



Business Template

E-COMMERCE GIFTS SHOP



Logo / Image

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1 BUSINESS DESCRIPTION

1.1 BUSINESS BACKGROUND

In today's world people are using the internet for various reasons. One of those reasons is how easy it is to buy goods from the other end of the world and have it shipped to your door. That's why many online stores are opened and generating profit. This E-commerce is selling gifts and homeware to people over the world. Customers from all over the globe make direct purchases for themselves. There are also small businesses that buy in bulk and sell to other customers through retail outlet channels. Because the business is going very well and a lot of purchases are being made by customers there is a great amount of data to analyze. Doing it without a DWH can be problematic what will be discussed in next topic.

1.2 PROBLEMS BECAUSE OF POOR DATA MANAGEMENT

Not being able to properly analyze data can have a negative impact on our business. We don't know what are we doing right and what wrong. What products generate money and which are losing it? We need a good way to analyze data to know in what way we want our business to go and how to get it there.

1.3 BENEFITS FROM IMPLEMENTING A DATA WAREHOUSE

Using DWH can help with the problems described above. Implementing a DWH can answer a lot of important questions for our businesses:

- Which category of products is most profitable?
- Customers from which country make us the most money?
- How much have our sales change during a period of time?

Those and many other questions can be correctly answered using a DWH. Having a DWH will let us plan how to develop our businesses in a more efficient way

2 DIMENSIONS OF A BUSINESS

Using 4 step dimensional process:

1. Step 1: Selecting the business process.

While having an online shop generates many business processes like advertising, shipping, supplying products for our shop, storage of products for this task and using the data from my set I will choose the retail sale process of products from the shop to customers. I think that analyzing this process can give many insightful answers to a lot of businesses questions.

2. Step 2: Declaring the grain.

Grain represents a single row in our DWH. For the E-commerce grain I will use a single purchase of one product by one customer that was sold by one employee on a specific date at a specific time. This will be the lowest level of data captured for my business process.

3. Step : Dimensions.

After choosing the grain that will be the most atomic row in my DWH in this step I will chose dimension that will allow to describe this operation and analyze the business properly.

I will start with DIM_CUSTOMERS and information related to then like name, surname, day of birth. Customers are people who buy products the business depends on them that's make this

dimension so important.

Next we have DIM_DATES that will show the date of our grain. It allows us to analyze performance more effectively across different time periods for our data and is essential for describing our data.

DIM_PRODUCTS - will describe what are customers buying from our shop. Our business works with gifts and homewares, it will be very beneficial for us to be able to identify which products have the biggest demand from our customers, in what periods and so on.

DIM_GEOGRAPHY – the detailed description of place where our order is send after it is bought by the customer. Continent, country, city and so on. This dimension will be used as a shipping address for products of our company.

DIM_EMPLOYEES – here we will store data of people who are working for our company.

DIM_PROMOTIONS – dimension describing ways we are trying to get our products to as many client as possible.

