



Kirby Miner, CIO,
Trex Company

Decked Out for the Future

JD EDWARDS UPGRADE KEEPS TREX ON SOLID COMPETITIVE GROUND.

Trex Company has built an empire on grocery bags. The company turns plastic, wood scraps, and sawdust into wood-alternative decking, using 1.5 billion recycled grocery bags to make Trex products each year. In fact, the average 500-square-foot composite Trex deck contains about 140,000 recycled plastic bags.

Although Trex certainly pioneered the use of 98 percent recyclable materials to create its signature deck flooring, several competitors have sprung up in the 15 years since the company was founded. Indeed, Trex executives realized that aging technology and unwieldy manual processes left over from the company's early days could seriously hinder the company's ability to quickly and reliably deliver orders to wholesale distributors and retail centers.

So when Kirby Miner came aboard as CIO, one of his first missions was not only to replace the company's aging enterprise resource planning (ERP) system with Oracle's JD Edwards EnterpriseOne 8.12 but also to use the upgrade as an opportunity to improve efficiency and productivity to stay competitive.

"We had been growing so fast that it was like running with our hair on fire for the past seven years," says Miner. "We were trying to keep up with demand, branding, and a product list that grew to include railings, trim, and fencing. As a result, our IT became a tertiary type of event and our systems grew stagnant."

Working with Oracle Partner CSS, Trex pursued a plan to streamline operations by simplifying sales and inventory processes and creating a more transparent financials process. At the same time, the company wanted to slash IT costs by moving an externally hosted ERP system into the Trex data center.

Concentrating on the priorities set by executive management, Trex and CSS used creative, cost-effective project methods and subject matter experts to make the plan a success. As a result, Trex realized numerous business process improvements that today enable management to concentrate on the things that are important to the company's success—providing the best products for environmentally friendly outdoor living.

"Our project was complex and involved various business

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—Kirby Miner, CIO, Trex Company

units—this was much more than just an upgrade. **Finishing on time and under budget is a credit to the leadership we got from CSS and the support we got from our senior management team,”** says Miner.

CLEARING THE DECKS

Trex had reached a point where its leaders knew they had to gain efficiencies to continue the company’s growth.

“We had a great product, but we needed to make the manufacturing and distribution processes more efficient to become more competitive,” says Miner, who found multiple areas ripe for improvement within IT.

For example, the company’s accounting processes, while accurate, posed one challenge. The financial chart of accounts was difficult to navigate and inefficient. “With many companies such as Trex, as the business changes, they start adding more general ledger account numbers rather than restructuring the chart of accounts,” says Keith Jones, director at Charleston, South Carolina–based CSS. “So more often than not, the account numbers don’t adhere to a set of standards that

ties them to particular parts of the business, meaning that it becomes difficult to access information for reports.”

Waiting for end-of-month accounting reports was not sufficient. “We’re not a 35-person staff anymore,” says Miner. “We wanted more-detailed, faster, and customizable reporting.” For example, the company wanted to be able to access and analyze more-detailed information on purchasing variances, and it wanted to give users the ability to produce customized reports on the fly.

As with the chart of accounts, Trex needed to improve and automate outdated business processes to support company growth. “We can no longer get by with manual processes,” says Miner. “We wanted to use technology to streamline the supply chain process.”

The prime target was the distribution process. Trex uses a multitier distribution system, with about 80 percent of sales going to traditional building distributors and the remaining 20 percent heading to big-box retailers such as Home Depot and Lowe’s. But although those bigger companies used electronic data interchange (EDI) to share data online in a structured

Five Steps to Getting the Most from a System Upgrade

Sometimes an upgrade is just that: installing the latest version of a particular business application. But sometimes companies can ratchet up the ROI by reaping additional business value from the process. Keith Jones, director for Oracle Partner CSS, based in Charleston, South Carolina, suggests the following five tactics to optimize the return on any technology upgrade.

1. Upgrade within a strategic business plan. Look at the upgrade in the context of what you want to accomplish from a business point of view. Are there business processes that can be streamlined or automated? How can the technology solve those problems? “There are real opportunities to decrease inventory, manufacturing, and administrative costs with an ERP [enterprise resource planning]

upgrade, and identifying those opportunities will help you build a stronger business case for the project,” says Jones. In fact, companies such as CSS offer an automated assessment tool designed to identify the costs and hard dollar returns from an upgrade of Oracle’s JD Edwards EnterpriseOne.

