



## West Corporation Case Study: Cutting Edge Analytics in the Age of Marketing

#### **Mike Moore**

Director Product Management West Corporation



## **Cathy Pendley**

Senior Consultant Vlamis Software Solutions







## **Mike Moore**

- Director of Product Management, West Corporation, Alerts & Notifications
- Proactive customer communications, business intelligence and customer analytics
- 5 years experience as an analytics manager at West
- 10 years of automated customer communications experience including data analysis, voice user interface (VUI) design and usability analysis









SOFTWARE SOLUTIONS



**West Corporation** is a leading provider of technology-driven, communication services, serving Fortune 1000 companies and other clients in a variety of industries, including telecommunications, retail, financial services, public safety, technology and healthcare.

## **OUR COMPANY**

Founded: 1986

**Revenue**: \$2.49B<sub>(2011)</sub>

Headquarters: Omaha, NE

**Employees**: ~36,500

Locations: 43

## COMPANY HIGHLIGHTS

- World's largest conferencing provider (InterCall)
- Nation's leading provider of <u>emergency</u> communications (Intrado)
- Premier provider of **customer contact** solutions
- Leading provider of automated <u>alerts &</u> notifications
- Leading provider of automated voice solutions
- Leading provider of <u>accounts receivable</u> <u>management</u> solutions







## **Fortune 500 Companies Choose West Corporation**

of the Fortune 10 use West Corporation

of the Fortune 100 use West Corporation

of the Fortune 500 use West Corporation

of the Top 10

10 of the Top 10

of the Top 10

Commercial Banks

**Healthcare Companies** 

**Insurance Companies** 

**Pharmaceutical Companies** 

**Retail Companies** 

Telecommunications Companies

**Utility Companies** 



West Alerts

\*According to Fortune's 2011 ranking of America's largest companies and Notifications \*\*Companies represented use one or more of West Corporation's service(s)
\*\*\*Data was matched with 2010 West Corporation client list







## **Cathye Pendley**

- Consulting Director for Vlamis Software Solutions
- Implementing Oracle Business Intelligence systems since 1993
- Lead project teams through full-cycle of projects
- Speaker at Oracle Conference









## **Vlamis Software Solutions, Inc.**

- Founded in 1992 in Kansas City, Missouri
- Oracle Partner and reseller since 1995
- Developed more than 200 Oracle BI systems
- Specializes in ORACLE-based:
  - ✓ Data Warehousing
  - ✓ Business Intelligence
  - ✓ Data Transformation (ETL)
  - ✓ Web development and portals

#### Why Vlamis?

- Award winning authors and educators
- Aggressive adopters of the latest technologies
- Connected with Oracle product management and developers
- Efficient implementers by working offsite to reduce costs
- Team-oriented collaborative approach
- Respected reputation for ethical business practices









### **Overview**

- Learn how West Corporation is enhancing their ability to provide world-class, <u>best-in-breed proactive customer communications</u> with the Oracle 11g Database, Oracle OLAP, and OBI Foundation Suite.
- Learn the keys to a <u>successful data warehouse implementation</u> with Oracle OLAP and OBI Foundation Suite
- Learn how to <u>optimize</u> a data warehouse design for business objectives









## What is Proactive Engagement?

'Proactive communications is a vital corporate strategy to enable client engagement with a targeted audience virtually through message, brand and/or experience."

- Proactive engagement communication to a targeted audience
  - ...will be one of the <u>single most important</u> corporate initiatives of the future to drive message, brand, experience and therefore business growth
  - ...is achieved by the realization that <u>contacting customers the way they want</u> with personalized, relevant and context aware data results in customer intimacy and therefore holds extraordinary value
- When providing the <u>right customer experience</u>, a client maximizes customer engagement and seizes opportunities to drive more brand revenue and higher customer lifetime value









