

BEZ Systems

BEZ's Performance Improvements Help Build Lowe's Success



Retail Industry

Lowe's At-A-Glance

One of the two largest home improvement stores in the world

\$26.5 billion in sales last year

Serves 9 million do-it-yourself and business customers every week

850 stores in 45 states

"America's Most Admired Specialty Retailer", 2003
Fortune magazine

Technical Environment

Teradata data warehouse

48 nodes

Data warehouse size: 4.5 terabytes

Challenges

Optimum maintenance and performance improvement of current customer database for 40 million households and inventory for 850 stores

Predict future data system growth and capacity

Support business decisions with verifiable data

BEZ Builds Performance Framework for Lowe's

- Consistently provides high-throughput and responds to performance issues
- Delivers measurable data to support business decisions
- Analyzes and assesses future capacity needs

Lowe's Companies, Inc., a \$26 billion retailer of home improvement products, services and equipment, serves more than nine million customers each week throughout more than 850 stores across 45 states. Lowe's is the world's second largest home improvement retailer and the 14th largest retailer in the U.S.

The company is in the midst of an aggressive expansion plan, opening a new store on an average of every three days. The current prototypical store has a 121,000 square foot sales floor with a lawn and garden center averaging an additional 30,000 square feet.

While market rival Home Depot is number one in the home improvement arena, their sales and market share have slipped in contrast to Lowe's impressive growth and increased market share over the past few years. Lowe's is positioning itself for taking the lead in the home improvement industry.

Blueprint for Market Success

How does Lowe's grow in a market where its largest rival is having problems? Home improvement television, one of the fastest growing programming sectors today, markets to the audience company executives feel make the home improvement decisions: female head-of-households. Lowe's takes its cue from this segment with its female-friendly store layout and an extensively trained in-store staff meant to guide the customer through projects from start to finish. These two factors have attracted a loyal set of shoppers.

But it takes more to be successful than targeting a segment of the market. The real secret to Lowe's strategy lies in how it reaches out to its customers. Lowe's customer database includes nearly 40 million households with complete customer profiles matched to item-specific purchasing behavior, all providing Lowe's a wealth of information. This knowledge is used to communicate new product and services announcements or advice about potential projects. Within the organization, this data supports decisions that are driven by the goal of maintaining repeat business.

Powering their ability to get repeat business—a critical success factor in any business—is their powerful Teradata data warehouse, which helps Lowe's understand their



Lowe's IT staff must proactively and continuously improve performance of their data warehouse—a goal they achieve with BEZPlus

customers' actions—and the results of their marketing efforts—on a daily and weekly basis.

Maintaining and Improving Peak Performance

Ensuring the Teradata system is always operating at peak performance is critical to Lowe's IT staff. Executive management and merchandising groups are key constituents for this information, which means the Teradata system must be responsive and have consistently high throughput in order for them to make timely business decisions. Lowe's IT staff proactively and continuously improves performance of their system by relying on BEZ Systems.

The IT department has utilized BEZ's predictive performance management software, BEZPlus, for several years and considers it the heart-and-soul of their ability to deliver consistently good performance and plan for their future needs.

BEZPlus provides insight for Lowe's staff to understand how the system is used on a daily basis. This insight allows them to carefully monitor trends and keep tabs on critical users and associated workload throughput.

When occasional problem do occur, Lowe's is able to respond with their 'all hands on deck' mission to identify and focus on performance issues quickly and easily. BEZPlus provides them with critical workload information to resolve bottlenecks. Because they need to keep careful track of how the system is being used, BEZPlus' Statistical Process Control (SPC) capability makes it easy to see if a performance issue is an exception or part of a growing trend.

Measure Twice, Cut Once... Even When Building Business

This old construction adage also applies to BEZ's ability to provide and validate accurate performance metrics. This accuracy gives Lowe's IT staff confidence when reporting key performance data

to executive management. This is important because Lowe's managers understand that good performance of their Teradata system means they can make real-time business decisions. BEZPlus gives them a wealth of actionable reports that correlate data, workloads and resources to the company's lines of business, so key business groups are always getting the performance they demand from the data warehouse.

BEZPlus also helps Lowe's managers understand the various alternatives they have when making changes to their system. Whether it is adding indexes, aggregating data, deleting dormant data and indexes or denormalizing tables, BEZPlus helps them understand the potential impact of their decisions. BEZPlus also helps Lowe's improve performance by identifying the skewed data that causes hot AMP conditions. By doing so, BEZPlus helped Lowe's achieve a 10-20% improvement in each workload affected by the condition.

BEZ Benefits Future Expansion

Finally, Lowe's leverages BEZPlus' award-winning predictive capabilities to help manage future growth. By using BEZPlus to consistently monitor their system resources and model sophisticated, 'what if' scenarios, Lowe's managers project their future Teradata growth needs. They model different hardware configurations, expected workload growth, anticipated user growth and other factors critical to their expanding business.

An additional benefit Lowe's plans to realize with BEZPlus and Teradata V2R5 is the ability to compare actual results with their projections. Using BEZPlus to manage availability of critical customer data and continuously improve the performance of their system—this is the foundation on which Lowe's builds its home improvement success.

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About BEZ Systems

For over ten years, BEZ Systems has been the leading provider of Predictive Performance Management solutions for IBM DB2 UDB and Teradata applications. Companies around the world rely on BEZ software, services and consulting to achieve a high level of responsiveness and scalability for their critical, growing business applications. BEZ is a privately held company headquartered in Boston, MA. For more information, go to www.bez.com.



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