

# Dataware Housing & BI Case Study

## Company Overview

Evoke Technologies is client-centric and relationship-based company, with focus to provide cost effective software maintenance & support while our client's can focus on future needs. As a SEI-CMM level 3 standards company, Evoke differs from other offshore outsourcing software firms because we maintain a focused approach to building the solutions you demand, using our highly successful implementation methodologies.

## Business Needs:

The company had different applications and each application has its own database like Oracle, Microsoft SQL server and etc. and they wanted to have consolidated data from various system at once place (Datawarehouse) for flexible reporting, data analysis with in and across related applications.

## Features:

- Database design partly de-normalized and redundant for better performance.
- Contains aggregate data, less atomic data.
- Most data access will be targeted at a small partition of the data.
- Data aggregation.
- OLAP support.
- Query caching.
- Web interface - BO Universe.
- Drilling, slicing and dicing features.

## Key Challenges:

To integrate various systems running in multiple databases and platforms.

- Data selection ( Need to understand source system and reporting domain)

- Data cleansing ( Based on business logic need to have data cleansing)
- Error detection and correction.
- Data mapping and usage.
- ETL tools did not support Complex business logic so we have developed manual ELT.
- In order to load data into datawarehouse, developed Perl and Unix scripts to extract the files, in zip format.

## Approach:

Design and deliver the ETL processes required for this complex environment involving multiple agencies and several data sources.

- Source data acquisition micro design.
- EDW physical database design.
- Data mart logical/physical database design.
- Agile architecture that is flexible to accommodate and integrate additional data stores.
- Data Analysis and Mapping design.
- Naming standards for the architecture.
- Design architecture for the DW.

