

Data Warehouse is one of the most dramatic new developments in database design. It is a powerful database model that enhances manager's ability to quickly analyse large multidimensional data sets. The Data Warehouse training equips delegates with the information related to design and manage and how to use dimensional data warehouses for all kind of business applications virtually. The delegates will learn about the architecture, applications, modelling and flow of Data Warehouse.

During the Data Warehouse training, the delegates will understand how to model data and design the data warehouses to support advanced multidimensional decision support system. Throughout the Data Warehouse training, the delegates will also get familiar with the latest concepts and technologies. The delegates also get an opportunity to learn how to implement and manage an enterprise data warehouse solution.

The Data Warehouse training enables the delegates to provide a fast, cost-effective and reliable solution to their business or organisation for Data warehouse. The delegates also understand how to access data from various parts of a data warehouse system. The delegates will also able to enhance the quality of data, minimise inconsistent reports, provide the capability for data sharing and merge historical and current data. At the end of the Data Warehouse Certification training, the delegates will be able to design a successful data warehouse using multi-dimensional data modelling techniques.

## Prerequisites

For attending the Data Warehousing Certification Training, the delegates should have a basic knowledge of scripting language.

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## Course Objectives

After the completion of Data Warehousing Certification Training at Silicon Beach Training, the delegates will be able to:

- Understand and apply the concepts, principles and processes of data warehousing
- Understand how to Identify the components of a data warehouse architecture
- Understand data warehouse terminology
- Identify success and risk factors related to data warehousing
- Take practical steps to begin a success data warehousing initiative

## Introduction to Data Warehouse

- What is Data Warehousing?
- Features and Types of Data Warehouse
- Components of Data Warehouse
- Use of Data Warehouse
- Advantages and Disadvantages

- Data Warehouse Tools
- Data Warehouse Applications
- Integrating Heterogeneous Databases

## **Terminologies**

- Metadata
- Metadata Repository
- Data Cube
- Data Mart
- Virtual Warehouse

## **Dimensions and Facts**

## **Modelling**

- ER Diagram

## **Delivery Process**

- Delivery Method
- IT Strategy
- Education and Prototyping
- Technical Blueprint

## **System Processes**

- Process Flow in Data Warehouse
- Extract and Load Process
- Clean and Transform Process
- Backup and Archive the Data

## **Data Warehouse Architecture**

- Three-Tier Data Warehouse Architecture
- Data Warehouse Models
- Load, Warehouse, and Query Manager

## **Data Warehouse OLAP**

- Types of OLAP Servers
- OLAP Operations
- OLAP vs OLTP

## **Relational and Multidimensional OLAP**

## **Data Warehouse Schemas**

- Star Schema
- Snowflake Schema

- Fact Constellation Schema
- Schema Definition

## **Horizontal and Vertical Partitioning**

### **Metadata Concepts**

- Metadata Categories
- Role of Metadata
- Metadata Repository

## **Introduction to Data Marting**

## **System and Process Managers**

## **Security and Backup**

- Security Requirements
- User Access
- Impact of Security on Design
- Hardware and Software Backup

## **Tuning and Testing**

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