

## Data Warehousing Concepts

### Technology Lifecycle

#### Basics of Data Warehouse

- Features & Advantages
- OLTP Vs. OLAP
- Data Warehouse Architecture
- Data Mart
- Applications of Data warehouse & marts
- Data Warehouse Approaches

#### Dimensional Modelling

- Data Modelling vs. Dimensional Modelling
- Dimension & Fact Tables
- Types of Dimensions & Facts
- Slowly changing Dimensions (Type I, II, III)
- Surrogate Key Generation
- Schema Design – Star, Snowflake, Fact Constellation

#### ETL & Metadata

- ETL Architecture
- Need for ETL Tool
- ETL Tools Available in market
- Metadata
- Metadata Warehouse (MDW)

#### Data Mining

- Knowledge discovery process
- Need & use of data mining
- Data Mining Operations
- Data Mining Products

#### Business Intelligence

- Need for Business Intelligence
- BI Tools Available in market