



# Retail store metric on a real-time and mobile platform

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One of the US-Based fortune 50 companies



## ABOUT THE CLIENT

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The Client organization is one of the US-based fortune 50 companies having more than 400 retail stores worldwide.

## EXISTING BOTTLENECKS

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Earlier applications were desktop based and had significant data latency. Moreover, the key metrics were spread across multiple applications and did not provide a consolidated view.

This made it difficult for store managers and other stakeholders to get up to date information on the go. The problem was compounded during new product launches when the scale of operation increases significantly and so tracking and taking action in time is of essence.

So there was a need for a real time and mobile platform based application, which would give a consolidated view of all the key metric in a retail store.

## KEY DRIVERS FOR THE INITIATIVE

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The key driver for the client was to deliver a real time reporting tool to support in the moment decision making for store managers, by helping identify opportunities for improvement and recognition.

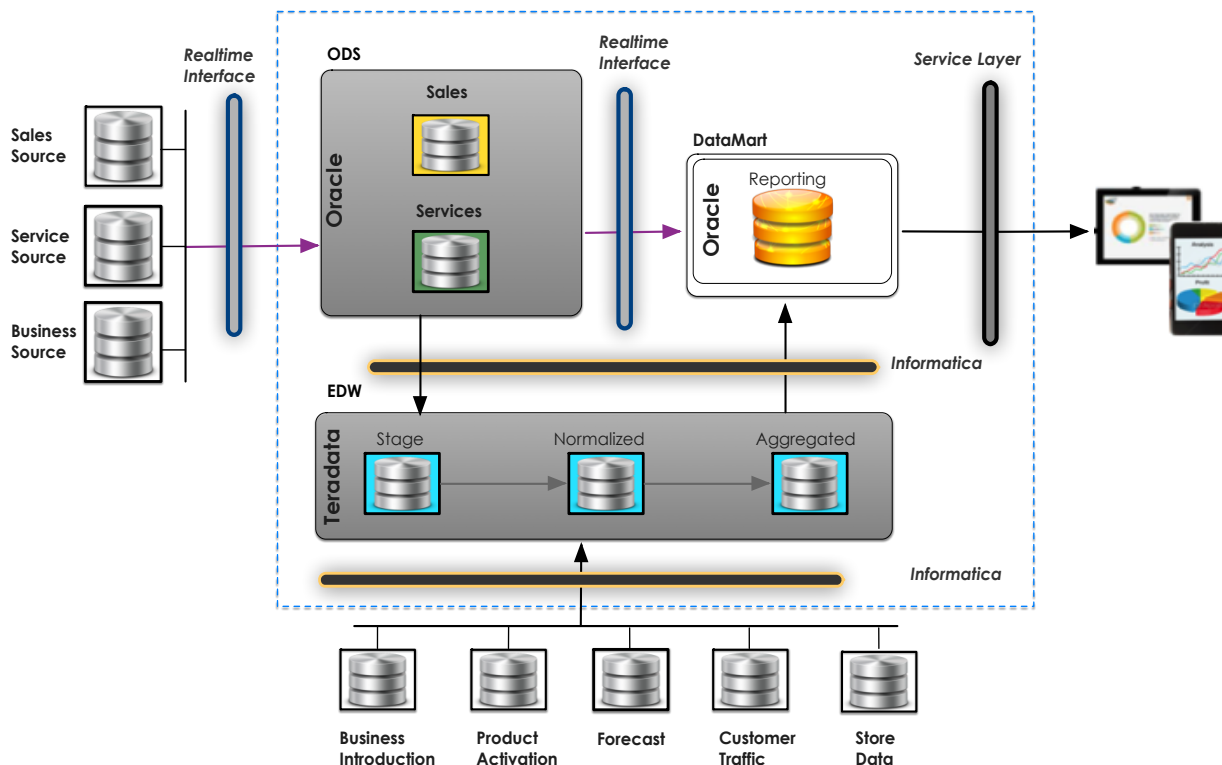
The new system was envisaged to meet the following expectations -

- Develop a mobile application and have end-to-end backend integration
- Provide key actionable real-time metrics around sales, services and operations of retail stores
- Secure authentication & authorisation model
- Optimise store staffing and operations to improve efficiency of the store
- Monitor sales associate performance
- Seamless exchange between container application
- Helps individual sales associates to review their performance and match it against company's top 25% data

**SOLUTION OVERVIEW**

EXILANT was engaged all through the SDLC (requirements, design, develop, test, deploy and support) of this system.

System flow diagram below:



**Figure 1- High-level component view of various layers**

The key components are:

**1. Source Systems:**

- a. Data is derived from multiple sources, having information on sales, services, stores, revenue forecast, product and customer details

**2. Interfaces:**

- a. Real time source data is transferred to the ODS (Operational Data Store) layer using real time interface (e.g. DB Link)
- b. Batch based source data is transferred to EDW (Enterprise Data warehouse) using Informatica interfaces

**3. ODS:**

- a. Sales and services related data is inducted from SAP and other in-house systems
- b. Raw source is cleaned and enriched with additional information

**4. EDW:**

- a. Source data is moved to a data warehouse which stores data in three layers
  - i. Staging layer (raw data with minimal processing)
  - ii. Normalized layer (cleaned and normalized data)
  - iii. Aggregated layer (application specific aggregation)
- b. All historical data is stored

**5. Data Mart:**

- a. Data from EDW and ODS are inducted into a Data Mart for reporting purpose
- b. Database is optimized for reporting and uses SSD (Solid State Drives)

**6. Service Layer:**

- a. Customized service layer framework transfers data in XML format

**7. UI:**

- a. UI was designed using **Cocoa touch**, which is a UI framework for building applications on iOS

## TECHNOLOGY

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Environment	Detail
Client Development	iOS (Cocoa)
Database	Teradata, Oracle
Others	Informatica, Customized service layer framework

## QUALITATIVE BENEFITS REALIZED

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The key business benefits can be summarized as –

This will provide a mobile tool to assist identifying “in the moment” decision opportunities for store managers. Core Business metrics will be displayed through UI to provide contextual instruction and employee performance detail.

By creating the mobile version of the Retail sales, services and operations data, client efficiently implemented below benefits:

- Real-time monitoring of the sales and operations data improved supply chain planning
- Early adoption of mobile device support for corporate users and store workforce
- Ability to provide sales information in both store local currency and USD
- Scalable solution tested with peak load of max 2000 concurrent users on a total user base of 7K+ users

## CLIENT TESTIMONIAL

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“My team has had their two most productive weeks of the last 4 months. I love it because it allows me to give in the moment, specific feedback”

**VP Sales, Retail North America**

“The dashboard has become my best friend. I love the homepage, and the ability to drill down into specific trends. Very user friendly.”

**VP, Worldwide Retail**