## **Industries Using Proactive Engagement**

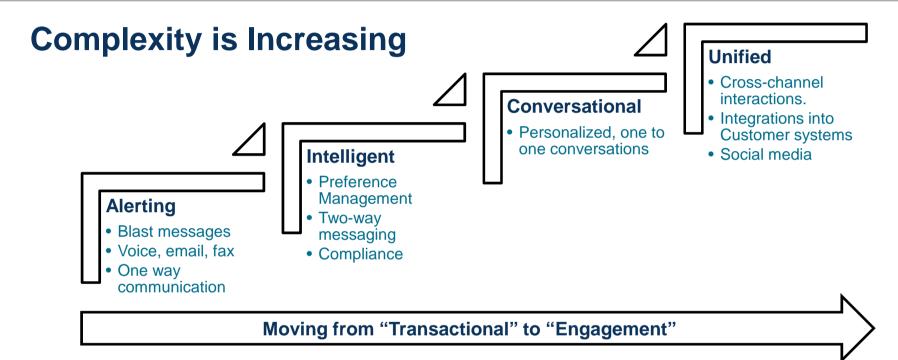
- Financial Services
  - ✓ Collections & Payment Reminders, Low Balance Alerts, Transaction Confirmations & Fraud Alerts
- Healthcare
  - ✓ Appointment Reminders, Disease Management Programs
- Pharmaceutical
  - ✓ Prescription Refill Reminders & Adherence Programs
- Utilities
  - ✓ Outage alerts, Disconnect notices, Start/stop/transfer confirmations, Prepaid reminders
- Travel & Entertainment
  - ✓ Flight Status Notifications, E-Fare Notices, Package Offers & Reward Program Updates

















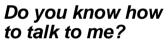


## **Customer Expectations are High!**



- •What did I call about?
- •What help do I need?
- •What do I need to know right now?





- Voice
- •Email
- •SMS
- •Web



## Do you now when to talk to me?

- •Now?
- •Time of day
- Day of the week

My Space... My Way... My Time ...



west

West Alerts and Notifications





## **Key Features and Functionality**

- Data Storage & Integration
  - ✓ Centralized, conforming data across the A&N enterprise
  - ✓ Normalized internal data
  - ✓ Use 3rd party data to gain an end-to-end view of customer experience
  - ✓ Use data from multiple source to develop personalized, context-aware communications strategies
- Reporting, Dashboards & Scorecards
  - ✓ Standard reporting with drill down & user customization
  - ✓ ROI tools that consistently & accurately communicates value
  - ✓ Scorecards and benchmarking tools to track & measure progress









## **Key Features and Functionality**

- AD Hoc Query & Analysis
  - ✓ Facilitates timely performance optimization analysis
  - ✓ Enables end-user ask questions of their data without IT support
- Data Mining & Predictive Modeling
  - ✓ Personalize customer treatment strategies based on explicit customer preferences and implicit customer behavior and attributes
  - ✓ Predict future events & trends & their impact on the business
- Analytics Packages with Accelerators
  - ✓ Pre-built accelerator models for specific vertical markets & notification & alert types
  - ✓ Customizable based on customer behavior
  - ✓ Enhanced with client & third-party data









## **Executive Support is Critical**

- High visibility and involvement at the senior level
- Whenever we needed additional resources we found them.
- We decided to train our people in some areas instead of partnering due to budget needs
- Our consultant is training our resources to self-sufficient









## Oracle 11g Database, Oracle OLAP & OBIEE

- Multidimensional analytical capabilities required
- Performance, scalability, time series analysis & "slice & dice" critically important
- Security and encryption required



- Web based, OBIEE front end
- Visualizations important
- Needed robust dashboard and ad hoc capability
- Needed to able to handle multiple clients and internal analysts



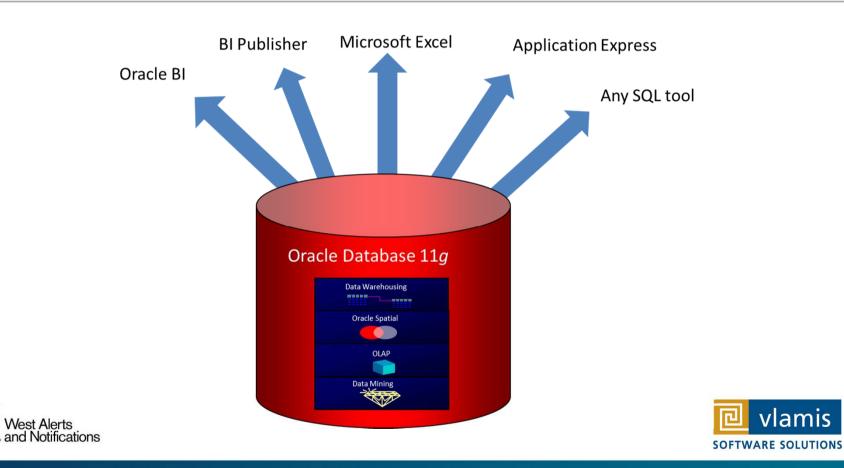






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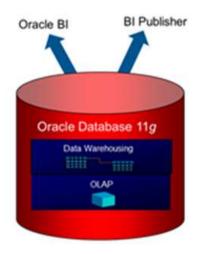






