



Construction Firm Integrates Business Systems with Comprehensive Solution

Microsoft Corporation



TDIndustries

Overview

Country or Region: United States

Industry: Construction

Customer Profile

Based in Dallas, Texas, TDIndustries is an employee-owned specialty construction firm that earned U.S.\$247 million in 2006.

Business Situation

Saddled with unconnected business systems, TDIndustries struggled to achieve its stated mission of “continuous, aggressive improvement.”

Solution

Over the past six years, TDIndustries has progressively enhanced and extended Microsoft Dynamics™ SL to improve the flow and value of business data throughout the company.

Benefits

- Simple financial management
- Informed decision-making
- Increased manufacturing productivity
- Support for extended applications
- Enhanced with business intelligence



Construction Firm Integrates Business Systems with Comprehensive Solution

“Microsoft Dynamics SL empowers our people to do more and, at the same time, has helped us increase the detail and accuracy of our information.”

Mike Sebastian, CIO, TDIndustries

Founded in 1946, TDIndustries has grown into a premier facility services and specialty construction firm specializing in HVAC, electrical, plumbing, and other building systems. In the late 1990s, TDIndustries maintained disparate business systems that kept the company from increasing efficiency and performance. With the help of Microsoft, TDIndustries progressively incorporated more business functions into Microsoft Dynamics™ SL as its needs evolved. Today, virtually all business activities run through Microsoft Dynamic SL, helping to simplify financial management and empower employees with real-time data. To enhance Microsoft Dynamics SL, TDIndustries relies on a number of Microsoft partners. For example, Microsoft® Gold Certified Partner Artis Consulting helped build a business intelligence solution on top of Microsoft Dynamics SL that saved TDIndustries U.S.\$3 million.



Situation

TDIndustries is a premier specialty construction and building services firm based in Dallas, Texas. Owned by its 1,500 employees, TDIndustries has a unique corporate culture—every employee is a partner and no offices have doors—and has ranked among Fortune magazine’s “100 Best Companies to Work For” over the past 10 years.

In 2006, TDIndustries brought in U.S.\$247 million, the bulk of which came from construction projects focusing on HVAC (Heating, Ventilation, and Air Conditioning), plumbing, high-purity piping, building automation, and refrigeration systems. Recent multimillion-dollar projects include the University of Phoenix Stadium (home to the Arizona Cardinals) and the American Airlines Center in Dallas (a sports and entertainment venue). Other significant business areas include a service fleet of 250 trucks in Dallas, Fort Worth, Houston, San Antonio, Austin, and Phoenix. These crews operate, maintain, and provide round-the-clock emergency service for electrical and mechanical systems. TDIndustries also offers contractual, site-based services to customers such as Dell, Verizon, and the City of Houston.

In addition to these customer-facing operations, TDIndustries also operates a 60,000-square-foot manufacturing facility that makes piping, assemblies, and ductwork for TDIndustries construction projects. By sourcing materials in-house, TDIndustries reduces costs while ensuring a high-quality product. The manufacturing facility employed several home-grown costing systems to help track cost and assign those costs to projects, but none of them satisfied all TDIndustries’s requirements. “We are always looking for ways to integrate our processes to provide our customers with the best price-point. TDIndustries operates many different businesses and we need flexible, integrated

management tools to help us make the most of our position in the marketplace,” says Jim Bivins, Business Applications Manager for TDIndustries.

In the late 1990s, TDIndustries relied on Microsoft Dynamics™ SL (formerly Microsoft® Business Solutions–Solomon) to administer its core finances, but used separate systems for project management, payroll, and service dispatch. Because of this lack of integration, data did not flow easily through the organization and required manual file transfers and repeat data entry. Most importantly, TDIndustries needed to replace its 20-year-old legacy job-costing system with a more efficient one that could handle online, real-time inquiries and integrate with other business applications.

TDIndustries needed to find an integrated business-management solution to tie its various systems together and integrate with its financial management system. Doing so would enable TDIndustries to improve operational efficiency and financial management as well as provide a basis for the “continuous, aggressive improvement” called for in the TDIndustries mission statement.

“We wanted an industry-standard solution that was flexible enough to accommodate all our various business activities,” says Bivins. “In addition, we were keeping an eye out for the future, knowing that the company’s needs would continue to evolve and require enhancements to the solution.”

Solution

In 1999, TDIndustries began working with the Solomon Technology Center team in Dallas to upgrade its solution (now Microsoft Dynamics SL). Over the following years TDIndustries worked with Microsoft and Microsoft partners to expand and enhance its Microsoft Dynamics SL solution, as shown in Figure 1.

