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VENDOR PROFILE

QlikTech Enjoys Market Gains with Focus on Ease of Use, Flexible Ad Hoc Analysis, and In-Memory Data Processing

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IDC OPINION

Business intelligence (BI) tools used for accessing, analyzing, and delivering information in support of decision-making processes have been on the market for three decades. As such, the technology is mature and used at tens of thousands of organizations. The well-established BI tools market reached $6.25 billion in worldwide software revenue in 2006 (see *Worldwide Business Intelligence Tools 2006 Vendor Shares,* IDC #207422, June 2007). Despite the maturity of BI tools and their widespread adoption, there is universal acceptance that BI tools reach only a fraction of business users who could benefit from better decision support technology. The primary roadblocks to wider use of BI tools have been complexity in implementation, deployment, and maintenance, and inappropriate interfaces for the broad business user audience. To date, few BI tools vendors have been able to overcome these roadblocks. While some are beginning to address one or more issues with their product offerings, QlikTech, a vendor focused on medium-sized organizations since 1993, has seen impressive recent growth because of several factors:

- QlikTech's BI offering, QlikView, provides an intuitive user interface with a visual and tabular interface that requires minimal training and can be used by a wide range of users.
- QlikTech's in-memory, n-dimensional ad hoc query, reporting, and analysis (QRA) technology does not require extensive resources, or time, to implement and support.
- QlikTech has made its offering easy to download and install, and it has a money-back guarantee, allowing prospective buyers to experiment with the tool at minimal risk.
- QlikTech's technology is focused on ad hoc query, reporting, and analysis needs. One of the company's strengths is its discipline in avoiding an attempt "to provide all things to all people." For example, related BI functionality for predictive modeling, data stream processing, and rules engines are out of the scope of the QlikView product. As a result of the focused scope of the offering, QlikTech prices QlikView accordingly.

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This IDC Vendor Profile examines the strategies and offerings of business intelligence tool vendor QlikTech. The study also examines a customer of QlikTech to better illustrate QlikTech's success in the market.

SITUATION OVERVIEW

Supporting the decision support needs of business users is a complicated endeavor for any IT department, and even more so for medium-sized organizations that don't have the necessary IT resources with BI expertise. One of the key tasks is to assure that all stakeholders receive the right information at the right time using the right technology. Many organizations and industry observers lament the fact that there are multiple BI tools at most organizations. However, the existence of multiple tools is often necessary given their specific focus. The decision support needs of executives, managers, line-of-business staff, suppliers, and customers differ, and their ability and willingness to learn various BI tools also differs. There is a place in most organizations' portfolios for production reporting tools; dashboards; data mining and statistical tools; and ad hoc query, reporting, and analysis tools. It's rare for a single vendor to provide the best-in-class technology for all of these usage scenarios.

In fact, ad hoc QRA tools can be further segmented into two subsegments: controlled ad hoc and n-dimensional ad hoc. The former, based on online analytical processing (OLAP) technology, has been the preferred method for deploying ad hoc QRA tools for years. OLAP was created to address performance issues with early decision support workloads, and it allows IT to preaggregate operational data into cubes or multidimensional structures. Business end users can then navigate through the data along the predefined dimensions such as time, geography, product, employee, or other dimension. However, should the business end user want to navigate along a path that has not been predefined in the cube, they will need to submit a change request to IT. This request initiates a lengthy process involving the gathering of user requirements, followed by planning, development, testing, and deployment processes.

OLAP-based technology has its merits and is appropriate in certain circumstances such as in financially oriented analytic applications for budgeting and planning where the dimensions rarely change because the applications are based on current accounting principles. However, it seems that in most other circumstances, OLAP-based BI tools for ad hoc query have outlived their usefulness. What's needed is a method that is not constrained by predefined cubes and doesn't involve writing free-format SQL statements.

One such BI offering is QlikView, available from QlikTech International, which provides an n-dimensional ad hoc query, reporting, and analysis tool based on in-memory deployment.

Company Overview

Headquartered in Radnor, Pennsylvania, with development in Lund, Sweden, QlikTech is an innovative and fast-growing BI software vendor. Privately held and venture backed, the company was the fastest growing of the top 15 business intelligence vendors in 2006 based on license and maintenance revenue (see *Worldwide Business Intelligence Tools 2006 Vendor Shares,* IDC #207422, June 2007).

