# Aerospace Firm Centralizes Information While Improving Its Project Selection Process

### Overview

**Country or Region:** United States **Industry:** Manufacturing—Aerospace

#### **Customer Profile**

Ball Aerospace & Technologies Corp. develops and manufactures aerospace hardware, software, and components. Based in Colorado, it has 2,700 employees.

### **Business Situation**

Ball Aerospace wanted a project management solution that could help it better select projects, track project information in a single location, and improve decision making.

### Solution

With help from Microsoft Services and Microsoft Certified Partner DeltaBahn, Ball Aerospace implemented Microsoft Project Server 2010.

### Benefits

- · Centralized project data
- Objective project portfolio analysis and selection
- · Strategic decision making
- Improved capacity and resource management
- More consistency across the board

"Project Server 2010 gives us greater visibility into our portfolio, a set of common business drivers, and the ability to provide accurate, timely data to decision makers."

Gavin Payne, Manager of Strategic Improvement, Ball Aerospace

Ball Aerospace & Technologies Corp., an aerospace manufacturer, wanted to improve the way it chose its portfolio of internal projects. It also wanted a centralized repository for internal project information to help executives better manage resources and make more informed decisions. With the help of Microsoft Services consultants and Microsoft Certified Partner DeltaBahn (formerly Blue Badges), Ball Aerospace chose Microsoft Project Server 2010. With Project Server 2010, Ball Aerospace put project information in a single solution and improved the objectivity of its project portfolio selection process. With increased visibility through Project Server 2010, the company makes more strategic decisions and has started improving its capacity and resource management. Finally, by uniting internal projects with a single solution, Ball Aerospace is bringing greater consistency to its operations.



### Situation

Ball Aerospace & Technologies develops and manufactures spacecraft, advanced instruments and sensors, components, and software solutions for U.S. government and commercial customers. As a mid-tier industry player, it often supplies larger aerospace companies such as Lockheed, Northrop Grumman, and Boeing; it also serves as a primary supplier on some space missions. With headquarters in Broomfield, Colorado, Ball Aerospace employs 2,700 people at eight locations nationwide. Its 2010 revenues were U.S.\$713 million.

Four customer-facing business units at Ball Aerospace run hundreds of programs comprising thousands of projects. All are supported by internal projects that build and support infrastructure in IT, facilities, capital purchases, and key strategic processes. When leaders of these internal projects discussed project management in October 2009, they saw opportunities to bring more consistency and objectivity to their work.

Ball Aerospace had been managing projects in many different ways. One group used Microsoft Office Project Server 2003. Other groups used OpenText Livelink software to manage project artifacts, and many used Microsoft Office Excel 2007 spreadsheet software to manage budgets and costs. "We had a mishmash of different tools and methods in our different internal groups," says Gavin Payne, Manager of Strategic Improvement at Ball Aerospace.

As Ball Aerospace started considering a new project management solution, its biggest concern was to improve its prioritization and selection of projects. "You always have more opportunities to do projects than you have resources," says Payne. "One classic example that we talk about is: Should we do this IT project or

this facilities project? These are projects from separate pools, managed by different people, but competing for the same pot of capital. As I worked with our vice presidents to prioritize these projects, there was a lot of consternation over our lack of objectivity. People always asked, 'Why is it prioritized this way?'"

Ball Aerospace also wanted to collect project data in a single location in order to give managers and executives better understanding, access to data, and control. "Once we were doing a large, complex, multiyear internal project, and one of the company leaders asked, 'How much are we spending on this?'" Payne recalls. "The data was in different places across three or four subprojects, so we weren't able to give him a ready answer." The executive perceived the project as out of control, which put it on a much more challenging course to fulfillment.