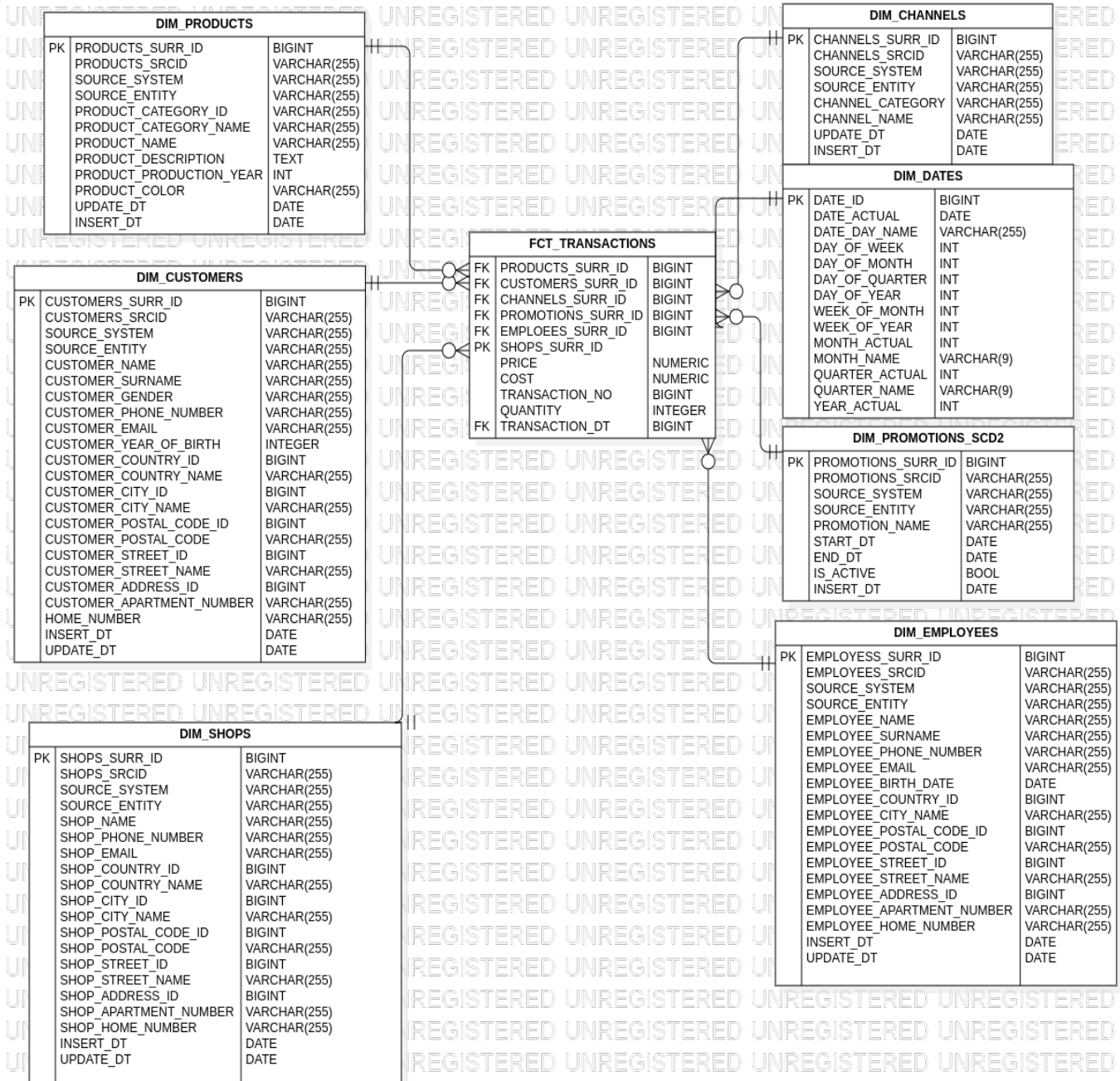
DIM_CHANNELS – describes the path our products make to our customers.

DIM_SHOPS – describes the attributes of our shops. The product can be shipped from there to our customer or he can by those products coming to our stationary shop. That's why there are two source systems for online delivery and buying in physical shop.