2. Implement with an eye to the future. Make sure the project will support future business growth, and build those requirements in to the implementation. “You want to make sure that periodic assessments and upgrades are part of a five-year business plan,” says Jones.

3. Look for smaller opportunities to add business value. Upgrades don’t have to be large—sometimes adding a smaller “edge application” can yield surprisingly large returns.

4. Manage culture change. Yes, this is project management 101, but one of the best ways to maximize ROI with an ERP upgrade is to make sure the users are on board. Managing expectations and involving business units in process redesigns can go a long way toward getting that crucial buy-in.

5. Go vanilla. Avoid software customization as much as possible—it saves time and money and creates flexibility by removing the need to recode customizations with each upgrade. “Every company wants to believe that it has unique processes, but the reality is that most companies are pretty standard,” says Jones. “You are paying for each software vendor’s expertise and the best practices that vendor has put into its system, and it often pays to leverage that by using its processes.”

format, many of the smaller accounts were lagging, which was a major stumbling block for efficient replenishment. Moreover, the product list had dramatically expanded beyond decking to include a variety of products in multiple sizes and colors.

“This industry is more technologically conservative and doesn’t require leading-edge solutions that other industries have had for years,” Miner says. “Although retail is more automated, we had a very crude EDI process. It worked, but we wanted a better way.”

By improving EDI, the company hoped to help distributors manage inventory more efficiently. “If they aren’t being

efficient with inventory, our product won’t get to the people building decks,” Miner points out. “We need to get product out more quickly, so they can carry less inventory. Companies such as Lowe’s and Home Depot are very particular about how much inventory they carry, and with cash flow an issue for smaller lumberyards and dealers, it’s important to turn inventory more efficiently.”

The last hurdle lay in Trex’ IT infrastructure. The company was unhappy with its current hosted computer environment, which was costing roughly US\$500,000 in vendor fees annually. “Our infrastructure was not kept fresh, nor were upgrades

Seven Reasons Why JD Edwards EnterpriseOne Looks Good in Red

One of the distinguishing virtues of the architecture of Oracle’s JD Edwards EnterpriseOne is its open platform strategy. Customers have benefited from a broad matrix of options for hardware, operating systems, databases, and Web middleware. Among their platform choices, customers can now run JD Edwards EnterpriseOne on a complete Oracle technology stack, including Oracle Database 11g, Oracle Fusion Middleware, Oracle VM, Oracle Enterprise Linux, and Oracle Enterprise Manager. Running JD Edwards EnterpriseOne on a complete Oracle stack offers users advanced capabilities that can help them better meet their business challenges. Here are seven good reasons to choose Oracle’s full stack.

1. Ensure system uptime and performance with Oracle Enterprise Manager. A system isn’t providing any benefit to its users if it is down or performing poorly. The Oracle stack, Oracle Enterprise Manager, and Oracle Application Management Pack for JD Edwards EnterpriseOne enable administrators to provide better proactive monitoring of servers, faster troubleshooting, and a higher level of service to end users.

2. Give end users more control over the content and formatting of their reports. Also exclusive to Oracle’s technology portfolio, Oracle Business Intelligence Publisher is integrated

with JD Edwards EnterpriseOne and enables users to design more-robust output templates for their reports, with features such as pictures, logos, and font control. Oracle Business Intelligence Publisher also gives business users the ability to write ad hoc queries into the JD Edwards data and run reports through common desktop tools Oracle Business Intelligence Publisher integrates with, such as Microsoft Word and Microsoft Excel.

3. Reduce the cost, complexity, and risk of integrating with Oracle applications. For organizations whose evolving business needs require adding new software, the Oracle stack offers the flexibility of seamlessly connecting to Oracle’s best-of-breed applications that deliver project management, demand planning, forecasting, and content management.

4. Improve the performance and increase the flexibility of business processes. The Oracle technology stack helps customers integrate JD Edwards EnterpriseOne with other applications, even if those applications are not in Oracle’s portfolio. By adopting the principles of a SOA, users gain a more flexible infrastructure, enabling better communication and interoperability between applications.

5. Simplify and improve user access and security. With Oracle Access Manager, users can sign in to all of their systems at once. This eliminates

the need for multiple usernames and passwords and helps enforce strong password and authentication policies. It provides a centralized framework for security and compliance enforcement.

6. Increase productivity with a consistent user interface. As JD Edwards EnterpriseOne users switch from one Oracle application to another, Oracle’s standard user interface design enables them to have a seamless design experience that incorporates the latest advances in UI design. A standard design eliminates the time users spend learning how to navigate new interfaces and increases productivity.

