

ESJ Enterprise Systems Journal

High-End Datacenter and Server Solutions

Big-Company Intelligence

For large enterprises that want better business intelligence without the high cost and management headaches of an in-house solution, hosted business intelligence might be the answer.

By John Harney ■ 06/01/2002

When you think of hosted applications, CRM, ERP and e-business come to mind, but business intelligence (BI)? Not likely. Though still a small niche in the Application Service Provider (ASP) industry, the appeal of outsourcing BI is growing in large companies—and for good reasons. An ASP focused on BI can take the headaches of installation, management and specialized personnel off your hands, often for less than the cost of installed BI systems—without sacrificing data quality.

Business Intelligence ASPs (BI ASPs) work well in two broad activities—capturing data and analyzing it. Data capture might include authenticating new data, cleansing redundant data and integrating data from disparate sources. Sources include business-to-consumer data, tech support, and customer service Web sites. The ASP then analyzes the data for business intelligence. The BI applications may also be integrated with in-house production applications like ERP or CRM.

ASPs differ in what they offer. While most download customers' raw data over a broadband link, they vary in how they allow customers to access the processed data afterward. Some permit customers to query the data via Web browsers; others do periodic queries themselves and forward the results to customers. It's then up to the customer to forecast trends and plan business strategies to deal with them.

Enterprise Appeal

From the beginning, BI ASPs have targeted small- to medium-sized businesses. But in the last year or so, Global 2000 companies and other large enterprises have started to find the simplicity and affordability of BI ASPs appealing. In addition to rapidly

deploying robust data warehouses and other BI technologies, BI ASPs eliminate the need for high-paid, specialized staff like database administrators who manage data warehouses, and application developers who write data mining algorithms. Large companies are also finding that hosted data warehouses are easier to integrate with and populate from the data archives of their in-house customer-oriented "power" applications like CRM and ERP.

Traditional BI vendors like IBM, SAS, Cognos and Micro Strategies tend to have the most robust installed systems and therefore cater to the high-end market with hosted versions of their products. SAS, for example, has partnered with EDS for data center and network software and with Compaq for hardware to launch IntelliVisor for Retail. IntelliVisor primarily lets retailers set relevant performance metrics and then measure real performance against them. The solution tells companies which customers buy which products and which types of marketing campaigns are most effective in encouraging customers to purchase online. That savvy helps retailers improve Web-site offerings, more effectively target marketing campaigns, and successfully cross-sell and up-sell to existing customers.

IntelliVisor works by capturing and then applying analytics to the data overnight, then returning a variety of reports to customers the following day that compare real results with forecasted expectations. SAS claims that several customers report paybacks of up to 300 percent within three months, as well as improved customer satisfaction and increased revenue. Blair Corporation, a large catalogue and online retailer, boasted increases in e-commerce sales from \$2.5 million in 2000 to \$35 million in 2001—success partly attributable to IntelliVisor analytics.

BI ASPs are also making inroads into high-end vertical markets like health care and energy. For instance, Philip Russom, consulting analyst for business intelligence and data warehousing at the Hurwitz Group, an analyst firm, says Business Objects offers a hosted extranet solution for Owens and Minor, a major supplier of medical equipment. Business Objects allows Owens and Minor customers, like large coalitions of hospitals and clinics, to tap into the company's hosted data warehouse to analyze what products and what quantities they're purchasing over time. Owens and Minor provides the ASP infrastructure, and hosted Business Objects BI software and its partners access them over the extranet.

In the energy market, where single transactions can cost hundreds of thousands of dollars, players also want to track when goods were bought and for what price. Russom says utilities that generate and transport electricity or buy and sell petroleum and natural gas specifically want to examine product and price trends over time to make sure they're

getting the best deals. He identifies Duke Energy as one utility that now offers hosted business intelligence as a value-added service to customers with whom it does business.

Across vertical markets, Russom says some very high-end BI ASPs offer complete data warehouses run on multiple OLAP software platforms like Epiphany and Brio, as well as provide a variety of professional services like designing and personalizing data warehouses for clients. This isn't cheap, though—he says Interelate, for instance, does all of this but charges from \$.5 to \$1 million a year in leasing fees.

While high-end traditional data warehousing installs are hardly numerous, less traditional hosted BI applications have gotten fairly common. What Russom calls "Data Quality Service Providers" specialize in correcting and enhancing raw data before the customer company archives it. For instance, he says, BI ASPs like GroupOne might massage data on e-business forms a site visitor filled out on Amazon.com's Web site and then forward the cleansed results to the customer. Russom explains that these ASPs do things like correct typos, complete incomplete addresses, and confirm that the site visitor lives at the address given and is the valid owner of the credit card used.

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A Case In Point

CBSmarketwatch.com is a good example of a large company leasing BI capabilities to avoid the headaches of installing and managing an in-house system. It aims to be the premier news and research tool provider on the Internet—and currently attracts 9 to 11 million unique visitors each month.

The site comprises both CBS.marketwatch.com for news and Bigcharts.marketwatch.com for research. Staff journalists produce original content for both, while the Bigcharts site offers tools such as advanced charting capabilities and a portfolio of products that allow users to manage their finances.

But according to Elisabeth Koehler, manager, financial planning and analysis, before March 2001, the site lacked the BI capabilities to "track page views, unique users [and] users' time spent on the Web site in almost real time ... [as well as] process the huge amount of data we process through our log files."

Then CBS hired DigiMine. Koehler says DigiMine first "built the [data] warehouse ... to handle a large amount of data and group and aggregate it in a way that makes sense to the end user ... We set up the categorization with them—how we wanted to see the data, what business questions we were trying to answer, etc."

Now, she explains, DigiMine provides nightly processing of their log files. "We send them over the files from the previous day," she says, "and they process them, filter out the garbage and then take the data and organize it in a way so it's accessible via a Web [browser]." DigiMine then returns the processed data the following day. "They also provide us with weekly and monthly aggregations of the data based on those same log files," she adds.

Performance isn't an issue. Koehler says data access times via browser "are very fast—we can navigate from report to report in the time it would take to load any Web page." In the event of problems, though, the service level agreement (SLA) guarantees a certain response time to fix any DigiMine malfunctions. The SLA guarantees that daily reports will be available by a certain time each day and weekly and monthly reports made available on a similar schedule. This was key for CBSMarketwatch.com—"other vendors could not make the same guarantees," says Koehler.

CBSmarketwatch paid between \$100,000 and \$300,000 for setup and all software and value-added services—Koehler says the investment was well worth it to understand their customer base better and have Web analytics at their fingertips on a daily basis.

Keep It Simple

Big customers looking for the most affordable solution should stick with ASPs offering straightforward hosted BI without value-added services like advanced integration. If they can pay the freight, of course, the largest companies can always find a full-service BI ASP that does everything from hosting, loading and customizing complex data warehouses to integrating BI systems with other hosted and legacy systems like CRM and ERP.

That situation may change, however, with the development of Web services, mini-applications conforming to common standards and readily interoperating both over the Internet and across platforms. Web services can function as both lightweight applications and as a means of integrating separate traditional applications. As they become more pervasive, many of the meat-and-potatoes BI ASPs that don't offer customization and other professional services will use Web services as a means of more affordably integrating hosted BI with complementary hosted and legacy applications. Until then, big companies looking to leverage BI technologies but also control costs should keep it simple—go with an ASP that does a few things very well.