Dimensional Modelling (DWDM-300) Agenda

Prepared for Data & Analytics Training

Prepared by Altis Consulting

1 Introduction

Having a data model that is easy to understand and performs well is imperative for any organisation that wants to share anything but the simplest of data.

This one-day workshop teaches the tried and tested Kimball approach to dimensional modelling that is used more than any other technique in the field of data and analytics.

Delegates will learn the techniques and work through practical exercises with the help of our expert instructor.

1.1 Learning Outcomes

At the end of this course delegates should be able to:

- Define dimensional modelling and know when to use it
- Understand:
    - The Data ecosystem
    - Types of reporting
    - OLAP vs OLTP
    - The terms; "Dimension", "Fact", "Grain", "Star Schema" and others
    - Surrogate Keys, why & when to use them
    - Bus Matrix
    - The process of building a dimensional model
    - Types of dimensions
    - Types of Facts & Fact tables
    - Bridge tables
    - Supertype/Subtype Schemas
    - The Integration or ETL process
- Recognise common mistakes

2   Example course agenda

#	Topic

1. **Background Concepts**
    - Data ecosystem
    - Types of Reporting
    - Data Warehousing
    - Dimensional Modelling definition & rationale

2. **Dimensional Modelling Principles**
    - Terminology
    - Dimensions
    - Facts
    - Granularity/ Grain
    - Business Processes
    - Star Schema
    - Bus Matrix
    - Kimball's 4 Steps to Dimensional Modelling
    - Surrogate Keys

3. **Dimensional Modelling Advanced Topics**
    - Types of Dimensions
    - Types of Facts
    - Types of Fact Tables
    - Bridge Tables
    - Supertype/Subtype Schemas

4. **Data Integration Introduction**

#	Topic
	• Extract, Transform & Load (ETL) overview
	• Development Process
	• Metadata
5.	**Common mistakes and references**
6.	**Summary and close**

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