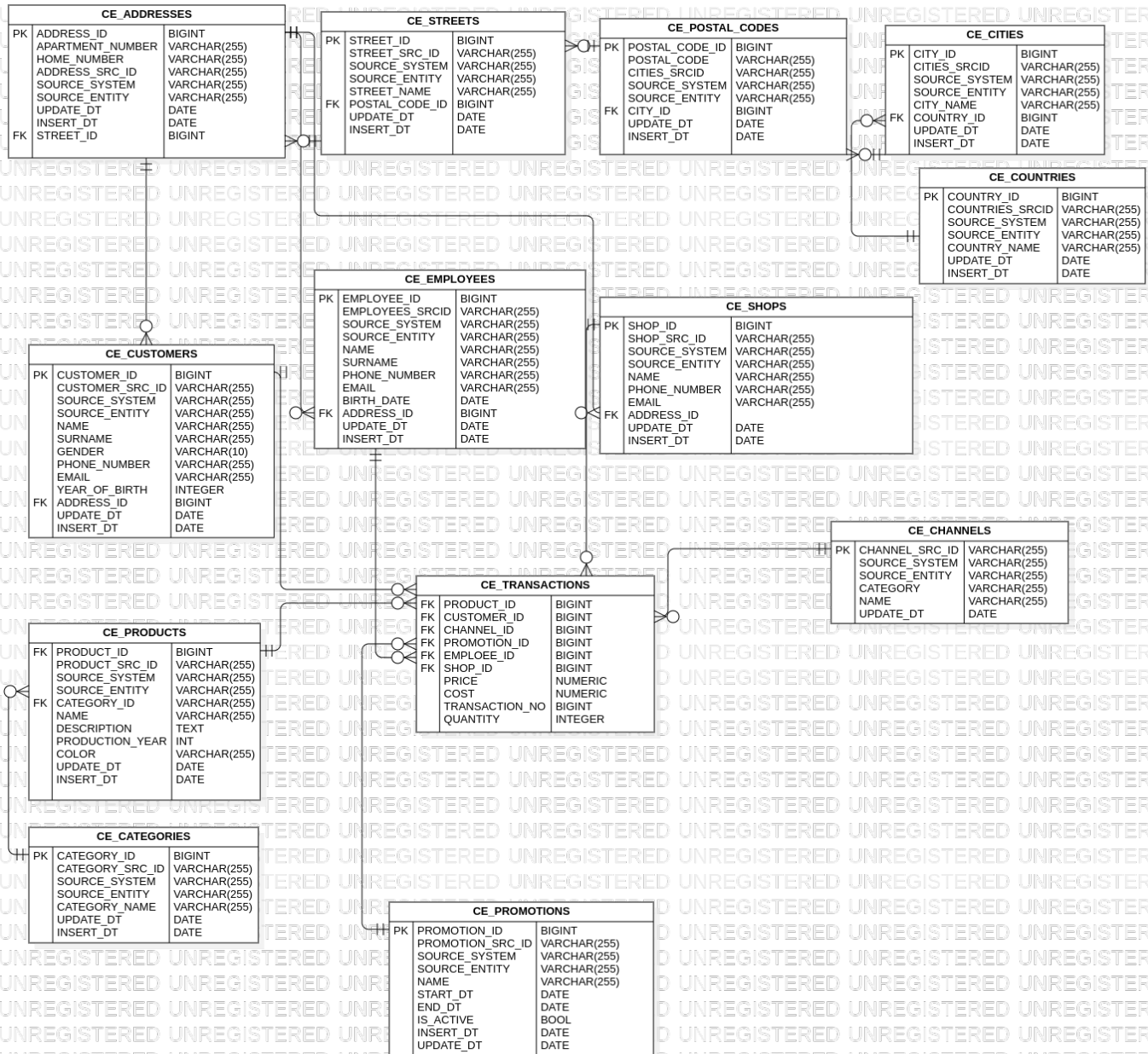
4. Step 4: Identify the facts.

Facts needed for FCT_TRANSACTIONS used for this DWH will be price of product, transaction_no that is taken from my dataset set and will be a degenerated dimension, quantity of products sold and cost of those products.