Additionally, Ball Aerospace wanted to improve its resource allocation. "Labor expenses comprise the majority of the cost on our projects," says Jay Deandrea, Director of the Information Technology Project Management Office at Ball Aerospace. "We have a matrix organization with people working on multiple projects. But the information about where resources were allocated was dispersed across multiple systems, so we couldn't easily quantify the workload on any given employee. Supervisors had no data source that could help them see potential resource issues and spark a conversation such as, 'Oh, you're working on five projects? So I guess I shouldn't give you a sixth." This poor resource allocation led to delays, reductions in quality, and increased costs.

In summary, Ball Aerospace wanted a solution that could improve its project portfolio selection and collect project data

"We're using Project Server 2010 to gain the benefits of top-down management and topdown communication."

Jay Deandrea, Information Technology Project Management Office Director, Ball Aerospace in a single location, thus improving strategic decision making and resource allocation.

### Solution

In December 2009, Ball Aerospace started examining a prerelease version of Microsoft Project Server 2010. The company worked with Microsoft Services consultants and DeltaBahn, a Microsoft Certified Partner based in Houston, Texas. "The DeltaBahn consultant was very knowledgeable about the product," says Payne. "And Microsoft Services had some deep resources when we asked some tough questions. When our main contact wasn't personally knowledgeable about some of our database issues, he was very good at finding the people who did know, and making their knowledge available to us."

In March 2010, Ball Aerospace committed to implement Project Server 2010. The company had just finished migrating from Livelink to Microsoft Office SharePoint Server 2007, and it began sketching plans to migrate to Microsoft SharePoint Server 2010 in the future. "We could have just installed Project Server 2010 on one box and gotten moving with it, but we wanted to build a system to handle our enterprise collaboration needs using SharePoint Server 2010," says Payne. "It took time—as did the implementation of our complex security model—but we succeeded." In September, Payne started using Project Server 2010 for strategic process projects and, in December, Deandrea started loading data on IT projects. About 250 projects are now in the system.

Ball Aerospace runs Project Server 2010 and SharePoint Server 2010 on a virtualized farm on Dell PowerEdge R710 server computers. Project data is stored using Microsoft SQL Server 2008 R2 Enterprise data management software, which runs on two clustered Dell PowerEdge R910 server computers.

Both the IT and the strategic process departments have set up basic workflows in Project Server 2010. "We've always had stage gates for project approvals," says Payne, "but it was a very manual process. As we've automated it with Project Server 2010, people generally haven't noticed—which means we're doing it well."

Project managers interact with project data using the full Microsoft Project Professional 2010 client application. "We're currently using about half of our 30 Project Professional 2010 licenses, although that's growing quickly, because we're getting grassroots demand," Deandrea says. Other employees can do simple schedule management tasks using the web client, Microsoft Project Web App. "The web client user base has grown substantially," says Payne. "We have more than 200 Project Web App users as of mid-June."

By that date, Ball Aerospace also plans to get its facilities and capital purchases departments running on Project Server 2010. "We'll then be prepared to do our 2012 annual planning and budgeting cycle for all of our internal projects using Project Server 2010," says Payne. "Then, as we show value, we'll look to roll out the solution to our customer-facing programs."

Two initiatives to be completed by late July will help the company show that value. First, the IT department plans to load information on past projects. "We want Project Server 2010 not only to be a forward-looking tool but also to help us research things from the past," says Deandrea.

Second, Ball Aerospace plans to improve its dashboards and reports from Project Server

"With the consistent data elements and workflow elements in Project Server 2010, we can bring greater consistency and data fidelity across our portfolio."

Gavin Payne, Manager of Strategic Improvement, Ball Aerospace 2010. "We're using some out-of-the-box dashboards right now, but by July we will embellish that functionality using PerformancePoint Services in Microsoft SharePoint Server 2010," says Deandrea.

### **Benefits**

Ball Aerospace is using Project Server 2010 to centralize project information, improve portfolio selection processes, make more strategic decisions, enhance capacity and resource management, and generally bring more consistency across the company's business processes.