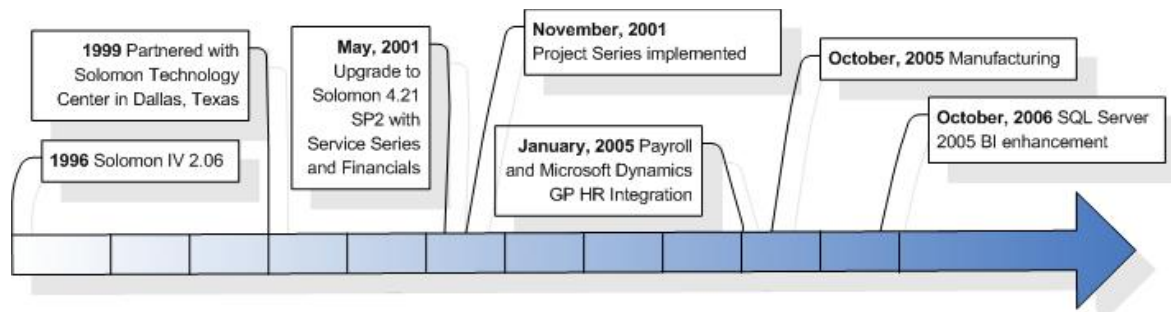


Figure 1. TDIndustries has been expanding its Microsoft Dynamics SL solution since 1996.

Today, roughly 500 TDIndustries employees use Microsoft Dynamics SL 6.5, with about 150 concurrent users at any given time. In addition to financial management, Project Series, and Service Series modules, TDIndustries recently deployed the Microsoft Dynamics SL Bill-of-Materials, Work Order, and Inventory modules for its manufacturing operation. Working with Microsoft Gold Certified Partner Artis Consulting, TDIndustries rolled out a new business intelligence (BI) solution based on Microsoft Dynamics SL and Microsoft SQL Server™ 2005.

“We use Microsoft Dynamics SL in every facet of our business, from general accounting and payroll, to project management and manufacturing. It standardizes our entire company on a single, integrated business-management solution,” says Bivins.

Project Management

Because the majority of TDIndustries’s revenue comes from construction projects that involve dozens of contractors, project management is a critical function. Microsoft Dynamics SL ties together processes to minimize data entry, and Microsoft Office Excel® budget spreadsheets can be imported directly into Microsoft Dynamics SL. Because Microsoft Dynamics SL Project Series is integrated with Payroll and General Ledger modules, data such as time and expense are

automatically available throughout the company.

In Microsoft Dynamics SL, TDIndustries project managers can quickly access detailed information through a consolidated project dashboard and drill down to the transactional level. TDIndustries also uses a third-party imaging application to capture paper documents, so project managers can pull up the actual documents associated with a job from within Microsoft Dynamics SL, if needed.

Manufacturing

TDIndustries’s manufacturing operation is responsible for more than 150,000 work hours in producing ductwork, piping, and other materials for company projects. The company implemented Microsoft Dynamics SL Bill-of-Materials, Work Order, and Inventory modules in 2005. To enhance management of the shop floor, TDIndustries augmented the Microsoft Dynamics SL Work Order module with Shop Floor Control from Microsoft Gold Certified Partner Sandler • Kahne.

Productivity Initiative

When TDIndustries deployed the Project Series modules in 2001, the company began creating weekly project productivity reports with Microsoft Dynamics SL data, measuring earned value against actual cost per accounting period. “Our managers found these reports to be very valuable, and they

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Jim Bivins, Business Applications Manager,
TDIndustries

started to ask our IT department to run ‘what-if’ scenarios,” says Bob Hauck, Systems Analyst for TDIndustries.

To enhance its reporting flexibility, TDIndustries engaged Artis Consulting, a Microsoft Gold Certified Partner and BI specialist, to implement data-management tools on top of Microsoft Dynamics SL using SQL Server 2005 Reporting Services and Analysis Services. Now, TDIndustries can automatically generate scheduled reports using Microsoft Dynamics SL data. Business managers can also use the Report Builder component in Reporting Services to create their own reports and to further explore the Microsoft Dynamics SL data.

Because SQL Server 2005 Reporting Services offers a Web publishing option, TDIndustries provides project managers access to important Microsoft Dynamics SL operational data while out in the field. Project managers can then access Web-based reports from their job sites via virtual private network (VPN) connections.

In the future, TDIndustries intends to extend its new reporting structure to other business areas that rely on Microsoft Dynamics SL. “Our productivity initiative is not limited to project management, but applies to manufacturing and vendor performance as well,” says Hauck.

Benefits

Over the years, TDIndustries expanded Microsoft Dynamics SL so that today the solution is a nexus for business processes, simplifying financial management processes, informing decision-making, and enhancing productivity.

“Since 2001, when we significantly upgraded our Microsoft Dynamics SL solution, TDIndustries has grown while maintaining the same amount of administrative staff.

Microsoft Dynamics SL empowers our people to do more and, at the same time, has helped us increase the detail and accuracy of our information,” says Mike Sebastian, TDIndustries CIO.

