



Netezza Builds Momentum in Retail: An Intriguing Approach to Data Warehousing

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Retailers have identified Business Intelligence (BI) and demand forecasting as their two most important technology infrastructure investments for 2005 (see the *AMR Research Report* "Retail IT Spending Profile, 2004–2005: Consumer-Focused IT Investments Fuel Spending Growth"). With increasing amounts of granular data being collected from throughout the Retail enterprise, the need to ensure data warehouse performance while controlling the cost of the technology has become paramount in the minds of many Retail CIOs. A number of major retailers, including Ahold and TJX, have turned to **Netezza** and its impressive data warehousing technology to gain operational benefits from improved BI and quicker "analysis to action."

The Bottom Line: Netezza is capturing Retail IT attention with a compelling message of data warehouse technology performance and purchase price, though intense competition from established players and a need for broader analytics will be an increasing challenge.

What It Means: Founded in 2000 and backed by a number of successful venture firms, the company's *Netezza Performance Server (NPS)* technology has been generally available since early 2003. Netezza has focused on a small number of industries where data volumes are massive and quick insight is critical. To date, more than 20 companies have purchased various *NPS* configurations, depending on requirements. Additional retailer deals include a major Tier-1 grocery chain looking to augment its incumbent data warehouse and a major online retailer looking for improved performance on clickstream analytics.

Some of what interests retailers about Netezza includes the following:

- **Technology**—Netezza has combined the use of commodity hardware, heavily modified open source database software, and unique disc drive-embedded processing logic to drive tremendous query performance on very large data sets. References claim 20x to 40x improvements over incumbent solutions that were in some cases twice as expensive to deploy. **The Takeaway:** This approach has proven initially successful against the perception of "premium investment" for competitive offerings with similar capabilities. But the reliability risks of low-cost hardware and the complexities surrounding their pseudo-proprietary database platform will need to be effectively managed to avoid the risk of any system failures or development issues that could overshadow performance benefits.
- **Administration**—Because of Netezza's brute force approach to data warehouse performance through disc-based query processing, the platform all but eliminates the need (or ability) to generate indexes or other configuration tweaks, thus requiring little handholding other than that for data loading and systems management. **The Takeaway:** Many of the retail queries, such as market basket analysis, customer segmentation, and clickstream analysis are well suited for this environment. Other more complex queries might arise over time that could narrow the performance benefits if a broader set of SQL parameters is not available to optimize the database configuration.
- **Proof of concept and aggressive pricing sales approach**—Netezza has focused heavily on facilitating rapid evaluations of its query capabilities using the retailers' own data and existing analytic requirements to spark customer interest. In some cases, queries that took hours to perform (or couldn't complete at all) were completed in minutes on Netezza technology. These successful pilots, coupled with aggressive pricing on initial platform configurations, have led to most of the business with retailers. **The Takeaway:** This sales approach is proving highly effective for Netezza. More attention on additional retail application pilots in operational areas like replenishment, retail planning, and workforce management could draw more retailers into proof-of-concept engagements.

While Netezza's retailer wins and deployments of late are impressive, its future success will not be easy and will require the attention of senior leadership and industry go-to-market teams. Challenges include the following:

- **Established competition increasingly wise to Netezza positioning.** Netezza's early sales efforts were targeted at retailers with little or no data warehousing technology, or those retailers that had legacy technology that had clearly reached performance ceilings. Recent successes, however, have raised the ire of **NCR/Teradata**, which has no intent of ceding its market leadership in retail enterprise data warehousing to Netezza. Expect more aggression in its messaging, emphasizing its long-proven linear scalability in enterprise data warehousing enhanced by its Retail industry expertise from a services, management, and applications standpoint. Teradata's replenishment and Customer Relationship Management (CRM) applications give it distinction in the market that Netezza will need to counter. Other competitors, including **SAS, Oracle, and IBM**, will be paying particular attention to Netezza's Retail momentum as well, since each has placed very large bets on Retail industry spending growth.
- **Adding a solutions angle to the technology message.** Netezza's validated strength in price/performance will need to be expanded to include more integrated applications that make use of large amounts of retailer data. This isn't just about tighter linkage to broad BI tools like **MicroStrategy's**, this is about providing a portfolio of analytic-oriented retail applications that retailers need to deploy today, including inventory optimization, retail price and promotion management, and store execution. Netezza has a strong application partner portfolio, but additional cohesion with some premier software partners will be necessary to offer broader analytic-oriented retail systems.

Conclusion: Netezza deserves credit for addressing the critical data warehousing pain points that have constrained retailers recently—strong technical performance to deal with increasing amounts of data and query complexity coupled with aggressive platform pricing that fits retailer budgets. Along with a strong management team and referenceable customers, it's a platform worthy of evaluation by any retailer looking at data warehousing. But industry market execution will need to be close to perfect to address more aggressive competition and more demanding retailer requirements.

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