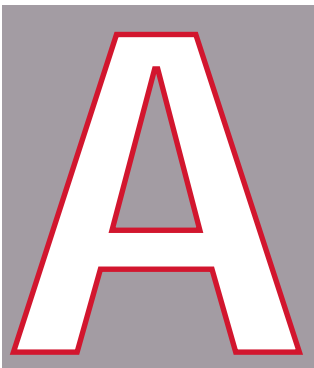


Driving the Business With WebFOCUS

ARVINMERITOR USES BUSINESS INTELLIGENCE TECHNOLOGY TO IMPROVE THE EFFICIENCY OF ITS WORLDWIDE MANUFACTURING OPERATION



ArvinMeritor is on the road to e-business, with a corporate makeover that is affecting nearly every aspect of its operations. Central to its e-business strategy is data access and reporting technology from Information Builders.

“Business Intelligence is extremely important to our e-business efforts,” says Perry Lipe, chief information officer at the \$7 billion manufacturing firm. “We want to provide information anywhere, anytime to all types of users, both within the firm and to our external constituents.”

This “information anywhere” directive is taking Lipe and his team down some very interesting roads, from legacy data conversion to wireless reporting through personal digital assistants (PDAs). “Due to our corporate strategy of organic growth, acquisitions and alliances with other companies, we needed to be able to accommodate a lot of flexibility in our information systems,” Lipe adds.

Corporate Expansion

As a global supplier of a broad range of integrated systems, modules and components to the motor vehicle industry, ArvinMeritor serves light vehicle, commercial truck, trailer and specialty original equipment

SNAPSHOT

ORGANIZATION: ArvinMeritor (www.arvinmeritor.com) is a global supplier of integrated systems, modules and components for the motor vehicle industry. The \$7 billion company—which supplies parts and supplies for some of the world's largest automotive companies—employs 36,000 people at more than 150 manufacturing facilities in 26 countries.

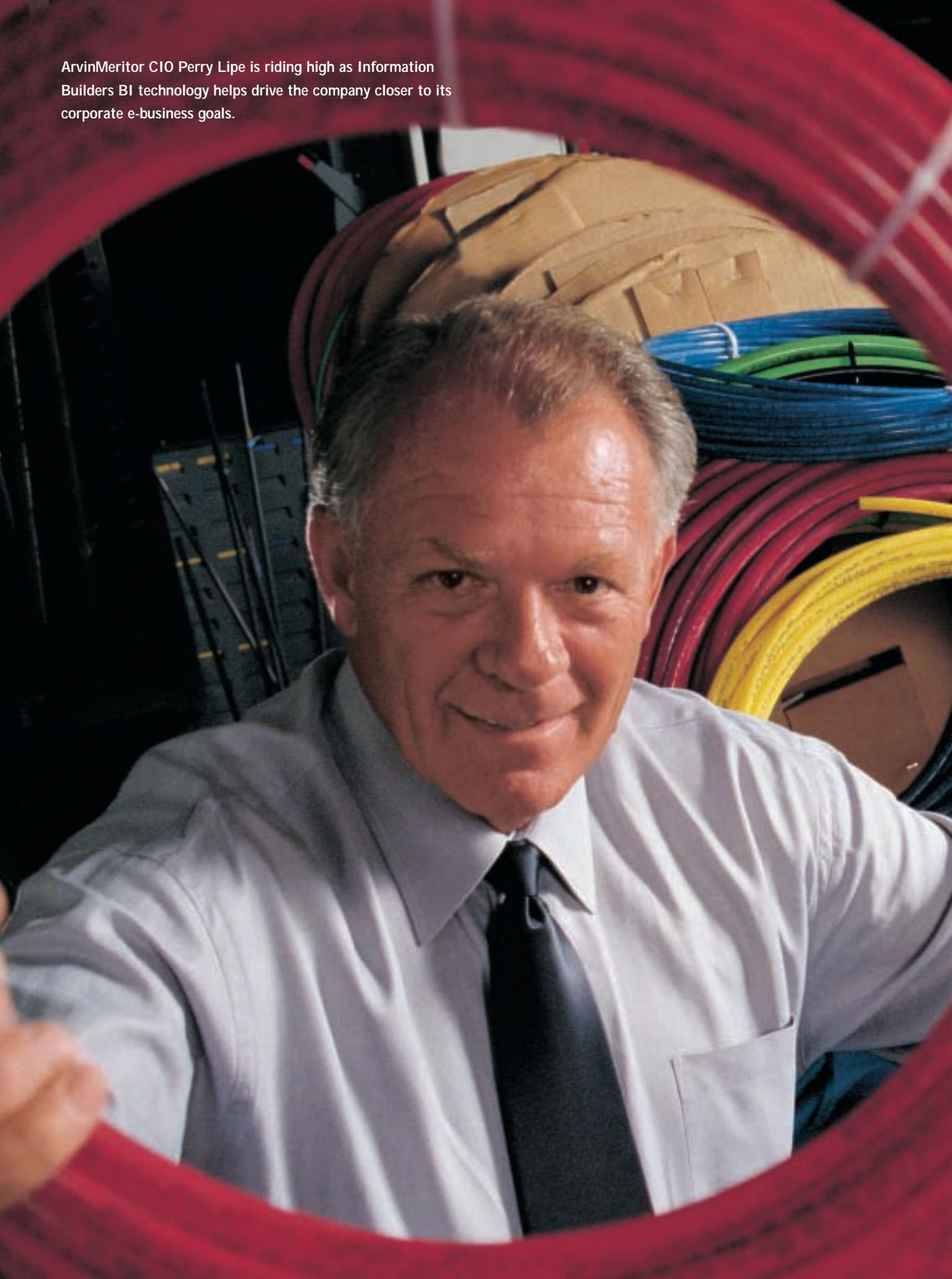
CHALLENGE: To create a flexible, user-friendly business intelligence environment for a variety of reporting, e-commerce and e-business initiatives.

