Business Template

# PERFUME RETAIL

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# 1 BUSINESS DESCRIPTION

## 1.1 BUSINESS BACKGROUND

Perfume retail business is a very competitive kind of business, as having a good perfume became not merely a status symbol, but a part of everyday life for many people. Moreover, due to the fact that given retail business has two business lines: working with individual customers and other business entities, the differences of management approaches should be followed closely. To understand all factors influencing this specific kind of business as well as use this understanding to further promote it, special tools and analytics should be at hand.

## 1.2 PROBLEMS BECAUSE OF POOR DATA MANAGEMENT

Poor data management doesn't let to do successful business because of insufficient information about what should you do next. If you don't use instruments which can give you information for analysis and which can help you to come up with a business strategy you won't be competitive in this or that field.

## 1.3 BENEFITS FROM IMPLEMENTING A DATA WAREHOUSE

Using of data warehouse can help you with the problems described above. Implementing a data warehouse can answer you the following questions:

- Which products are the most popular?
- What companies are the top customers?
- What is the best time of introducing a new product?

Further processing data would also let you:

- Correlate specific product features with changes in price.
- If there are any differences in business strategies regarding individual customers and business entities.
- And many other.

# 2 DIMENSIONS OF BUSINESS

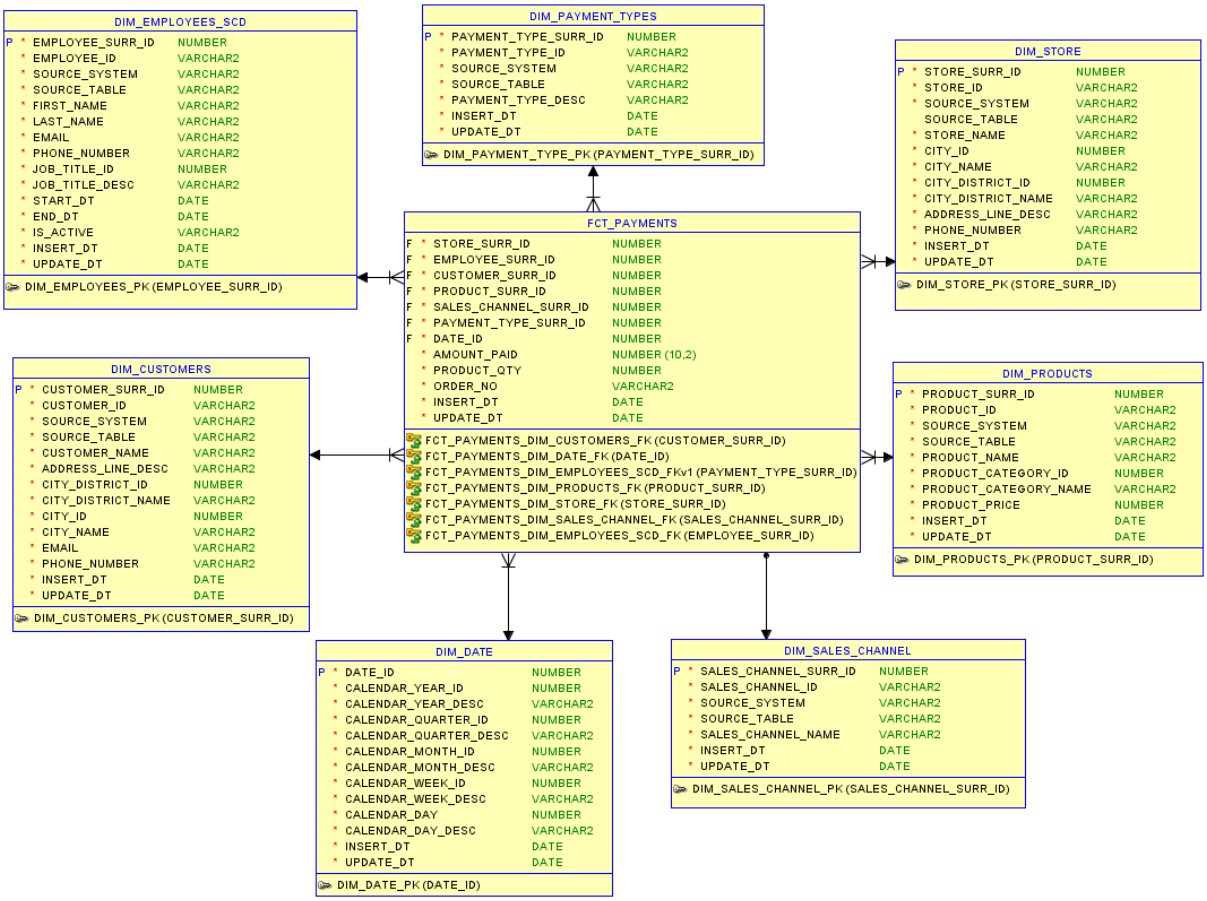
The development of perfume retail business dimensional model was conducted according to the following four steps:

1) The perfume retail business and its main processes were analyzed, it is the retail of specific perfume products to two kind of customers (individual customers and business entities) in different shops located in various cities.

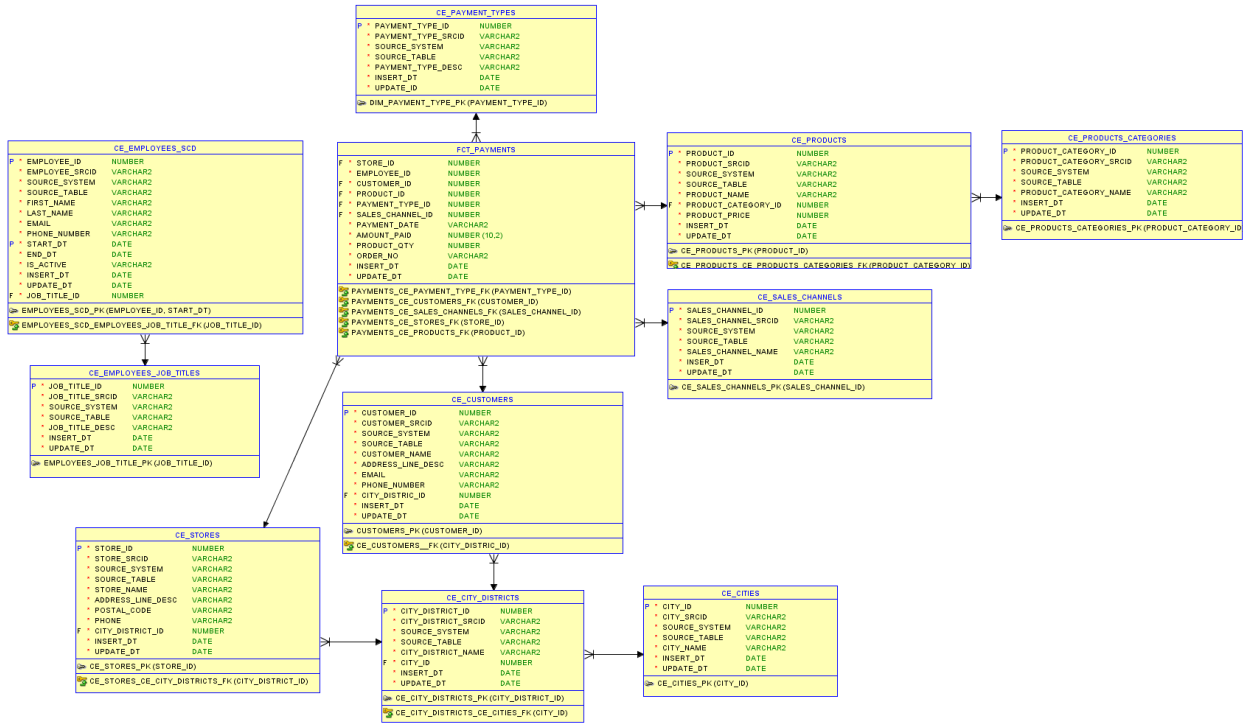
2) By the second step a grain was identified which is the specific payment for a specific product/products in a specific shop with a specific date and amount.

