Sega of America Uses Microsoft SQL Server 2000 to Better Serve Its Legions of Gamers

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As one of the largest developers of video games in the world, Sega of America, Inc., needed a more flexible solution for tracking sales data; forecasting; and performing trend analysis, competitive analysis, and market share analysis using both external and internal data from disparate sources. Sega replaced a system based on the Oracle Express 6.1 database development environment with a market research analytics solution based on Microsoft SQL Server 2000 Analysis Services, with a ProClarity front end. Since replacing Oracle Express, Sega has slashed its maintenance costs by 80 percent while gaining greater flexibility in how it analyzes its data.

Solution Overview

Customer Profile
Sega of America is a global leader in creating video games for a range of platforms.

Business Situation
The company required a more flexible solution for performing market research analytics on sales and inventory data from disparate sources.

Solution
Microsoft® SQL Server™ 2000 Analysis Services functions as a middle tier to an Oracle database and uses a ProClarity presentation tier.

Benefits
- 80 percent lower maintenance costs
- More flexible data analysis capabilities
- Integration with legacy database
- Enhanced performance with quick user response times

Software and Services
- Microsoft® Windows® 2000
- Microsoft SQL Server 2000 Analysis Services and Data Transformation Services
- Microsoft Office 2000

Hardware
- IBM servers

Partners
- Symmetry Corporation
- ProClarity Corporation

Scenario
Enterprise analytics and business intelligence

Situation

It seems only natural that a company like Sega—which has built a worldwide following for fast-paced video games starring a range of characters including the globally famous Sonic the Hedgehog—would want to bring some speed and flexibility into its market research analytics.

But the company’s existing system was cumbersome to customize and expensive to maintain. Sega’s system was based on an Oracle database, with reporting through the Oracle Express 6.1 database development environment. When Sega came to a crossroads of either upgrading to the next release of Oracle Express or choosing another analytics platform, it worked with Symmetry Corporation to determine the best solution.

Solution

Sega replaced Oracle Express with Microsoft® SQL Server™ 2000 Analysis Services, which provides a middle-tier server for online analytical processing (OLAP). The Analysis Services system includes a server that manages multidimensional cubes of data for analysis and provides rapid client access to cube information. Sega retained its legacy Oracle database, using Microsoft SQL Server 2000 Data Transformation Services (DTS) for loading data from the Oracle database into Analysis Services according to a snowflake schema. ProClarity Corporation’s Analytics Platform 5 Desktop Professional was used for the presentation tier.

“What we saw was just a wonderfully compelling architecture for Analysis Services,” says William Brown, Principal Consultant, Symmetry Corporation, which assisted Sega in evaluating technology. “And we could also see a lower total cost of ownership for Sega.”
**Benefits**

**Easier to Use**

Rob Lightner, Director, Research & Analysis, Sega of America, says about 80 million people in the United States play video games. With thousands of games to track, he’s keenly interested in seeing what sells where and when. “We need the ability to check our progress against the competition on a weekly basis, to see, for example, how a new product is doing against its forecasts, and to project future sales based on an initial release,” Lightner says.

That’s why he appreciates the ease of use he’s found with SQL Server 2000 Analysis Services.

“The more quickly and efficiently I can get the historical information I need, the better I can do my analysis and forecasts,” Lightner says. “With our Microsoft and ProClarity solution, we no longer have to build reports from scratch. With our old system, we had to go in and manually move files around and sometimes required the help of a programmer. Today, I get the information I need when I need it, and I’m not dependent on programmers to create custom reports for me.”

**Integration with Legacy Systems**

Integration was a key element to the solution because Sega was keeping its Oracle database, while replacing Oracle Express with the Microsoft-based middle tier.

“SQL Server 2000 Analysis Services was able to seamlessly integrate with the Oracle database,” Brown says. “We use DTS to manage the data load processing. DTS is much easier to use than the Oracle data load facilities, so even though Sega has an Oracle back-end server, we use DTS to automate the data loading. DTS makes it easy to import and transform data from multiple, heterogeneous sources.”

**Enhanced Performance**

SQL Server 2000 Analysis Services enables Sega to double the number of dimensions and reduce load times, while it maintains quick user response times.

“The Analysis Services aggregation engine is nothing short of amazing,” Brown says. “It builds intelligent aggregation. And it has a compression engine, so as it aggregates data and stores it, it also compresses it. The result is that instead of building a 3-gigabyte database, which is what I was doing with the old system, I’m building a 150-megabyte database. I can do things with the new system that I would have never tried with the old one simply because there would have been too much data to aggregate.”

This enhanced performance allows for the creation of new dimensions.

“With the old system, we had all the data to add dimensions, but we didn’t have the performance window,” Brown says. “Adding a dimension in the old system quite often would add at least 30 or 40 percent onto the load times and disk space requirements. With Analysis Services, I would need a stopwatch to detect a difference.”

**Lower Total Cost of Ownership**

Sega is seeing a significant reduction in the cost of maintaining its market analytics system simply because the Microsoft solution is more stable and easier to maintain than the Oracle Express system was.
“We have cut our maintenance costs by about 80 percent,” says Lightner. “With Oracle Express, it seemed as if we had consultants in here two or three days a week. With Analysis Services, we simply don’t need them anymore.”

Brown, who helped maintain the old system, agrees. “The old system was very proprietary and required a high level of expertise,” Brown says. “With the new system, the level of expertise required to run it has been greatly reduced. I don’t get calls as often. This saves Sega money and enables them to leverage my time more productively.”

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