RETURNED, etc.)
- order\_placed\_at (DATETIME) []: Exact timestamp when order was placed
- channel (VARCHAR(50)) []: Sales channel (web, mobile\_app, store, etc.)
- user\_agent (TEXT) []: Browser or app user-agent string
- device\_type (VARCHAR(20)) []: Device type (desktop, mobile, etc.)
- utm\_source (VARCHAR(100)) []: UTM tracking source for marketing attribution
- order\_value (DECIMAL(12,2)) []: Total monetary value of the order
- num\_items (INT) []: Total number of items in the order

## Table: order\_items

- order\_item\_id (BIGINT) [PK]: Unique identifier for each order line item
- order\_id (BIGINT) [FK]: Foreign key to orders
- product\_id (BIGINT) [FK]: Foreign key to products

- quantity (INT) []: Quantity of product ordered
- unit\_price (DECIMAL(10,2)) []: Unit selling price per product
- line\_total (DECIMAL(12,2)) []: Total for this line (quantity \* unit\_price)

## Table: payments

- payment\_id (BIGINT) [PK]: Unique payment identifier
- order\_id (BIGINT) [FK]: Foreign key to orders
- payment\_method (VARCHAR(50)) []: Payment method (CREDIT\_CARD, DEBIT\_CARD, UPI, COD, etc.)
- amount (DECIMAL(12,2)) []: Payment amount
- payment\_date (DATE) []: Date payment processed
- is\_refunded (BOOLEAN) []: True if payment was refunded

## Table: shipments

- shipment\_id (BIGINT) [PK]: Unique shipment identifier
- order\_id (BIGINT) [FK]: Foreign key to orders
- shipped\_date (DATE) []: Date shipment was dispatched
- delivered\_date (DATE) []: Date shipment was delivered
- delivery\_city (VARCHAR(50)) []: City where shipment was delivered
- shipment\_status (VARCHAR(20)) []: Shipment status (PENDING, SHIPPED, DELIVERED, RETURNED)
- carrier (VARCHAR(50)) []: Logistics carrier responsible for delivery

## Table: returns

- return\_id (BIGINT) [PK]: Unique return identifier
- order\_id (BIGINT) [FK]: Foreign key to orders
- order\_item\_id (BIGINT) [FK]: Foreign key to order\_items
- returned\_date (DATE) []: Date item was returned
- reason\_code (VARCHAR(100)) []: Reason for return (DAMAGED, SIZE\_ISSUE, etc.)
- refund\_amount (DECIMAL(12,2)) []: Refund amount issued for the return

## Table: product\_bundles

- bundle\_id (BIGINT) [PK]: Unique bundle identifier
- bundle\_name (VARCHAR(150)) []: Name of the bundle

## Table: bundle\_items

- bundle\_item\_id (BIGINT) [PK]: Unique identifier for bundle item
- bundle\_id (BIGINT) [FK]: Foreign key to product\_bundles
- product\_id (BIGINT) [FK]: Foreign key to products
- quantity (INT) []: Quantity of each product in the bundle
- bundle\_price (DECIMAL(10,2)) []: Discounted price for the bundle component

## Table: product\_price\_history

- id (BIGINT) [PK]: Unique identifier for price history record

- product\_id (BIGINT) [FK]: Foreign key to products
- start\_date (DATE) []: Start date for price validity
- end\_date (DATE) []: End date for price validity
- list\_price (DECIMAL(10,2)) []: List price during this period
- promotion\_id (VARCHAR(50)) []: Associated promotion identifier if any