3) By the third step the dimensions that can describe the characteristics of a grain were identified, like DIM_SHOPS, DIM_CUSTOMERS, DIM_EMPLOYEES, DIM_DATE, DIM_PRODUCTS, DIM_SALES_CHANNELS and DIM_PAYMENT_TYPE for a specific business operation.

4) The fields of a fact table were detected which are consistent with the declared grain. These are all the PK of dim_tables (FK in fact table), measurements AMOUNT and PRODUCT_QTY, and additional fields like ORDER_NO, etc.

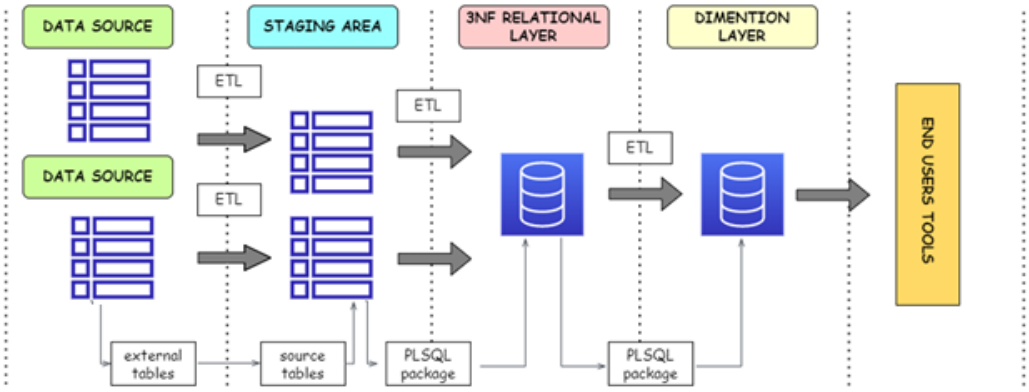



As the logic of 3NF is organizing data in a normalized way, so it has many tables each describing one specific entity with the aim there is no transitivity in data. As a result, a 3NF model of future DWH was created:



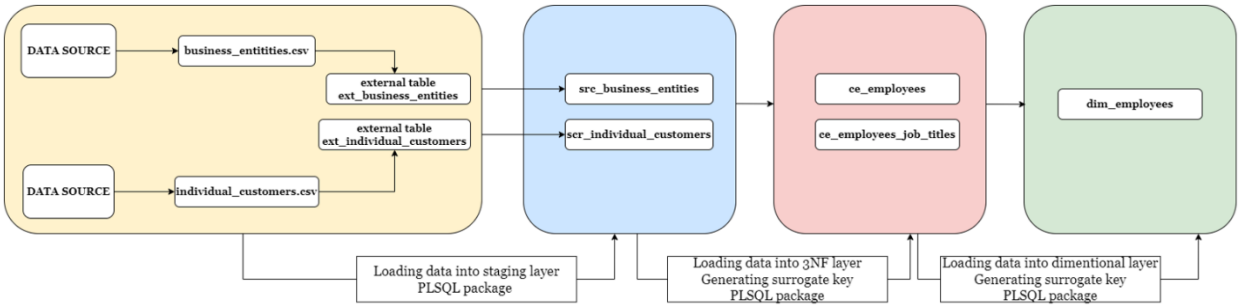
# 3 LOGICAL SCHEME

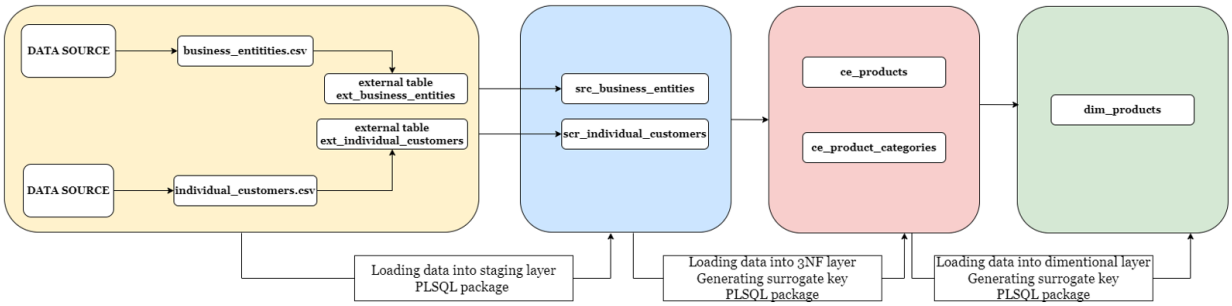
The following scheme is to demonstrate the general flow of DWH load.

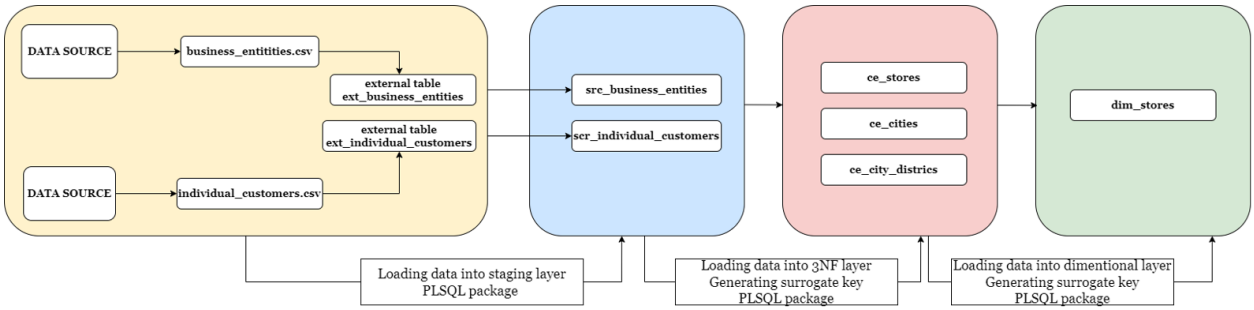


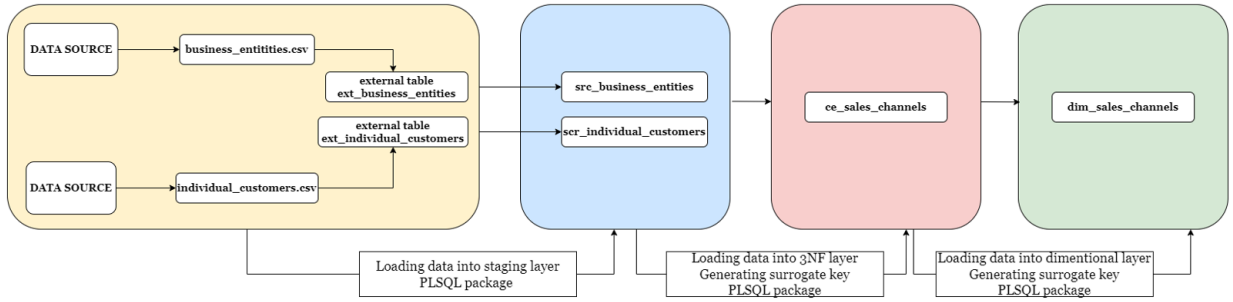

# 4 DATA FLOW

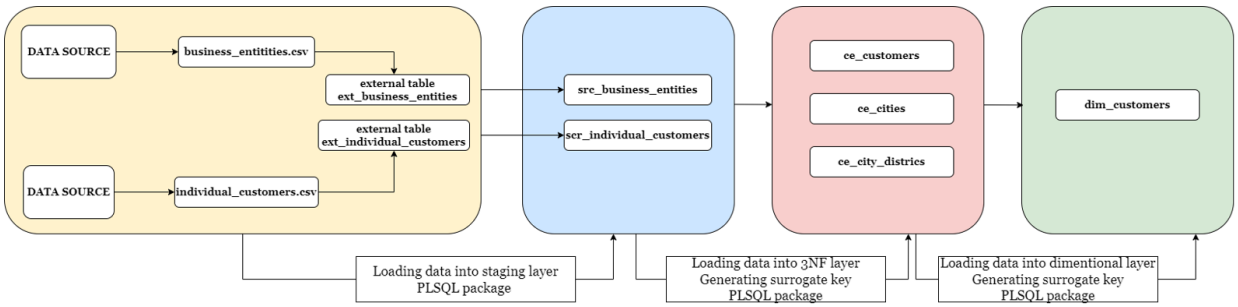
The following schemes are to demonstrate the flow of data loading from the source systems via 3NF into each dimension table and fact table.

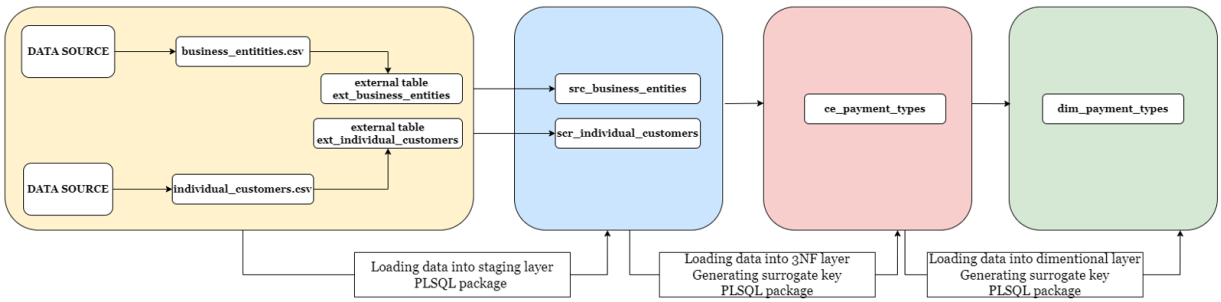


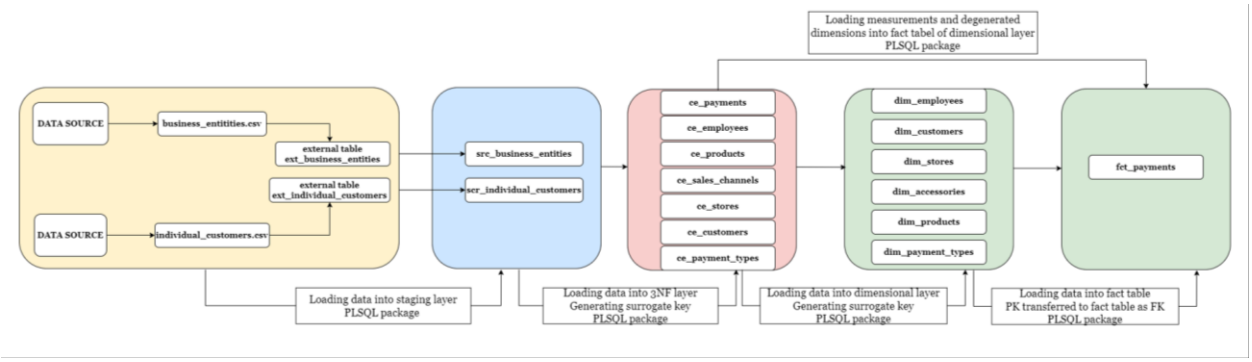






# 5 FACT TABLE PARTITIONING STRATEGY

As fact table is related to payments within specific dates, so naturally the partitioning is to be by Q1-4 for each year (using range partitioning).

Additionally, within each range partition for each sales channel (using list partitioning) is created.