### **Centralized Project Data**

Ball Aerospace is using Project Server 2010 as a centralized repository for internal project data. Now when an executive wants to know how much is being spent on a project, or its status, the information is readily available. "Just having in one place all of the metadata associated with a project and how it's being managed was a near-term goal that we have fully achieved with Project Server 2010," says Deandrea.

# **Objective Project Portfolio Analysis and Selection**

With Project Server 2010, Ball Aerospace is improving the processes it uses to choose which projects to pursue. "Using Project Server 2010, we can be more objective in the selection of our internal projects, deciding where money should go and how we can best prepare for new business," Payne says.

Now when Payne meets with the vice presidents to decide on internal projects, their first step is to collectively set the priorities by which projects will be chosen. "Having a much more open process using Project Server 2010 has helped us to overcome the second-guessing that used to plague these meetings," Payne says. Executives no longer ask him, "Why is it

prioritized this way?" because they understand that they themselves set—and can change—the portfolio selection priorities in Project Server 2010.

### Strategic Decision Making due to Greater Visibility and Accurate Data

With more comprehensive information and better processes, Ball Aerospace can make better decisions. "We're using Project Server 2010 to gain the benefits of topdown management and top-down communication," says Deandrea.

"Project Server 2010 gives us greater visibility into our internal project portfolio, a set of common business drivers, and the ability to provide accurate, timely data to decision makers," Payne says. "That helps them make more strategic business decisions."

# Improved Capacity and Resource Management

Ball Aerospace will use Project Server 2010 to improve its capacity and resource management. "We have struggled in the past with gaining information on resource allocation beyond a rough approximation," says Deandrea. "Project Server 2010 will help us with that. We're not sure exactly what it will look like, but Project Server 2010 gives us the tools to address a real pain point."

He expects to start with capacity management. "We can use Project Server 2010 to see what we're actively working on and where we're investing our capital, and then forecast to gain a rough assessment of whether somebody's going to be overbooked. The next step would be resource allocation, where we could look more tactically at what projects people are working on, how much time they are spending, and how our actual data compares with our estimates."

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers in the United States and Canada who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

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For more information about DeltaBahn products and services, call (281) 344-0437 or visit the website at: www.deltabahn.com

For more information about Ball Aerospace & Technologies Corp. products and services, call (303) 939-6100 or visit the website at: www.ballaerospace.com

### **More Consistency Across the Board**

In all of these areas, Ball Aerospace is using Project Server 2010 to bring more consistency to its processes and decisions. "In the past, it was sometimes difficult to keep everyone doing the same thing when they weren't using the same tool," says Payne. "But with the consistent data elements and workflow elements in Project Server 2010, we can bring greater consistency and data fidelity across our portfolio."

The various internal groups—IT, strategic processes, facilities, and capital purchases—have had slightly different ways of doing business. "In the past, we've tried to make our processes, criteria, and decision making as similar as possible, but the standards have been a bit loose," Payne says. "By bringing everyone together into one system, and providing visibility, we can ensure more consistency across our business processes."

### Microsoft Project Server 2010

Microsoft Project Server 2010 brings together the business collaboration platform services of Microsoft SharePoint Server 2010 with structured execution capabilities to provide flexible work management solutions. Project Server 2010 unifies project and portfolio management to help organizations align resources and investments with business priorities, gain control across all types of work, and visualize performance through powerful dashboards.

For more information about Microsoft Project Server 2010, go to: <a href="https://www.microsoft.com/project/2010">www.microsoft.com/project/2010</a>

# Software and Services

- Microsoft Server Product Portfolio
  - Microsoft Project Server 2010
  - Microsoft SharePoint Server 2010
  - Microsoft SQL Server 2008 R2 Enterprise
- Microsoft Project Professional 2010
- Services
  - Microsoft Services
- Technologies
  - Microsoft Project Web App
  - PerformancePoint Services in Microsoft SharePoint Server 2010

# Hardware

- Virtualized farm on Dell PowerEdge R710 server computers
- Dell PowerEdge R910 server computers

### Partner

DeltaBahn

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