

# Comset Services

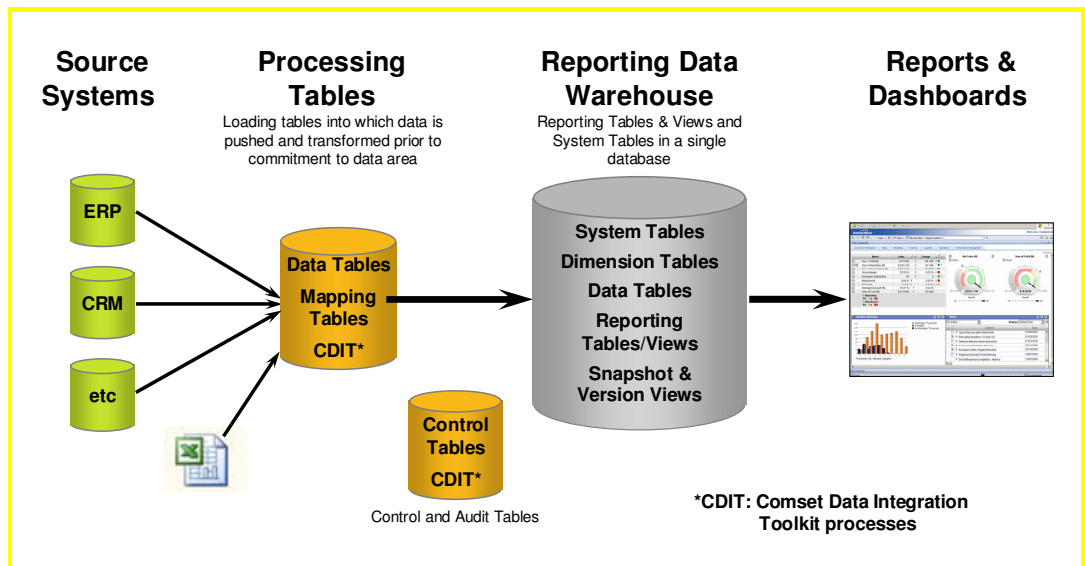
## Building a Reporting Data Warehouse

### OVERVIEW

A reporting data warehouse provides a central data management platform optimised for the management information needs of a business. By being independent of the underlying operational business systems, the data warehouse makes available a consistent, consolidated view of the business, structured in a way to specifically address reporting and analytic requirements.

The data warehouse provides an integrated data model for all data of interest, regardless of its source. This makes it easier and quicker to report and analyse business performance at all levels. By maintaining a greater depth of historical information than is possible in the business systems, the data warehouse enables analytic activities such as sophisticated data versioning and snap-shot comparative reporting.

A reporting data warehouse should be a core component of every enterprise business intelligence and performance management strategy. Building on the experience of many data warehouse implementations, Comset offer a suite of services to support clients in building a reporting data warehouse to meet their business requirements.



### COMSET DESIGN APPROACH

A reporting data warehouse needs a very different structure to a transaction-oriented operational database. It needs to be designed for ease and speed of data retrieval and navigation to meet reporting and analysis requirements, rather than speed of processing transactional data, such as entering invoices or updating customer records.

A sound understanding of the business reporting and analysis requirements is a fundamental prerequisite to the design activity, and is commonly facilitated by management workshops run by one of our business consultants. The data warehouse is designed using a dimensional modelling technique that seeks to present the data in a standard, intuitive framework that allows for high-performance query access. A dimensional structure is readily understood by query tools and is extensible to accommodate new data elements as the business itself evolves.

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## DATA WAREHOUSE IMPLEMENTATION SERVICES

Typical steps in the development of a reporting data warehouse, undertaken by Comset working closely with the client, include:

### Business Reporting Requirements Analysis

We assist business users in defining and prioritising their reporting requirements and identifying the supporting data sources and applications. Management workshops, facilitated by one of our experienced business consultants, are a key enabler during this phase.

### Reporting Data Warehouse Design

We use two core techniques to ensure the delivery of a robust, flexible and highly performant data warehouse that not only meets the identified business requirements but one that can be readily extended as the business evolves:

- Dimension Modelling: Delivers a database schema optimised for reporting and analysis;
- Aggregation Design: Provides performance improvements by enabling pre-calculated values to be stored in the data warehouse, rather than using low level data and totalling it on the fly.

### Data Loading Analysis, Design & Build

This phase addresses the movement of data into the data warehouse and includes:

- Data Interface Analysis: Working with the business and IT to identify and itemise the source data;
- Source to Target Mapping: Detailed analysis to match available source data with the target reporting objects;
- Data Load Processes: Designing the appropriate loading processes. This could include the use of formal extract, transform and load (ETL) software such as Microsoft SSIS, SAP BusinessObjects Data Integrator or other tools that our clients may already possess.

### Education

It is vital that client personnel involved in the development project, and who will be responsible for ongoing support and enhancement of the data warehouse into the future, understand the principles behind its design:

- Dimension Modelling Training: Introduces the key terminology and techniques used in the design of a dimensional data warehouse.

## COMSET DATA INTEGRATION TOOLKIT

To help ensure rapid and cost-effective development of the reporting data warehouse, Comset have compiled a package of templates and processes. The **Comset Data Integration Toolkit** includes processes and procedures to manage these four key areas:

- Dimension Maintenance
- Measure Loading
- Versioning & Snapshots
- Logging & Auditing

For more detailed information on the **Comset Data Integration Toolkit**, ask to see our separate data sheet.

## SUMMARY

Comset believe that delivering a rapid time to value in your reporting data warehouse is essential, to generate enthusiasm and commitment across the business. Our agile project methodology enables you to achieve an early return on investment whilst our experience and expertise ensures that the solution can be developed and expanded to meet the ever changing needs of your business.

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