



New UGS-eQ Reporting and Analytics: Bringing Business Intelligence to PLM

Market Event

UGS, a leading provider of product lifecycle management (PLM) software and services, has announced the availability of new PLM reporting and analytics software as part of its portfolio of Teamcenter PLM software. The new software incorporates the eQube business intelligence and analytics software product from eQ Technologic Inc. under a marketing and technology agreement that allows UGS to promote and sell eQube.

This move allows companies to get further benefit from their PLM systems by providing direct access to the data to generate custom reports, track key performance indicators, analyze performance, and – ultimately – make better decisions. As PLM solutions mature, more companies will likely begin to offer integrated analytics capabilities based on customer demands to gain better control of their business through access to timely and accurate analysis aimed directly at solving their unique business issues relating to product development.

Aberdeen Analysis

Current Capabilities

Based on eQube's visibility infrastructure, the new software accesses and collates data from Teamcenter and other enterprise systems, legacy sources, and databases and gives users tools to manipulate, analyze, and output the data in standard and ad hoc reports, digital dashboards, and emails for near-real-time sharing of business intelligence (BI). As a result, users can track, monitor, and better manage PLM processes and make more informed and timely decisions.

The new application is integrated directly into the Teamcenter software portfolio. The eQube solution connects to Teamcenter through Teamcenter's native API, as opposed to connecting directly to the database or a data warehouse. It works within the Teamcenter business rules and security model to ensure access integrity and leverages the Teamcenter object model. In this way, existing security and data access controls do not need to be replicated, minimizing deployment time and effort.

Based on their levels of authorization, users can:

- Access Teamcenter PLM data – as well as data from other enterprise applications, legacy systems, data warehouses, and databases from a browser-based client in real time or near real time. The data is integrated, providing a single version of the data and visibility into product development processes and status across distributed design environments.
- View and, on the fly, analyze the data, which can be presented in multiple hierarchies, by drilling up or down to get multiple views and levels of understanding of key performance indicators (KPIs) and other metrics. Users can view the data in cubes, reports, and graphs

Announcement

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and can rotate, sort, and drag-drop data elements to view and dynamically analyze information from a chosen perspective or combine multiple KPIs for a better understanding.

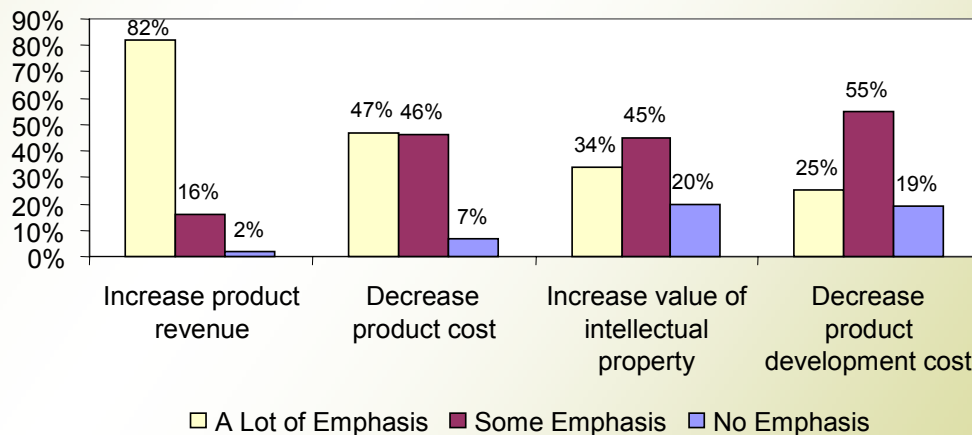
- Create reports and multi-dimensional views, including graphs, and charts, without programming. Reports and graphics can be embedded into digital dashboards to be shared in near real-time on the web or exported to text files, HTML, Microsoft Excel, PDF, or XML formats and communicated via emails or in print.
- Schedule predefined reports and views to run at designated time intervals or use the information and tools for real-time queries, ad hoc reporting, and on-demand analysis.

With these tools, users can get business intelligence, including complex analysis based on information from different enterprise systems, on a wide variety of product lifecycle activities and needs. Potential uses include information gathering and reports on project status, specific process status metrics or KPIs, root cause analysis, detailed BOM parts lists, BOM comparison reports (e.g., comparing “as designed” and “as built” BOMs), and other product, process, and project related data. This information can help them make timely and effective decisions to ensure products are delivered on time and on budgets and attain the desired quality levels. The analytics can also be applied to post-sales and service operations, for example, to spot trends in part and asset performance in order to reduce warranty costs or improve predictive maintenance, and KPIs can be used to gauge adherence to service level agreements (SLAs).

