Definitions of Important Terminology

Data Model – Two-dimensional representation of how data is stored. Includes columns, tables, and their relationships.

Dimensional Modeling – Data modeling technique that relaxes the assumptions of transactional data models. Dimensional models are okay with some amount of data duplication. Dimensional models are optimized for data retrieval.

Dimension Table – One of two types of tables in a dimensional model. Dimension tables, in general, hold textual data that is used for filtering purposes.

Fact Table – Table that holds the information that you do math on.

Slowly Changing Dimension – This is the longer term for dimension. Most dimensions change slowly. There are different types of slowly changing dimensions. The types vary by how you want to keep track of historical data. It ranges from in great detail to no detail at all.

Star Schema – Another name for a dimensional model, so named for its visual comparison to a star.

Snowflake – A dimensional modeling technique where dimensions are parent tables of other dimensions. This is an unusual technique to be used sparingly. Most dimension tables are parent tables of fact tables. Snowflaking occurs where it doesn't make sense to flatten a relationship.

Online Analytical Processing (OLAP) – Technically, a data warehouse by itself is OLAP. This is the term we use to describe running queries off dimensional models. However, OLAP has come to mean a layer of processing entirely separate from the base warehouse tables.

Master Data Management (MDM) – This is the collection of processes necessary to manage your master data. Your master data is data that might be sourced from different systems but is ultimately the same entity. Customers are a good example of a master data entity.

Data Contract – This is the agreement between systems that details the specifics of data transfers. Data Contracts can be implemented as code or agreements between departments.