



**Partner:** Affinity Systems  
**Partner Web Site:** [www.affsys.com](http://www.affsys.com)  
**Partner Size:** 1-99  
**Country or Region:** Canada and U.S.  
**Industry:** Professional services  
**Customer:** Brandimensions  
**Customer Web Site:**  
[www.brandimensions.com](http://www.brandimensions.com)

#### Partner Profile

Mississauga, Ontario-based Affinity Systems is a custom IT solutions provider with 26 employees. The company specializes in developing complex, high-quality solutions in a wide variety of verticals and is the strategic technology development partner for many firms.

#### Software and Services

- Microsoft® Servers
  - Microsoft SQL Server™ 2005
  - Windows Server® 2003
- Microsoft Visual Studio® 2005
- Technologies
  - Microsoft ASP.NET
  - Microsoft .NET Framework

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## Microsoft Partner Helps Internet-Monitoring Company Crawl 750 Million Pages Monthly

“Our partnership relationship with Microsoft has opened our eyes to the technology support opportunities out there, which means that we can continually offer stronger solutions to our customers.”

Leslie Goldsmith, Director, Affinity Systems

*Affinity Systems, a Microsoft® Certified Partner, developed a system for Brandimensions that monitors the Internet to track and help protect brands. Rather than using an Oracle database, the solution relies on Microsoft SQL Server™ 2005. As part of a long-term relationship, Affinity Systems has used Microsoft technologies to deliver greater value and a strategic advantage to Brandimensions.*

#### Business Needs

In 2001, Brandimensions saw an opportunity to develop a service that would monitor the Internet and provide customers with information about online usage of and opinions about corporate brands for better brand protection and product intelligence. The company wanted to offer its customers high-quality, relevant incident reports about their brands, including details of link errors or infractions, lapses in Web site availability, misrepresentations of brand affiliation, consumer discussion volumes and sentiment, and other online material that might be relevant to a customer or a product. To offer such a service,

Brandimensions had to find a way to automate the collection of relevant data from the millions of Web sites, blogs, and online social networks that are on the Internet. Also, the company wanted to be able to adapt its solution easily as new technology became available over time, harnessing greater power and better analytics capabilities to gather better information for customers.

However, the company knew that it needed a strong technology partner to help it succeed. Brandimensions turned to Affinity Systems, a custom solutions provider and Microsoft® Certified Partner, taking the first step along

the path to a long-term relationship between the two forward-thinking companies. "Affinity Systems developers are so highly skilled, with such a strong focus on algorithm-level details, that I can't imagine working with anyone else," says Hugh Hyndman, Chief Technology Officer for Brandimensions.

## Solution

Recognizing that a successful Internet-monitoring solution would require a powerful database system, Affinity Systems developers considered using an Oracle database, a Microsoft SQL Server™ 7.0 database, or a custom-developed one. "When we approached Oracle about the prospect of tracking and storing hundreds of millions—or even billions—of rows of data, Oracle couldn't offer any assurance that its system could meet our needs. The response was somewhat surprising," says Leslie Goldsmith, Director for Affinity Systems. "Plus, the Oracle license fees were an order of magnitude more expensive than those for SQL Server."

Affinity Systems decided that basing the Brandimensions solution on SQL Server made good technical and financial sense. Says Goldsmith, "We had plenty of experience with SQL Server, were confident that it could scale, and thought it would be a better use of our customer's resources. Instead of building the infrastructure, we could use the out-of-the-box database functionality and focus our time on the relevancy side of information gathering."

Built using Microsoft development tools such as the Microsoft .NET Framework, ASP.NET, and the Visual Studio® 6.0 development system, the brand-protection solution launched in 2002. "Choosing the Microsoft Windows Server® platform for development and deployment was a natural one," says Goldsmith. "It leveraged our skills, and offered an unparalleled level of integration across the

theatre of execution—from Web crawling to data categorization to report generation."

Architecturally, the core data collection and analysis logic resides on a series of low-cost servers running Windows Server 2003. These communicate with the SQL Server database, which acts as a data authority for information mined from Web pages as well as a central dispatch queue that influences the tasks performed on the other machines. Scalability is achieved easily by introducing more machines to the complex.

In 2003, as data volumes grew, Affinity Systems upgraded the solution to SQL Server 2000 so that Brandimensions could "spider" the whole Internet more effectively. The partner optimized the solution again in December 2005, using Visual Studio 2005 and upgrading the solution to SQL Server 2005 for greater performance in relevancy data mining.

After deployment, the Brandimensions database holds approximately 64 billion links mapped for 8 billion URLs and 210 million Web sites—more than 8 terabytes of data. It maintains 7,000–10,000 transactions per second and crawls 750 million Web pages each month. The solution is designed to crawl up to 2 billion sites per month with minimal cost increases and no software changes.

## Benefits

Brandimensions has built its business on the mission-critical Internet-monitoring solution, and relying on both Microsoft technologies and Microsoft Partner Affinity Systems continues to serve the company well. The company can keep offering additional functionality at an affordable cost because working with Affinity Systems to fine-tune the solution is fast and therefore cost-effective.

"We constantly work to broaden the spectrum of our metrics to support more granular levels of analysis, providing our customers with better business intelligence," says Hyndman. "The combination of Affinity Systems expertise and SQL Server 2005 functionality is making that possible."

### ■ Excellent performance and reliability.

"Without a doubt, the two most critical factors that have led to the success of the Brandimensions solution are the performance and reliability of SQL Server 2005," says Goldsmith. "This, coupled with the excellent technical support offered by Microsoft, has led to one of the largest and highest transaction-rate SQL Server implementations in the world."

■ **Ability to easily enhance solution.** "Our use of Microsoft technologies means that we can release upgrades of sophisticated client-side software with minimal effort and cost," says Goldsmith. "The evolution of the Brandimensions solution and its integration into the company's workflows has been much more straightforward than it would have been on other platforms or technologies."

■ **Proactive support and fast problem-solving.** The support that Brandimensions receives from both Affinity Systems and Microsoft ensures that the solution stays up and running as optimally as possible. "Our partnership relationship with Microsoft has opened our eyes to the technology support opportunities out there, which means that we can continually offer stronger solutions to our customers," says Goldsmith.