Founded in 1993, QlikTech's first product release was in 1995. QlikTech currently has several thousand customers in 72 countries spanning a multitude of industries. QlikTech has over 500 partners, including numerous application software partners and resellers, across the world.

Company Strategy

QlikTech, with its flagship product called QlikView, focuses primarily on midmarket clients with limited IT resources. However, it also has customers in various departments of large enterprises (e.g., Novartis, Campbells, Williams-Sonoma, Volvo, British American Tobacco, Deutsche Telekom, Toyota, Sonofon, Amcor Flexibles, Pfizer, ADP Netherlands, and Colonial Insurance).

QlikView

QlikView technology is based on a patented in-memory associative data model. This technology is made up of three primary components:

- High-speed query engine for querying as the user clicks
- Analysis or calculation engine for multidimensional analysis
- End-user visualization layer for displaying interactive charts and lists

Source data is loaded from underlying systems such as databases, mainframes, ERP or CRM systems, spreadsheets, etc., via standard interfaces such as ODBC, flat files, Web services, or from SAP using its SAP connector. As data is loaded, it is compressed and highly normalized to remove redundancy in the data. For example, a 400MB source relational database could result in a 4MB QlikView file.

QlikView is a RAM-based solution — what IDC would call a nonaggregated virtual data warehouse. Because the data is not preaggregated, QlikView solutions don't require any prebuilt data models, as is the case with OLAP cubes. QlikView has been optimized for both 32- and 64-bit environments and for multiprocessor systems. This last point is significant because QlikView can take advantage of the larger memory capacity of 64-bit servers and the greater processing power of multiprocessor/multicore servers being offered today.

Customer Case Study: SI International

Founded in 1998 to serve the computing services needs of the U.S. federal government, SI International (NASDAQ: SINT) currently employs about 4,700 people

across the United States. SI International's primary internal processes are supported by enterprise applications from Deltek, which are used primarily to track project information and financial data.

Business Problem

One of the decision support tasks of SI International's employees was to maintain several spreadsheets for revenue and expense performance evaluation. The business intelligence data collection and publication process was manual, time consuming, and error prone. It needed to be enhanced to get better information to executives and managers.

IT Solution

The company's CIO, Steve Hunt, had been searching for just such a BI tool for two and a half years before discovering QlikView. Hunt found competing offerings to be too expensive to acquire. The dependency of many of these technologies on cubes and complex administration would add additional ongoing costs to the implementation and maintenance. During yet another day spent searching for the right tool, Hunt came across QlikTech's Web site and downloaded and installed a trial version of QlikView. After watching the available demonstration videos, he integrated 14 different expense management spreadsheets within three hours, and the following day decided to show the solution to other SI International executives.

The executives wanted to see more, so they requested a consultant from QlikView to come to their site to build four applications for reviewing operating expenses and revenue, resource allocation, and corporate expenses. The management team reviewed the applications a day later and was impressed with the outcome. With the CEO approval, SI International purchased QlikView licenses six weeks later and went on to develop more BI solutions with QlikView.

Outcome and Benefits

The resulting applications integrated expense information and resource utilization data on a weekly basis so that management could review three years of history of utilization by individual consultants, projects, or various labor categories. SI International was able to eliminate the manual process of extracting and formatting data within spreadsheets for delivery to management via email. These spreadsheets were incapable of enabling drilldown to finer levels of detail — something the CEO now does regularly with QlikView.

SI International went live with 60 active users on the two QlikTech business intelligence applications presented through Microsoft's SharePoint portal. The users perform data analysis within the portal through QlikView's Web-based interface. Since the initial rollout, marketing has also built a business intelligence application that examines active information about proposals in progress, project backlog data, and information about the marketing and sales pipeline.

The amount of data that was manually extracted was expanded within the QlikView applications to include 1.5 million rows of data covering 3.5 years and presented so it balanced to the penny in aggregate views while retaining all the detail. Managers now

work with trusted data that is updated weekly rather than waiting for monthly corporate deadlines to integrate data from multiple sources for their own analysis.

SI International estimates it will save thousands of hours every month previously spent on performing manual data extraction and formatting processes. SI International sees more benefits from moving to the latest version of the software that adds writeback capabilities to QlikView. This version will allow for managers to input budgeting and forecasting data currently done manually across 450 active client projects requiring aggregation.

