Case Study
Air Products and Chemicals, Inc.

Process Improvement
Air Products and Chemicals uses visual tools to deliver innovative solutions quickly

Air Products and Chemicals, Inc. delivers a broad range of products to diverse industries; from glass coatings for the architectural industry, to hydrogen for energy production, to gases for semiconductor chip making. The company’s success depends on getting the most reliable and innovative products to market—and getting them there fast. Such innovation depends on effective collaboration, rapid problem solving, and clear, concise communications. Air Products has found in Mindjet® MindManager® a quickly implemented solution that improves the processes Air Products uses to create its products.

Managing projects flexibly, visually
Phil Henderson, a Research Associate at Air Products’ Corporate Science and Technology Center, leads a group of scientists in developing new products and finding new markets for existing products. He says Air Products chemists and engineers like the way Mindjet’s visual interface captures their nonlinear thinking and planning in an easily understood, flexible environment.

“It’s very messy at the start of a new R&D project,” Henderson says “You’re not sure what the tasks are or who should do them. We use MindManager maps to create a visual image of the project as it emerges from a team of people sitting down together and brainstorming.”

ROI
More productive meetings; improved brainstorming, process planning, and project design.

Company Profile
Air Products provides atmospheric gases, process and specialty gases, performance materials and chemical intermediates to diverse industries. The company has annual revenues of $7.4 billion, 20,000 employees, and operations in more than 30 countries.

Challenge
To efficiently harness Air Products’ intellectual capital to create market-leading products.

Using Mindjet MindManager to monitor external contracts
Henderson says the map constantly pulls people back to the big picture instead of getting caught up in linear lists. “You’re able to toggle between seeing the sum of a project and all its parts. And you can go back into the map and reorganize to your heart’s content.”

Previously, Henderson and his team collaborated via white boards, butcher paper, and flip charts. “Now we project a map onto the wall, start collecting input, and put it into a work breakdown structure, which we then pop right into Microsoft® Project. The map interface helps you see interdependencies that I’m sure we would have missed had we not been working in this very visual manner. I’m convinced that the mapping interface gets us higher quality brainstorming.”
**Solution**
Use Mindjet's mapping interface, enabling users to create powerful visual representations of ideas, projects, and processes.

**Product**
Mindjet MindManager

**Key Features**
Nonlinear information capture, export to Microsoft® Project, Word, and PowerPoint®, document hyperlinking.

**Result**
Significant time savings, improved brainstorming, and more efficient processes.

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**Adding structure to collaboration**

Paul Wood is project manager for Air Products' Wichita Advanced Controls Initiative Project, an effort to automate at one of the company's existing chemical plants. Like Henderson, Wood and his project team use Mindjet MindManager to track the typically non-linear path that begins at project inception.

“When defining the scope of a subcontract, for example, we may find ourselves discussing tubing installation,” Wood says. “That might prompt someone to mention that we need to incorporate tubing specifications in the package, which in turn prompts mentioning other specifications that need to be supplied. MindManager allows the team to pull some structure out of these free-ranging conversations.”

One result, he says, is more productive meetings. “If there are eight to ten people sitting in a room and we can knock a half hour off the meeting, then we’re really saving time. People can refer back to one map that has all the project ideas, action items, and related documents. And the maps become agendas for subsequent meetings.”

**Understanding, improving processes**

In addition to using Mindjet MindManager for outward-directed activities, Air Products also finds MindManager useful for improving internal performance. The main benefits include an easy-to-understand, visual document that can be collapsed or expanded to hide or reveal details — and significant time savings.

Paul Pfiefenberger, Air Products’ Continuous Improvement Manager, uses MindManager to map brainstorming sessions that can include as many as twenty chemists, engineers, sales representatives, projects team members, and plant personnel. He says the software makes these sessions, on average, about 25 percent more efficient. “That means that a typical four-hour session may take only three hours; an eight-hour session only six.”

Al DeBona, Knowledge Management Project Manager within Air Products’ Business Process Improvement Organization, says that he uses the software to help his project teams “understand what they are trying to do and how they are going to do it.”

DeBona says Mindjet MindManager helps him get better feedback during the early stages of such process improvement projects. “When people see a process portrayed in project management software, all they see are a hundred lines of things to do. When they see the process as a visual map, it makes more sense to them. We get better feedback and can capture their input right into the appropriate part of the map.”

The main benefit of using the software comes next, he says. “Having created a map of the brainstorming session, I have concise, structured meeting notes I can disseminate as a one-page document. Or I can export the map to Word, PowerPoint, Project or PDF. Plus I can get the notes out immediately – not three weeks later. That means that the total cycle time of improvement is reduced. We can get new products and processes to market that much faster.”

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To find out how other leading organizations have benefited from Mindjet MindManager, visit www.mindjet.com/casestudies.