

4.15 Course Project: Dimensional Data Model ERD

- Key
 - **Dim_** - tables with the “Dim_” prefix denote dimension tables
 - **Fact_** - tables with the “Fact_” prefix denote fact tables
 - **PK** - primary key
 - **FK** - foreign key
 - **SK** - surrogate key
 - **NK** - natural key

Table	Grain and commentary
Fact_Sales	A single order / sale at a given date, of a given product, to a particular buyer. Includes calculations for sales quantity, amount, profit, and profit margin.
Fact_Target_Products	A single sales target for a given day for a particular product. Since the target data is segmented by year, the target sales quantity is divided by the number of business days per year to create a daily_target_sales_qty .
Fact_Target_Channel_Store	A single sales target amount for a given day for a particular channel. Since the target data is segmented by year, the target sales amount is divided by the number of business days per year to create a daily_target_sales_amt .
Dim_Product	A single product and its attributes that make it distinct from other products (name, type, category, etc.). A product_id column is created as a surrogate key. This dimension describes the types of products that are available to be bought or sold.
Dim_Date	A single date with columns breaking down the components of a date (day of week, month, day of month, year). The full_date column is used as a natural key. This dimension describes the date that an event takes place.
Dim_Channel	A single category that describes a channel and its category. A channel_id column is created as a surrogate key. This dimension describes the different ways customers / buyers are interacted with.
Dim_Buyer	A single entity that purchases products. A buyer_id column is created as a surrogate key. This dimension consolidates the attributes of the different buyers and categorizes them by type (customers, resellers, and stores). Certain attributes were combined into the same field as they serve the same function for different types of buyers (e.g., contact_name includes store managers, reseller contacts, and customer contacts).
Dim_Location	A single address. A location_id column is created as a surrogate key. This dimension describes locations of events that take place.