STRATEGY: Create a Web-based reporting environment and several e-commerce applications to serve multiple constituencies, both within and without the firm.

RESULTS: Fast, intuitive access to information that increases sales, streamlines operations, and improves customer service.

INFORMATION BUILDERS SOLUTION: WebFOCUS, iWay ETL Manager, iWay Enterprise Integrator and Consulting, in conjunction with AvantGo Enterprise.

ArvinMeritor CIO Perry Lipe is riding high as Information Builders BI technology helps drive the company closer to its corporate e-business goals.



manufacturers and related aftermarkets. In addition to supplying parts and supplies for some of the world's largest automotive companies, ArvinMeritor is a leader in coil coating applications, including those for the transportation, appliance, construction and furniture industries.

ArvinMeritor's corporate profile has changed dramatically as a result of corporate acquisitions. Perhaps the best

door. IT pros within the Exhaust Systems Division were facing an aggressive schedule to deploy JD Edwards accounting systems. They had to get the e-business infrastructure in place very quickly so they could move ahead with their financial initiatives.

"We needed a solid back-end infrastructure that would streamline financial reporting activities," recalls Jerald Hatton, director of Business Systems Solutions for the Exhaust Systems division. "We purchased Information Builders' iWay ETL Manager to move data from one plat-



PHOTOGRAPH BY ELLEN JACKSON

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Kent Barth,
Senior Director of
E-Business Development and
Customer Value Systems

example involves the Light Vehicle Aftermarket (LVA) division, which manufactures vehicle aperture and undercarriage systems for cars, light trucks and sport utility vehicles. This division is a product of the merger of three independent companies: Maremont for mufflers, Purolator for filters, and Gabriel for shock absorbers. Each company had its own IT infrastructure, dependent on legacy systems within the mainframe and IBM AS/400 domains.

"The foundation for our e-business activities is gaining access to a wealth of information in legacy systems," says Kent Barth, senior director of E-Business Development and Customer Value Systems. "Thus we needed a business intelligence environment that would allow us to access and exchange data from disparate platforms."

ArvinMeritor's search for cross-platform, user-friendly reporting tools landed the team at Information Builders'

form to another and to create interfaces. Then we used the WebFOCUS Business Intelligence Environment to create a managed reporting environment."

Motivated by their impending deadlines, it only took three months to get the back-end infrastructure in place, develop working reports, and train users. Hatton says the team considered developing the data interfaces manually, but realized it would be a very tedious and time-consuming job. "We estimate that iWay ETL Manager cut the time and effort by 50 percent," he says.

ArvinMeritor worked with Information Builders Consulting throughout the initial phases of the data access, migration and reporting projects. "They helped us get started, with an emphasis on building our technical competency in-house," says Hatton. "Information Builders has been very good to work with and very responsive to our needs. It is evident that

they want us to succeed with these projects.”

Lipe concurs. “We have received exceptional consulting and support from Information Builders,” he adds. “They have worked tirelessly to ensure we are successful.”

