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## Case Study: Netezza Unifies Knowledge Access For Improved Customer Service Outcomes

by **Kate Leggett**

with William Band and Andrew Magarie

### EXECUTIVE SUMMARY

IBM Netezza, a provider of data warehouse and analytics appliances, needed to tame its knowledge problem. Knowledge resided in multiple sources: a customer call ticket system, a knowledge base, personal email, shared files, a software bug tracking system, and a product engineering wiki. Customer support agents wanted a more comprehensive view of all available knowledge that could help better resolve customer issues in a timely way. Netezza used three best practices to roll out a new knowledge program that presented structured and unstructured knowledge to agents and management in unified case consoles and dashboards. The result? This single view of knowledge increased customer satisfaction, reduced the time needed to identify known issues by 67%, and reduced the number of duplicate bugs submitted to product engineering by 50%, while increasing the number of bugs engineering fixed by 85%.

### SITUATION: SILOED CONTENT OFFERS CHALLENGES FOR CUSTOMER SERVICE

Customer service managers struggle to tame the volume of corporate knowledge that exists in disconnected silos such as knowledge bases, document management systems, social media sites, company intranets, and traditional paper manuals. They also struggle to understand what knowledge sources are the most accurate, up to date, and complete.

Netezza, an IBM company and a provider of data warehouse and analytic appliances, needed a solution to better leverage the information in its customer knowledge base to improve customer service. Netezza customers view their appliances as critical to their success. This means that they must quickly resolve any incidents that arise, as downtimes are not tolerated. Netezza's customer support agents accessed product information from a call ticket system, a standalone knowledge base, a bug tracking system, shared files, personal emails, and an engineering wiki. Agents needed the ability to quickly sort through the various content sources to identify pertinent information tailored to the customer's product and specific environment.

Jim Coleman, principal support analyst at Netezza, observes that "As a data warehouse and analytics appliance, Netezza's product is easy to use, but incident resolution requires Netezza product software and hardware expertise *and* knowledge of Linux, networking, and the many applications that run on Netezza. Customers who escalate to us are often in a jam and need a support engineer to provide immediate help or answers. Many escalations are complex or adaptive problems — problems that don't have simple resolutions, or have a number of possible resolutions. It is up to Netezza support to determine the best resolution based on numerous considerations, including performance and the application that the customer is using. Quickly finding the data needed to resolve customer problems is a necessity."

## BEST PRACTICE: NETEZZA USED UNIFIED CONTENT VIEWS TO DELIVER KNOWLEDGE

At first, Netezza tried to address this problem in a traditional manner by porting valuable technical information into knowledge base articles. However, this process placed an additional burden on support engineers, who were busy resolving customer problems. And the company lost much of the contextual value of data and links to important related data when it moved information to the knowledge base.

Netezza looked for better ways to ensure that its customer support agents had the right contextual knowledge at hand to quickly help customers resolve their issues. After implementing Coveo's Knowledge 360 Solutions for Customer Service, the company gained a unified view of all knowledge and customer information — both the structured content in the knowledge base and the unstructured content in the various engineering information sources that agents needed to resolve customer issues. Netezza used three best practices to ensure success:

- **Selectively move content into a knowledge base.** The Netezza knowledge base is an excellent source of procedural information and product training information. It was not, however, a repository of highly customer- and environment-specific information. Netezza identified the sources of content that it wanted to present to its agents and determined which content would be more valuable — inside or outside of the knowledge base.
- **Supply a unified view across all content sources.** Netezza implemented a single interface to search for content from the knowledge base and other sources. Coveo's search-based unified case consoles and dashboards present content from different sources to support agents. This content includes near real-time information from nine different systems, including knowledge base solutions, customer cases, related cases and their solutions, and known software bugs.
- **Provide end users with contextual content.** Users need information that is relevant to their specific roles. The solution that Coveo configured for Netezza helps agents surface pertinent information related to a customer's issues. Managers can understand trends in product issues and what the impact of an issue is. Business users can quickly assemble knowledge dashboards precisely targeted to the user role and question at hand.

## Next Steps: Netezza's Plans For Optimized Knowledge Management Outcomes

Netezza initially focused on giving agents the unified view of knowledge needed to quickly resolve customer issues. It has rolled out unified views via dashboards to all support agents and management, including the senior vice president of operations and the CEO. With this first deployment under its belt, Netezza now intends to:

- **Index additional data sources to provide a richer view of customer status.** Today, Netezza identifies customers as having a green, yellow, or red status, based on data in the call ticket

and bug tracking systems. The next step is for Netezza to index the customer survey and sales data it collected using customer relationship management (CRM) tools to gain a fuller view of customer status and the potential impact on business opportunities.

- **Understand the customer service experience from every angle.** Today, Netezza can use the information presented in the Coveo dashboards to quickly assess the initial quality of new releases, individual customer service experiences, and support center workload planning. Going forward, Netezza would like to enhance dashboard views so it can analyze the customer service experience based on additional dimensions like account, hardware model, software release, and location. This will allow the company to more easily identify emerging trends, prioritize customer requirements, and track difficult-to-measure metrics such as how quickly agents contact customers after the initial issue is logged.
- **Eliminate as much reporting as possible.** Jim Coleman said, “We think that Coveo’s 360-degree dashboard can eliminate most reporting as we know it. We have done well by the reporting tools that we use today, but our needs are constantly changing, and modifying the reports is time-consuming and requires specific technical expertise. Information in reports can also go stale as soon as we hit ‘send.’ The dashboard provides near real-time data that anyone from our support engineers to our CEO can access.”

## BEST PRACTICE RESULTS: NETEZZA MOVES THE NEEDLE ON CUSTOMER SERVICE

The benefits that Netezza realized include:

- **Faster identification of known product issues.** Within 30 days of implementation, Netezza reduced the time needed to identify known issues by 67%.
- **Better bug submissions to product engineering.** Over six months, Netezza reduced the percentage of duplicate bugs submitted to engineering by 40%, cut the number of submissions that were determined not to be bugs by 50%, and decreased the percentage of problems that could not be reproduced by 67%.
- **Increased engineering productivity.** Engineering at Netezza is able to now concentrate on fixing new product issues, not on triaging and identifying issue submissions that it ultimately categorizes as known issues or not really bugs. These efficiency gains have helped engineering increase the percentage of fixed customer bugs by 85% over the past six months.
- **Increased operational efficiencies.** Prior to implementing the new solution, adding headcount was the only way to effectively scale to support a rapidly expanding customer base. Now every support agent is more efficient, allowing the organization to scale at a reduced cost.

## RECOMMENDATIONS

### HOW TO APPLY NETEZZA'S AGENT KNOWLEDGE MANAGEMENT BEST PRACTICES

- **Be selective with the information contained in a knowledge base.** There are quantifiable benefits of having a formal knowledge base that contains trusted information about products and services. However, other content sources contain information that is of value to customer support agents and doesn't belong in a knowledge base. For example, product documentation, tutorials, and training guides belong in content management systems, whereas case information with customer environment details belongs in a case management system. It's important to understand all the content that agents need to do their jobs and then present it to them in a unified view.
- **Identify your sources.** Tag structured and unstructured knowledge presented to agents with visible icons so that they quickly understand the source and context of the knowledge.