



Microsoft Dynamics Customer Solution Case Study



Overview

Country or Region: United States

Industry: Aerospace and defense manufacturing

Customer Profile

Intelligent Automation Corporation (IAC), a San Diego-based company, earning U.S.\$11 million in revenue last year, produces systems that predict and diagnose aircraft mechanical faults.

Business Situation

An MS-DOS-based accounting application could not support expanding manufacturing operations. IAC faced ongoing inaccuracies in the general ledger and inventory, as well as scheduling challenges.

Solution

IAC deployed a solution based on Microsoft Dynamics™ SL that integrates corporate information, including government-mandated accounting, financials, scheduling, manufacturing, and project management.

Benefits

- Boosted productivity by up to 50 percent
- Enabled expansion in manufacturing
- Enhanced communication and accountability
- Provided a central information repository



Company Builds Integrated Platform, Boosting Productivity by up to 50 Percent

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Robin Ash, Controller, Intelligent Automation Corporation

Intelligent Automation Corporation (IAC) supplies diagnostic products for helicopter and turbine engines. Seventy-five percent of the company's revenue—projected to be U.S.\$11 million this fiscal year—comes from government contracts. From 1999 to 2003, the company's accounting application was sufficient to meet the government's strict project accounting and reporting requirements. However, as IAC began to expand its manufacturing operation, integrating manufacturing and accounting data presented many challenges. To overcome these issues, IAC, with the help of Advanced Solutions & Consulting Company, deployed Microsoft Dynamics™ SL and Microsoft® Office Project Server. As a result, IAC has increased productivity by 10 to 50 percent, expanded manufacturing operations, enhanced employee accountability and communication, and provided a central repository of information.



Situation

Intelligent Automation Corporation (IAC) is a leading supplier of helicopter and turbine engine diagnostic products. Projected to earn U.S.\$11 million in revenue this fiscal year, IAC employs approximately 50 people and is headquartered in San Diego, California. Seventy five percent of the company's earnings come from government contracts, particularly with the U.S. Army.

Founded in 1999, IAC develops prototypes or diagnostic equipment used primarily in helicopters, with grant money provided through the U.S. government's Small Business Innovative Research Program. Over the next several years, government agencies expressed interest in several product designs. This meant that IAC had to build prototypes and, consequently, open a small manufacturing facility. The company's efforts paid off. By 2003, IAC had won several manufacturing contracts producing products for the U.S. Army, U.S. Air Force, and commercial helicopter manufacturers.

Inability to Support Manufacturing Expansion

As the manufacturing side of the business grew, however, several IT challenges arose. One key obstacle was that the company's computing infrastructure was designed to support research and development as well as strict government contractor accounting requirements—not manufacturing. Dell Dimension workstations running the Windows® XP Professional operating system, and Microsoft® Office Basic Edition 2003 provided basic office productivity tools. Eight Dell PowerEdge server computers, running either the Microsoft Windows Server® 2003 Enterprise or Standard Edition operating systems or the Microsoft Windows 2000 Server operating system, powered network operations and a mission-critical accounting application known as Deltek.

“We originally chose Deltek because it is tailored to support the very detailed, very complex regulations of the U.S. government,” explains Robin Ash, Controller, IAC. “The application focuses heavily on project cost accounting, and it is quite effective in managing the services role of a government contractor. But once our production demands grew, the application couldn't accurately incorporate manufacturing subsidiary activity into the general ledger.”

To help support manufacturing demands—such as inventory management, procurement, and work order processing—IAC initially expanded its solution by deploying a Deltek purchasing and manufacturing module. However, it soon became obvious that the Deltek module could not provide the functionality required to seamlessly integrate a growing manufacturing operation. “Our hand was forced to find a new solution, because if we didn't, we knew we would face ongoing problems in manufacturing and accounting,” says Ash.

Difficulty Scheduling Personnel

As the company struggled with the Deltek application, employees were also facing issues in managing projects and scheduling. To date, employees had relied on a combination of spreadsheets created using Microsoft Office Excel® spreadsheet software and another Deltek product, E-Planner, to gain insight into projects and personnel resource availability. However, because IAC was no longer just a product design house, employees needed greater insight into the schedules of various personnel involved in product design, prototyping, and manufacturing—especially because individuals often worked on multiple projects.

“Our existing system could tell us that a certain employee would work full time on a project for three months, but that's about it,” Ash notes. “It was very difficult for managers

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to measure work completed with budget spent since there was no tool that could simultaneously monitor both in real time. Project managers had to make sure all of their resources were 100% utilized and that employees were getting their work done in the allotted amount of time, within budget. However, project managers lacked the tools needed to see the cost and time impact of moving resources from Project A to Project B, especially as project requirements and deliverables became more complex.”

IAC began looking for a computing solution that could integrate and report on all of the company’s information, including traditional financials, accounting, scheduling, project management, and manufacturing. In addition, the system had to support government requirements in project cost accounting and report generation.

Solution

IAC evaluated options from numerous vendors, and in August 2004, selected Microsoft Dynamics™ SL, (formerly known as Microsoft Business Solutions–Solomon®) and Microsoft Office Project Server 2003. Two Dell PowerEdge servers—running Windows Server 2003 Enterprise Edition and Microsoft SQL Server™ 2000 Enterprise Edition—would drive the new solution. By choosing Microsoft technologies, IAC could maximize its existing hardware and operating system investments, accelerate the time required for system integration, and benefit from an easy-to-use interface.

IAC engaged Advanced Solutions & Consulting Company (ASC), a Microsoft Gold Certified Partner headquartered in San Diego, California, to deploy the new solution. Representatives from IAC worked with ASC as well as ASC-sponsored subcontractors that were experts in Project Server and manufacturing.

IAC and its consultants began by identifying and standardizing all of the templates required in day-to-day operations. In addition, they mapped the business processes to determine how information should pass between Microsoft Dynamics SL and Project Server 2003. Next, the group set up the accounting system, including the general ledger, charts of accounts, and beginning balances. Consultants also customized Microsoft Dynamics SL modules for project management and accounting, financial management, and distribution using the Microsoft Visual Basic® version 6.0 development system. And in April 2005, IAC made the official switch from Deltek over to Microsoft Dynamics SL and Project Server.

IAC continued to expand the capabilities of its system. ASC engaged a subcontractor to help customize Microsoft SL so that it would collect the detailed project cost information required in government audit reports by agencies such as the Defense Contract Audit Agency (DCAA).

IAC also upgraded to the latest Microsoft Dynamics SL version. ASC capitalized on the enhanced business portal functionality in the new release by building a portal using Microsoft Office SharePoint® Portal Server 2003 to provide access to a central repository regulated by access controls. In addition, consultants incorporated electronic timesheet processing, accessible through the portal. Consultants also set up the portal to include sufficient rules and security to comply with government requirements surrounding timesheets.

The next big IT goal of IAC is to deploy Microsoft Dynamics CRM to streamline marketing, sales, and customer service. Integrating Microsoft Dynamics CRM with Microsoft Dynamics SL will give IAC a complete solution for financial management, supply chain management, and customer

relationship management. IAC also plans to implement the electronic requisition capabilities in Microsoft Dynamics SL within the next several months, as well as electronic Expense Reports. By doing so, IAC can eliminate paper-based purchase request and expense report processes.

Benefits

As a result of deploying Microsoft Dynamics SL, Project Server 2003, and Microsoft Office SharePoint Portal Server, IAC has increased the productivity of employees by 10 to 50 percent, enabled the expansion of manufacturing operations, enhanced communication and accountability, and provided a centralized repository of information.

Boosted Productivity by 10 to 50 Percent

Employees at IAC are working 10 to 50 percent faster by using Microsoft Dynamics SL and Project Server. "Generally speaking, our productivity has increased simply because the Microsoft product interface is so much easier to understand than our old MS-DOS®-based system," says Ash. "The ability Microsoft Dynamics SL gives us to drill down and instantly access the information we need is invaluable. Employees in manufacturing and project management have realized the greatest increases in productivity, working up to 50 percent faster."

One reason for this improvement in manufacturing is a result of work order processing. In the past, receiving clerks logged information directly into inventory. Today, receiving clerks log materials in the system, and then a material operations manager verifies the information before the new materials are posted in inventory. As a result, work orders are more accurate, and employees do not have to backtrack to troubleshoot inventory issues. Project managers are getting more done because they no longer have to constantly

monitor projects and follow up with employees. "Project managers used to manage milestones, schedules, and budgets," explains Ash. "This responsibility has filtered down to individual engineers."

Other areas of the company have benefited as well. The ability to export reports in different formats has increased the productivity of accounting by 10 percent. Productivity in the Human Resources (HR) department has increased by 15 percent because employees no longer have to send an e-mail message or call about healthcare and 401K benefits. Instead, employees access the information they need on the portal.

Enabled Expansion in Manufacturing

Previously, IAC accountants faced reconciliation issues from manufacturing every month. For example, newly released products often did not make it into the Finished Goods report, and there were frequent discrepancies in inventories.

"It's very hard to marry manufacturing and accounting," says Ash. "Microsoft Dynamics SL does a wonderful job connecting our manufacturing subsidiary activity into the general ledger. The information we need is just a click away. For example, using our old system, we had to go into so many different reports to get the information we needed. Using Microsoft Dynamics SL, I can instantly check every work order that has been created against a part number, or check every sales order including transaction information. You can drill so far down into details that it is just amazing."

Enhanced Communication and Accountability

One of the biggest changes IAC has realized as a result of the deployment is an increase in communication between engineering teams and project managers. "Microsoft

Dynamics and Project Server have transformed the culture of our company,” Ash notes. “Communication between employees has dramatically increased. Engineers used to focus almost exclusively on their own work, whereas today there is a lot of synergy between engineering groups. People realize that one person’s work might be relevant to a different project. And as a result, we’ve seen improvements in product quality.”

Authorized engineers and managers can access project status through the portal, instantly learning how much money has been spent on a project and how much money is left. Employees can also see if the project is on track or if more resources are required to get the job done on time.

The addition of Microsoft CRM will further boost communication and accountability. The first of the goals IAC expects to accomplish with Microsoft CRM is the delegation of marketing opportunities, which are all currently managed by the company’s CEO. In addition, the sales force will be able to generate quotes based on real-time inventory and pricing, eliminating a lengthy approval step.

Provided a Central Repository of Information

The business portal provides centralized access to Microsoft Dynamics SL—including information about financials, project cost accounting, scheduling, project management, and manufacturing—as well as access to electronic timesheets and information from HR. For example, the portal includes access to job listings, employee benefit information, and companywide announcements. In addition, authorized employees can now view the quantity of an individual product part, the sales history of a particular customer, a project’s status, or which projects are over budget.

“The business portal is an amazing tool, which we have just started to use,” explains Ash. “The portal allows any authorized employee to access Microsoft Dynamics SL, even if they do not have a seat on their system. Employees use it to set up work spaces for each project, so people can post documents, chat online, or just see what’s going on with a project. We have so many plans for the portal because it is an enabling technology that provides our employees with the information and tools they need to get their jobs done effectively.”

For More Information

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For more information about Advanced Solutions & Consulting Company products and services, call (858) 755-9200 or visit the Web site at:

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For more information about Intelligent Automation Company products and services, call (858) 679-4140 or visit the Web site at:

www.iac-online.com

Microsoft Dynamics

Microsoft Dynamics is a line of integrated, adaptable business management solutions that enables you and your people to make business decisions with greater confidence. Microsoft Dynamics works like familiar Microsoft software such as Microsoft Office, which means less of a learning curve for your people, so they can get up and running quickly and focus on what's most important. And because it is from Microsoft, it easily works with the systems that your company already has implemented. By automating and streamlining financial, customer relationship, and supply chain processes, Microsoft Dynamics brings together people, processes, and technologies, increasing the productivity and effectiveness of your business, and helping you drive business success.

For more information about Microsoft Dynamics, go to:

www.microsoft.com/dynamics

Software and Services

- Microsoft Dynamics
 - Microsoft Dynamics SL
- Microsoft Office
 - Microsoft Office Project Server 2003
 - Microsoft Office SharePoint Portal Server 2003
- Microsoft Server Product Portfolio
 - Microsoft Windows Server 2003 Enterprise Edition
 - Microsoft SQL Server 2000
- Microsoft Visual Studio
 - Microsoft Visual Basic 6.0

Hardware

- Dell PowerEdge server computers

Partners

- Advanced Solutions and Consulting Company

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