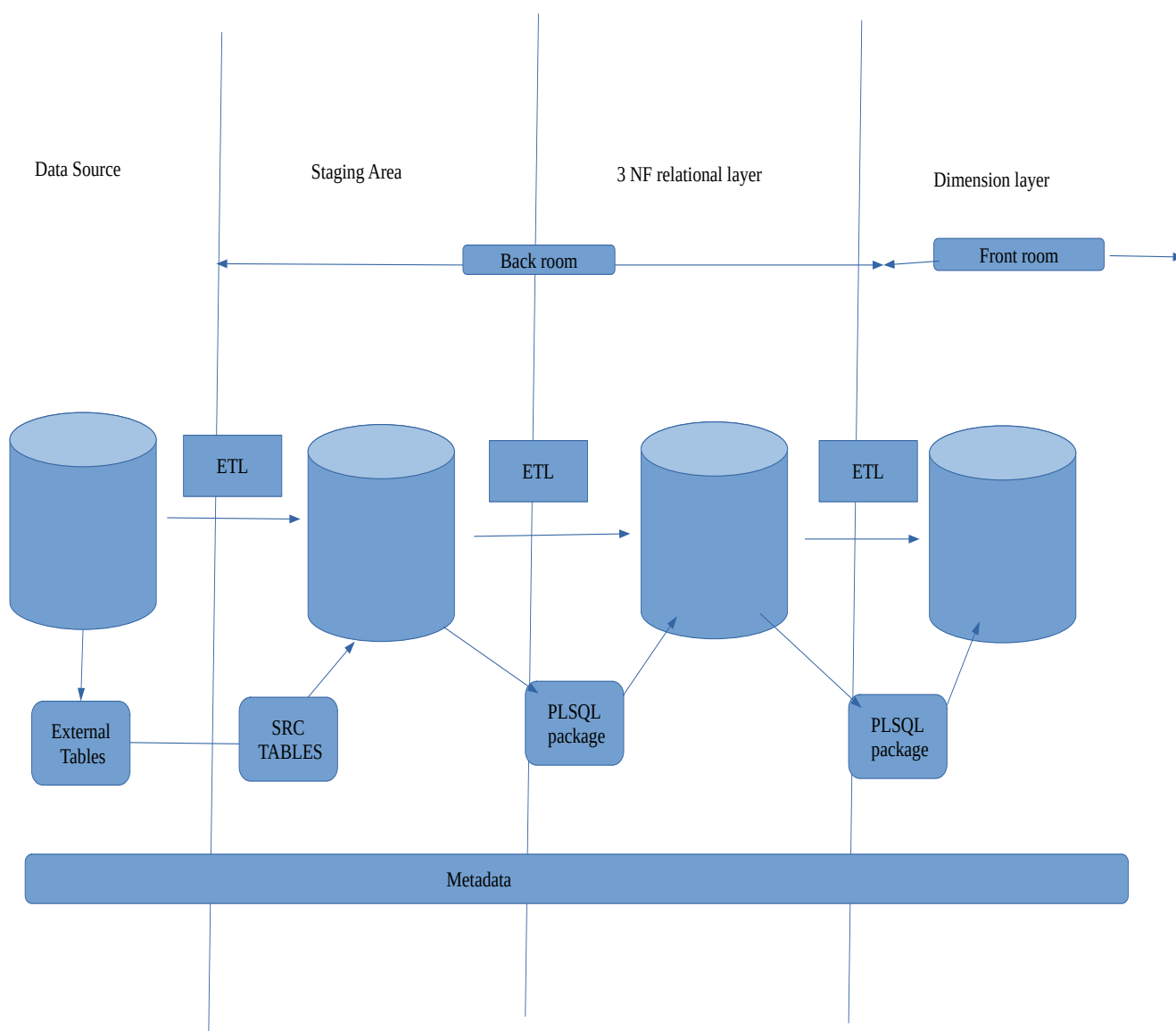
STAR SCHEMA



3_NF_MODEL

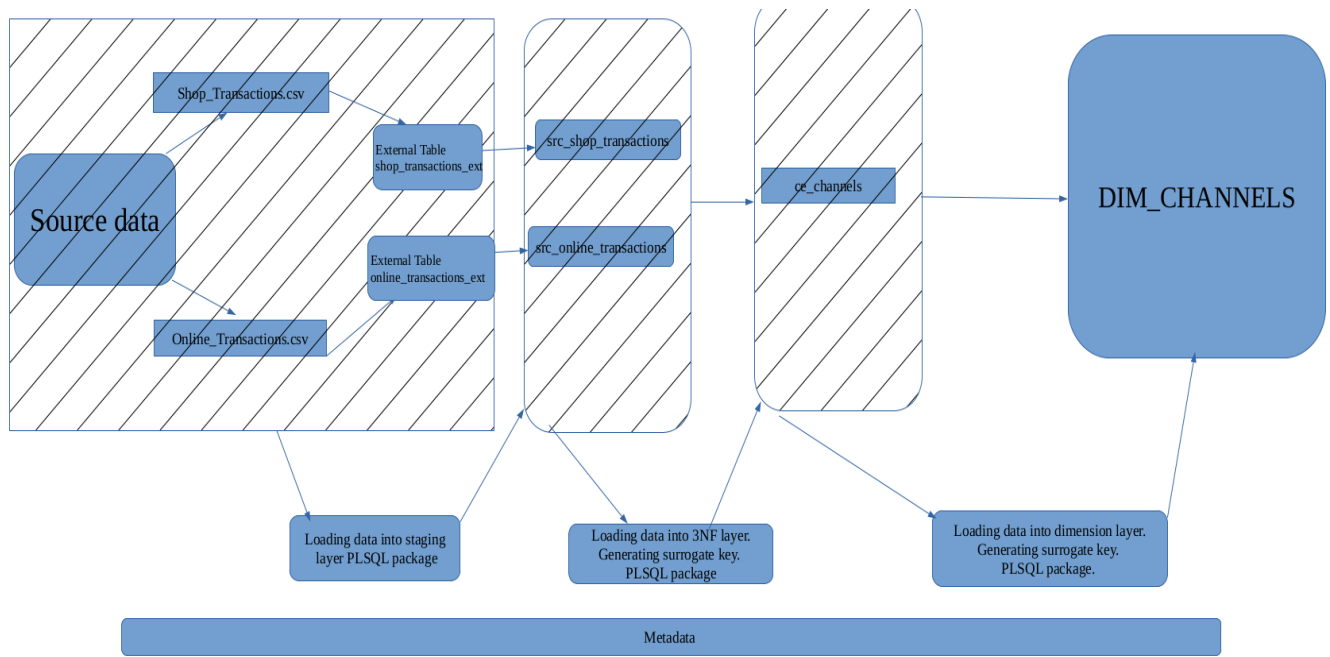