7. Build enterprise IT on a trusted, reliable, rock-solid platform. Oracle’s JD Edwards EnterpriseOne is engineered and tested to work with Oracle’s core technology—Oracle Database 11g, Oracle Fusion Middleware, Oracle VM, Oracle Enterprise Linux, and Oracle Enterprise Manager. This allows for a more reliable experience as users work with different applications. Also, Oracle’s technology and applications consistently garner the industry’s top rankings—Oracle Database is the #1 relational database system in the world, with 49 percent of market share. With technology from Oracle at the core of the enterprise, customers get best-in-class performance that enables business to perform at its best.

—Monica Mehta

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performed to the software when Oracle came out with patches,” says Miner. “We were still living with the same software that came out years ago.”

BUILDING THE FUTURE

Trex answered the challenges by looking at the initiative through the lens of business value rather than treating the project as a straightforward technology upgrade. “What the company did was target opportunities for improvement on a list before starting the project,” says Jones. “It’s not just doing the upgrade. It’s also doing the upgrade with the intention of getting business benefits out of it.”

Working together, Trex and CSS analyzed and redesigned 10 to 15 business processes to take advantage of tools and functionality within JD Edwards EnterpriseOne 8.12. Some focused on financial processes like the chart of accounts and reporting. Others focused on moving orders through the supply chain, inventory, and replenishment. “We examined our processes to eliminate unneeded tasks and leveraged the software to cut out manual steps,” says Miner. “We tried to find ways to move orders through the system faster and more accurately by taking out most chances for human error.”

The team built its analysis on current business drivers and worked closely with subject matter experts within the business units to provide several process change options that aligned closely with strategic goals.

“CSS was able to listen to user needs, examine current processes, and give 2 or 3 choices rather than 50,” says Miner. “It’s a very decisive leader and did a good job of helping drive home the business requirements that had been set up.”

The team also made the decision to “go vanilla” and avoid software customization as much as possible, a choice predicated on the limitations imposed by the previous incarnation of ERP software. The previous system was built around an older generation of technology, requiring Trex to customize the system to interface with basic banking functions such as EDI and purchase cards. “It was like a guy who has a new car with an elaborate stereo system but uses a boom box in the front seat while driving—all because he didn’t read the owner’s manual,” says Miner. “Does he get music? Yes, but it’s cumbersome, expensive, and redundant.”

The team decided that it was more effective to adapt processes to the software rather than vice versa, a decision reinforced by the fact that JD Edwards software is built on a deep

reservoir of collective best practices. “Oracle is expert in ERP, so why not leverage that?” says Miner. “Why pay for it and then go and do something else?”

Finally, the team built a physical infrastructure that enabled Trex to move the application in-house, enabling the company to migrate away from a hosted system environment. Trex had to invest in hardware, but the company was able to fill an open IT position with an expert in JD Edwards software, which enabled it to support the application without adding to head count. “By bringing it in-house, we ended up saving about half a million dollars a year,” Miner says.

The implementation went smoothly—not surprising, considering that it was Miner’s 17th ERP implementation. The entire project took seven months and went live in May 2009. “The day after we went live, I was able to attend [Oracle user group conference] COLLABORATE—that’s how confident I was in CSS and our team’s ability to get things going,” says Miner.

As Trex continues to expand, Jones sees the project as the foundation of a broad operational overhaul. “In manufacturing, the big-time ROI comes from improving manufacturing operations, and that’s what Trex is teeing up for,” says

Miner. “It now has both the technical and accounting structure in place to support that.”

Even better, Miner thinks this project will help Trex accomplish a larger goal of removing waste from the environment. The company is one of the only in its niche that uses primarily recyclable materials—Trex now buys about 70 percent of the nation’s recycled plastic bags and adds sawdust to create its composite products. By analyzing consumption and making its manufacturing processes more efficient, the company will be able to lower its prices and increase orders. “If we sell more Trex products, we’ll recycle more and our competitors will be using less virgin plastic,” Miner says. “It’s better for the environment.” <>

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>> SNAPSHOT

Trex Company

Location: Winchester, Virginia

Revenue: More than US\$329 million

Employees: 600

Oracle products: JD Edwards EnterpriseOne 8.12, including accounts payable, accounts receivable, general ledger, fixed assets, electronic data interchange, procurement, sales order processing, and work orders

>> FOR MORE INFORMATION

JD Edwards EnterpriseOne
oracle.com/goto/jdedwards

Oracle Consulting for Upgrade Services
oracle.com/consulting/upgrade-services.html