Wide World of Reporting Options

Once the back-end infrastructure was in place, developers used the WebFOCUS Managed Reporting Environment (MRE) to create a centralized report server that supports users throughout the company. The reporting environment points to many types of platforms and data structures, yet users only need to learn one Web-based reporting environment.

“The learning curve for WebFOCUS is very low – it’s an extremely intuitive product,” says Angie McGaha, ArvinMeritor’s manager of Business Systems Solutions for North America. “We staged training courses and invited representatives from several divisions. They walked away two days later creating useful reports from the JD Edwards data.”

Today, users from all parts of the organization are creating reports. “We use it for everything,” McGaha adds, “for accounting and financial reports, task forecasting, customer service, end-of-month billing, quality control, shipping, engineering, purchasing...there really is no end to WebFOCUS’s potential.”

McGaha estimates there are now 170 employees with WebFOCUS development experience, most of whom are self-taught and have minimal technical training. Hundreds of internal users access the reports, and potentially thousands of external users will soon be online. “Some people are authorized to create reports and access the database,” she explains. “Others can simply read the reports on the intranet after they have been posted.”

A query governor ensures that users don’t submit large queries against production databases. For in-depth trending and sales analysis, five years of historical data can be migrated to accessory data marts, either in an Oracle database or Microsoft SQL Server.

Meeting Customer Needs

ArvinMeritor also used WebFOCUS to develop several production applications. For example, within the Exhaust Systems division, Hatton and his team created an e-commerce web site that allows vendors to obtain payment information, check on the status of receipts, and receive advanced shipment notifications. “It’s a self-service application that we have made available to authorized users,” says Hatton. “They can make queries against our production databases to gather up-to-the-minute information.”

Meanwhile, developers used WebFOCUS to create an e-commerce application that enables after-market customers to order products and track shipments. Barth estimates that there are approximately 500 external users who utilize this particular WebFOCUS application. Data access and conversion of the various back-end databases is performed using enterprise integration technology from iWay Software, a division of Information Builders. “The web site accesses three different back-end systems – one for shocks, one for filters, and one for mufflers,” he explains. “iWay works behind the scenes to inte-

grate the data and present one interface to the customer.”

As time goes on, more and more customers are using the Web site to order and track products directly. “Our call center currently handles about 2,000 phone orders per week, all of which we are gradually transitioning to the Web,” Barth adds. “This represents a huge time savings for the call center and a direct payback on our efforts.”

Pursuing Wireless Initiatives

As ArvinMeritor becomes more and more dependent on real-time information, developers are creating new types of applications for wireless information delivery. For example, the LVA Division is using WebFOCUS to deliver operations summary reports to PDA users whenever they synch their PDAs with their PCs.

Developers created the wireless reporting architecture by using the WebFOCUS Mini Browser enablement option with AvantGo Enterprise. Taken together, these products allow users to download corporate information, with drill-downs, directly to their PDAs for viewing away from the office. AvantGo handles centralized administration and automatic reformatting of customized WebFOCUS reports for delivery.

The WebFOCUS/AvantGo solution permits customers to choose if they want offline (downloaded), or real-time (wireless) access to information – without having to make any changes to the software or architecture. “It’s a very flexible architecture that adds to our mobile business strategy,” says Barth. “If workers need customer or sales information on the road, we can deliver it.”

Lipe says that this first wireless application is a test-bed for others that could come later. For example, a distributor stocking aftermarket supplies for an auto parts dealer could use a wireless device to obtain current information about inventory, shipping, and product availability. “When wireless access becomes mainstream, we’ll be ready to meet the needs of our customer base,” Lipe states. “One of our prominent customers just bought 10,000 hand-held devices with these types of capabilities in mind.”

Lipe advises his colleagues at other manufacturing firms to take a close look at how any wireless application adds value to existing network resources. “The real issue is working with the business units to add incremental value to a process,” he suggests. “Once you get beyond the ‘cool factor,’ a wireless application must add additional capabilities in order to justify the expense.”

This pragmatic outlook is typical of Lipe’s overall approach to e-business automation: investments in new technology must promise a measurable return on investment, either by reducing costs, improving efficiency, or making it easier for customers to do business with the firm.

“ArvinMeritor takes a close look at any new technology before investing time and effort in a potential solution,” he concludes. “We are confident about the ability of business intelligence technology to help us meet our corporate goals. Information Builders technology will become increasingly important as we go forward – in many ways, it is key to our entire e-business strategy, which is based on providing timely and accurate information to our users.” 