3 LOGICAL SCHEME

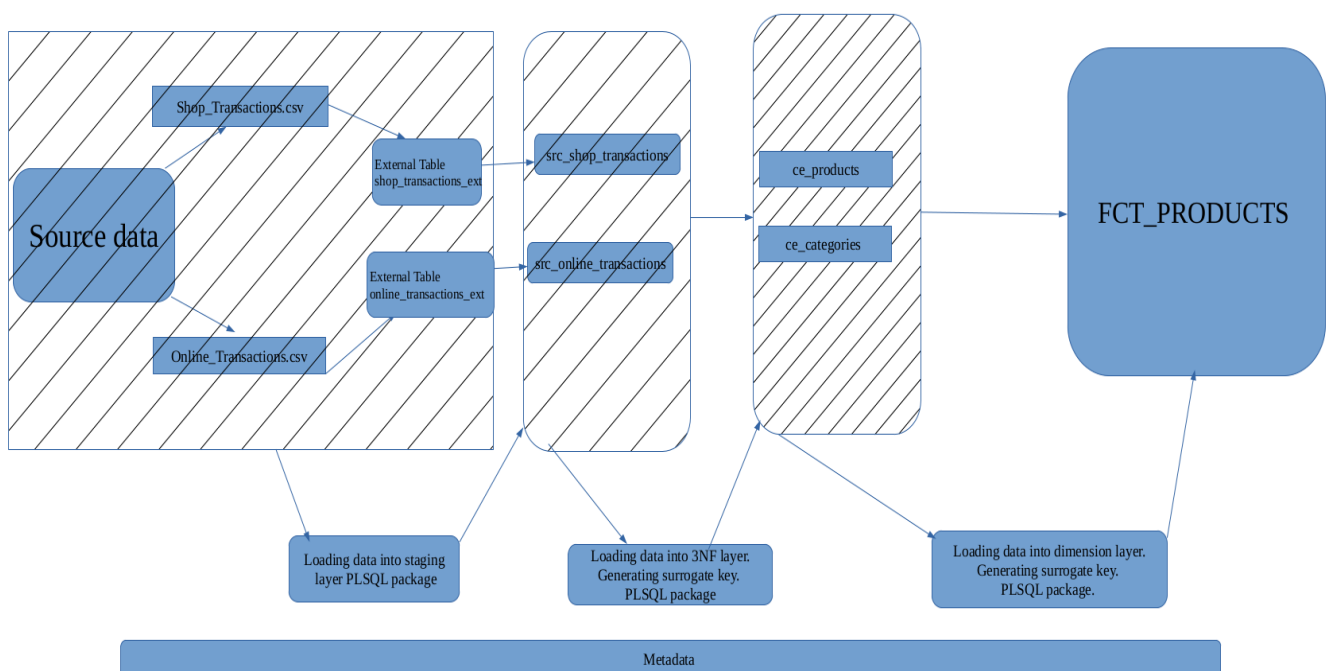


4 DATA FLOW

