Chapter 5 Foundations of Business Intelligence: Databases and Information Management

Case 1: Maruti Suzuki Business Intelligence and Enterprise Databases

Tags: Business process management; ERP Enterprise Resource Planning; E-Business Suite; Real Application Clusters; Fusion Middleware; Server Weblogic; Hyperion.

Summary

"For the past 25 years, Maruti Suzuki has been the industry leader in India's passenger car market, the fastest growing in world. Since 1995, Maruti Suzuki has built its IT infrastructure on Oracle database and technologies including Oracle Real Application Clusters, Oracle Fusion Middleware Application Server and Weblogic. Maruti Suzuki has built its Enterprise Resource Planning (ERP) system on Oracle E-Business Suite and added Hyperion Enterprise to further enhance financial consolidation and reporting efficiency." L= 5:30.

URL: http://www.youtube.com/watch?v=aZWAzbRm-ms

Case

"Oracle Corporation (NASDAQ: ORCL) specializes in developing and marketing enterprise software products particularly database management systems. Through organic growth and a number of high-profile acquisitions, Oracle enlarged its share of the software market. By 2007 Oracle ranked third on the list of largest software companies in the world, after Microsoft and IBM. Subsequently it became larger than IBM after its acquisition of Hyperion and BEA.

The corporation has arguably become best-known due to association with its flagship Oracle database. The company also builds tools for database development, middle-tier software, enterprise resource planning software (ERP), customer relationship management software (CRM) and supply chain management (SCM) software.

The founder and CEO of Oracle Corporation, Larry Ellison, has served as Oracle's CEO throughout the company's history. Ellison also served as the Chairman of the Board until his replacement by Jeffrey O. Henley in 2004. Ellison retains his role as CEO.

Ellison took inspiration from the 1970 paper written by Edgar F. Codd on relational database systems named "A Relational Model of Data for Large Shared Data Banks". He had heard about the IBM System R database from an article in the IBM Research Journal provided by Ed Oates (a future co-founder of Oracle Corporation). System R also derived from Codd's theories, and Ellison wanted to make his Oracle product compatible with System R, but IBM stopped this by keeping the error codes for their DBMS secret.

Ellison co-founded Oracle Corporation in 1977 under the name Software Development Laboratories (SDL). In 1979 SDL changed its name to Relational Software, Inc. (RSI). In 1982, RSI renamed itself as Oracle Systems to align itself more closely with its flagship product Oracle Database."

You may find some of the terms used in the video are new and refer to specific elements of Oracle's suite. Oracle's *Real Application Clusters* (Oracle RAC), is an option to Oracle Database 11g Enterprise Edition. RAC supports the deployment of a single database across a cluster of servers located throughout the firm providing fault tolerance, performance and scalability with no application changes necessary.

"Oracle's *Fusion Middleware* is a set of software services (applications) that enable multiple applications in a firm (often from different vendors) to work together by sharing information So-called "middleware" can be purchased from many large vendors like IBM, HP, Microsoft as well as from thousands of smaller suppliers. The software consists of a set of enabling services that allow multiple processes running on one or more machines to interact across a network. This technology evolved to provide for interoperability in support of the move to coherent distributed architectures, which are used most often to support and simplify complex, distributed applications. It includes web servers, application servers, and similar tools that support application development and delivery. Middleware is especially integral to modern information technology based on XML, SOAP, Web services, and service-oriented architecture. Most important, middleware enables a firm to retain older legacy systems and put them to use in a modern, distributed, TCP/IP communications oriented environment."

Hyperion is a performance-oriented management software, sometimes also called business intelligence software. It is an application that works with Oracle databases and Oracle data warehouses to provide real-time data, as well as periodic MIS reports, to managers. Hyperion supports near real-time transaction reporting, graphics and summaries of data, and management dashboards.

Together these tools make up Oracle's "E-business suite."

Sources: Oracle.com; Wikipedia.com.

Case Study Questions

1. What were the business challenges facing Maruti Suzuki management prior to adopting the Oracle suite?

2. What advantages does Maruti Suzuki derive from working with a single vendor, Oracle? What are the possible risks of working with a single vendor?

3. What were the important business factors which management used to evaluate Oracle's database offerings?

4. Why was it important that a vendor's products be able to integrate with "legacy systems?"

5. What are the business benefits reported by management to using the Oracle suite of products?
