4-step process and denormalizing the model

1-The business process is trackingsalestransactions. Each sale represents an event where a product is sold to a customer, managed by an employee, and occurs at a specific store. This business process generates performance metrics such as salesamount, paymentdetails, and transactioncounts.

2-Grain Statement: One row per individual product sale transaction

STEP 3: IDENTIFY THE DIMENSIONS

Product Dimension-(DIM\_PRODUCTS)  
Attributes: PRODUCT\_ID, PRODUCT\_NAME, CATEGORY\_ID, CATEGORY\_NAME, PRODUCT\_UPDATE\_DT.

Customer Dimension (DIM\_CUSTOMERS)  
Attributes: CUSTOMER\_ID, CUSTOMER\_FIRST\_NAME, CUSTOMER\_LAST\_NAME, CUSTOMER\_EMAIL, ADDRESS\_ID, CITY\_ID, COUNTRY\_ID, REGION\_ID, etc.

Store Dimension (DIM\_STORES)  
Attributes: STORE\_ID, STORE\_ADDRESS\_ID, CITY\_ID, COUNTRY\_ID, REGION\_ID, etc.

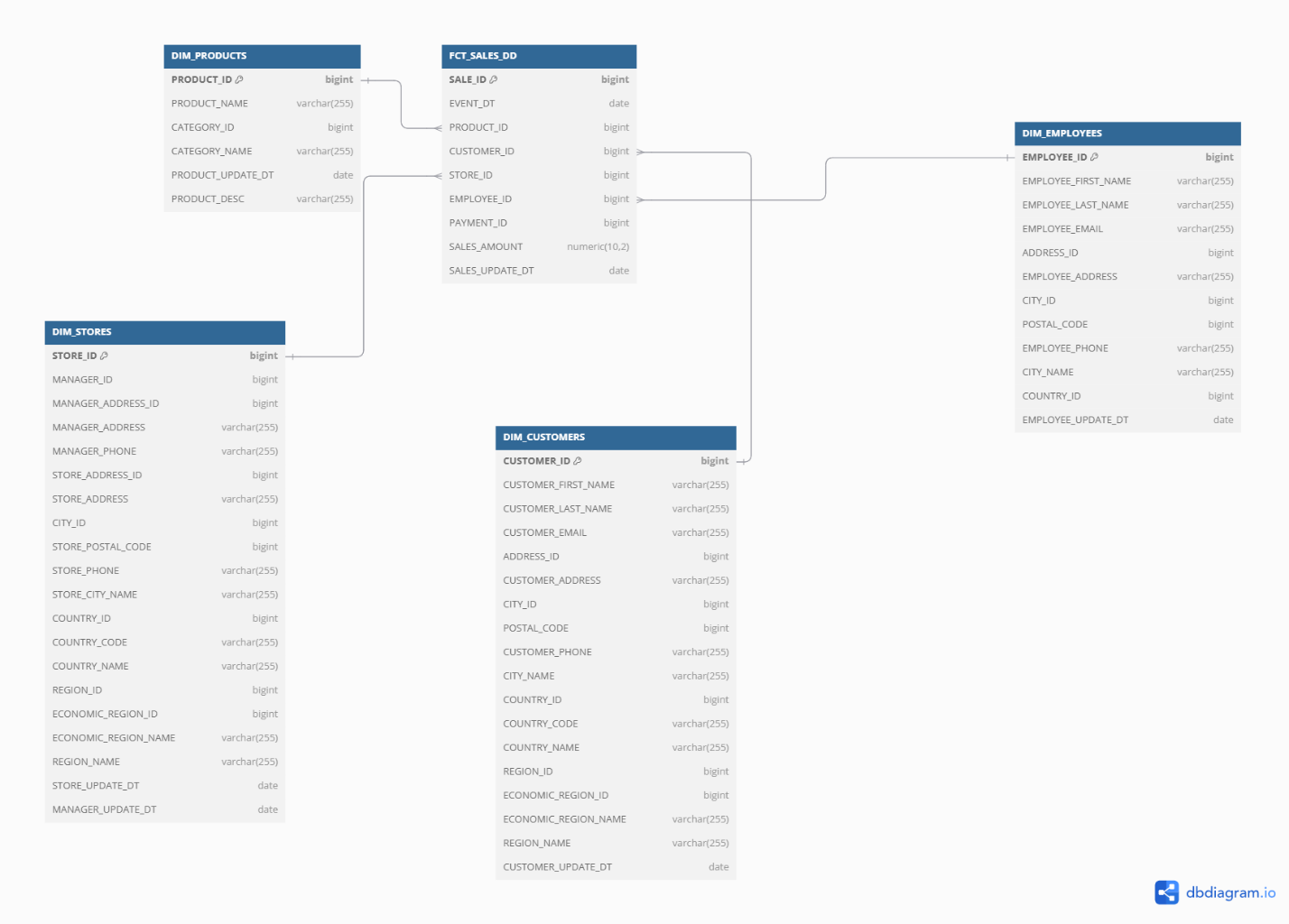
Employee Dimension (DIM\_EMPLOYEES)  
Attributes: EMPLOYEE\_ID, EMPLOYEE\_FIRST\_NAME, EMPLOYEE\_LAST\_NAME, ADDRESS\_ID, CITY\_ID, COUNTRY\_ID, etc.

4-identify the facts:

Sales Amount**-**The numeric amount of the sale

Payment Details -Identifies how the transaction was completed.

The image of star schema:



Snowflake schema description-I’m not sure about snowflake schema but my idea was to normalize address, country and city tables. We need them for customers, employee and store tables and because of that I normalized them and used them in these 3 tables. Fact table relationships remain unchanged, connecting to primary dimensions, which now reference sub-dimensions.

Address and location data centralized in DIM\_ADDRESSES, DIM\_CITIES, DIM\_COUNTRIES, DIM\_REGIONS, and DIM\_ECONOMIC\_REGIONS.

Snowflake schema(I hope you can see it clearly):