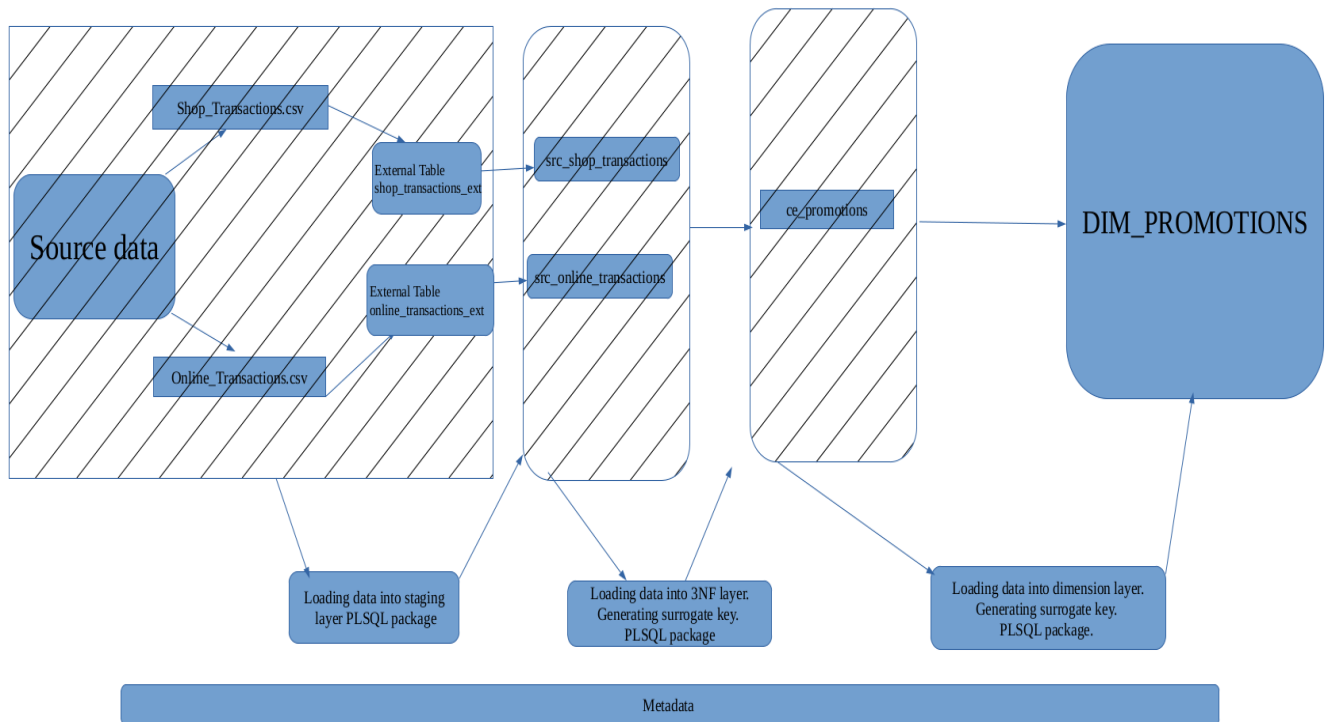
DIM_CHANNELS:



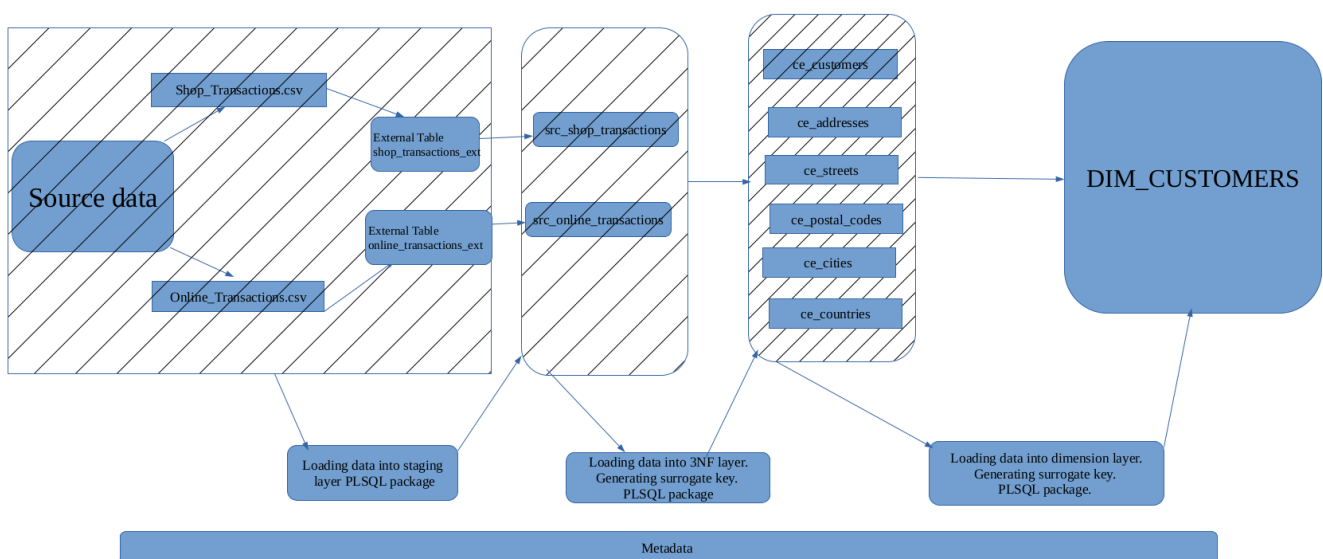
DIM_PRODUCTS:



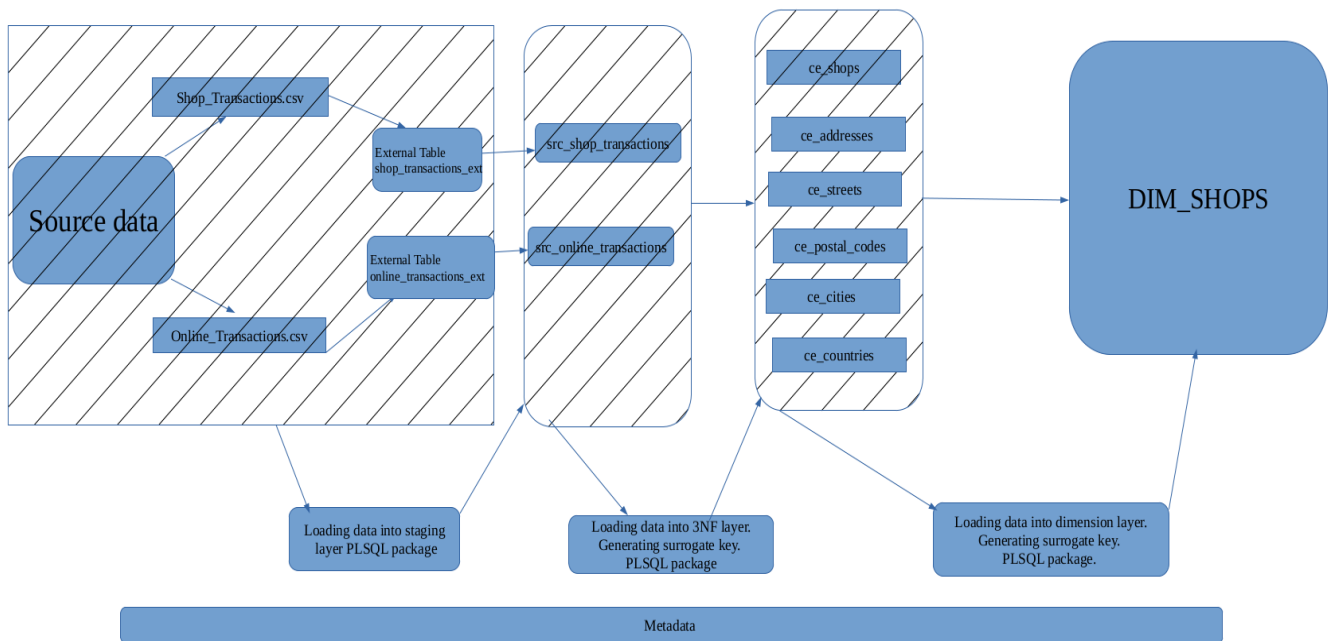
DIM_PROMOTIONS:



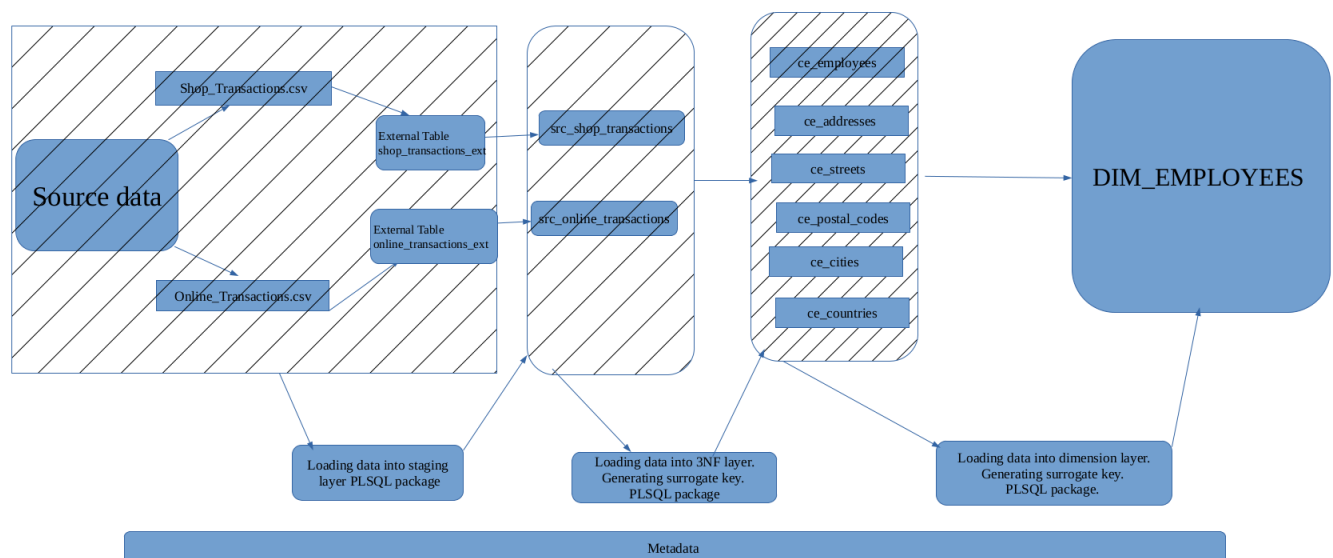
DIM_CUSTOMERS:



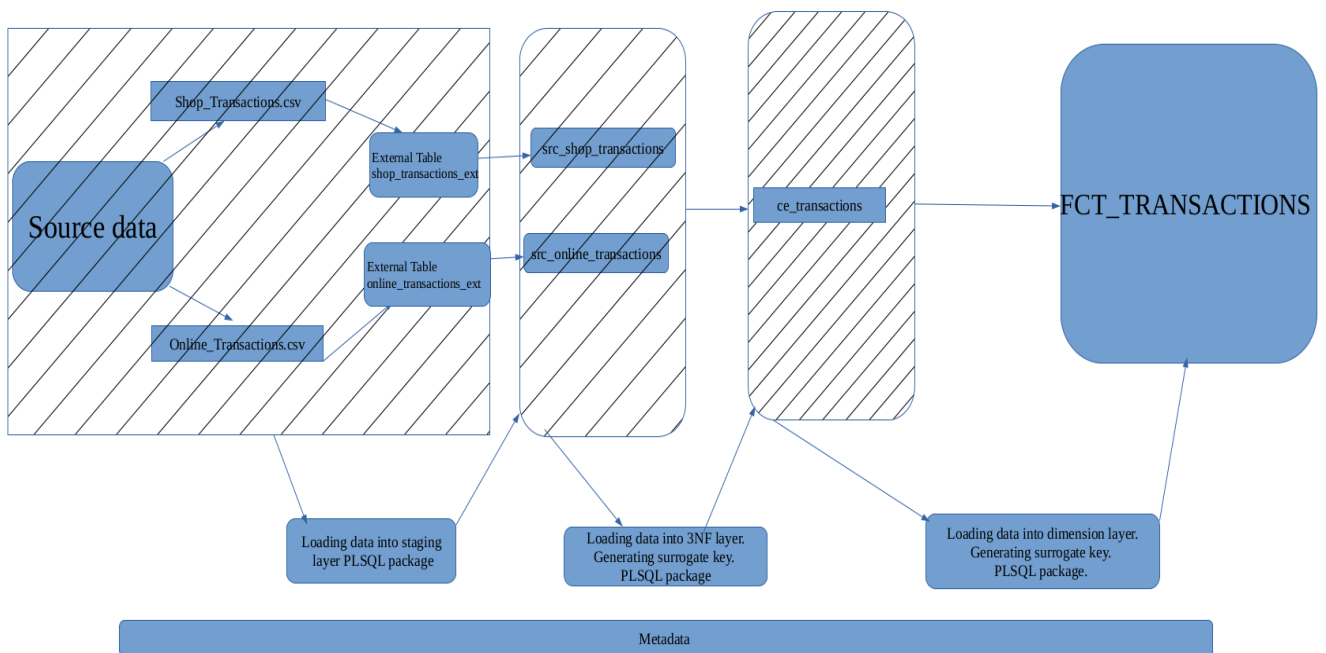
DIM_SHOPS:



DIM_EMPLOYEES:



FCT_TRANSACTIONS:



5 FACT TABLE PARTITIONING STRATEGY