

DATABASE

TRENDS AND APPLICATIONS

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APPLICATIONS INSIGHT



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SAS delivers the “I” in “BI”

To the uninitiated, business intelligence (BI) is a term that invokes visions of complex esoteric data-crunching by super-geeks using science fiction-style computer workstations. The reality can be less impressive: many BI solutions consist of little more than GUI query and reporting tools with - if you're lucky - some ability to transform two-dimensional RDBMS result sets into multi-dimensional “cubes.” Terms such as “data mining” have suffered from unrealistic expectations and hype and many business executives are either skeptical of the value of expensive data warehouses or frustrated by an inability to leverage these data assets to make forward-looking business decisions.

Part of the problem with BI is the mismatch between the complexity and sophistication of the algorithms required to perform true forecasting and analysis and the mathematical sophistication of the business analysts and executives who are the ultimate consumers of the BI software. As a result, BI vendors feel compelled to offer software that requires minimal user sophistication. The resulting tools typically suffer from a lowest-common-denominator problem.

However, there is a strong market for sophisticated analytics, forecasting and BI tools, as evidenced by the success of privately-held BI and analytics company SAS Software.

SAS started life as the “SAS Institute”

in the mid-1970s, offering statistical analysis software for the mainframe. By the mid-1980s, SAS was deployed widely in Fortune 500 companies and had added simple data entry and storage capabilities. Indeed, SAS was often used to construct simple data entry applications similar to those being built using dBase II on microcomputers around the same time period.

With the advent of widespread data warehousing and ubiquitous RDBMS deployment during the 1990s, SAS found a sweet spot as a tool to analyze and report on the data held in those data stores using its powerful data manipulation and statistical analysis capabilities. Arguably, SAS was a BI vendor long before the term was invented. Today, SAS differentiates from other BI vendors in their depth of analytical capabilities and focus on predictive analytics and enterprise-level scalability and support.

As a software company, SAS is unusual in that it has remained privately held. SAS could have generated a large amount of capital through an IPO - especially during the Internet boom. However, you could argue that the SAS high-end vision might have been harder to maintain as a public company: the relentless growth demands placed on public companies often detract from long-term strategic planning. SAS also has the reputation as having an almost “utopian” work environment, reflecting personal philosophies

of SAS founder and CEO Jim Goodnight, that might not have survived as a public company.

SAS is rated as number two in the BI market. The number-one position is taken by Business Objects, which produces rival BI and analytics platforms (BusinessObjects XI) but generates a very significant portion of its revenue from the market-leading Crystal Reports product line.

The biggest threat to BI vendors comes not from each other, but from the big RDBMS and application companies: Oracle and Microsoft, in particular. Both companies are introducing increasingly sophisticated tools for BI and analytics, both within the core RDBMS and in their application platforms. Certainly, the days in which a third-party tool will be required to generate business reports are coming to a rapid end. However, while the low-end BI vendors may well be disrupted by these initiatives, the deep analytical and predictive capabilities of SAS will not be found inside the box with Oracle or Microsoft anytime soon.

Guy Harrison is chief architect for database tools at Quest Software. An expert with over 15 years of experience, Harrison has specialized in application and database administration, development, performance tuning and project management. He is the author of “Oracle SQL High Performance Tuning” (Prentice Hall).