



Dimensional Modeling

The Kimball Approach



quest for knowledge

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COURSE DESCRIPTION



OVERVIEW

Ralph Kimball popularized dimensional modeling, or star schemas, nearly thirty years ago. In the decades since, the five members of the Kimball Group worked to develop, explain, and teach the techniques for dimensional modeling. Today's popular business intelligence, database, and ETL tools are all marked by the concepts published by the Kimball Group. An excellent dimensional model, or star schema, is the foundation of an excellent data warehouse.

In this practical course, you will learn techniques for developing your dimensional model, from the basics to the most advanced practices. Concepts are taught through a combination of lectures, case studies, and small group exercises. Our goal is to provide you with the skillset you need to lead a dimensional modeling effort at your organization, and the judgement needed to make the tradeoffs between competing goals.

This course gives you the opportunity to learn directly from Joy Mundy, formerly of the Kimball Group and co-author with Ralph Kimball of *The Data Warehouse Lifecycle Toolkit*, *The Microsoft Data Warehouse Toolkit* and *The Kimball Group Reader*. She teaches the full course portfolio, previously taught by Kimball University for one simple reason: the methodology proves its value over and over in practice.



WHO SHOULD ATTEND

This course is designed for data warehouse architects, data modelers, database administrators, business analysts, and ETL or BI application developers and designers.



PREREQUISITES

You should be:

- Able to name and describe in a few words the main operational systems of his or her organization
- Able to name and describe in a few words the main business concerns of the end users in his or her organization
- Somewhat familiar with basic data modeling concepts such as referential integrity

However, the absence of these abilities and familiarity will not keep you from profiting from the course.

COURSE OUTLINE

01 DIMENSIONAL MODELING FUNDAMENTALS

02 CASE STUDY: RETAIL SALES

- Transactional fact tables
- Star vs. snowflake dimensions
- Surrogate keys
- NULLs
- Date and time
- Header versus details
- Identifiers

03 WORKSHOP: CONTENT MARKETING

- Roles of dimensions
- Junk dimensions
- Generic dimensions
- Comments and other freeform text
- Factless fact tables

04 CASE STUDY: FINANCIAL ACCOUNTS

- Semi-additive facts
- Allocated facts
- Multiple currencies
- Multiple time zones
- Periodic and accumulating snapshot fact tables
- Conformed dimensions
- Drilling across fact tables
- Ragged hierarchies

05 DESIGN REVIEW EXERCISE

COURSE OUTLINE

06 SLOWLY CHANGING DIMENSIONS

- Types 0..7

07 WORKSHOP: CHILD PROTECTIVE SERVICES

08 CASE STUDY: INSURANCE CLAIMS

- Simultaneous facts and dimensions
- Many to many dimensions

09 THE DIMENSIONAL MODELING PROCESS

10 WORKSHOP: HIGHER EDUCATION

- Supertype and subtype dimensions



INSTRUCTOR

Joy Mundy has worked with business managers and IT professionals to prioritize, justify and implement large scale business intelligence and data warehousing systems since 1992. She leverages these consulting experiences when teaching DW/BI courses. She co-authored, with Ralph Kimball and other members of Kimball Group, many of the popular “Toolkit” books including The Data Warehouse Lifecycle Toolkit (Second Edition) and The Kimball Group Reader (Second Edition).

Joy began her career as a financial analyst, but soon decided that she enjoyed working with a wide variety of data. She learned the fundamentals of data warehousing by building a system at Stanford University, and then started a data warehouse consultancy in 1994. She worked at WebTV and Microsoft’s SQL Server product development team for a few years before returning to consulting with Kimball Group in 2004, until Kimball Group’s dissolution in 2016. Joy is now semi-retired, but loves teaching and the occasional consulting engagement. She graduated from Tufts University with a BS in Economics, and from Stanford University with an MS in Engineering-Economic Systems.



COURSE DATES

12-19 NOVEMBER 2020

VIRTUAL LIVE CET TIME

This course will be delivered in a part time approach. In conjunction with our virtual training platform, the course content is taught in half-day blocks, from 1:00 pm until 5:00pm Central European Time (CET). The course dates and times are as follows:

- 12 November 1:00 - 5:00 pm CET
- 13 November 1:00 - 5:00 pm CET
- 17 November 1:00 - 5:00 pm CET
- 18 November 1:00 - 5:00 pm CET
- 19 November 1:00 - 5:00 pm CET



PRICING

The fee for this course is EUR 2.175 (+VAT) per person. We offer the following discounts:

- 10% discount for groups of 2 or more students from the same company registering at the same time.
- 20% discount for groups of 4 or more students from the same company registering at the same time.

Note: Groups that register at a discounted rate must retain the minimum group size or the discount will be revoked. Discounts cannot be combined.