Simple Financial Management

Thanks to financial management in Microsoft Dynamics SL, TDIndustries closes its monthly financial reports in just 10 days, which is extremely fast considering the variety and complexity of TDIndustries operations.

“Our business is diverse, with commercial construction, systems service, facilities maintenance, multifamily construction, and manufacturing operations,” says Hauck. “I don’t know of any other business management solution that covers so many areas of business while also keeping everything integrated in terms of accounting. With our new manufacturing module, for instance, whenever we produce something in our shop, we can charge it directly to a project and ship it out to the field—and it’s all done within Microsoft Dynamics SL.”

For most processes, data is entered only once—Microsoft Dynamics SL automates the rest of the process. “We are close to having a single-entry, fully integrated accounting system that tremendously simplifies our financial management. For example, data entered into our Time and Expense module feeds back into the Payroll module. Then, when checks are issued, that cost is automatically assigned back to the project,” says Bivins.

Informed Decision-Making

Microsoft Dynamics SL makes data immediately available to TDIndustries employees. Project managers have up-to-date information consolidated in one place, allowing them to easily compare actual performance against budgets or delve into

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Bob Hauck, Systems Analyst, TDIndustries

details around purchase orders and subcontractor invoices.

Increased data visibility also benefits TDIndustries’s service representatives. “In our services operation, the ability to see real-time data means our customer representatives are informed when taking a call. While on the phone, they can easily investigate customer account information and make decisions based on the latest data,” says Bob Hughs, IT Project Manager for TDIndustries.

Increased Manufacturing Productivity

Microsoft Dynamics SL enables TDIndustries to better control its manufacturing resources, helping the company make the most of an important and unique asset. The Microsoft Dynamics SL Inventory module provides deeper insight into material demand, and also material tracking and costing. In addition, the Microsoft Dynamics SL Work Order module with Shop Floor Control helps in scheduling resources and assigning costs to appropriate projects.

“Without Microsoft Dynamics SL, we were running our shop with educated guesses. Now, we know exactly what stage production is in, how much it’s costing us, and when it’s going to be ready. And because we’re able to schedule resources more efficiently, we can give our project managers a better look into what’s being built for them,” says Hauck.

Support for Extended Applications

Microsoft Dynamics SL integrates with other systems and technologies, allowing TDIndustries to easily extend the solution and create greater value from Microsoft Dynamics SL data. For example, because Microsoft Dynamics SL uses the SQL Server database, Artis Consulting was able to build a new data mart for reporting and customize the package in just six weeks.

By implementing both SQL Server 2005 Reporting Services and Analysis Services on top of Microsoft Dynamics SL, TDIndustries makes corporate data more accessible to more people. The Reporting Services reports are available in various formats—including over the Web and in PDF—so project managers can easily print them to take to the job site or view important data on the Web without logging on to the corporate system.

“We depend on Microsoft Dynamics SL in every facet of our business, so it’s nice to know that when we need the solution to be faster or better in a certain aspect—in this case, our productivity system—Microsoft Dynamics SL is flexible and can be enhanced,” says Hauck.

Enhanced with Business Intelligence

With Microsoft Dynamics SL and SQL Server 2005 integrated for powerful business intelligence, TDIndustries project managers are better able to keep complex construction projects on schedule and on budget.

Before deploying the new reporting and analysis tools, TDIndustries’s projects overran projected cost, on average, by 4 percent. Six months after deploying the BI tools, TDIndustries started to see real results—most of its projects were aligning within budget and eventually coming in 3 percent under budget.

“We estimated annual budgeted project costs around forty-two million dollars, so with the seven percent improvement in productivity, TDIndustries realized a three-million-dollar reduction in project costs,” says Hauck. TDIndustries estimates another 10 percent productivity increase in 2007. Similar gains are expected in TDIndustries’s manufacturing operation when plant managers are able to tap into the same productivity reporting and analysis tools.

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 who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: www.microsoft.com

For more information about TDIndustries products and services, call (972) 888-9500 or visit the Web site at: www.tdindustries.com

For more information about Artis Consulting products and services, call (972) 702-9500 or visit the Web site at: www.artisconsulting.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 6.5
- Microsoft Servers
 - Microsoft SQL Server 2005
 - Microsoft SQL Server 2000
- Technologies
 - Microsoft SQL Server 2005 Analysis Services
 - Microsoft SQL Server 2005 Reporting Services

Partners

- Artis Consulting



About Tribridge

Tribridge is an IT services firm that delivers and supports technology, business management and core infrastructure solutions for organizations spanning diverse industries. Tribridge helps customers strategically leverage IT investments to become more productive, profitable, competitive and secure through proven methodologies, process optimization and industry best practices. We are dedicated to building a community in which organizations derive long-term business value from practical solutions that guarantee customer success and maximum return on investment. Headquartered in Tampa, Tribridge has customers, offices and team members across the U.S. and is the recipient of numerous awards, including the 2008 Microsoft Dynamics Worldwide Partner of the Year.

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