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## **Technology Focus – Phase 1**



# Data Warehouse with Oracle Business Intelligence Reporting Vest Alerts Rest Alerts







## **Project Timeline Overview**

The project is broke out into four phases and is scheduled to be completed December 2012:

- Phase 1 Subset of commercial clients
- Phase 2 Remainder of commercial clients
- Phase 3 Healthcare clients
- Phase 4 Utilities clients











## **Project Team**

#### **ETL (Extract Transform Load)**

 Responsible for taking the data from the source systems then converts/transforms the data so it can loaded into the data warehouse.

#### **Data Architect**

 Builds the data model and meta-data for Oracle Business Intelligence Enterprise Edition (OBIEE).

#### **Oracle DBA (Database Administrator)**

 Responsible for general database performance, maintenance, and security.

#### **Project Management**

 Build and monitor the project plan to mitigate the risks and avoid delays.

#### **Super User/Client**

 Builds the OBIEE reports, uses the system for analysis, provides feedback to technical team

#### **Executive Sponsors**

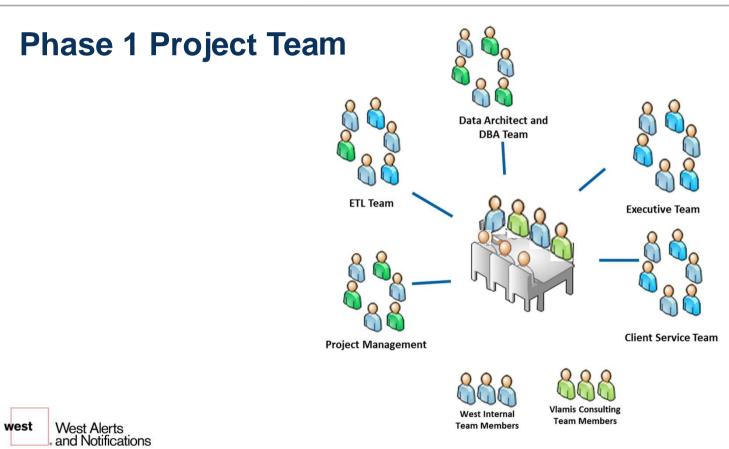
 Upper level management that have a vested interested in the success of the project.

















## **Phase 1 Focus**

#### 1.5 Million Records loaded daily into staging via ODI

Common data combined

#### Data is loaded into the data store/fact tables

Data is stored down to the time of day (seconds)

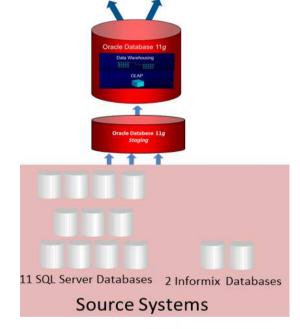
#### **Summary Data / Dimension Tables**

- A summary view is created to stores aggregate data
- Dimension tables are built to support dimensional reporting

#### **OLAP Data**

for reporting in OBIEE.













## **Project Timeline**

#### **September**

- Project approved by upper level management
- Project management team began working on the project

#### October

Requirements gathering started

#### **November**

- Key data architect left West
- Completed requirements document
- Data model started

#### **December**

- Data mapping started
- Identified internal resource needs









## **Project Timeline**

#### **January**

- Identified internal project team
- Began putting project team in place

#### **February**

- Project team in place
- Trained project team on ETL tool (Oracle Data Warehouse)
- Software installed and security issues addressed

#### March

- Data warehouse and cube build started
- ETL process kicked off

#### **April**

- Data warehouse and cube build completed for initial reporting
- OBIEE meta data and report build started









## **Responding to Challenges**

Risks	Mitigation
Loss of key resource	Backed filled with internal resources
Deliverables date slip	Project manager quickly act to get the project back on track
Lack of in-house expertise	Added internal project members with similar experience and hired consultants to train and mentor.









## **Key to the Success**

#### **Upper level management support**

Some with the clout get the resources you need (money and staff)

#### **Project management from the beginning**

#### Working jointly with consultants

Taking advantage of consultants expertise while keeping as much of the ownership of the project as possible

#### **Start Small**

Phased approach









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TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY