



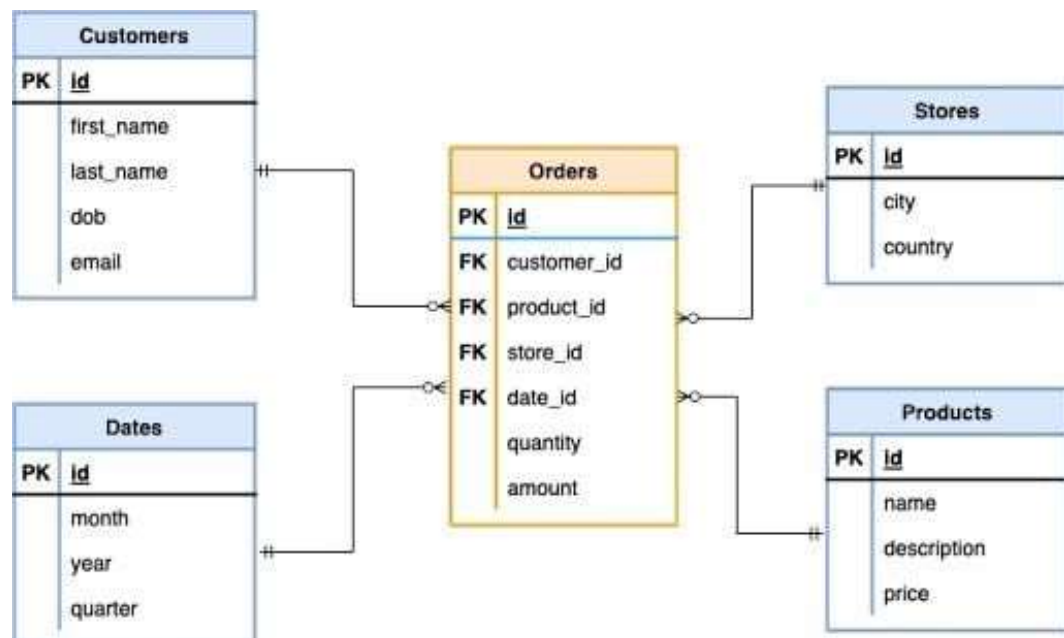
WITHOUT DATA, YOU'RE JUST ANOTHER PERSON WITH AN OPINION

HOW TO DIFFERENTIATE A FACT TABLE VS. DIMENSION TABLE

A straightforward approach to differentiating fact tables from dimension tables is to examine whether a table refers to a **noun**, such as a physical object or person. **For instance**, a product or a customer may exist independently of any specific business event. Dimension tables, therefore, represent nouns since they represent something that either takes action or has action taken upon it, such as a physical store, customer or product.

On the other hand, a **verb** usually corresponds to a fact table. Each record corresponds to an event in which entries from dimension tables are involved. **For example**, an order involves a customer and a product (or potentially more). The act of placing an order is made by a specific customer for a specific product.

As an example, let's consider a use-case where customers purchase products in physical stores. The star schema is illustrated below.



Dimension tables, which are in blue, correspond to the tables containing information about the “Customers,” “Stores,” “Products” and “Dates.” These are the nouns of the business case.

The fact table shown in orange, contains all the primary keys (PK) of the dimension tables, which are the foreign keys (FK) in the fact table, along with two quantitative fields, namely quantity and amount.

A fact table could exist without a primary key, but usually, they are assigned a surrogate key.