SI International has found the development effort in QlikView to be simple, even though its data from multiple packaged and in-house developed applications is complex. In fact, QlikView brought to light incorrect methods for tracking some types of data that were previously hidden by SI International's manual extraction and aggregation steps.

With QlikView, SI International's CIO personally develops applications with the help of one other person, which is a testament to the simplicity of QlikView's development environment. SI International further relies on one person in accounting to do data validation over one day a month and one part-time developer in the marketing department that spends an hour a month fine-tuning the application. There is no need for a database administrator to be involved. In fact, other employees have since developed their own applications to replace specialized personal or group databases that often contribute to the siloed business intelligence environments found in most organizations.

To enhance the employees' access to business intelligence or decision support functionality, the CIO is building a team to support new application development and has trained eight people to participate in QlikView development, with two coming from the IT department and six coming from the business units.

FUTURE OUTLOOK

QlikView 8 is the latest version release from QlikTech. The product is expected to reach new customers and result in upgrades to extend the capabilities in place at current customer sites. Several key enhancements to the product include:

- **In-memory writeback.** New placeholder fields can hold data temporarily in memory. This capability can enable what-if or scenario analysis, allowing users to input budget or planning data that is not written back to any operational data store.

- **Performance improvements.** Based on QlikTech's claims, QlikView 8 has improved performance by 30–90% for more common operations.

- **Enhanced collaboration.** QlikView 8 allows users to share links to specific data views and output to productivity applications for presentation to users outside the QlikView environment and provides support for emailing data views. Combined with other existing features, users are better equipped to share insight and collaborate on the analysis of data.

- **Web services interface.** Deployment of business intelligence in the context of a business process managed by a composite, Web-based application will result in expanded decision support capabilities across more processes within an enterprise or government agency.

QlikView's technology is not the only candidate to replace OLAP-based tools for ad hoc QRA. Search and discovery tools that were developed to access and analyze unstructured content are also likely to find a place in this BI market segment. However, because these tools were developed with a different goal in mind (i.e., text analysis), this technology, at least in 2007, remains significantly costlier than that of QlikTech or even other BI vendors.

ESSENTIAL GUIDANCE

According to IDC survey data, management across industries views business intelligence as a critical capability to remaining competitive. However, many will make the mistake of delivering intelligence to the privileged few rather than integrate it with everyday decision-making across the enterprise. Managers viewing aggregated data will be challenged with connecting strategy and policies with execution if line-of-business employees can't see the relationship as they form decisions.

Delivering n-dimensional ad hoc query and analysis will enable new insights to be discovered, data-quality issues to be revealed, and more informed decisions to be made. Putting business intelligence in the context that an end user would find most appropriate is a further challenge that should be considered when thinking about future goals for any BI initiative. The costs of solving these challenges do not have to be exorbitant if the right technology exists that can eliminate some of the more expensive development, integration, maintenance, or training costs. A solution that isn't readily accepted by end users because of its apparent usefulness will result in failure, future sunk costs and, more unfortunately, lost opportunities.

QlikTech is growing rapidly and finding success at customer sites across industries. Its success has been dependent on its ability to deliver an easy-to-use and flexible business intelligence tool that does not require limited development skills. As its product matures, the company must focus on enhancing the strengths of its offering rather than diverting attention to other characteristics found in competing tools. As long as QlikTech stays focused on the core competencies that brought it success, it should continue to gain share in the marketplace.

LEARN MORE

Related Research

- *Business Intelligence Tools 2006 Vendor Shares* (IDC #207422, June 2007)
- *Business Intelligence Software: Buyer Priorities and Preferences* (IDC #206814, May 2007)

- *Worldwide Business Analytics Services 2007–2011 Forecast: Increased Growth in BA Software Drives Growth for Related Services* (IDC #206107, March 2007)
- *Worldwide Business Analytics Software 2007–2011 Forecast: The Growth Cycle Continues* (IDC #206071, March 2007)
- *IDC's Software Taxonomy, 2007* (IDC #205437, February 2007)
- *Worldwide Information Access 2007 Top 10 Predictions: The Last Great Computing Platform Arrives* (IDC #205154, January 2007)

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