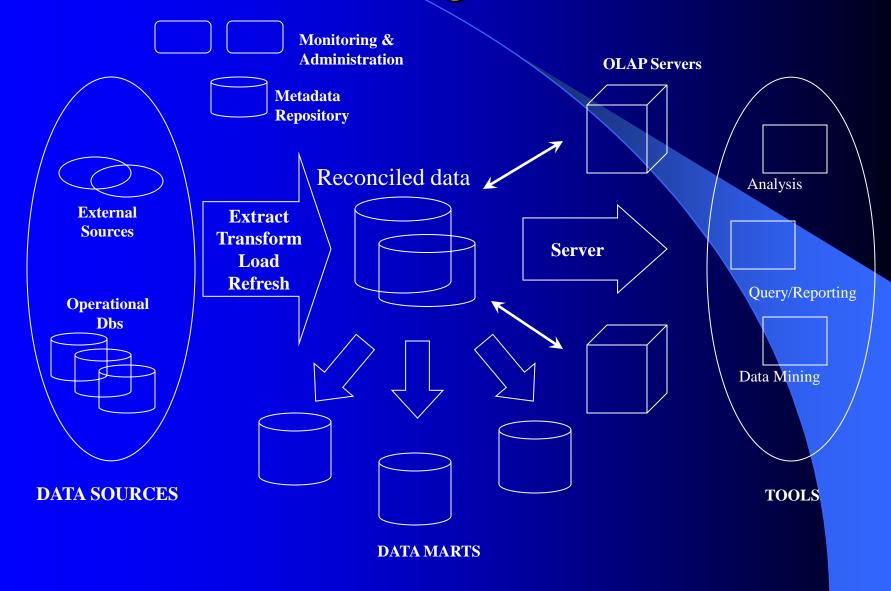
Data Warehousing Architecture

Data Warehousing Architecture



Data Warehousing - Architecture

Source Systems

Execution Systems

- CRM
- ERP
- Legacy
- e-Commerce

External Data

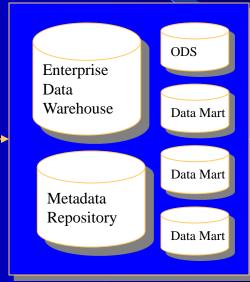
- Purchased Market Data
- Spreadsheets

ETL Layer

Extract, Transformation, and Load (ETL) Layer

- · Cleanse Data
- Filter Records
- Standardize Values
- Decode Values
- Apply Business Rules
- Householding
- Merge Records

Data and Metadata Repository Layer



Sample Technologies:

- •PeopleSoft
- •SAP
- •Siebel
- Oracle Applications
- Custom Systems

ETL Tools:

- •Informatica Power Mart
- •ETI
- Oracle Warehouse Builder
- Custom programs
- •SQL scripts

•Oracle

- •SQL Server
- •Teradata
- •DB2

Presentation Layer

Reporting Tools

OLAP Tools

Ad Hoc Query Tools

Data Mining Tools

- •Custom Tools
- •HTML Reports
- •Cognos
- Business Objects
- MicroStrategy
- Oracle Discoverer
- Data Mining Tools
- Portals

Data Warehouse Architecture

- Data Warehouse server
 - almost always a relational DBMS, rarely flat files
- OLAP servers
 - to support and operate on multi-dimensional data structures
- Clients
 - Query and reporting tools
 - Analysis tools
 - Data mining tools

References

- Building Data Warehouse by Inmon
- Data Mining: Concepts and Techniques by Han, Kamber.
- www.datawarehousingonline.com
- www.billinmon.com