Implications for Customers: New Help for Meeting Corporate Goals

Why is business intelligence so important? According to Aberdeen’s [Product Innovation Agenda Benchmark Report](#), most manufacturers now place a high level of strategic emphasis on growing product revenue (82%) while 93% place at least some emphasis on decreasing product cost and 80% on decreasing product development cost – indicating that they are striving for profitable growth.

Figure 1: Corporate Goals for Product Innovation



Source: AberdeenGroup, September 2005

At the same time, companies are facing substantial challenges in developing products to meet these goals in the complex, fast-changing, and often global marketplace where their products are rapidly commoditized; customers demand complex, high-quality products; and global competition exerts cost pressure. In this environment, product development and lifecycle

processes frequently span multiple departments and information systems within an organization and often extend to external design, manufacturing, and supply partners – making it difficult to get visibility into what’s happening to ensure the efficiency and cost-effectiveness of processes. BI solutions offer the ability to gain control over complex, multi-departmental processes.

The ability of the new Teamcenter reporting and analytics software to integrate information from various Teamcenter applications, as well as ERP and other enterprise systems, provides needed visibility into a range of activities throughout the product lifecycle. In addition, the new software’s analytical tools allow users to leverage the vast store of product development data to derive business intelligence for use in making timely decisions that help companies’ meet their goals. For example, users could spot bottlenecks in processes in real time, to troubleshoot and minimize delays – helping them make product launch dates and maximize windows of opportunity for product revenues.

Another potential use is to better estimate product costs. AberdeenGroup research has shown that over one half of companies can’t predict the cost of the products within 25% accuracy. By providing better visibility to cost information earlier in the process, companies may have the ability to better hit cost targets and enhance profitability. Reports such as costed BOMs could be generated based on current product structures from PLM and up-to-date costs from sourcing and ERP solutions, if that information is not readily available in the PLM system itself.

Implications for the PLM Market

The introduction of integrated BI and analytics tools into the offerings of a major PLM software suite represents a key step in the evolution of PLM that mirrors the maturation of other enterprise software suites, for example, for enterprise resource planning (ERP), supply chain management (SCM), and customer relationship management (CRM). Namely, PLM solutions create a vast amount of information in various formats covering various phases of the product lifecycle. These include requirements management; project management and workflows; engineering change management; compliance; design, engineering, analysis, and manufacturing processes; MRO; and sourcing.

This wide range of product information has been largely an untapped resource for manufacturers. The new UGS Teamcenter reporting and analytics software will allow users to leverage this resource in real time to identify a wide range of problems and product and process trends – so they can quickly take actions to manage and expedite product development processes in order to control costs, assure quality, and launch products in a timely fashion.

Competitive Landscape

UGS is one of the first PLM suite vendors to market with this new capability, but many more will likely follow. While most PLM suite vendors offer reporting capabilities related to their applications, most do not offer the depth of analysis or integration to analyze such a wide span of data.

Agile Software, as another example of this trend, recently announced the addition of analytics for decision support as a core component of its PLM platform. This capability also includes scheduled and custom reports for products, processes, sourcing, and quality, each of which provides a variety of insights and metrics into activities, costs, backlogs, and trends. It also includes preconfigured modules for cost intelligence, quality intelligence, portfolio intelligence, and change intelligence. These modules leverage the product data within Agile and can handle some product attributes (for example, inventory, forecasts, and purchase orders) from other systems.

Conclusions and Recommendations for Action

The new eQube-based BI and analytics software provides valuable capabilities to UGS Teamcenter customers. It enables them to quickly spot a range of potential problems and arms them with the information to solve them quickly and make business decisions that minimize delays and costs and maximize product quality and revenues – ultimately, helping to ensure product profitability.

Recommendations for Action

- √ UGS customers should consider extending their Teamcenter implementation by adding this new reporting and analytics software.
- √ Companies looking for PLM solutions should consider including analytics and business intelligence capabilities in their PLM requirements.
- √ Companies with existing PLM solution should investigate the use of business intelligence, and ask vendors about their strategy to provide an integrated BI solution.

Related Research

[*The PLM for Small to Medium-Size Manufactures Benchmark Report*](#); March 2006

[*The Product Global Design Benchmark Report*](#); December 2005.

[*The Product Innovation Agenda Benchmark Report*](#); September 2005

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