SAP Customer Success Story

AIR PRODUCTS

SAP® BUSINESS INTELLIGENCE GIVES AIR PRODUCTS EMPLOYEES CONSISTENT SELF-SERVICE ANALYTICS

Air Products, a $6 billion gases and chemicals company, supported dozens of data warehouses and other information-reporting resources across the globe, but had no enterprise-wide view of company operations. The company refocused its global business information initiative with the SAP® Business Intelligence and SAP Enterprise Portal technology components of the SAP NetWeaver™ integration and application platform, bringing consistent, responsive reporting and analysis to its decision makers.

NEW SOLUTIONS TO REPORTING PROBLEMS

How are we running the business? What works and what doesn't work?

These appear to be simple questions, but to a $6 billion company like Lehigh Valley, Pennsylvania–based Air Products, they revealed some daunting business-intelligence challenges.

Since its founding in 1940, Air Products grew by creating innovative new products and product-delivery mechanisms, and by acquiring businesses that would extend the company's core competencies. As the company became immensely successful, its IT systems grew increasingly isolated and its ability to produce reports was unreliable.

"We had lots of people getting business reports from their own systems," says Heidi Collins, director of knowledge management for Air Products' IT group. "But we had no enterprise-wide reporting. Different divisions were producing reports, but the reports – and the numbers themselves – were not consistent with one another. This limited our ability to make business decisions from an enterprise-wide point of view."

In 2002, Air Products began a major upgrade of operational systems, eventually retiring more than 600 applications in favor of an enterprise-wide operational strategy based on the SAP® R/3® System. At the same time, Air Products brought in the SAP Business Intelligence (SAP BI) technology component, including its component foundation, SAP Business Information

Warehouse (SAP BW), along with SAP Enterprise Portal (SAP EP). SAP BI and SAP EP are technology components of the SAP NetWeaver™ integration and application platform.

The result: Air Products is well on its way toward delivering consistent, accurate, timely information to business analysts and other users in company divisions located in the United States and Europe. For the first time in its history, the company has a business information infrastructure in place that can support enterprise-wide reporting and provide quick answers to user questions about company performance. As a result, the company is now poised to take on new market opportunities as they emerge.

NEEDED: A ONE-COMPANY FOCUS

Air Products began with a single, innovative idea: rather than sell and distribute oxygen in the customary metal cylinders used in the 1940s, the company would build gas-generating facilities near its commercial customers and pipe the oxygen in from there. This time- and cost-saving advance gave Air Products a significant competitive advantage.

> **"People, portfolios, and processes constantly change, and SAP NetWeaver gives the company a valuable tool for tracking our own growth and for anticipating our business needs in the future."**
>
> Heidi Collins, Director of Knowledge Management, Air Products

Through the years, Air Products grew by taking on other products, including hydrogen, helium, nitrogen, and other gases, as well as chemicals that were needed by commercial customers. Air Products also acquired companies ranging from independent regional gas distributors to businesses in industries such as construction and healthcare.

Today, Air Products has more than 18,000 employees with facilities in over 30 countries around the world. Until recently, the company also had hundreds of production data processing systems, running on mainframes, workstations, and PCs.

"We also had many different business-reporting strategies and systems in use," says Collins. "Some divisions used Microsoft Access and Excel spreadsheets, others had data warehouses in Siebel or SQL – it seemed like there were data warehouses everywhere."

The problem was that Air Products had no single, holistic view of its business. It was difficult for business analysts and managers to collaborate with one another and, consequently, that raised the risk that Air Products might miss new market opportunities similar to the one it leveraged so effectively in the 1940s.

"We started our entire transformation initiative with this in mind," says Collins. "We brought SAP software to serve as a central ERP facility and began retiring legacy applications."

Air Products also brought in SAP EP to improve its change-management and training processes, and SAP BI to help align its business-reporting infrastructure.

A ROLE-BASED PORTAL FOR CHANGE MANAGEMENT AND TRAINING

To streamline information delivery, Air Products installed SAP EP for its internal users. Air Products first developed its own infrastructure of local power users, and then the power users worked with local managers to assign appropriate roles to Air Products' portal users.

"The portal provides consistent information and application access for business analysts, managers, power users, and other employees in the company," says Collins. "It delivers change-management information and training resources that are based

on individuals' roles in the company – their divisions, their geographic locations, and so on. This information is determined and updated as appropriate by their power users, and approved by managers."

By employing the power-user base in implementing the portal, Air Products has been able to bring its one-company focus to a large number of users relatively quickly. To date, the portal is live in approximately 25 Air Products locations throughout the United States, Germany, Belgium, France, the United Kingdom, and Ireland. Collins expects the total user count will reach 3,800 by next year.

"The portal is an important enabler of our one-company focus," says Collins. "It creates a consistent user experience, and at the same time it is customized for each user, so it is both friendly and meaningful."

SAP BI PUTS USERS ON THE SAME PAGE

Also important for Air Products' one-company focus is SAP BW, the component foundation of SAP BI. SAP BW adds a reporting dimension to the portal, delivering key performance metrics to users – again, based on their roles – and adding the ability to create custom queries and reports. This enhances business alignment, timely information delivery, and the ability of Air Products' managers to make business decisions based on "a single version of the truth," according to Collins.

Air Products was able to speed installation of the business information warehouse by activating some of the function-specific business-content InfoCubes that are delivered with SAP BW. These are multidimensional information cubes that form the basis for various business reports and analysis.

"So far, we have activated 11 InfoCubes in areas as wide-ranging as inventory, production planning, materials management, profitability analysis, and human resources," says Collins. "The fact that they are pre-built helped us to get the right information to the right user and to have the reporting and analysis system up quickly. And the fact that all reporting is increasingly going through SAP BW is a major factor in making information consistent from user to user, and division to division."

For many business analysts, reports are now easier to create, modify, and share, and they are faster to generate, thanks to the self-service nature of the combined SAP BW and SAP EP solution.

"With the help of the power users, business analysts can now go in and quickly modify the reports they want," she says. "This means information – better information – is getting to those who need it much faster than before, when they had to make requests for changes."

TRACKING AIR PRODUCTS' EVOLUTION

SAP BW also gives Collins and other IT managers a tool to track the changing needs of Air Products itself. This is facilitated by an InfoCube, built by the business intelligence team that worked on the SAP project, which tracks the activities of the business information warehouse.

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"We watch to see which reports, scorecards, and other functions are being used the most, which are being used the least, and which new ones are being created," Collins says. "This helps us to constantly tune and improve the system; to find out why, for instance, a report may not be getting much use, and to make modifications – or to take it out of circulation."

The changing nature of users' needs also helps show how the company is changing.

"We can see Air Products evolve, based on the changing needs for information," she says. "People, portfolios, and processes constantly change, and SAP NetWeaver gives the company a valuable tool for tracking our own growth and for anticipating our business needs in the future."

AT A GLANCE

SAP® software	SAP NetWeaver™, including SAP Business Intelligence (SAP BI) 3.0b with SAP Business Information Warehouse (SAP BW) 3.0 and SAP Enterprise Portal (SAP EP) 5.0
Hardware	HP servers
Operating system	Microsoft Windows 2000 (for SAP BW) and Microsoft Windows 2000 Advanced Server (for SAP EP)
Database	Microsoft SQL Server
Implementation partner	BearingPoint
Length of implementation	3 years
Number of users	Currently around 1,700 per week; will grow to 2,500 per week in the United States and Europe
Types of sources	SAP R/3®

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